The domestic dictionary and housekeeper's manual : comprising everything pertaining to cookery, diet, economy and medicine / by Gibbons Merle ; the medical portion of the work by John Reitch, M.D.

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Merle, Gibbons, -1855.
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University of Leeds. Library

Publication/Creation

London : James Blackwood, 1857.

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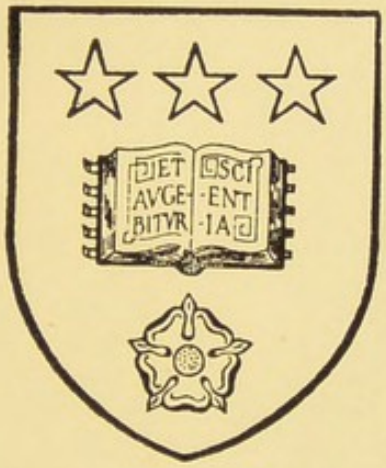
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THE

DOMESTIC DICTIONARY:

COMPRISING

EVERYTHING PERTAINING TO COOKERY, DIET, ECONOMY, AND MEDICINE.

BY GIBBONS MERLE.

THE MEDICAL PORTION OF THE WORK

BY JOHN REITCH, M.D.

LONDON:
JAMES BLACKWOOD, PATERNOSTER ROW.
1857.

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PREFACE.

If we could dispense with a preface, we should do so; for, generally speaking, it is that part of a book which is least read. In this work, however, the preface is essential to the reader, and we shall endeavour to make it as little tedious as possible, by saying just so much of ourselves as the reader may wish to be acquainted with, and no more.

We will not begin, as most authors do, by saying that we were induced to print and publish at the urgent entreaty of private friends, who, having had the high delight of reading the work in manuscript, benevolently opposed the idea of excluding from the same enjoyment the public at large; we will be more candid. We consulted no private friends; we thought the work would be useful, and our publisher, who has an eye to business, thought it would sell.

And now a few words as to our grounds for thinking that the work would be useful, and as to our mode of execution. Within the last twenty years we have had thrice that number of books on the various subjects which are treated of in this; but there has hitherto been no attempt to bring the information which they contain within the range of every purse, and every man's time. There are treatises upon cookery enough to fill several shelves of a library, and several of them are very well done; but they are, for the greater part, compilations from each other; and where men like M. Ude and M. Carême have chosen to give to the world the results of their experience in the culinary art, they have taken care to make people pay dearly for the information, and they have also treated with contempt the domestic cookery which must be of the greatest importance to nine-tenths of those civilized beings who, whilst they agree with those gentlemen in thinking that it was not intended for man to devour raw food, do not appreciate dishes exactly in proportion to their cost. On the other hand, there has been no want of works on domestic cookery, but the authors have, for the greater part, fallen into the opposite extreme, and, either from ignorance of the culinary art, or from a belief that it is not possible to prepare rich dishes unless one be actually rich, have neglected to borrow from the autocrats of the kitchen some of this knowledge of fashionable life. We have endeavoured to avoid both extremes. Every work of real merit on cookery has been consulted, and those articles which are mere compilations

have been revised by practical cooks, whilst several hundred hitherto unpublished recipes for the preparation of food have been supplied by cooks equally eminent with those who have figured in print. Thus far, then, our work will be useful; and not the less so for being in a condensed form. We have consulted every work on French cookery, from Vatel and Carême to the *Cuisinier Royal*, the *Cordon Bleu*, and the *Cuisine Bourgeoise*. Everything that they contain, and which our culinary collaborators knew from experience to be good, is given here. And if we have not given M. Carême's four hundred modes of dressing fish and making soups, it was because nine out of ten are silly modifications, made from affectation, or for the purpose of swelling out the book. The works of other countries, where good cookery is known, have also been consulted; and as regards English cookery, no expense has been spared to obtain the best information that could be procured, at the same time endeavouring to introduce economy throughout; for economy should be aimed at in the preparation of the richest, as well as of the plainest food. Here, indeed, lies the true science of the good cook; for with an outlay of five shillings he can prepare a savory dish, which a bungling *artiste* would be unable to prepare at a cost of fifteen. Everybody has heard of the French general, who, when besieged, invited the besieging general to dinner, in order to convince him that there was still an abundance of good cheer in the garrison, instead of its being, as reported, on the point of starvation. The besieging general was regaled with no less than twenty dishes, all equally good; great, therefore, was his astonishment at learning subsequently that he had been dining on horseflesh, variously cooked. This is given as an instance of what may be achieved by a good cook, even with the worst materials. How must his science predominate, therefore, when his materials are good.

But if in the portion of the Domestic Dictionary which relates to food we merely gave the most approved known preparations, enriched by the new stores of knowledge which our culinary collaborators have laid open to us, we should have but half performed the mission which we imposed upon ourselves. The great feature of this portion of the work is, the attempt to render health compatible with enjoyment, and to shew how the most atrabilious dyspeptic may eat without dread, and digest what he eats. Here we have felt it our duty to explode absurd prejudices, and to lay down new rules. So far, the work is a true *Dictionary of Health*. Without asserting that men may eat and drink what they like, and be none the worse, or denying what is good in Mr. Accum's warning of *Death in the Pot*, we endeavour to lay down precepts, by following which the most delicate may indulge in savory food, and the digestive organs be rather invigorated than impaired. In this, everything like quackery has been avoided; there have been quacks enough the other way, and we have not attempted to substitute for the harsh and unfeeling rules of the dietetic practitioner, who would make his patient drink by measure and eat by weight, extreme notions, having no other claim to notice than their novelty. More than one practical and really eminent physician has contributed articles and general information as to the things which may be eaten with safety, enjoyment, and benefit; and we may assert, without fear of refutation, that this portion of the work is good as well as new.

As far as it has been found practicable, every article relative to cookery is alphabetically arranged; and where variations are made from the general rule, the object is to assist the reader. Thus, for instance, *oyster soup* will not be found under the letter O, nor will *hare* be found under the letter H, but the one under S (soups), and the other under G (game): and this is also the case with *fish*, *pastry*, &c. This arrangement will be understood and appreciated by supposing that a lady intends to give a dinner party, and has (as every lady will, we trust, have) a copy of the DOMESTIC DICTIONARY in her practical library. She sends for her cook, male or female, and concerts as to the fare to be provided. "What fish shall we have?" says the lady. Now, if the different kinds of fish mentioned in the Dictionary were classed under their separate letters, she must run through the whole of it to find them, whereas, by looking under F, for *fish*, she finds them all. So it is with *game*, *soups*, *sauces*, *pastry*, *jellies*, &c. She is to refer to each general head, and under that she will find the various articles alphabetically arranged. The index at the end of the volume will also aid her in her search, and render the reference the affair of a moment.

Great care and attention have been bestowed upon all the vegetables which are used as food. Their medicinal qualities, when they possess any, are pointed out, as is also the mode of raising them, for it is not necessary to have a gardening book with this Dictionary in hand; and then follow the various modes of dressing vegetables in different parts of the world.

In *domestic economy*, everything that the head of a family, a housekeeper, a cook, or a common serving maid should know, is given. There are practical treatises, by writers of experience, in each art, on *brewing*, *baking*, *the manufacture of liqueurs; the mode of choosing foreign, and of making domestic wines; the making of coffee*, *butter*, *cheese*, *jellies*, *preserves*, &c.; *the mode of economizing fuel and light;* in fact, all that is connected with the cares and duties of a family. There are also instructions for the rearing of domestic animals, the preservation of meats and vegetables; and these are not compiled from other books, but articles written expressly for this work, with references to printed authorities where they are good.

In minor matters, the *Domestic Dictionary* will be found to contain much useful information. Our readers must not expect to find in it any attempt at domestic medicine, except as connected with the management of a house; but in this respect nothing has been omitted. Thus, under the head *baths*, all that relates to warm bathing, whether of foot-baths or general baths, is given, because that is a portion of domestic economy. So are remedies given for burns, scalds, &c., because a female may burn or scald herself in the duties of the household, and the remedy should be immediately at hand. There is a treatise on poisons, also; for a member of a family may be poisoned by verdigris from saucepans, by poisonous mushrooms, by certain kinds of fish, by arsenic obtained for the destruction of rats and inadvertently mixed with food: where an accident in domestic economy can occur, the remedy is pointed out.

The washing of silks, and other articles of apparel; the dying of articles, where it is practicable in a private way; the removal of stains, and the various information necessary for the good housewife, are not omitted: and, in this

respect, nothing is recommended that has not been tried by experience, and been crowned with success. All that a lady of the highest rank, at the head of a family, and a servant, of whatever degree, should know, is here taught. The aim of the author has been to give, as regards domestic economy, a *Practical Cyclopædia of Practical Things.*

Not one of the least interesting features of this work is that which relates to the toilet. All the secrets of the perfumer are opened to the public. The lady may now make her *Eau de Cologne*, her *lavender water*, her *essences*, *pomatums*, *poudres dentifrices*, &c. &c., with economy, and with a degree of excellence which many perfumers would be glad to attain. The instructions are from various, but approved sources; and when the process of distillation can be dispensed with, the mode of operating by infusion is given; but as distillation is sometimes indispensable, the instructions under that head are so plain and practical, and the process is rendered so interesting, that many ladies will become distillers whether we would or not.

Long as our preface is, we have but glanced at the general features of the work. We trust that what we have said is fully borne out by the contents, and that our readers will allow that we might have said more

A

DOMESTIC DICTIONARY.

ACETIC ACID, is distilled vinegar. It is sometimes used for pickling, on account of its strength; but it has a flavour which is far from agreeable. Its chief use is in medicine, where a pure acid is required.

ACETIFICATION. The term applied to wines and other liquids when they turn sour.

ACIDS. The various acids having reference to culinary preparations and domestic economy will be found under their different heads. For the effect of acids on the animal system, see INDIGESTION, WINES, &c.

ACIDULATION. This is the term employed in gastronomy for the mode of preserving food by the addition of vinegar. In most cases it is proper to use a salt pickle before the vinegar is applied; and wherever it is practicable, the meat to be preserved should be brought to as dry a state as possible before it is salted. A very strong brine is then made, in which the meat is laid for one, two, or three days, according to the length of time that it is to be kept. Vinegar, which has been previously boiled with spices or herbs, according to taste, is then put into a pan, with an equal quantity of water, also previously boiled, and the meat is laid in it to soak. When it has lain three or four days, it may be taken out and hung up, keeping it as long as it has not turned, when it is cooked by either boiling or roasting. In very hot weather, meat may be kept fresh for several days by drawing over the surface of it a fine brush, dipped in pyroligneous acid; in this case, however, the outer part of the meat, when cooked, has a very unpleasant flavour. By first putting the meat in brine for a couple of days, and then steeping it for three days in water which has been boiled with spices, to which is to be added about a tenth part of pyroligneous acid, it may be kept for several days, and will eat tender, without unpleasant flavour.

AIR. The air which we breathe, in its pure state is composed of two simple substances, called oxygen and nitrogen, in the proportions of seven parts of the former to two of the latter, with a small proportion of carbonic acid, and water in the state of vapour. The two latter, however, are accidental, and their presence varies much as to quantity according to circumstances. In some experiments upon atmospheric air, only three parts of carbonic acid have been found in a thousand parts of air; and in other experiments, eight parts have been found; the quantity of water in the state of vapour varies considerably, but generally speaking is not two per cent. The proportions of hydrogen and nitrogen do not vary much. Many thousand experiments have been made with air, at different heights and in different localities, but the results as to the presence of oxygen and nitrogen have been nearly the same, although the effects upon dyspeptic patients in some localities had been so powerful as to lead to an opinion that the component parts of the air were greatly modified, as compared with that which they had been accustomed to breathe. Nature has proved herself a benevolent chemist in the mode in which the two great elements are mixed: a larger proportion of nitrogen would have

been injurious to health, and a smaller proportion would have been insufficient to correct the excitement which a greater preponderance of nitrogen would create. Our readers who are desirous of acquiring scientific information as to the exact proportions of the elementary and accidental parts of which atmospheric air is composed, and its mode of action, will do well to turn to those articles in a good encyclopædia; we shall treat of it only in connexion with its known effects in the digestion of food and the regulation of health.

An unlimited enjoyment of pure air is essential to healthful existence. If this be not the case, all rules for diet, and every course of medicine, however judicious, would be vain. Digestion is, in a great measure, regulated by the state of the blood, and the blood is regulated by the free action of the lungs; consequently the air which we breathe cannot be too pure. Copious inhalation of pure air, and the active exertion of the lungs, is, in many cases, a successful substitute for general muscular exercise; indeed, so important is the frequent and powerful action of the lungs, that we see frequent instances of longevity and good health in persons who pass the greater part of their time in a vitiated atmosphere. This is the case with actors, and lawyers who have great forensic practice, and whose otherwise sedentary pursuits would inevitably induce disease. Where a free evacuation of the pores is kept up by bodily exercise, a pretty good state of health may be kept up even when the air in which that exercise is carried on is not the best; but where both exercise and pure air are wanting, wonders are effected by the active exertion of the lungs.

Change of air is frequently recommended to invalids, and above all to those who are unable to digest well; and yet what is called change of air is sometimes merely nominal; for a man may remove to a place a thousand miles distant from his usual place of residence, and find great improvement in his health, eating without inconvenience things which he could not previously digest; and yet if the new air into which he had removed were to be analyzed, it might be found precisely similar, so far, at least, as analysis could go, as that which he had left. Change of air involves change of scene, and a variety of new and wholesome excitements of the mind, and, in most cases, an abstinence from injurious pursuits; it is not surprising, therefore, that wondrous results should be attributed to what is called change of air. Such change is always to be recommended to dyspeptic persons; for whether there really be any modifications of air of which chemistry is ignorant, or the desired effect be produced by the various causes dependent upon a change of scene, the exercise of travelling, and a variation in the ordinary course of our occupations and pursuits, yet, as the effect is in most cases obtained, we must not omit such a curative process when it is within our means.

In order to restore and preserve health, frequent exercise in the open air is desirable; and although currents of air are to be avoided in rooms, we cannot be too careful in our mode of ventilating them, so that we may continually breathe fresh and pure air. The night air is to be avoided by persons of weak digestion; for it is frequently productive of injury, although we are not aware that it undergoes any other change than that of temperature, which, however, is of itself more than sufficient at times to affect the general health. That it is injurious is sufficient for the practical man; it is useless to inquire into causes in a matter of this nature, when it is so easy to guard against the effects. The windows of sleeping-rooms, however, should always be thrown open, for two or three hours during the day, particularly when the air is warm; and it is an excellent practice, on rising from bed, to throw off all the covering, and allow the air to act freely upon every part of the bed and clothing. Where many persons are assembled in the same room, it is advisable, if there be no other means of ventilation, to have a window opened, if the external air be not too cold for endurance; and in factories a perfect ventilation should always be maintained.

One of our best physicians, Dr. Loudon, is of opinion that not only is pure air essential for the healthy digestion of food, but that there is in the air itself a certain degree of nourishment independently of its mechanical action upon the blood. To what extent this may be true, it is perhaps impossible to determine; but the opinion is entitled to great respect from such a source.

When the air which we breathe in confined rooms cannot conveniently to the invalid be entirely renewed by allowing it to escape to the outside, and admitting a fresh supply, it is sometimes corrected by the burning of aromatic pastilles, or by mixtures which give out a large quan-

tity of gas, in which oxygen prevails; but these artificial means need never be resorted to, if care be taken in the first instance to secure perfect ventilation in the room. The sleeping rooms of even healthy persons should never be very small; but where this is inevitable, a door communicating with an outer room, in which no person sleeps, should, if practicable, be kept partly open; for although the external night air is to be excluded, as much of the air which the house contains, and that as far as possible from places in which the night air enters freely, should be enjoyed. If it be injurious to pass the day in an atmosphere of vitiated air, it is equally injurious to pass the night with an insufficient supply of what is pure; for the respiration of even a single individual is sufficient to alter the character of the air which he breathes; and if the same air is reinhaled, it not only has lost the character essential for a healthy action upon the system, but it may lay the foundation of severe disease.

ALBUMEN. This is the term used by medical writers for the white of an egg; those articles which approach in their nature to albumen, are called albuminous. The whites of eggs are of a cooling quality, and are therefore much used in the diet of invalids, as also in some external applications. They make, when mixed with rose-water, a good collyrium for the eyes, and they are also used with benefit in burns and fresh wounds. Dr. Chalmers, in his Encyclopædia, says, that the white of an egg being boiled hard in the shell, and suspended in the air by a thread, resolves and drops down into an insipid scentless liquor, which, although it contains nothing sharp, oleaginous, or saponaceous, will make a thorough solution of myrrh, which is more than either water, oil, spirits, or even fire, will effect. The whites of eggs are used for fining wines and other fermented liquors. See Wines.

ALCALIS. The effect and operation of alkalis in cookery and domestic economy will be found under different heads; and as regards their effects upon the system, see Indigestion, Poisons, &c.

ALE. See Beer and Brewing.

ALIMENTS. Under this head are comprised the various kinds of food provided by Nature for our support. They are animal and vegetable, and may be divided into nine classes; viz., 1st, Farinaceous, such as wheat, barley, sago, chesnuts, beans, potatoes, &c.; 2ndly, Mucilaginous, as endive, spinach, lettuce, asparagus, &c.; 3rd, Saccharine, such as honey, dates, figs, apricots, peaches, &c.; 4th, Acidulated, as currants, apples, lemons, oranges, and the various other acidulated fruits in which the acid predominates over the saccharine qualities; 5th, Oily articles, such as olives, and other productions abounding in this property; 6th, Caseous, as milk, and various kinds of cheese; 7th, Gelatinous, as the white flesh of young animals, and certain fish, animal jelly, &c.; 8th, Fibrous, these are often combined with gelatine and grease, and are furnished by the domestic animals which are raised for the supply of the table; amongst the most fibrous animals are the ox, the sheep, the duck, the pheasant, the partridge, the wild boar, the hare, the deer, &c.; and 9th, Albuminous, such as eggs, the brains of animals, oysters, mussels, &c. All these alimentary substances are not equally adapted to appease hunger and support the system. Those aliments which are the most easy of digestion do not remove the sensation of hunger for so long a period as others which are digested with difficulty, and acquire a certain volume in the stomach; for instance, venison is more rapidly digested than pork, goose, and some other meats, which are known from experience to be of slow and difficult digestion. Some very extraordinary experiments as to the comparative digestibility of different sorts of food were made some years ago, in one of the hospitals of Paris. One of the patients, a soldier, had received a wound which left an opening to the stomach from the exterior; and it was found that substances could be introduced into it by this artificial opening, without occasioning any serious derangement. Portions of different kinds of food, tied with silk, were successively introduced, and notes were carefully made of the quantity dissolved of each within the same given period of time. Mutton, venison, partridge, and some other sorts of game, were dissolved more rapidly than beef; beef more rapidly than veal, and the white flesh of domestic poultry; and these latter were digested more quickly than pork. Ham and bacon remained almost entire at the end of the time during which mutton was almost wholly dissolved. These experiments, although not entirely conclusive, as they were made only upon a single individual, go very far to confirm the received notions as to what are called digestible and indigestible aliments. There are, however, many

idiosyncracies to which no general rule can be applied. Some persons are seriously inconvenienced by the use of fruits, while others derive great benefit from them. One man will eat a large quantity of nuts, without inconvenience, whilst another will have an acute attack of indigestion from taking a very small quantity; some will digest pork with facility, and find difficulty in digesting those meats which are generally most rapid in their passage through the system. The celebrated Dr. Gall could not take mutton in any form, and, indeed, the very appearance of it on a table would bring on, with him, a sensation of sickness. On one occasion, some medical friends, with whom he was dining, and who concluded that the imagination had much to do with this repugnance, had a dish of mutton so disguised in the cooking that it was impossible to discover it. The Doctor having, of course, no suspicion, partook of it; but he had not taken two mouthfuls when he fell from his chair, and remained for some time seriously indisposed. An instance is mentioned, by a medical writer, of a gentleman who could not take a single oyster in its raw state without having an attack of indigestion, but could eat them cooked in any way without inconvenience, although they might become almost as hard as leather. Such instances, however, are the exception, not the rule. The process of digestion may be described as follows:—When the aliments arrive in the stomach, they undergo there their first elaboration, and are converted by the action of what is called the gastric juice into a greyish semi-liquid, called chyme. This chyme passing into the intestines, comes in contact with the bile, and is separated into two parts, one of which is the chyle, which is taken up by the absorbent vessels and distributed over the system for the nutrition of the individual, whilst the other, which constitutes the fœces, is expelled after it has lain a certain time in the bowels. This expulsion appears to be mechanical, and to arise from a certain degree of healthy irritation which rouses the muscles of that part of the body into action, and enables them to get rid of their load. When there is a want of tone to do this naturally, artificial means, such as purgatives, or lavements, are resorted to; the latter is the usual course on the Continent, and even the abuse of it is, as compared with the habit of purgatives, attended with little danger, or even inconvenience. It has been generally supposed that persons of very slow digestion have either a deficiency or defective quality of gastric juice, and attempts have been made in some cases to introduce a gastric juice taken from the stomachs of animals in order to assist in the process of digestion. It does not appear, however, that these attempts have been attended with any good results. The mode in which the gastric juice is secreted has been of late years a subject of discussion. Some medical men have contended that it is not formed during the period of repose of the stomach between meals, but that it is secreted at the time of eating; this, however, is not the general opinion. The most indigestible aliments are those which contain a large quantity of oil or grease; only a portion of these is thoroughly separated in the process of digestion, and a large quantity sometimes comes away in the evacuations, in their first state. Boiled meat, being more softened than roasted meat, digests with more facility, but it is less nourishing, as a large portion of the natural juices is carried off by boiling. Pastry is generally indigestible, both from the quantity of grease it contains, and the imperfect dressing of the gluten, but it has been remarked that when the crust of pastry is very thin, it is digested with much less difficulty. Smoked and salted meats are always unwholesome, if eaten by persons of a sedentary life, although those who take active exercise may safely use them in moderate quantities. Farinaceous food, although much recommended to invalids, is frequently very injurious to the stomach, unless a small quantity of animal food be taken with it. A weak stomach is frequently rendered still more feeble by the long and exclusive use of farinaceous food; wherever, therefore, there is no acute disease to make it improper to use animal food, a small portion, either in the solid form, or as strong gravy, should be taken occasionally by those persons who are living on what is called farinaceous diet. The albuminous food is, for the most part, a light digestive aliment, without being too exciting, thus it is that eggs agree with most weak persons, when the stomach will take scarcely any other food. The brains of animals are said to be light of digestion, as is also the sweetbread of the calf; this kind of food is a happy medium between a vegetable and an exciting animal diet. As regards what is called a vegetable diet, it is evidently not that which was

exclusively intended for man, as his organization proves; but, as far as health is concerned, it performs an important office in the economy of life when it accompanies animal diet.

ALMOND. This fruit, in its green or unripe state, and before the shell has become hard, is sometimes preserved in the same way as apricots, but its most common use is as dessert, or as a component part of many articles of pastry, &c. There are two sorts of almond, the sweet or Jordan almond, and the bitter; they both contain oil and mucilage, but the bitter almond has a much stronger medicinal property. This fruit is very nourishing, on account of the mucilage which it contains; but it is nevertheless indigestible, from its oily nature. The bitter almond owes its peculiar flavour to the quantity of prussic acid which it contains; it may sometimes be injurious, eaten in even small quantities, but, generally speaking, the addition of a few bitter almonds to a large quantity of sweet is not prejudicial; on the contrary, the principle which in excess would be poisonous appears to have a sedative and tonic property. Almonds yield a soft oil, which is used in medicine, and in the fine soaps. This oil may be obtained by crushing the almonds in a mortar until they are reduced to paste, and then placing the paste in a canvass bag, which is to be put into a press. If it is desired to have the oil colourless, the almonds should be previously blanched; this will take a small portion of the oil away, but not in a sufficient quantity to make it of any consideration. Another mode of obtaining the oil is by boiling the paste for some time, and stirring it continually; then set it by, and when cold remove the oil from the surface.

Milk of Almonds for the Table. Pound two ounces of blanched sweet almonds and two bitter; mix with the paste a pint of fresh boiling milk, and strain through a sieve; then add two eggs beaten up, and enough sugar to sweeten it, and put it over a slow fire to become thick.

For the use of almonds in pastry, see Pastry.

AMBIGU. A term in French gastronomy applied to a repast in which all the dishes, hot and cold, are set at the same time upon the table, but in which soup does not appear. The ambigu is chiefly served to gentlemen who, meeting together on business, wish to discourse without the presence of servants. All the dishes being placed on the table at the same time, with a supply of clean plates, knives and forks, glasses, &c., on a side-table, the parties are able to dispense with servants.

ANGELICA. A fine aromatic plant, used in confectionary, and also, in its green state for infusions, as it is supposed to have good stomachic properties. It grows freely on moist soils; the best kind is that which is called Bohemian Angelica. The seed must be sown as soon as it is ripe, for if kept, it loses its virtue. When the plants are strong enough to be removed, they are transplanted, and placed at a distance of at least two feet from each other. The same plant may be preserved for several years, by cutting the extremity of the stems in May.

Preserved Angelica. When the stems are of a good size, and before they run to seed, cut them into slices, and put them for some time into cold water, after having removed the rind; then boil them until they become soft, and wash them afterwards two or three times in cold water; boil them in strong syrup for an hour, then let them stand for twenty-four hours; now take them out of the syrup, and drain them. In the meantime strengthen the syrup, by the addition of sugar, and when that is done, let the angelica simmer in it for half an hour. It is then to be taken out, placed upon tins, and dried in a slow oven, or on a hot plate, powdering it well with white sugar. Angelica preserved in this way will remain good for several years, and is an agreeable addition to a dessert.

Angelica Ratafia. Put half a pound of angelica shoots into two quarts of brandy, a pint of water, two pounds of sugar, a few cloves, and a little cinnamon. Let the angelica infuse for two months in a close vessel, then strain and bottle. This is a very rich and fine cordial.

ANTIPUTRESCENTS. Substances which arrest the decomposition of animal matter. Salt is the most useful for domestic purposes, but there are others of much greater power. Sir John Pringle mentions the following, with their respective strength—salt, 1; vitriolated and soluble tartar, 2; sal ammonia, 3; nitre, hartshorn, and wormwood, 4; borax, 12; salt of amber, 20; alum and myrrh, 30; bark, 120; camphor, 300; and pyroligneous acid, which is a still stronger antiputrescent than camphor.

APPLES. This is a most agreeable

fruit, and of more general domestic use than any other. Its medicinal properties vary with the species; apples of the sour kind are generally astringent, whilst others, particularly if cooked, are of a laxative nature. The best apples are those which keep the longest, for if gathered a little unripe, the ripening which they acquire by keeping improves the quality as regards wholesomeness. All apples, however, contain a large quantity of fixed air, and are very flatulent to weak stomachs, if eaten raw; but this property is, of course, entirely removed by cooking. Persons who are fond of raw apples, and are nevertheless compelled to abstain from eating them by the flatulency which they occasion, may obviate this inconvenience by a very simple precaution; instead of biting the apple, it should be scraped, as it is eaten, into a fine pulp; the juice is thus preserved, and all the agreeableness of the apple retained, without any unpleasant effect being produced, provided the bounds of moderation be not exceeded. Those who have strong digestive powers may, however, indulge freely in the apple in its raw state, particularly if bread be eaten at the same time. In many parts of the Continent an apple with bread is the common breakfast of the labouring classes; it gives stamina to the stomach, and enables the labourer to proceed cheerfully with his toil until the hour of dinner. The juice of apples also, if boiled with an equal quantity of sugar into a syrup, and used cold with water, is an agreeable and refreshing drink. The late Dr. M'Nab, who was physician to the Duke of Kent, relates three cases of patients whose stomachs were in a very debilitated state, and who were effectually cured by the frequent use of this beverage. The best mode of preserving apples for winter use is to lay them upon good clean straw, in a situation where they will not be exposed to the action of frost, but where there is a free admission of air, taking care, if space will admit, that they do not touch each other. Sometimes a very contrary course is adopted; the apples being packed in bran or sawdust, and kept from the air, but this is rarely found to be successful. Apples are found in almost all moderate climates, and form, in some countries, when made into cider, the common beverage of the people. In the greater part of Normandy nothing but cider is used at the dinner-table, and it is the only beverage of the laborious classes. For this cider the small sour apple which grows on trees on each side of the large roads of Normandy is used. A few persons make a better sort of cider from the garden apple, but it bears a small proportion to the general quantity used. Cider is also made to a great extent in many parts of England, but scarcely any of it is of the inferior quality used in France. It is not found that cider, when taken as a beverage from youth, is more unwholesome than any other fermented liquor; but it frequently disagrees with persons who are not accustomed to it. For the mode of making this beverage, see CIDER.

APPLE JELLY. Take some fine reinettes, wash them well, and cut them in pieces, boil them with water and the juice of a lemon, without covering the saucepan. When the juice has become adhesive, strain it through a sieve, and add to it some syrup made as thick as possible; boil and skim, and when it is so thick as to fall in flakes from the spoon, put it into the jelly-glasses, and tie over. The quantity of sugar used should be the same weight as that of the apples.

APPLE MARMALADE. Peel the apples, and boil them in water, then pass them through a sieve. Now put the pulp into a stewpan, and let it evaporate over the fire until it is become nearly dry, stirring frequently. Then add thick syrup, making the proportion of a pound and a quarter of sugar to a pound of apples, and let them heat together until they are well incorporated, but without boiling.

APPLE PASTE. Peel some fine reinettes, take out the cores, and boil them in water. When quite soft, take them out and put them in cold water; having drained them, press them through a coarse cloth; put this marmalade into a pan on the fire, stir it frequently with a wooden spoon, and when it is nearly dry, take it out, and add an equal weight of sugar, mixing them well together. Press the mixture flat, of the thickness of an ordinary pie-crust, put it upon tins, and place to dry in a slack oven.

BUTTERED APPLES. Take as many apples as you may require, peel them, cut them into quarters, and take out the cores. Let the quarters be of an uniform shape and size. Then put them into a stewpan, with a bit of butter and some powdered sugar. As soon as any of them begin to break, take out those which are entire, and put them by on a plate. Then put all the pieces which you have cut off

to bring the quarters to the same form, to those which are left in the stewpan, and make them into a marmalade, adding half a pound of apricot marmalade. When done, make a layer of this, and place on it a layer of the entire apples which you have before taken out, then another layer of the marmalade, and so on till you have formed a pyramid, and cover the whole with some more of the marmalade. Put it into the oven, or under a brasing pan.

Compote of Apples. Cut the apples into halves or quarters, according to their size, take out the core, and put them on to dress with a little water and as much sugar as may be sufficient. Let them stand on the fire until they get soft, then mash them in their juice.

To Preserve Reinette Apples with Sugar. Take ripe good apples, peel and blanch them; let them simmer for some time in strong syrup, the quantity of sugar employed being equal in weight to that of the apples; then put them in pots or bottles.

To Preserve them in a dry state. Having prepared them as above, take them out of the syrup, put them upon tins, powder them well with white sugar, and set them in a slow oven or in the sun till they are quite dry.

APRICOTS. This is a very agreeable and wholesome fruit, being, when thoroughly ripe, easy of digestion. Prepared, and formed into paste and jelly, it is excellent for invalids, the marmalade, however, being rather more difficult of digestion than any other preparation of the fruit.

Apricot Jelly. Take thirty ripe apricots, and having cut them in two and extracted the stones, break the latter and take out the kernels; pound them in a mortar with a glass of water and a little lemon juice. Having put the apricots, with an equal weight of sugar, into a stewpan, first crushing the apricots, add the kernels mixed in the way described, then proceed as with any other jelly. The number of kernels used should be in the proportion of twelve to each pound of jelly, and the juice of two moderate sized lemons must be used for the same quantity.

Apricot Paste. Set any quantity of the fruit you may require over the fire in a stewpan, and cook until they are quite soft; then take out the stones, pass the fruit through a sieve, and dry. Then take clarified sugar, equal in weight to the fruit, mix and let them dress together, turn out into shapes, and dry in a slow oven, or in the sun.

Apricot Ratafia. Cut thirty apricots into small pieces; crack the stones and take out the kernels, which must be peeled and bruised; then put the whole together into a jar, with two quarts of good brandy, half a pound of sugar, a little cinnamon, eight cloves, a very small quantity of mace; close the jar well, and let it remain for three weeks, shaking it frequently; then strain it off into bottles, and keep in a cool place.

Apricots Preserved in Brandy.—Boil the apricots, which must not be too ripe, for a short time in water, then put them into cold water; repeat this operation twice, after which boil them for a short time in strong syrup; take them out again, and let the syrup be boiled until it has become much thickened, skimming it carefully. When it is nearly cold, the brandy is to be mixed with it and poured upon the fruit, in bottles or jars. For four pounds of fruit, there should be one pound of sugar made into syrup, and three quarts of brandy.

Compote of Ripe Apricots. If they are fresh, do not peel them, cut them in two and take out the kernels; put them in water over the fire, and when they begin to feel soft to the touch take them off, and put them into cold water; drain them, throw them into clarified sugar, giving two or three boils, and skimming it well. Remove the kernels from the stones, which blanch, and throw into the compote. When cold, serve.

Compote of Ripe Apricots entire. Slit the fruit just sufficient to allow the stone to be removed; prick them with a pin, put them in water over the fire, and stew until they begin to get soft, then throw them into cold water and drain them. Have ready some clarified sugar, and while it is in a state of ebullition, throw in the fruit; when they have boiled a few minutes, let them get cold. Drain and serve.

Marmalade of Green Apricots.—Take any quantity of the green fruit, and having removed the down, boil them in water until they become very tender, then take them out, throw them into cold water, and then place them to drain; then bruise, and pass them through a sieve. Put this marmalade over the fire to dry, turning it occasionally to prevent its burning. Have ready as much sugar as you have weight of marmalade, add a little

water, and boil and skim until it has become so strong a syrup as, when cold, to break; put the marmalade into it, and mix well together without letting it boil; when done, set it by in pots.

PRESERVED APRICOTS. Take some apricots which are not quite ripe, and remove the stones without entirely dividing the fruit, put them into cold water; then blanch them on the fire; when they become soft, take them off, and put them again into cold water. When they are cold, drain them, and throw them into some clarified sugar, while it is in a boiling state, and which has been made into thick syrup; let the whole boil again for a few minutes, and let them stand for twenty-four hours. Take out the apricots, and give the syrup another boil, then throw it boiling over the fruit, and let it stand another twenty-four hours; at the end of that time boil the sugar again until very thick, into which put the apricots, and, after having given them a boil, let them again stand for twenty-four hours; after which take them out, drain them, put them on dishes which have been well covered with powdered sugar, dry them in a stove, cover them well with powdered sugar, and lay them by in a box, placed in layers, with a sheet of paper between each.

For the use of this fruit for wines or pastry, see those heads.

AREOMETER. All liquids, although of equal bulk, do not possess the same specific gravity; for instance, wines, different kinds of spirits of wine, ethers, &c., are lighter than water; whilst certain mineral acids, and saline solutions, weigh heavier than that liquid; it is therefore possible to determine, whether by adulteration, or other means, the proportions of any liquors have been changed, and this instrument is employed to ascertain that point. It consists of a glass tube, with a bulb containing mercury: when plunged into distilled water, at its maximum of density, it will sink to a certain point, which may be described by No. 10; being next plunged in water containing ten parts of salt out of one hundred of bulk, the instrument will not sink so deep; the point at which it stops may be described by 0. Now divide the space between 0 and 10 into ten equal parts, and the space above 10 into as many equal divisions as the tube will contain. The instrument thus marked will sink deeper in the alcohol than in water. Thus, when we say that spirits of wine are 33 or 36 degrees, we mean that the instrument plunged in this liquid has sunk to the 33rd or 36th division of the scale, whilst in distilled water it only sunk to the 10th above 0. If we now add a certain quantity of water to the alcohol, the instrument will not sink so deep, the density of the liquid being increased. Areometers are made for different descriptions of liquid, wines, acids, brandies, &c. The wine areometer indicates the quantity of alcohol contained in the wine; and the spirit of wine areometer, the quantity of pure alcohol contained in the spirit. The spirits of wine used in commerce is more or less weak, and when in its strongest state is pure alcohol.

ARRACK. Most of the arrack imported into this country is distilled from rice. It is but little used in England, except to flavour punch; the taste of it is very agreeable in this mixture. Arrack improves very much with age. It is much used in some parts of India. An imitation of arrack punch is made by adding to a bowl of punch a few grains of benzoin, commonly called flowers of Benjamin.

ARROWROOT. This is the dried root of a plant imported from the colonies. It is much used in the diet of invalids, being considered at once nutritious and light of digestion. It is also a favourite food for children. It is perhaps one of the best articles of vegetable diet. Arrowroot being imported from various parts of the world, it is not all of the same quality; the Bermuda arrowroot is generally considered to be one of the best. When arrowroot is taken by invalids, a very small portion of brandy or sherry wine should be added to it, if there be no inflammatory symptoms, as in this way the tendency to acidity is corrected. Mixed with chocolate (see CHOCOLATE) it forms a very fashionable breakfast article, called Racahout des Arabes.

ARROWROOT JELLY. Pound three bitter almonds, and put them with the peel of a lemon into a large wine glass of water, and let them steep therein for four or five hours; then strain the liquid, and mix it with four table-spoonfuls of arrowroot, an equal quantity of lemon-juice, and two spoonfuls of brandy; sweeten to taste, and stir it over the fire until it becomes quite thick. When cold, put it in jelly-glasses, and set by in a cool place.

ARROWROOT CREAM. Mix two table-spoonfuls of arrowroot with about half a pint of water; when it has well settled, pour the water off. Boil two quarts of

milk, sweetened, and add the peel of a lemon, and some cinnamon. Strain it, boiling, over the arrowroot, stirring it well and frequently until cold. It is served to eat with preserved fruits or fruit tarts.

To Boil Arrowroot. The arrowroot is to be mixed well in a little cold water, taking care that it be not lumpy; when this has stood a quarter of an hour, pour off the water, and add as much sugar as may be necessary. Then boil a pint of milk, and pour it gradually over the arrowroot, stirring it well. Three table-spoonfuls of arrowroot will be sufficient for the above quantity of milk. It may be made with all water instead of milk, if preferred, in which case a little lemon-peel should be boiled in the water. A little port, or sherry wine, may be added when eaten.

ARTICHOKES. There are five kinds of this vegetable which are well known, and more or less cultivated, viz., the white, green, violet, red, and the sweet Genoese. Of these the white, being very delicate, is little cultivated; the green is the one most in use, it grows to a very large size, and is tender and of a fine taste. The violet does not grow so large as the green, but is equally tender. The red is more delicate than either of the others; it is eaten raw when young, when older it becomes hard. The sweet Genoese kind far exceeds all the others for delicacy, but as it degenerates after the first year, it is rarely cultivated. When eaten raw the artichoke is not easy of digestion, but when cooked that objection is removed. Artichokes are dressed in a variety of ways. They are propagated by suckers, taken off early in April. They should be placed in a thick bed of light loam, and trenched to the depth of three feet, with an abundant supply of good manure at the bottom of the trench. They will yield in the first autumn, but not abundantly until the next year. When all the heads are gathered, the stems are broken off close to the ground; after which the plants are well earthed up, and some good long dung placed round them. It is also advisable for winter dressing to dig some rotten dung into the ground round the plants. Early in the spring the plants are to be examined, the earth and litter to be removed, and the weak shoots to be detached. If the artichoke bed is allowed to last more than from five to six years, the quality of the plant will be deteriorated.

Artichokes in the Italian way. Cut the artichokes into four equal parts, trimming the leaves, and taking away the choke, wash them carefully and put them into a saucepan with a little butter, adding the juice of a lemon and half a pint of white wine to every three artichokes; let them stew until thoroughly tender, then take them out and serve them with white Italian sauce.

Artichoke Bottoms in Fricassee. Cut off the bottoms of the artichokes, cook them in a white roux (see Sauces) for a quarter of an hour, then put them into cold water, and warm them in the same way as for a fricassée de poulets.

Dried Artichokes. On the Continent the bottoms of artichokes are dried and kept for winter use; in this way they form a very nice addition to stews and fricassées, when they are no longer in season. The mode of drying is as follows: Having boiled them quite tender, take away the chokes, and put the bottoms upon a piece of wicker-work in a very slow oven. When perfectly dry, put them into paper bags, and keep them for use. They may also be preserved by putting them into strong brine after being boiled.

Fried Artichokes. Choose some young artichokes, and after having cut them into quarters, trim and wash them well, and throw them into a pan; season with pepper and salt and a little lemon-juice; then add to them four spoonfuls of flour, three eggs, two tea-spoonfuls of oil, and stir till the sauce is well mixed with the artichokes. Boil them in boiling lard; when done, lay them on a cloth to drain, and serve with fried parsley.

Jerusalem Artichokes. This agreeable root is propagated and planted in the same way as potatoes. The time for planting is in March, in a light soil. In September they are fit for use, and are dug up as wanted. The best way of eating the Jerusalem artichoke is plain boiled with melted butter; but they may also be served up with rich gravy, or be added in stews or ragouts.

To Boil Artichokes. After having cut off the stalks close to the bottom, and half the leaves from the top, let them lie for two hours in cold water. They must be then put into boiling water, with a little salt, and boil gently for about an hour and a half, keeping the vessel well covered the whole time. Melt some butter and serve with them.

ASPARAGUS. This is considered to be one of the most wholesome, and at

the same time agreeable products of the garden. It is strongly diuretic, and at the same time sedative. The frequent use of it in its green state, as an article of food, has been strongly recommended, not only for persons who require diuretics, but also in affections of the chest and lungs. It is used medicinally, when no longer in season, by preserving it in the same way as any other green vegetable, or drying it and reducing it to powder, or making an extract. The extract is made by boiling the asparagus in water for several hours, then straining the liquor, and evaporating it slowly over a very slow fire, until it becomes exceedingly thick. Two or three table-spoonfuls of good brandy are then added to each quarter of a pint of this extract to preserve it, and it is put by in bottles for use. A table-spoonful of it may be used night and morning, in water or milk. The mode of raising asparagus requiring considerable experience, it is recommended, when a bed is made, to employ a good gardener. Any directions which might be given for the preparation of an asparagus bed, to persons who have not had experience, would rather do harm than good. The strong fetid smell arising from the excretion after eating asparagus, and which is exceedingly unpleasant to some persons at night, in a close room, may be removed by adding a few drops of turpentine, which will immediately change it to the smell of violets. Asparagus is used in various ways, but is generally, in the first instance, plain boiled.

Asparagus en petit Pois. Cut the heads of asparagus in small pieces, about the size of peas; cook, and serve in the same way.

Asparagus Ragout. Scald the asparagus, cut off the heads, and put them into a saucepan, with a gravy made of veal and ham; simmer for some time, then add a little butter covered with flour, and a small quantity of vinegar, to give a flavour; when nicely thickened, serve up.

Asparagus with Gravy. Cut off the hard part, and dip what is to be used in melted lard; add chopped parsley and cerfoil, or any other herb, salt, pepper, and a little nutmeg; simmer in some stock for some time, then take out the asparagus, and drain it and serve it up quickly in the gravy from roasted mutton, made quite hot.

To Boil Asparagus. After washing and cleaning the asparagus, cutting off the harder portion of the white end, put into boiling water with a little salt, and boil for about a quarter of an hour, if it is intended that the asparagus should be soft. On the Continent, where asparagus is always eaten rather firm, it is not boiled more than seven or eight minutes. It is then served upon toasted bread, and eaten with melted butter. Cold asparagus, not boiled quite tender, and eaten with vinegar, oil, salt, and pepper, is a favourite dish on the Continent; in this state it is called "asperges à l'huile."

To Preserve Asparagus. If they are to be kept only for two or three days, it will be sufficient to put them in a cloth, which is to be frequently wetted. If they are to be kept for a week or so, they should be buried in rather damp fine sand. To keep green for winter use, take away the white part, and boil them for a very short time with salt and butter; then take them out, and put them in cold water for an hour. After this, let them drain and put them into a vessel with salt, a few cloves, a lemon cut in slices, and an equal quantity of water and vinegar; cover this to a good thickness with butter that has been previously melted, and set by in a moderately cold place.

BACHELOR'S LUNCH. Put into a small saucepan (an iron one is preferable) a small bit of butter; when it has quite melted, put in a small piece of beef-steak, a mutton-chop with the bone taken out, or a couple of sheep's kidneys; when the meat has become brown on one side, turn it; then cut a slice of bread about the size of the saucepan, butter it, place it on the meat, and cover close. Let it cook on hot ashes or a very slow fire for about twenty minutes, then turn it out on a plate, so that the bread will be underneath. A few minutes before taking it off, the addition of a small quantity of mushroom catsup, or some piquant sauce, will be an improvement.

BACON. See Pork.

BALM. Balm tea enjoys a high reputation as a wholesome beverage, and it does not seem to have any but beneficial properties, although these are, perhaps, much exaggerated. It grows freely, and the bed lasts good for three years; but in order to have green leaves all the summer, the stalks should be frequently cut down. It is easily propagated by slips in spring or autumn.

BARBERRIES. An acid fruit, little used except as a pickle. They are sometimes however, preserved in sugar, by

boiling, as for other fruits, and are also dried. For the latter purpose, they are put in bunches into boiling syrup made with sugar, in the proportion of two pounds to three of barberries, and simmered for a few minutes; then set by to get cold, and boiled again on the following day for about half an hour. When cold they are taken out and powdered with sugar, and dried under glasses in the sun. For barberries pickled, see PICKLES.

BARLEY WATER. Boil pearl barley for a few minutes, then throw away the water and add other, in the proportion of a pint to an ounce of barley. Boil quickly, and then let it simmer for an hour, when it is to be strained, and sweetened, and flavoured according to taste. This drink is very mucilaginous, and is much used as drink for invalids.

BATHS. Where the means of the housekeeper will admit of the expense of fitting up warm and cold baths, it ought to be incurred; for health and cleanliness (and the one does not exist without the other) require such an outlay. It is not however indispensable, as regards warm baths, that there should be any expense of fitting up, this being merely an arrangement of convenience. The possession of a wooden, tin, or zinc bath, and a small copper or large kitchen boiler, to heat the water, will be sufficient, and much boiling water is not necessary; for it is a great error in England to use warm baths too hot. Except in very particular cases, the water of a bath should never be warmer than what is just sufficient to prevent a sensation of chilliness; and it should be kept at the same degree of temperature, by means of a cock for hot water, if the bath be regularly fitted up; or if otherwise, a large pail, filled with very hot water, standing by the side of the bath, from which the bather can take water from time to time with a jug. A small quantity of boiling water is therefore sufficient to heat a bath. The bather should remain in the bath from thirty to forty minutes, to give time for the thorough relaxation of the skin; and if the water be only moderately warm, strength will be imparted to the whole system; whereas even ten minutes are sometimes too much with a very hot bath, bringing on debility of stomach, agitation of the circulation, and general derangement of the digestion. In France, where only tepid baths are used, an hour is not considered too long a time for remaining in the water; and it is customary to read in that position, and not unfrequently slight refreshments are taken. The use of baths is not, in that country, as it is too much in England, merely medicinal. A sense of propriety prescribes at least the monthly use of a warm bath; and there are not only very few of the middle classes who abstain from this practice, but even the servants bathe in this way once a month. The small expense of a warm bath in Paris (only eightpence, or tenpence English) naturally contributes to keep up this wholesome custom; and for a little more, a bathing tub, with a sufficient supply of water, is supplied at one's house. In England, where there are very few establishments of this kind, it is advisable to have a bath in the house. Generally speaking, plain water baths are all that is necessary, but they may be medicated at will; thus, if there be cutaneous disease, and a sulphur bath be recommended, three or four ounces of sulphur in powder may be boiled in the water with which the bath is to be heated; and if herbs are to be used, they are to be boiled in the same way, and the water strained off. The French go to a ridiculous extreme with their medicated and cosmetic baths, when they do take baths of that kind. Some persons pour into a single bath six or seven bottles of eau de Cologne; and what is called a beauty bath is made by boiling eight pounds of wheaten bran, two pounds of pea flour, and two pounds of almond paste, in the water, which preparation it is pretended has the effect of rendering the skin white and beautiful. Baths of chicken-broth have also been ordered to very feeble and wealthy persons; and, it is asserted (an assertion the truth of which is not guaranteed here), with great benefit. Mustard baths, made in the same way as sulphur baths, are prescribed for rheumatism; and sometimes equal quantities of mustard and sulphur. These are very good, but in order that they may be effectual, the bather should remain in the water for a long period, in order that absorption may take place. On leaving the bath, sharp friction with coarse towels should be resorted to, and the use of the flesh brush, when in the bath, is advisable. The best cold bath, as an article of domestic use, is the shower bath; but nearly the same effect may be produced by standing in a large washing-tub, and squeezing a large sponge, dipped in cold water, with which some vinegar and camphorated spirits should be mixed, several times over the head, allowing the water to flow copiously

over the entire body. Every person whose means will afford it should also have a vapour bath in the house; but this is an expensive article, and rarely required except in case of illness. Foot baths should be taken in the same way as ordinary warm baths. For a cold in the head, what is called a head bath is useful. All that is necessary is to fill a washhand-basin with boiling water, and to add an ounce of flour of mustard, then to hold the head, covered with a cloth, to prevent the escape of the steam, over the basin as long as any steam continues to rise.

BAVAROISE. A French mixture, much used in coffee-houses and evening parties. The bavaroise a l'eau is made by sweetening an infusion of tea with syrup of capillaire, and adding a little orange-flower water. The bavaroise au lait is made in the same way, using as much milk as tea.

BEANS. These are a very useful vegetable, and are cooked in various ways, both green and dry.

French, or Kidney Bean. This bean, which is elsewhere described under the head "Haricot," may be grown either in the open field or in gardens, but the soil must be of a light, good character. The dwarf bean should be sown in April, in drills, covered with about two inches of soil; as they advance they are hoed and cleared of weeds, the stems being protected from time to time by drawing the earth round them. If the mornings and nights be frosty, the beds should be covered with mattings. The scarlet runner is usually set rather later. In favourable seasons the green beans are generally ready to pluck about the end of June. Those which are intended to be used as dry should be left on the stems until the pods change colour. There are not less than fifty sorts of the dwarf French beans, but that usually cultivated is the dwarf haricot, or white bean. The broad, or Windsor bean is sown about the same time as the scarlet runner.

To Boil French Beans. Having cut off the stalk and strung them, slice them into two or four, according to their size, put them into boiling water with a little salt, and let them boil for half an hour. Another mode is the following: Put a bit of butter, parsley, chopped shalots, salt and pepper, into a saucepan; when the butter is melted, take the beans which have been previously boiled in plain water, and having drained them, put them into the saucepan with the butter, &c., and let them cook for five minutes. A little lemon-juice may be added.

To Boil Windsor Beans. Having shelled and washed the beans, put them into boiling water and boil for twenty minutes. Serve with parsley and butter. Broad beans may be made into a pudding, by pounding them in a mortar after boiling them, and taking off the skins, then seasoning with salt and pepper, and a little butter, and tying them up in a cloth that has been floured and buttered. The pudding must be put into boiling water, and boiled for half an hour. When done, squeeze the water out by pressing the cloth, and take out the pudding, to which you can give any shape you please. Yolks of eggs beaten up, and the crumb of a roll soaked in cream, may be pounded with the beans to make a richer sort of pudding. This may be either boiled in a basin, or baked in an oven.

French Beans as Salad. When the beans have been boiled in salt and water and drained, season them with pepper, oil, and vinegar, and having covered them, let them stand for three or four hours. Then having drained them again, mix them with salad of any kind, seasoning in the usual way.

To Preserve French Beans the whole year. String them, and let them boil for about ten minutes in a large quantity of water, with a sufficient quantity of salt. Take them out, and place them in a good quantity of cold water. When they are cold, let them drain thoroughly, and then put them into bottles, filling up the cavity with some fresh brine. Clarify some butter, and pour into the bottle to the thickness of an inch when cold, then tie up with parchment.

To Pickle French Beans. See Pickles.

BEEF. The flesh of the ox is one of the best and most nourishing aliments; there is no meat that furnishes so much nutritious juice, and is consequently so well calculated to recruit the body when hungry and fatigued from violent exertion. Beef, although not so easy of digestion as mutton, is considered to be next in the scale of flesh meat as to digestibility. When the stomach is weak, mutton is preferable; but beef, if well cooked, and kept a sufficient length of time before dressing to become tender, rarely disagrees with those who take it in moderate quantity. The most tender and digestible part of the ox is the under

part of the sirloin. It is a generally received notion that under-cooked meat is easier of digestion than when well done. This, however, is a popular mistake. Under-dressed meat is certainly more nutricious, as it contains a larger quantity of the animal juices; but in that state it is not easier of digestion.

Alamode Beef. Take a piece of beef, weighing five or six pounds, and after it has been well beaten, lard it with bacon and put it into a stewpan with some rind of bacon, two onions, two carrots, some fine herbs, four cloves, and a little pepper and salt; add a glass of water, and let it stew over a very slow fire, closely covered, for five hours, or until quite tender. A glass of French white wine and a small quantity of brown roux may be added to the above sauce, which, before serving, must be strained.

Beef, (en Miroton.) This is a very favourite article on the Continent, and is a valuable dish when economy is considered, as the cold beef of the preceding day may be used. The mode of preparing it is as follows :—Cut the meat into thin slices, put into the dish (which should be of metal) in which it is to be served two ladlefuls of cullis, a little parsley, chiboles, or young onions, capers, an anchovy, a little shalot, all chopped fine; salt and pepper: place the slices of beef upon them, and cover them in the same way. Now cover the dish and put it over a slow charcoal fire for about half an hour, and then serve.

Beef Olives. Mix bread crumbs, suet finely minced, chopped parsley, a little nutmeg, pepper and salt, with the yolk of an egg, into the consistence of forcemeat; then, having cut the beef into long thin slices, cover each with the stuffing and roll up, tying round with thread. Fry them a short time, and then put them into a stewpan with some good stock, a little brown roux, a glass of French white wine, and a little cayenne. Let them stew gently for about an hour.

Italian Beef Steak. Take a rump steak, not too fat, and score it transversely with a sharp knife, but without dividing it. Then lay it in a stewpan, with a very small bit of butter, and strew over it a shalot and a green onion, chopped fine, with a little pepper and salt. No water must be added, as it must stew over a very slow fire in its own gravy. Three quarters of an hour is sufficient time for a steak of a pound. An iron stewpan should always be used, if possible. This dish is very much improved by serving with it rice boiled as for curry. See Curry.

Beef Steak. In London, the rump of beef is almost exclusively used for cutting into steaks, and is by far the best part of the ox for that purpose, though on the Continent other parts are used. The fillets, or under-cut of the sirloin, is in greatest estimation, though the entrecôte, or slice cut from between the ribs, is very good. The best way of cooking a rump steak is on a gridiron; before putting on, it is always desirable to beat it well with a rolling-pin. In turning it, a fork should never be used, as it allows the gravy to escape. When taken off, put a bit of butter on it, and serve as hot as possible. The plate being rubbed with a shalot gives a very pleasant flavour to it for those who are partial to that vegetable. Oyster sauce, made as for fish, is served with rump steak.

Beef Steak Pie. This should always be made of rump steaks, and should not be too fat. Mix some black pepper and salt together, and season each steak well with it, and lay them in a pie-dish. Cover with a crust, and bake in rather a slow oven. When to be eaten hot, the crust is best made with suet; but if to be left cold, butter should be used. Put a small teacupful of cold water into the dish before the crust is put on. Some persons add a few oysters, which give a very fine flavour. In the West of England, where they are famous for pies of all sorts, the beef is cut into thin slices, and rolled up as for beef olives, but not tied, with a bit of fat in the middle of each roll.

Beef Steak Pudding. Prepare and season the beef as for a pie, and put into a pudding basin previously lined with a moderately thick suet crust. Then close the crust over the top, and tie up in a cloth. It may be made without a basin, as an apple dumpling; but the use of a basin is in case of an accident, as it sometimes breaks in taking up. It will require slow boiling for many hours, keeping the vessel filled up with boiling water as it wastes. When done, open a round hole in the upper part, and put in a bit of butter and a little boiling water. A little bullock's kidney is a great improvement with the beef to those who like the flavour. In Kent, the beef is cut into small diamonds, and some pickled pork cut up and mixed with it.

Boiled Beef. This article, in Eng-

land, is seldom or ever used in any other state than salted; but on the Continent, corned or salted beef is scarcely known, the fresh beef, from which the sour has been made, being generally eaten. Three or four days, according to the weight, is enough for the ordinary operation of salting beef, which is done by rubbing it well with salt for some time, and then putting it by in a cool place. It may, however, be prepared in twenty-four hours by placing it on two sticks across a pan of cold water, and rubbing it well with salt on the top and sides. The rump and round are the parts mostly chosen for salting, but the brisket is preferred by many parties; the latter is, however, eaten cold; and when taken up, should be placed under a heavy weight to press.

The vegetables mostly used with boiled beef are carrots, turnips, and parsnips, boiled and mashed together with a little butter, pepper, and salt. Pease pudding is also a common accompaniment to this joint. The beef should be always put in cold water, and a little salt. When it begins to boil, let the black scum be carefully removed, and a little cold water thrown in to bring up the white scum, which must be as carefully taken off. It should not be allowed to boil fast, or it becomes hard; indeed, when it is convenient, the best plan is to put it in an oven, to finish cooking, after it has once been scummed.

Bullock's Heart. Make a stuffing as for veal, which introduce into the upper part. Roast it till well done. This dish should be either served on a water dish, or a dish with a spirit lamp. Serve with currant jelly, as for venison. The French cook a bullock's heart thus: cut the heart into slices, and soak it for several days, as for larded fillet of beef, then broil, and serve with pepper sauce.

Entrecôte of Beef. Lay the entrecôte on a dish, and season it with pepper and salt, and pour over it a wine glass of salad oil. Let it soak in this for six or eight hours. Then broil on a gridiron over a clear fire, and when done, serve with sauce piquante.

Fillet of Beef Steak. Cut the beef into slices, about the thickness of half an inch, season them with salt and pepper, then soak them in melted butter, and broil them over a clear fire. Serve with sauce piquante, truffle, or tomato sauce, or with gravy. Potatoes cut in long slices, and fried brown in butter, are generally served round these steaks.

Roast Fillet of Beef Larded. After rolling up the fillet, and larding it at each end, let it soak for two days in seasoning made of salad oil, parsley, chopped shalots, lemon juice, and pepper. Roast it before a clear fire, taking care it does not burn. Sauce espagnole, or any other that is preferred, may be served with it. Tomato sauce laid in the dish, and the meat served on it, is a favourite mode.

Fillet of Beef Steak with Fine Herbs. The beef is to be prepared as above, and soaked for a short time in salad oil, seasoned with pepper and salt; then broil them over a clear fire, and serve them. Before serving, put a small piece of butter on the plate, with which has been mixed some fine herbs and parsley, chopped very fine.

Hamburg Beef. Take out the bone from a rump of beef, not too fat, rub the lean well with a pound of saltpetre, then place it in a large salting-pan, with bay-leaves, thyme, cloves, coriander seed, and a little garlic, cover it well with salt, and close the pan with a cover in such a way that the air may not enter. In about eight or nine days, take out the beef, wash it several times, then wrap it in a cloth and boil it for several hours. This beef is eaten cold.

Hunting Beef. This is a most useful dish in a large family, and, prepared agreeably to the following directions in Mrs. Dalgairn's "Practice of Cookery," will be found excellent:—Rub well into a round of beef, weighing forty pounds, three ounces of saltpetre; let it stand five or six hours; pound three ounces of allspice, one of black pepper, and mix them with two pounds of salt, and seven ounces of brown sugar. Rub the beef all over with the salt and spices; let it remain fourteen days, and every other day turn and rub it with the pickle; then wash off the spices and put it into a deep pan. Cut small nearly six pounds of beef-suet, put some into the bottom of the pan, but the greater part upon the top of the beef. Cover it with a coarse paste, and bake it in a slow oven for eight hours. When cold, take off the crust and pour off the gravy. It will keep good for three months. Preserve the gravy, as a little of it improves the flavour of hashes, soups, or any made dishes.

Loss of Weight in Cooking Beef as compared with Mutton. Sir R. Phillips, in his "Million of Facts," states, that 4 lbs. of beef lose 1 lb. by boiling, 1 lb. 5 oz. by roasting, and 1 lb. 3 oz. by

baking; 4 lbs. of mutton lose 14 oz. by boiling, 1 lb. 6 oz. by roasting, and 1 lb. 4 oz. by baking.

Neat's Tongue. The tongue of the ox is seldom or ever used in England, except in a pickled state; but on the Continent it is dressed fresh in a variety of ways. To salt the tongue, the following plan is adopted:—Having rubbed it well with common salt, lay it longways in an earthenware pan, turning it every day for four days. At the expiration of that time, mix together one ounce of common salt, one of brown sugar, and a quarter of an ounce of saltpetre, with which rub it well, turning it daily for about ten days, when it will be fit for use. When boiled, put it on in cold water. When taken up, and before cold, remove the skin.

Neat's Tongue with Gherkins.—After having well washed the tongue, blanch it for a short time, and then let it cool. Then lard it with some strips of bacon which you have previously seasoned with salt, whole pepper, and some parsley and shalot chopped very fine, and put into a stewpan, with some slices of bacon, two or three carrots, two onions, a little thyme, a bay leaf, and a few cloves. Moisten the whole with some good stock, and let it stew very gently for three hours. The outer skin of the tongue must be removed, after blanching. Serve in some cullis, with a few gherkins chopped.

Neat's Tongue with Parsley.—Having blanched the tongue, as above directed, lard it with bacon, and boil it. Take off the outer skin, and cut it lengthwise, rather more than half through, but without dividing it. Lay it open on the dish, and serve with some stock, pepper, and parsley shred fine, and a little lemon juice mixed together, and poured over the tongue boiling hot.

Ox Palates. Wash well three ox palates, and having boiled them a short time, in order to remove the skin readily, and take out all the part that is black, cut them in bits, and put them into a stewpan, in which you have previously turned an onion a few times over the fire in a little butter. Add to this a little good stock, fine herbs, pepper and salt, and a shalot cut fine. Skim the same well.

Pickled Ox Palates. Prepare them as above directed; and having cut them into narrow pieces about three inches long, put them for an hour in a lukewarm mixture made of vinegar, salt, pepper, a shalot, and two bay leaves. When they have soaked in this mixture for the time mentioned, take them out, dry and fry them to a good colour, and serve with crisped parsley.

To Roast Beef. The ribs and the sirloin are the parts mostly used for this purpose, but the rump is also sometimes roasted, and is by some considered superior to the other joints, particularly of heifer beef. Care should be taken to balance the meat well on the spit, or otherwise one side will be burnt before the other is properly done. In roasting, as well as in boiling, beef, the time required for the proper cooking of the joint is regulated by the weight, allowing always a quarter of an hour to a pound. It should not at first be put too close to the fire, but put nearer as the cooking proceeds. It should be well basted with its own fat during the whole operation of roasting; but when first put down, until the fat begins to melt, use some butter. A short time before it is ready to take up from the fire, strew over it a little salt, and dredge with flour, basting until it froths well, and becomes of a fine colour. After the meat has been dished up, let the fat be carefully poured off from the dripping-pan, leaving only the gravy, to which add a little boiling water, some salt, and a teaspoonful of walnut catsup. This must be poured over the meat boiling hot. Garnish the dish with horseradish finely scraped.

Smoked Beef. Cut the beef into large pieces and cover it with salt. At the expiration of two or three days, press it, and hang it in a chimney where only wood is burnt, at a sufficient distance for the fat not to be melted by the heat. The wood should be green, as it gives a larger quantity of smoke. The beef must remain until it is dry, when it may be eaten in thin slices or grated.

Smoked Hamburg Beef. Rub the beef with saltpetre and brown sugar, let it lie for three days, strewing it over from time to time with a very little common salt, and then press it. It is now to be hung in the chimney, and smoked with green wood. Where a little juniper wood can be mixed with the other wood, it gives a fine aromatic flavour. This beef may be dried where only a coal fire is kept, by hanging it near the fire, in such a way that the coal smoke may not reach it; but it will not have the fine flavour of beef exposed to the wood smoke.

To Stew a Rump or Beef. The beef should be well tied up with some clean strong twine, in order to keep it in shape,

and then put into a large stewpan, with as much cold water as will nearly cover it. Put slices of bacon in it, and add five or six onions, two bay-leaves, three carrots, two turnips, a bunch of sweet herbs, whole peppers, a pint of port or French red wine, six cloves, and a little allspice. When it has stewed gently for seven hours, take out the beef, strain the liquor, boil it up again, and pour it over the beef. This is very good hot, but better cold to eat with its own jelly. Brisket of beef may be stewed in the same way, adding a little mushroom catsup and cayenne to the sauce.

BEER. This name is applied generally to any preparation from malt and hops; but according to the mode of preparation, it may bear the name of ale or porter; the word beer, however, being in some cases used to signify porter. Beer is the general beverage in countries where the vine does not thrive, and where apples are not sufficiently abundant to make cheap cider. Beer, however, is much used in the wine countries; and it is a singular fact, that the best beer in France is that which is made at Tours and its environs, where wine can be made at a much cheaper rate than beer. The beer in Germany and Belgium has a good reputation, but it is decidedly inferior to that which is made in many parts of England. In Paris repeated attempts have been made to imitate the beer of London; and not only has malt been prepared in precisely the same way as that which is used in London, but on two or three occasions London malt has been imported. The same system of brewing as that adopted in England has been followed; but notwithstanding all these precautions, the beer so manufactured has not had the slightest resemblance to that which it was intended to imitate. The general opinion being that this variation was attributable to the water, which in Paris is strongly impregnated with gypsum, filtered rain water was tried, and even distilled river water; but still the desired result was not produced. In England it is still a very prevailing notion, that the peculiar flavour of the London porter arises from the use of the Thames water; but this opinion would seem to be unfounded from the fact that different kinds of water are used by different brewers, alike celebrated for the excellence of their beer. It is quite certain, however, that although in the manufacture of porter by the London brewers they may, by the use of particular ingredients, and the large quantity of hops, succeed in imitating each other pretty closely; it is impossible, in the manufacture of ale, to give precisely the same flavour, where a different kind of water is used. It is not in beer alone that these variations as to water are supposed to be produced; in dying, there is great difference of colour, in localities almost approaching each other; and these, too, have been attributed to the water; but it would appear that the air, as to fine colours, performs an important part of the operation. Some years ago a dyer, in the neighbourhood of Bolbec, in Normandy, had attained a high degree of reputation for his scarlet dye. The business of this person increasing, he purchased other premises, at a distance of about six miles, where he also carried on business, but found to his astonishment that his dye had no longer the same brilliancy of colour. The water of his new establishment, having been analyzed, was found to differ in a slight degree from that which he had been previously in the habit of using. By way of experiment, he brought several casks of water from his first establishment, but still found that there was a difference in the dye. This would seem to confirm the opinion that the difference of air produced a difference of colour. As regards brewing, it may be laid down as a general rule, that very good beer cannot be made with hard water, and that the artificial attempts to make water soft by chemical means do not answer the purpose. The properties of beer as an ordinary beverage, if it be not too strong, so as to disturb the brain or create over-excitement of the nerves of the stomach, are quite equal, if not superior to those of wine; and where the proportion of hop is sufficient to give a good bitter, beer is at once a tonic and a stimulant. The objections, however, which apply in common to all fermented liquors, have their weight as regards this beverage; but these objections apply more to the invalid, and even then rather in the abuse than in the moderate use of the article, than to the man in ordinary health. Beer, like wine, to be wholesome, must be well fermented, particularly if it be bottled; for in that case, unless it be previously well fermented, the quantity of fixed air which in a subdued state would produce wholesome excitement, will, in excess, produce great injury. New beer also is unwholesome, from the saccharine matter which it contains in a comparatively raw state. There

is a consideration connected with making beer which is very important. Many brewers are in the habit of previously infusing their hops, and then adding the infusion to the brewing. In this way the entire bitter of the hop is obtained, but its narcotic property is also fixed; whereas, if the hop be boiled, allowing the vapour to escape, the tonic quality is retained, and a great portion of what is narcotic escapes. Those who are very particular as to the hygienic character of beer would do well to boil the hop separately, and for a long time, and add it during the process of brewing. The component parts of beer are water, saccharine matter, gluten, dissolved starch, carbonic acid, alcohol, and a volatile oil, arising from the hop. Amongst these elements, those which check the fermentation are the alcohol, the carbonic acid, and the oil; to them is principally owing the preservation of the beer. The saccharine matter may also contribute to its preservation, but it promotes the fermentation. The gluten and dissolved starch have a tendency to turn the beer, and the water favours the decomposition. Beer may undergo various changes. By its contact with the air it loses its carbonic acid; heat deprives it of its alcohol by evaporation, and consequently reduces its strength; the beer becomes insipid and viscous, and has a tendency to corrupt and become sour; when beer, thus weakened and inodorous, is exposed to the action of air and heat, the acetous fermentation is hastened by the gluten and starch. To prevent beer losing its alcohol and carbonic acid, it should be put into well closed casks, and surrounded, if possible, with sand; but as the best casks are liable to evaporation, they should have a coat of varnish on the outside; and if the quantity of pitch contained in the varnish be large, it will serve as a non-conductor against electricity. Where it is intended to keep beer a long time, it should be very carefully racked off; for nothing advances the decomposition so soon, after a certain time has elapsed, as the lees. The clarification of beer is very important for its preservation. This is done in various ways; either with hartshorn shaving, isinglass, or white of egg; but isinglass is decidedly the best, (see Brewing.) Many things are used, either when beer is first put in casks, to prevent its turning sour, or when it has already begun to turn. Alkaline salts, chalk, marble, or pounded shells, are used in the latter case; but this can never be done without injury to the quality of the beer, as in proportion to the neutralization of the acid the beer is rendered vapid. One of the best means, perhaps, of preventing the turning of beer which is intended for a voyage, or which is liable from other circumstances to agitation and change of temperature, is to put entire eggs into the cask, in the proportion of one egg to four gallons of beer. The shell dissolves first, then the pellicle and the white, leaving the yolk intact. The albumen of the egg is said to act as an alkali, but without creating any effervescence, which has a tendency to make beer vapid. For weak beer, oatmeal, burnt sugar, or a portion of very strong beer, may be added in the summer; and in brewing beer of all kinds, it is found that a few handfuls of fresh oak leaves put into a large cask tends materially to preserve the quality. Strong beer, however, carefully made according to the instructions under the head Brewing, and sheltered from the action of the air, electricity, heat, damp, and excessive cold, will seldom require any of the additions above alluded to.

Mr. Storewell, an American, is said to have taken out a patent for a new mode of preventing beer from turning acid in hot weather. At the beginning of the fermentation in brewing, he suspends in the cask a linen bag, containing raisins in the proportion of a pound to one hundred and seventy-four gallons of beer. He leaves this for twenty-four hours, and then having withdrawn it, allows the beer to ferment in the regular course. It may be permitted, however, to doubt the success of this process. The choice and arrangement of the cellar (see Cellar) are also highly important points to be attended to. For Ginger-beer, Spruce-beer, &c., see the different heads.

The beer which is made in France is generally much weaker than that which is made in England, and bears otherwise little resemblance to it. Some of the French beer, however, has a very agreeable flavour.

Lille Beer. To six gallons of water add 7 lbs. of malt not bruised, 6 grains of socotrine aloes, and 1 oz. of juniper berries; boil very gently for an hour and a half, then add the hops and boil for another hour. Having strained the beer, add half a pound of treacle, and proceed as with Paris beer.

Lyons Beer. To the same quantity of water add 9 lbs. of whole malt, 6 grs. of aloes, and half a calf's foot; boil as

above, for an hour and a half, then add 7 oz. of hops, and boil for another hour; when strained, add half a pound of treacle and half a pound of moist sugar; finish as above.

PARIS BEER is made as follows:—put 6 galls. of water and 6 lbs. of bruised pale malt into a copper. Boil very gently for two hours and a half, then add 6 oz. of hops, an ounce of coriander seed, and half a calf's foot. Boil with this addition for another hour; taking care, during the whole of the boiling, to stir up the malt every ten minutes with a stick. After boiling, strain through a hair sieve into a cooler, and add half a pound of treacle. Let this cool for an hour, then put it into a cask, and add about four ounces of good beer yeast, mixed with a little of the wort. Ferment for twenty-four hours, then put the cask in the cellar, and fine with the whites of three eggs, beaten up with half a handful of salt; when the beer is clear, bottle it. In a few days it will be fit for drinking, and will sparkle and cream like Champagne wine; but it will not keep long.

BEES. The management of bees is a subject to which some of our first naturalists have turned their attention, for it is one which is important in domestic economy, and interesting to the amateur. The best and most practical instructions are contained in the "Livre de tout le Monde," a French work, in four volumes, on domestic economy, and in the miscellaneous part of the work called the Practice of Cookery, by Mrs. Dalgairn. The following extract is from the French work:—

"The position to be given to the hives depends upon the climate in which the bees are reared. In very hot countries, they should be placed in the shade, and facing the north. With us, the best aspect is the south; and, considering the variableness of our temperature in spring, it is advisable to place the hives in such a way that the bees may leave very early in the morning, when the weather is fine, so as to be able to make an abundant collection as a provision for those days when the harvest would be small. In whatever position the hives be placed, it is important that they should be protected from the influence of strong winds, and at a distance of one or two feet from the ground, to secure them from damp. They should not be much higher, for in that case they would probably stray to a great distance and be lost. The hives should be on an isolated table, or platform, and so placed as to give sufficient room between each. They should be under a roof to protect them from rain, wind, or the too great heat of the sun, and as distant as possible from noise. When the inhabitants of a hive are numerous, and well provided with food, they will be able to support the cold; but if the swarm be weak, they should be mingled with another hive. In order to effect this, in an evening, when the bees are grouped on the top of the inside of the hive, it should be struck sharply over a cloth spread upon the ground; and when the bees have fallen upon it, the hive, containing another swarm, to which they are to be transferred, is to be put over them, and left there for the night. The new inmates will settle themselves during the night. In sharp frosts, the hives are to be sheltered, and frequently watched, to see that the bees do not want food. If this be short, they must be fed by a mixture of a pound of molasses, or honey, and a pint of sweet cider; these are to be boiled and skimmed, and when formed into a thick syrup, the mixture is to be put into a pint bottle, the mouth of which is to be covered with coarse cloth, so that the syrup may drip out gently; this bottle is to be suspended, neck downwards, in the hive, from a hole in the roof. In the spring, the hives are to be cleaned, the entrance made thoroughly clear, and all the wants of the bees carefully provided for. Nothing beyond what is essential for the use of the bees should be left in their hives, which should be kept perfectly clean when the young bees begin to make their appearance, the head of the hive containing the store is to be removed and placed on another hive which is to be put over that in which the bees are, the junction being covered with a cloth to prevent their escape. The lower hive is now to be struck sharply to make the bees rise into the upper hive, or they may be driven out by a slight fumigation. When they have all entered the upper hive, it is to be placed on the spot formerly occupied by that from which they have been removed. By the end of June, the crown of the hive may be removed, and replaced by another. In this way their habitation is, as it were, renewed, cleanliness is secured, and full space is afforded to them for their labours, and for propagation. The best form of hive is that of an egg cut in two, and straw hives are generally preferred; but whatever may be the shape, or the material of which the hive is composed, it should be about fourteen inches wide, and eighteen

inches in height, and covered with a crown in proportion. This crown should be attached to the body of the hive from the outside, and when removed, the honey-comb must be carefully separated before the empty crown be put on. In the crown should be the hole previously spoken of, for the introduction of the bottle by which the bees are to be fed. The stopper should be so contrived that the hole may be opened all at once, or partially so, to give air to the hives in the temperate days of the winter season. In the general arrangement of the apiary there is much less danger of being stung than is generally imagined, provided gentleness be observed. If the bees settle upon the person, do not drive them off angrily, or betray any fear; it will be sufficient to blow upon them with the breath. They may even by gentle usage, and by giving to them, from time to time, the food of which they are most fond, become at length so familiar as to settle even upon the hands or face, without using the sting."

The following excellent recommendations for the management of the apiary are given in the English work to which we have referred:—

"The apiary should be situated so that the hives may have as much sun, and shelter from the wind, as possible. A few low trees or shrubs may be planted in the vicinity, to arrest the flight of the swarms, but all rubbish and noxious weeds must be carefully removed. The hives should be placed on pedestals, about two feet from the ground, and never less than five or six yards from each other. Of whatever form they be made, the material best suited for their construction is straw. When a hive is to be purchased, let it be chosen in the middle of the day; that which has the greatest number of bees going in with yellow pellets attached to their legs may be selected for further examination. The interior should be crowded with bees, the comb of a yellow hue, and the side ones filled; if there be many queen cells, which are like small inverted acorns attached to the sides of the combs, or if the wings of the bees should be ragged or torn, the hive is certainly old, and ought to be rejected. If a hive is to be purchased in spring, its weight should not be less than fifteen pounds; if in autumn, not less than thirty; and if it is a stock hive, the weight should not be less than forty pounds. A good hive having been selected, it may be removed in the evening, and placed on its single pedestal; but it should not be plastered to the stool. The stand on which the hive is placed should be cleaned four times in the year, and sprinkled with salt. Dampness is very injurious to bees: in winter, therefore, the snow must be carefully brushed off the hives, and while it continues upon the ground, the bees must be confined. Should they at this season become unhealthy, a renovation of air may be beneficial; and were the hives to remain an hour turned up, it would be rather an advantage than otherwise. Where there is not a little running stream in the neighbourhood of the apiary, troughs with water should be placed near the hives. They may be made of stone or wood, the wood well pitched, of eight or ten inches in depth, and sunk in the earth. A few inches of mould may be put in the bottom, and some watercresses planted therein, to preserve the purity of the water, with which they should be constantly supplied; or put one or two pieces of wood in a basin of water, and place it near the hive.

"Spring and autumn are the seasons for feeding the weak hives, beginning in February, if the weather be fine. The food most approved of for them is a syrup composed of sugar or treacle, ale, and salt, in the proportion of two pints of ale to a pound of sugar, and about half an once of salt, the whole to be boiled a quarter of an hour, and carefully skimmed; when cold, it should be bottled, corked, and, to prevent its candying, kept for use in a warm place. In the beginning of the season, a little port wine incorporated with the food may prevent dysentery. When the bees to be fed are in a plain cottage hive, an eek must be provided, of the same diameter as the hive. When the sun is set, and the bees all returned from the fields, let the hives be gently raised, and the eek placed on the stool; fill an empty comb with the food, place it in the cell, and replace the hive upon it; the bees will be less disturbed, if a slip of the eek be made to open, large enough to admit the piece of comb. It should be removed on the following morning, if the cold has not prevented their taking their usual supply in the night. Should that be the case, shut them up for a day or two, to prevent the mischief which would occur from strange bees entering the hive while it is feeding, or remove the weak hive to a considerable distance. A well-

peopled hive will require about two pounds of syrup in the month. A new swarm ought always to be put into a new hive, which should be provided in April. Sticks in the inside are unnecessary, but the projecting straws must be singed off. Should any hive in May seem wholly destitute of drones,—in Scotland they do not appear till the end of May or beginning of June,—watch at the entrance of that hive which appears to have the greatest number of them, and catch forty or fifty; confine them in a box till the evening, when they may be easily introduced, and will be most thankfully received by the hive that appears to be without them. To supply a hive with a queen, cut out from some of the other hives that can be got at most easily a piece of comb that has eggs in it; turn up the queenless hive, and with the left hand, shed two of the combs a little asunder, then with the right hand put in the piece of comb between them, observing that the cells be put in the hive in the same order as in their native hive, that is, the cells that were uppermost to be so still; then let the hand be removed, and the hive replaced. In England, a swarm may be expected in May, but not till June in Scotland; preceding the swarming, may be observed, amongst other signs, small drops of perspiration at the entrance; and when the bees cluster on the outside of the hive, the bee-master must be constantly on the watch. In general, they will swarm with the first sunshine; but if they continue to lie out when the weather is favourable, a little water may be squirted on them. The swarm once on the wing, it should never be lost sight of. Ringing of bells, and other noises, are more likely to do harm than good. It is unnecessary to prepare the hive with anything sweet or odoriferous; but if the swarm does not remain in one hive, give them another. The easiest situation for hiving a swarm is that in which the hive can be held under the swarm, and the bees shaken into it. In all cases, a goose wing will be found of essential service to brush the bees off the post into the hive; but great care must be taken that none of the knots of bees which may contain the queen bee drop upon the ground. The hive, when the bees have been all shaken or brushed into it, should be placed on the board, and left near the place of the swarm's first settling, until the evening, when it should be carefully removed and placed on a pedestal, at some distance from the parent hive. A second swarm may generally be looked for on the eighth or tenth day after the first; sometimes sooner, but never later than the twelfth day after. The day before the departure of the second swarm, the call of the queen bees may be distinctly heard; the note of the one is loud and clear; that of the other, the young queen, is lower, but equally distinct, and totally different from the hum of the other bees. As they give no other signal of their second swarming, it is necessary to keep a vigilant watch over the hives, to ascertain from which the swarm departs. It is generally necessary to return the second swarm to the parent hive immediately. They are seldom or never worth preserving as a separate colony, except when two fly off together, in which case they become, by an union, of little inferior value to a first swarm. Supposing the two swarms to have alighted upon separate branches, proceed to shake one of them into the empty hive, and then immediately shake the other into the same, leaving it to the bees to kill the superfluous queen bee, that is, if the proprietor has not the skill or courage to do it.

To join two swarms from different hives, it will be necessary to drench both with a mixture of beer, sugar, and water, made lukewarm, or with the fumigating bellows give them a little smoke from lime leaves or tobacco. When a second swarm is to be returned to the parent hive, turn down a chair, and place the back parallel with the entrance of the hive, over which a sheet or tablecloth may be spread; then holding the hive containing the second swarm over it, give it a few sharp knocks on the top, and the bees will fall immediately on the cloth; proceed then, either with the finger or a stick, to guide a few of the bees to the entrance of the parent hive, and they will instantly crowd into it: those who are acquainted with the person of the queen should take this opportunity of catching her. In regard to a third swarm, it would be folly to keep it. When the weather proves unfavourable after the hiving of a swarm, some food should be administered to the bees at night. When they lie out in clusters, and no more swarms are desired, an eek should be placed on the hive. If the heat be very great, it would be advisable to shade the hives, in addition to the common covering of straw, with which they ought always to be provided, as the best protection from the cold in winter, and the heat in summer. A particular value should

always be put on those hives that kill their drones the earliest. It sometimes happens that their numbers deter the bees from attempting any violence against them; therefore, when the other stocks kill their drones, let the bee-master place himself quietly by the side of the hive, in the middle of a fine day, and crush every drone with his finger or a stick, as it passes out or in. Every hive will be the better for a little assistance in this massacre, which may be looked for in the end of July or beginning of August.

Instead of following the general plan of suffocating the bees in August, the hives should be removed to the vicinity of a heath, and there allowed to remain from four to six weeks. July is the best season for depriving the hives of a part of their store. When a hive is to be robbed of its honey, remove it from the stool to some distance; procure an empty hive, invert it on that from which you wish to dislodge the bees, either to take the honey, or to unite them with another hive. Stop up the entrance, and then strike gently the under hive, on the side opposite to that to which the combs are fixed; in a few minutes, when the anger of the bees may be appeased, a piece of wood should be introduced, to keep the two hives about an inch apart on one side; for the purpose of preventing the bees, after being driven up on the one side, descending, which they might do, by the other, to the hive from whence they were dislodged, the knocking on the under hive must be continued, till the bees, terrified by the noise, take refuge in the upper hive; then, with the fumigating bellows, or common tobacco-pipe, blow into the hive a little smoke from lime leaves or tobacco. The same operation having been performed on the other hive, that is, the hive destined to receive the new colony, the dislodged bees are emptied into it, and swept with a brush of feathers into the interstices between the combs; the board being then put upon the hive, it is instantly reverted, and placed upon the stand. When a hive is merely to be deprived of a part of its store, the hive with the bees in it may be placed upon the pedestal from which the full one was removed, and the hive from which the bees have been driven must then be taken into the house. A few bees will be found still straggling about the combs, but they will be too frightened to use their sting. When the requisite quantity of comb is cut out, breaking it as little as possible, the hive should be cleared of every noxious matter, and returned to its former position; but first invert the hive containing the bees, and place the deprived hive over it; leave them in this situation till the morning, when the bees will be found to have taken possession of their intended home. At any season of the year, a weak hive may be strengthened from a strong one, by the following method:—Take a strong hive from its pedestal, and place on it that which has few bees in it; then turning up the strong one, give it several raps on its sides, when many of the bees will fly to their old station; then place the strong hive where the weak one stood, or the other at a considerable distance.

The bee-master, in approaching a hive, should avoid breathing on the bees; and if his manner be soft, calm, and gentle, he will in general need no protection from being stung; but when swarms are to be united, or hives deprived of a part of their store, the operator should be provided with thick worsted gloves, and a gauze, or piece of thin cloth, such as milk is usually strained through, for the head; this last must be large enough to go over a man's hat, and round the neck, so as to tie before, with a string running through a tape or loop holes; that part which comes next the face must be cut out, and a piece of very open gauze, catgut, or net-work, sewed therein. So protected, the most timid may proceed fearlessly; but every one who undertakes the management of the bee is more or less subject to its sting. No time should be lost in extracting it. Rub the wound briskly with a piece of woollen cloth till it ceases to smart, and apply goulard water, laudanum, or vinegar and spirits, as may be soonest attained; or wash with spirit of ammonia, and wrap a piece of linen about the part, steeped in spirits of wine. If the pain continue six hours, put on a hot poultice of bread and milk, and change it every four hours. The plants from which bees extract the greatest quantity of honey are—

Mignonette, heath, furze, white clover, thyme, particularly lemon thyme, rosemary, balm, beans, and every species of pulse, all resinous trees, borage, wild mustard, and golden-rod; this last begins to blow when all other flowers have faded, and continues to blow till the middle of November; it will grow in the worst soil, and should be particularly cultivated in the vicinity of an apiary. Of the best hives which are used, the same work says,

"The Huish Hive is made of straw, in the form of a flower-pot inverted, but open at both ends, and having a band of straw projecting from the inside about two inches from the top; upon this band are placed seven bars of well-seasoned wood, about one and a half inch broad, and a quarter of an inch thick; they are slightly fastened down with small nails, then covered with thin gauze or net-work, and again with a circular board, in which small holes are made, to permit the steam to escape from the body of the hive. The whole to have a convex cover of straw, manufactured as the hive, and made to fit in, like the cover of a saucepan. At any time or season of the year, when some honeycomb is required, or at the end of the season, when the bees are to be deprived of their superfluous store, remove the top and other coverings, and take the side bars out, from which having cut the honeycomb, replace them as before: the operation is facilitated by having some vacant bars ready to supply the places of the full ones. When the bees, by lying out in clusters, indicate that they stand in need of room, instead of an addition at the bottom, as in the common hive, this hive need only be deprived of a part of the comb attached to one or more of the bars. In time of snow, or when robbery is threatened, the centre should be closed by a tin wicket, or by a piece of lead with holes made in it to admit air. Another hive is formed as the common cottage-hive, being made to separate towards the middle. On the lower division, which may be made the largest, a board is placed, in which one large or some smaller holes are made, to admit of the bees ascending. When the upper part, or top, is filled with honey, it may be removed, and replaced by another prepared for the purpose. Those who wish to see the bees at work may place a glass top under the straw one, or invert tumblers, or long glasses made for the purpose, over each hole, one or more of which may be removed as they are filled."

BEET. This plant is become of late years a very important article, not only in its natural state, but for its use in the manufacture of sugar. The first application to this purpose was in France, at a time when, in consequence of the war with England, the French were able to receive only small quantities of colonial sugar. The price of sugar having risen to as much as five shillings a pound in Paris, a large premium was offered by Napoleon to the first person who should produce a pound of good beet-root sugar. The early experiments were not very satisfactory; but improvements having succeeded each other rapidly, beet-root sugar almost equal to colonial was produced, and at least half the consumption of sugar in France at this moment is produced from beet-root, which sugar, although subject to rather a heavy duty, is sold at from fifteen sous to twenty sous a pound, according to quality. The process of making sugar from beet-root is so very simple, except the refining, consisting merely in the expression of the juice and evaporation to a syrup, that it is carried on in many parts of France by the peasantry, and with a very small capital. There are three sorts of beet-root, white, yellow, and red. The white contains the largest quantity of saccharine matter, and the red the smallest. The root, boiled or baked, is a very fine addition to salad, and is highly nourishing and agreeable, but it is of difficult digestion. The red beet requires a light, deep, and rich soil, and that has not been recently manured. The seed is sown in April, in drills an inch deep, and about a foot asunder. For winter use it is stored in the same way as carrots, being careful, when taking them up, not to break the roots, as the saccharine matter escapes; and in trimming them, the leaves must not be cut off too close to the root. The white beet in England is cultivated only for its leaves, which are dressed and used as spinach. The leaves of the red beet are good fodder for cattle; by careful plucking, three successive crops may be obtained.

BISCUITS. A composition of flour, or other ingredients.

Almond Biscuits. Take four ounces of blanched sweet, and half an ounce of blanched bitter almonds, the whites of nine eggs, and six yolks, an ounce of finely sifted and well-dried flour, and three quarters of a pound of sugar in powder. Pound the almonds, adding from time to time a little of the white of egg, to prevent their turning to oil; beat up the yolks separately with the sugar, and whip the whites into a froth; then mix the whole, and powder in the flour by degrees, stirring the whole time, so that it may be well mixed; fill paper moulds, powdering each biscuit with a mixture of equal quantities of flour and sugar, and bake in rather a hot oven.

Biscuit de Rheims. This is a kind of sponge biscuit, but more compact and crisp; it is by far the best biscuit for dessert, and is usually, when eaten, dipped

into champagne or red wine. If carefully made, it retains all its freshness for a long time. M. Burnet gives the following receipt :—" Put into an earthen dish half a pound of finely powdered and sifted loaf sugar, add the yolks of twelve eggs, beat them together with a wooden spoon, and whilst this is doing, let another person whip the whites into a froth in another vessel ; when the whites are become like thick snow, add the first mixture to them, and stir gently with the wooden spoon ; then add six ounces of fine flour sifted over, two ounces of powdered sugar, and the grated and sifted peel of a lemon ; mix all well, but gently together, so as to keep up the frothy appearance of the whites of the eggs ; fill the little tins in which these biscuits are to be baked, and which are usually about four inches long, two broad, and an inch high, about half full, first buttering them, to prevent the paste from sticking ; bake in a quick oven until of a fine yellow colour, and as they are taken from the oven, and whilst hot, turn them out of their cases by tapping the latter with the hand or with a stick ; before putting them into the oven, they are to be floured over with fine sugar. These biscuits may be baked in paper cases, but they are generally made in tins ; if baked in paper, the paper is to remain."

Chocolate Biscuits are made in the same way, by adding an ounce and a half of finely powdered chocolate, when beating up the sugar, with the yolks of eggs.

Cold Harbour Balls. Dissolve an ounce of butter in a quart of warm milk, and use as much fine flour as will make a stiff paste ; add, in making the paste, about half a tea-spoonful of salt, and two eggs beaten up with a tablespoonful of yeast ; cover with a cloth and keep it before the fire for half an hour, then roll into balls or in pieces of the size and length of the small finger, and bake in a quick oven.

Filbert Biscuits. Take eight ounces of blanched filberts, one ounce of blanched bitter almonds, six whites and three yolks of eggs, an ounce of flour, and eight ounces of loaf sugar ; the filberts and almonds are to be pounded, and a little white of egg added from time to time to prevent their turning to oil ; whip up the remainder of the white of egg into a froth, and mix with them the yolks previously beaten up, with half the sugar ; now add the flour through a sieve, and then the remainder of the sugar ; mix this with the filberts and almonds thoroughly ; fill little cases made of writing paper, about four inches long, and half of an inch high, open of course at the top, and bake. The flavour is improved by beating up with the mixture a little grated lemon-peel.

Leman's Biscuit. This biscuit, which enjoys a high reputation, is made as follows :—Sift and dry a pound of fine flour, rub into it a quarter of a pound of butter, two ounces of pounded and sifted white sugar, and a bit of volatile salt, about the size of a nut ; mix in it as much new milk warmed as will make it into a stiff paste ; work it well together, and let it remain for two or three hours ; then roll it out and make it into small square biscuits, and into round balls, a little flattened ; prick them with a fork, and bake them in a quick oven, taking care that they do not become brown.

Oliver's Biscuit. Melt a quarter of a pound of fresh butter in half a pint of warm milk, add a table-spoonful of fresh yeast, and stir in a pound and a half of fine flour ; knead it well, and wrap it up in warm flannel, to remain for fifteen minutes ; roll it out several times, and the last time about the thickness of a penny-piece, cut it into small biscuits ; prick them well with a fork, and bake in a slow oven until of a pale brown colour.

Orange-Flower Biscuits. Beat up eight eggs, and work them in with a pound of white pounded sugar, and a pound of very fine flour, adding enough orange-flower water to give a flavour ; then add as much spring water as may be necessary to make the whole into a fine paste, and bake in square paper moulds, first powdering over the tops with sugar ; at the end of a quarter of an hour, take the biscuits out of the oven and powder them again with sugar. They will keep good for several days.

Plain Biscuits. Make a stiff paste with the finest flour and cold water and a little salt, beat it out with a rolling-pin for a long time in detached portions, and then again in the mass ; then roll thin, and form the biscuits, pricking as usual with a fork ; bake in a quick oven. These biscuits are much improved by drying, which may be done by placing them for two or three hours after they are baked (it is not important that this should be done immediately) in an oven after the bread has been drawn. The paste is improved by adding a very small quantity of butter, not more than one ounce to a pound of flour. The biscuit called Prince of Wales's Biscuit is made of this paste,

by rolling it into small balls. Pipe biscuit also may be made with it, but in that case a small quantity of sugar must be added.

Plain Buttered Biscuits. These are made by dissolving half a pound of butter in half a pint of warm milk, and with four pounds of fine flour making up a stiff, but very smooth paste; roll out very thin, and stamp out the biscuits, pricking them with a fork, and baking in a quick oven on tins. Many biscuit-bakers add a little carbonate of ammonia to them, and other biscuits, to render them short and light. It is a great improvement, and very wholesome, but care must be taken not to add so much as to convey a flavour; half a drachm of the carbonate in fine powder may be added to four pounds of flour. By adding the usual proportion of sugar to the above paste, with half a dozen eggs, and some currants, and candied lemon peel, a very agreeable sweet-biscuit is made.

Potato Biscuit. These are made in the same way as Savoy biscuits, using potato flour instead of wheat flour. It may here be observed as a general rule, that for biscuits which are to be baked in little paper cases, the cases should not be much more than half filled, in order to give room for their rising. Before putting them into the oven, they should be placed upon a board covered with white paper.

Savoy Biscuits. Take twelve eggs, their weight in sugar, and of fine flour half the weight of the eggs; but if flour be used, it must be thoroughly dried and sifted first; beat up the yolks with the sugar in fine powder, adding a little finely grated lemon peel and orange-flower water; whip the whites separately into a froth and mix them with the other, then stir in the flour and beat up the whole well together; warm a little butter, and with a brush butter a mould well, and put in your mixture; bake in a moderately warm oven. The same paste, made rather lighter by the addition of more white of egg, will do for making small biscuits in paper moulds.

Sea Biscuit is made by kneading for a long time and with great force fifty pounds of wheaten flour with five pounds of yeast, mixed with the quantity of water (tepid) requisite for making the dough; when the whole mass has been well kneaded, it is to be kneaded again in smaller portions, and made into round cakes of any weight, but not too thick. Before putting the biscuits into the oven, which is to be less hot than for bread, each biscuit is to be pierced with holes to assist the evaporation. The oven should be of such a heat as for the biscuits to remain two hours in it; when baked, they are to be put over a drying stove to finish the drying. Biscuits made in this way, with care, will keep good for a great length of time, if well packed.

Sponge Biscuits. Beat together for half an hour four eggs and half a pound of fine pounded loaf sugar; mix in carefully six ounces of fine dry and sifted flour, the grated and sifted rind of a lemon, and a table-spoonful of rose water; flour the pans, fill them half full, sift pounded sugar over, and bake in a quick oven. These biscuits may be baked in paper cases.

Sweet Biscuit. Make up a pound of flour, half a pound of butter, and half a pound of finely pounded loaf sugar, into a stiff paste, with two eggs, not beaten, and cold water. Roll out the paste, and to form the biscuits, make the paste into round balls, and flatten them a little; bake on tins, first pricking the biscuits a little; a few caraway seeds may be mixed with the paste for such as like the flavour.

BISHOP. A favourite beverage, made with claret or port. It is prepared as follows:—Roast four good sized bitter oranges till they are of a pale brown colour, lay them in a tureen, and put over them half a pound of pounded loaf sugar, and three glasses of claret; place the cover on the tureen and let it stand till the next day. When required for use, put the tureen into a pan of boiling water, press the oranges with a spoon, and run the juice through a sieve; then boil the remainder of the bottle of claret, taking care that it do not burn: add it to the strained juice, and serve it warm in glasses. Port wine will answer the purpose as well as claret.

BITTERS. The habit of taking bitters for the provocation of appetite is, on the whole, a bad one, unless it be medicinally, in which case the practice must be tempered by prudence; for although bitters are of themselves wholesome, when a judicious use is made of them, they frequently produce fever in delicate constitutions, and check the insensible perspiration which is necessary to health. In England, many of those who take bitters do but make them an excuse for dram drinking, and imagine that the addition of an infusion of bitters, made also with

spirit, corrects the dangerous properties of the spirit with which this infusion is mixed. Bitter orange peel forms the basis of the bitters sold by the publicans, and is a fine stomachic; but the drinking of spirits with it, unless in very small quantity, and largely diluted with water, is injurious. Mrs. Dalgairn, in her "Practice of Cookery," a work to which Sir Walter Scott is said, how truly we know not, to have contributed, recommends the following, under the head of Bitters:—"Put into a quart of sherry one ounce of the best powdered aloes, the same of rhubarb and liquorice root, and a teaspoonful of powdered ginger; keep it in the sun, or by the fire, for eight or ten days, shaking it frequently; let it settle for twenty-four hours, and strain it through a flannel. Two or three teaspoonfuls relieve headaches, and weakness of the stomach." This, it will be seen, has no reference to the bitters sold by publicans, and used to excite appetite. Mrs. Dalgairn's preparation, indeed, is but a modification of the elixir de longue vie, and, like that, acts at once as tonic and a purgative. There can be no objection to this domestic medicine, as a medicine, beyond that which applies, more or less, to all preparations of the same kind, by the danger of habit. As a general principle, persons who have headaches and weak stomachs, (the former is the necessary consequence of the latter,) and who are not ill enough to call in a doctor, will act much more wisely to try change of air, moderate diet, and exercise, than to resort to the practice of drugging, which at length becomes so confirmed as to be indispensable. It may also be mentioned that aloes, although a valuable bitter purgative in many cases, is very uncertain in its effects, and, taken to excess, it is frequently a dangerous medicine. Of all bitters, the least objectionable is the colombo root, for, whilst it acts as a tonic, it does not stimulate like other bitters. Many important cures in dyspepsia have been effected by this bitter alone. It should be thus prepared:—Cut into small pieces, or bruise, two drachms of the root, and pour upon it a pint of boiling water. Take a wine glass full of this infusion every morning, half an hour at least before breakfast. This is very superior to the infusion of the camomile flower, which, although a native bitter, frequently stimulates and creates fever, like some of the foreign bitters.

BLACKBERRIES, the fruit of the common briar. Blackberries are seldom used either in their raw state or dressed. They do not, however, make a bad pudding, if mixed with mulberries. Blackberry jam is said to be superior to the jam of the black currant for sore throats, and is also diuretic, and has been recommended in cases of gravel. The finest blackberries in England are those which grow in the Isle of Wight.

BLACKING. Forty years ago, scarcely any other blacking for boots and shoes was known than a mixture of the white of egg and ivory black, which was laid on with a brush resembling that which is now used by cooks for covering fish with the glaire of egg. The first improvement was a kind of paste, which was sold in balls and squares; and at length came the liquid jet of Turner, Warren, and Day and Martin. The secret of the preparation was at first known only to a few, and it was not unusual for a servant who possessed it to make several pounds in the year by selling the recipe to the acquaintances of his master. This, however, like all other kinds of knowledge, soon became general, and blacking manufacturers sprang up in every direction. There are few persons now who do not know how to make blacking, and many prefer manufacturing their own to purchasing it ready made, as they imagine that most of the blacking which is sold is, from the quantity of vitriol used in the preparation, injurious to leather. It does not appear, however, that, generally speaking, the blacking sold to the public is so destructive, and where boots and shoes wear out rapidly, the fault is rather with the tanner than with the blacking manufacturer. The competition in the blacking trade is now so great that there is very little economy in making it at home, for as the manufacturers purchase their ingredients in large quantities, they are able to sell almost as cheaply as private persons can manufacture. Many manufacturers pretend to mix with their blacking a large quantity of oil, as a preservative of the leather, and also caoutchouc, or India rubber, to render it waterproof. This is all imposition; the quantity of oil which is seen floating on some blacking is useless as regards the leather, and caoutchouc cannot be introduced in such quantity as to make the blacking waterproof, whilst it may, if in large quantity, crack the leather. We would recommend our readers to purchase their blacking, and to give the preference to that which pro-

duces the most perfect gloss, with the least evident signs of injury to the boot or shoe. The following, however, is a very good preparation for those who prefer making their own blacking. Ivory black, four ounces; molasses, three ounces, mix these well together; then add, in the following order, two table-spoonfuls of milk, and two of strong vinegar, mixing well, and adding at the end one ounce of oil of vitriol. The French usually add a few drops of the essential oil of lavender, and the plan is not a bad one, for it imparts a pleasant perfume, and at the same time assists in giving a gloss. It is not amiss, now and then, to wash the boot or shoe thoroughly with hot water, and then to cover it with neat's foot oil, placing it in the sun, for the oil to penetrate the pores. It requires some time for the boot or shoe to take the gloss from blacking after this, but in the end this is attained, and the leather is rendered supple, wears longer, and, to a certain extent, resists moisture.

BLANCHING, in culinary matters, consists in putting any article for a few minutes in warm water. Almonds are blanched by putting them first into boiling, and then into cold water. The skins are then removed very easily.

BLANC-MANGER. This is a very agreeable and wholesome dish, and when made in the simplest way, may be taken safely by invalids.

Cold Blanc-manger. Boil a quart of good milk, or cream, with six ounces of sugar, stir up with this the same quantity of almonds as below, (see Hot Blanc-manger) prepared in the same way; then squeeze it through a fine cloth. Beat up, in half a pint of water, an ounce of dissolved isinglass, and let it simmer very gently for two hours, then pass it through some thin muslin, and add it to the almond milk when it is lukewarm, stirring well together, and pour it into a shape, and put it in a cool place. The above is the original French way of making blanc-manger, but in England a much smaller quantity of almonds is used. The following mode of making blanc-manger is given in Mrs. Dalgairn's "Practice of Cookery."

Blanch and pound in a little ratafia, or rose water, two ounces of sweet, and six bitter almonds; dissolve three quarters of an ounce of isinglass; add it, when milk-warm, to a quart of good cream, or half milk, half cream; mix in the almonds the peel of a small lemon, and a bit of cinnamon; sweeten it with pounded loaf-sugar, let it stand for two or three hours, put it into a saucepan, stir it constantly, and let it boil for six or eight minutes; strain it through a lawn sieve, and stir it till nearly cold, then pour it into a mould.

Or, blanch and pound one ounce of sweet almonds with a glass of sherry and a table-spoonful of pounded loaf-sugar; add it to three quarters of an ounce of isinglass dissolved in half a pint of water, and boil it till the flavour of the almonds be extracted, stirring it all the time. Strain it through a bit of thin muslin, and mix with it a quart of good cream, stir it till quite cold, and pour it into a shape.

Hot Blanc-manger. Put into a saucepan a pound of sweet and a dozen bitter almonds, blanched and well pounded. In another saucepan boil, with some sugar, a quart of good milk, (cream is preferable;) pour this by degrees, boiling, upon the almonds, and pass the whole through a very fine sieve, squeezing the almonds at the same time. A quarter of an hour before serving, put this mixture on the fire and keep stirring it until it adheres to the spoon.

For Blanc-manger Fritters, see Pastry.

BRANDY. Spirit distilled from wine. The best brandy is made at Aix, Montpellier, and Cognac, in France. French brandy is the purest spirit made, and used medicinally, is frequently found very beneficial. Diluted with about eight times its bulk of water, it is a wholesome beverage for persons with whom wine and beer disagree, and the aged and those who undergo great fatigue derive great advantage from it, if taken in small quantities at a time, and always diluted with at least three times as much water as spirit. In France it is customary to take a little brandy either mixed with coffee, without milk, or immediately afterwards; and experience seems to shew that the practice is a good one, as it corrects the over stimulus of the coffee. A tea-spoonful of brandy taken in each cup of tea corrects the too exciting properties of that beverage, and prevents acidity of the stomach. Pure, however, as this spirit is, compared with many others, it is not to be taken beyond moderation, and medicinally as a tonic. Invalids may, if there be no fever, safely take two or three spoonsful of brandy in arrowroot, gruel, or other farinaceous food; and this they should do in preference to sherry or other wines. All brandy when it is first distilled is white; but when put into casks, it extracts

the colouring matter of the wood, and becomes darker with age; the high colour of much of the French brandy imported into England is artificial, having been communicated by burnt sugar or drugs. The strength of brandy, which should vary from twenty-two to twenty-four degrees, may be correctly ascertained by the little floating bulb, marked with a scale of degrees, which is sold by all the mathematical instrument makers; but the usual mode of judging of the strength is to put a little brandy into a phial, and shaking it up, to watch the bubbles which form on the surface; if they disappear very rapidly, it is to be presumed that the spirit is of fair strength. A more certain way is to put a given quantity in any metallic vessel, and set fire to it, letting it burn itself out. If the brandy be weak, the quantity of water left behind will be proportionately great; if strong, there will be little. There is another advantage in this process; for if any resinous substances have been put into the brandy to give smell or flavour, they will be detected after the burning. In consequence of the high price of French brandy in England, attempts have been made to imitate it; and enormous quantities are sold which are mixed by the retailers with the genuine article. All these imitations are bad, as the basis of them is spirit from grain. The flavour, such as it is, is given by sweet spirits of nitre, and drugs of various kinds. The purchaser is but paying for a very inferior spirit under a fine name.

Brandy is used for making ratafias, preserving fruits, &c., for which purposes what is called white brandy is to be preferred, as it is less highly flavoured than that which is coloured expressly for the English market; and before purchasing it, the strength should be ascertained; for it ought not to be under twenty-three or twenty-four degrees. In France there is a prejudice against brandy which has more than nineteen or twenty degrees if used for drinking; but for preserves, liqueurs, &c., it is never employed at less than twenty-two. It is rare that brandy weaker than this is imported into England; but the dealers in it generally reduce it, in order to derive a greater rate of profit, or to be able to sell it at a lower rate. In purchasing, therefore, a condition should be imposed as to the strength. Many persons use brandy as a remedy for sprains and bruises; but in such cases spirits of wine are to be preferred, as the operation is much more rapid. The principle upon which spirits are used in this way externally is evaporation. In all external injuries there is more or less inflammation; when spirits are applied, the evaporation carries with it a portion of the internal heat; consequently, the more rapid the evaporation is, the more rapidly does inflammation subside, if the application be frequently renewed. There is no other medicinal virtue in the brandy as an external remedy than this evaporation, and therefore it is never to be preferred to spirits of wine. When mixed with cold water and vinegar in the proportions of one table-spoonful of good brandy to a tea-spoonful of vinegar, and half a pint of water, brandy is said to be an excellent remedy for weak eyes; the mixture being applied early in the morning, and several times during the day, with an eye-glass, or with cotton wool. For the pretended uses of brandy mixed with salt, see SALT.

The flavour of old brandy may be given to the newly made spirit by putting into each bottle five or six grains of potash, previously dissolved in a little water, and shaking the bottle well. The acid remaining after distillation is thus destroyed, and the spirit has all the properties of old brandy.

BRASS AND COPPER, TO CLEAN. Rub with sweet oil and pounded rottenstone, clean off with a soft linen cloth, and polish with a leather covered with goldsmith's rouge.

BREAD. As this is the most important article of human food, too much care cannot be exercised as to the materials of which it is composed. The flour should be of good quality, but not too fine for bread of ordinary consumption; for it has been ascertained by repeated experiments that for the purposes of digestion and nutrition, flour in which a portion of the bran has been allowed to remain is much more wholesome than that which has been brought to a fine state. The gluten of bread requires to be mixed with some of the coarser material. Without this it is believed that the stomach is oppressed in the digestive process, and some medical men are of opinion that the coarser particles of flour, acting mechanically upon the coats of the stomach, keep up a degree of wholesome irritation, which assists its functions. It is a mistake to suppose that a small quantity of fine bread, as possessing the same degree of nutritious matter, chemically considered, as a larger quantity of the coarse article, produces the same effect upon the animal system. Bulk

as well as nutrition are requisite for the support of life. In a series of experiments made upon dogs and other animals fed alternately upon very fine white compact bread, and a coarser and light sort, it was found that they became thin, and even died when the first was used for a long time exclusively, whereas they throve and became fat upon the latter. The labouring classes, who eat an inferior sort of bread, enjoy good health; but if they take for any length of time white bread, of the finest quality, they become disordered in their digestion, and recover their health when they resume their former aliment. This observation can only hold good, however, where bread forms the chief and, indeed, almost sole article of food. Persons who eat small quantities and have variety of diet may, without inconvenience, use the best white bread; and although it has been the fashion lately to recommend to dyspeptic patients abstinence from the finer sorts of bread, and the use of bread in which a considerable portion of rye flour is used, that being considered the most laxative, and a portion of the bran being left in to keep up a gentle irritation, it may be doubted whether the benefit which is supposed to result from the change may not be attributed, in many cases, to other causes. There is nothing in good wheaten flour that can disagree with the stomach, generally speaking, provided it be not ground too fine, and particularly if a little bran be introduced into the composition of the bread. As far as the flavour of the bread is concerned, it is important that the yeast should be good; that which is obtained from good home-brewed ale is the best. Much of the yeast sold by the public brewers is bitter, and communicates a disagreeable taste to the bread. It is customary in many parts of the Continent to leaven bread with a portion of dough which has been brought almost to the state of acetous fermentation; but this gives a sour taste to the bread, which is far from agreeable. When good fresh yeast from brewing can be had, it is to be preferred to all other; but when this is not at hand, an artificial yeast (see YEAST) may be used.

Sir Humphrey Davy states the component parts of wheat to be four to six parts of saccharine matter, nineteen to twenty-four of gluten, and seventy to seventy-seven of starch. From experiments made in Paris by several eminent chemists and medical men, it would appear that neither gluten nor starch separately has any nutritive property, and that it undergoes no change during digestion. It is by their combination, and particularly with the saccharine matter, that flour possesses its alimentary qualities. Although the gentlemen who have made these experiments candidly admit that they cannot account for the result upon any principle of science, their experiments upon various animals, frequently repeated, ought to leave very little if any doubt of the fact. Mankind, in order to increase the nutritive properties of flour, add water and yeast, and call in the aid of fire. This constitutes what is called panification. It will be an error to suppose that water and yeast do not augment the nutritive qualities of flour; twenty-two ounces of wheat, the quantity necessary to produce a pound of flour, being torrefied in the grain, are much less nutritive than a pound of flour if boiled into a gruel. In the same way as the quantity of oatmeal used for making oat gruel will be found much less nourishing taken in that state than cooked with water. The addition of yeast brings out the nutritive qualities in a still higher degree; thus a pound of flour made into gruel is far less nourishing than the same quantity of flour made into dough by adding yeast, and baked into bread. The learned authors of the French Dictionary of Agriculture state that flour brought to the state of bread acquires by its increase of weight, from the addition of water and fermentation by yeast, an increase of one-third in nutrition. It is therefore evident that water and yeast not only develop the nutritive qualities of flour, but even increase them by rendering the flour more easy of absorption in the digestive process, and, to use the medical term, assimilating it with the human body. It is not the quantity of flour in the state of bread taken into the stomach that nourishes the system, but the quantity that is absorbed and assimilated. It is the common opinion that the more compact bread is, the greater nourishment it affords by its lying longer in the stomach; but experience proves the direct contrary. The bread which by its lightness has the largest volume, presents the greatest surface to the digestive juices, and is more easily absorbed. Consequently, that process of bread-making which best develops the component parts of the flour, and causes it to take up the largest quantity of water, is the most nutritive, because it is the most digestive. Upon this mode of reasoning, which appears to be unanswerable, various attempts have been

recently made to obtain from a given quantity of flour a greater number of loaves of equal weight, than by the ordinary system of panification. In England, by a new mode of fermentation, the quantity of bread from a sack of flour has been increased twenty pounds. In Paris, still greater success has been obtained; for there the increase of weight from the same quantity of flour is forty to fifty pounds, by a new process, the secret of which has not been made public. Should the theory above stated be found correct, if generally applied to the making of this important article of food, the result will be, that the present population of England may have a larger quantity of bread, or the quantity now grown and imported will suffice for a very large increase of the population.

Brown Bread.—The best, with the exception of that made from pure wheaten flour ground coarsely, is made from a mixture of wheat, barley, and rye flour, in the proportion of two pounds of good wheaten flour to one of each of the other. Oatmeal may be substituted for the barley flour, or added to the barley and rye in the proportion of one-third. When making brown bread, use a larger quantity of yeast and less water, and knead for an hour. A very nutritious brown bread is made by the addition of the flour of the haricot bean, as follows:—two parts of wheaten flour, one of rye flour, and one of the bean flour, (see Haricots.) Generally speaking, brown bread requires longer baking than that from pure wheaten flour.

Economical Bread. This bread, which has been successfully used in Saxony as a substitute for the common bread, is composed of a mixture of the flour of barley, oats, and beans, the latter in the proportion of an eighth part. The manner of preparing it is very simple. Potato flour may also be added by preparing it in the same manner as for making starch. (See Starch.) When all these ingredients have been well mixed together with the necessary quantity of water, add a little salt, and some yeast, and let it stand for some hours to rise. This bread is very nutritious. M. Bourdon Daguisey has recently published a process of making economical bread, which has excited considerable interest in France, and has been adopted to some extent in the rural districts. He begins by making a leaven with forty pounds of boiled potatoes, previously peeled, and cut into pieces; these are then rubbed through a colander, and the moisture which they contained before boiling is replaced by a sufficient quantity of water, which had been saturated by six pounds of fine bran. The mixture is then exposed to a heat just sufficient to be able to bear the hand in it, and thirty-four pounds of rye flour are mixed with it. The fermentation is rendered active with yeast and about two ounces of ground salt; the quantity of water used must be in the proportion, of course, to the batch of bread; in this case, one hundred pounds of rye flour, forty pounds of boiled potatoes, and twenty-five pounds of potato fecula, or starch, are mixed with twelve pounds of water, previously saturated with bran. Seven hours after the leaven above alluded to has been made, the other sixty-six pounds of rye flour and the twenty-five pounds of fecula are worked in with the remainder of the water, or rather more water, if that quantity should not be sufficient to make the dough rather more moist than for wheaten bread. The dough is then to be made into loaves of about two pounds and a half each, and baked for about an hour. The economy of this bread may be judged of from the fact that in the experiments made before the Society of Agriculture, at Compeigne, in France, it was found that the price was rather less than one-half that of wheaten bread. This bread has been used rather extensively in some of the hospitals, and has led to very favourable reports of its wholesomeness and nutritive qualities.

French Cakes. To one pound of flour add two ounces of fresh butter, rub them together, then mix them with about four table-spoonfuls of warm milk, one of beer yeast, and an egg beaten up; mix them together well, and set the dough before the fire to rise. When it has risen, knead it, make it into two or three cakes, and put them on buttered tins; let them stand before the fire for an hour, and then bake in a quick oven for a quarter of an hour.

To Make Household Bread. Take ten pounds of flour and three quarts of water which is about lukewarm, if in summer, and rather warmer in winter. Put the water in a large pan, and add a table-spoonful of salt. Add a portion of the flour, stirring it up well until it is of the consistency of butter, adding rather more than half a pint of good yeast, then add more flour, mixing the whole well, and put the pan, covered with a cloth, and throwing flour over the dough, before the

fire for a few minutes. About a third of the flour is to be kept back in the first operation, and this is to be well kneaded in when the mixture which has been placed before the fire has risen properly. Put the dough again before the fire, and let it rise for a few minutes, then knead again, and bake in a quick oven, having previously put the dough into pans, and pricked the surface of the dough with a fork, and placed it again before the fire in the pans. The baking, in an ordinary oven, will require about an hour for a four-pound loaf, and fifty minutes for a loaf of three pounds. If a heated oven be used, it must be well heated before the dough is put into it. If potatoes be mixed with the bread in the proportion of an ounce to two ounces to a pound, the flavour will be improved. The potatoes must be first boiled in their skins, then skinned, and when dry, rubbed well up with milk or water boiled and allowed to stand for a few minutes before it is used. Then add the mixture to the dish in which the dough is mixed. Rice may also be used. Take a pound of rice to ten pounds of wheat flour, boil it in a quart of water until the rice has become a complete pulp. Strain off the water, and beat the rice well in a mortar until it is completely crushed, and is entirely dissolved, then add the water in which it was boiled, and a pint of milk, and boil the whole together for an hour. Strain off the liquid and add it to the dish in which the dough is made, suppressing as much water from the process as the quantity of liquid obtained from the boiling of the rice will supply. The dough must in all cases be thoroughly kneaded. Only soft water should be used for bread-making; filtered rain water is the best. If the water be hard, a drachm of carbonate of soda may be added to three quarts of water, but this is unnecessary when the water is of a soft nature. If rolls are to be made, take a portion of the dough and mix it up with a few table-spoonfuls of cream in which the whites of two or three eggs whipped have been put; knead them carefully, and add a little flour, if they be too moist. The dough for rolls should be taken off when it has risen the second time, as above stated, before the fire. After taking the dough from the fire the second time, it must be kneaded for half an hour on a board strewed with flour, if intended for loaves, but the rolls will not require more than five or six minutes kneading. They are then to be baked in a quick oven until they are nicely browned. A minute or two before they are done, they should be taken out of the oven, and a brush dipped in the white of egg be passed over the top; then they are to be put into the oven again for one or two minutes. When there is reason to suspect, either from the appearance or smell of the flour, that it is not good, and there is still a necessity for using it, let it be baked for an hour in a very slack oven, and add to it, when making into dough, about ten grains of fresh carbonate of ammonia, carefully powdered, for every pound of flour. This will frequently correct any bad properties of the flour, and render the bread palatable. Milk may be substituted for water in the manufacture of bread, but it does not improve the flavour if the flour be good.

Italian Bread. Make a stiff dough, with twelve table-spoonfuls of fine flour, six of white powdered sugar, three eggs, the raspings of a lemon, and two ounces of fresh butter, mix them in a pan with a wooden spoon, and if the dough is not sufficiently firm, add more flour and sugar. Then turn it out and work it well with the hand, cut it into the shape of round long biscuits, and glaze them with white of egg. They are then to be baked in a hot oven.

Manheim Bread. Take two eggs, six table-spoonfuls of flour, three of sugar, some salt, and a little essence of anniseed to give a flavour; when well worked together, cut into pieces as above, and bake in a quick oven.

Pain de Gruau, or French Rolls. To about seven pounds of the finest flour add the whites of four eggs well beaten, and sufficient warm milk to make it into dough; work it together in the same way as for pie-crust, and let it rise before the fire under a towel. As the outside becomes hard by being placed before the fire, it should be removed, and the remaining dough be well beaten, made into rolls, and set for a few minutes before the fire to rise, and then baked in a quick oven. The Germans make their fine rolls in nearly the same way, but they give them a peculiar colour by throwing a little water upon some lighted braize, which is placed in the oven, the vapour from which gives a colour. They also brush them over with a little glaire of egg.

Potato Bread. The following mode of making potato bread, which is given by M. Bournet, a French cook of high repute, is by far the best that is known. Take the quantity of potatoes required;

boil them in their skins. When done, peel them, and bruise them with a rolling pin to the consistence of a paste. To this add as much flour as there is potato pulp, and some yeast. Knead them well, putting as much water as may be necessary. When properly kneaded, form into loaves, and place in the oven, taking care that it be not quite so hot as for common bread, or it will become hard on the outside before the inside be properly baked. The door of the oven should not be closed so soon as on ordinary occasions. This bread must be allowed longer time to bake than any other.

BREWING. This is the operation of preparing ale or porter from malt and hops. All the vessels used in the process of brewing should be particularly clean, as without this precaution all others will be useless; the same care should be taken with those in which the beer is kept. The vessels should be thoroughly scalded, and then washed with cold water, and if this be not sufficient, the operation must be repeated. It is also advisable, as far as the casks are concerned, to dip some strips of canvass in melted brimstone with which coriander seeds have been mixed, and, taking out the head of the cask, light three or four of these strips, and then close the head. When the cask has been thoroughly fumigated, take off the head again, to clear the cask, and having done this, it will be found perfectly sweet; the head is then replaced, and the cask kept for use. A more simple mode, however, is to suspend by a wire from the bunghole a small iron dish containing a little brimstone and coriander, with a few strips of rag or canvass; these are lighted, and a tile or slate placed over the bunghole, and secured by a little clay. At the end of half an hour, the dish or ladle is drawn out, and the cask left in the air with the bunghole open for some hours. The ingredients being ready for brewing, the water must be made to boil in the copper, which should be furnished with a large cock, and while in a boiling state, draw it off into the mashing-tub, where it must stand until it cools to the proper temperature for putting in the malt, which may be stated at from 145° to 140° of Fahrenheit; but a very safe criterion is to wait until the steam is gone sufficiently off for the reflection of the face to be strong in the water: if the malt be put in while the water is too hot, the whole virtue of the malt is not extracted. When the proper temperature is attained, strew in as much malt as can be conveniently stirred up, and keep adding until there is the quantity which is intended for the first boiling, allowing about six gallons of water more for a quarter of malt than the quantity of beer you intend to produce this extra quantity of water is either carried off in steam or absorbed by the ingredients. When the quantity of malt is in the mashing-tub, place two or three sticks across the top of it, and cover it well over with sacks or any other article, to keep in all the steam. This must stand from an hour and a half to two hours, according to the weather. When it is ready to draw off, put the hops into the cooler, and let the tap of the mashing-tub be turned; when the first wort has run through, pour some more water, brought to rather a higher temperature than at first used, over the malt in the mashing-tub, and let it stand as before. Then put the quantity first drawn off into the copper with the hops on which it has been allowed to run, and boil all together for an hour and a half; next strain it through a sieve into the coolers, which should be shallow in order to let it cool quickly. Put back the hops into the copper to be boiled with the second wort, which is to be treated precisely in a similar manner. The quantity of malt to be used, as also the quantity of water for each boiling, necessarily depends on the strength to be given to the beer; if very strong ale be required, the first wort from a quarter of malt should not exceed twenty-five gallons, and about forty gallons of good table-beer may be made from the second boiling. The first boiling in this case, however, will give an ale of extraordinary strength; but a quarter of malt will produce about fifty gallons of very good ale, and about the same quantity of good table-beer. If table-beer only be wanted, a bushel of malt will produce about twenty gallons very good, or the same quantity of malt will make about eight gallons of good ale, and five or six of table beer; a smaller quantity than a bushel at a time should not be used. The quantity of hops must be proportioned to the length of time that it is intended to keep the beer, and the taste of the consumer; for ordinary family use, half a pound of hops to a bushel of malt gives an agreeable flavour. The colour of the beer depends chiefly upon the drying of the malt; if therefore pale ale be desired, care should be taken to order pale dried malt from the maltster. The best hops are the Farnham. Porter is brewed

from very highly dried malt, with an extra quantity of hops. The operation of the working is a very important one, as on that depends in a great measure the quality of the beer. When the wort has cooled down to from 62° to 65° of Fahrenheit, put it into a vessel sufficiently large to contain each boiling, and wait until it has cooled down to about 50° of Fahrenheit, or barely lukewarm, and if this temperature be not obtained during the day, wait until night; then add the yeast, which should be in the proportion of a quart of good yeast to about forty gallons of strong beer, and rather less than a quart to the same quantity of small wort; in adding the yeast to the wort, stir the whole together for two or three minutes, then cover over and let it stand for twelve hours, or until it has well fermented, which is generally in that time. Now, having previously prepared the casks, strain the beer and pour it into them, placing a small tub under to receive what works over. During the operation of working in the casks, which will last for two or three days, according to the temperature of the weather, skim off the upper and frothy part of what falls from the cask into the tub below, and put it into a pan to settle, the thick part supplying yeast for bakings or future brewings, and the beer to be used to fill up the vacuum made in the cask by the working. Care must be taken to keep the cask constantly filled up; if this is neglected, the working is checked, and the beer will not be fine. When the cask has been first filled, mix well in a basin with a small quantity of the beer a table-spoonful each of salt, flour, and brown sugar, and throw into the cask. This will assist the working, and generally speaking, render unnecessary the use of isinglass or any other article for fining; but should this not have the desired effect, those articles may be had recourse to; the grand secret, however, in making beer fine is to give it plenty of time before tapping it. When it is found that all fermentation has ceased, stop the cask down, by pasting two or three layers of thick brown paper over the bunghole, and on that plaster a little clay, so as completely to make it air-tight; this is better than driving in a bung at once. The bung should be put in subsequently. The best months for brewing are considered to be March and October, but good beer may be made in any of the cool months. In very hot weather it is almost impossible to make very strong beer, and in excessive cold the fermentation is languid The quantity of yeast necessary for fermenting the wort is necessarily much smaller in summer than in the winter months, and in warm weather the yeast should not be put in all at once, lest the fermentation should be too rapid. The wholesomeness of beer depends materially upon its having undergone thorough fermentation. In France, where most of the beer is bottled quickly, and intended to be effervescent, the fermentation is not allowed to go through its whole course, and it is said that the shavings of box-wood are boiled up with the wort in order to promote the effervescence when bottled. Beer made in this way is a very agreeable beverage, but it is highly flatulent, and is therefore very injurious to weak stomachs. In bottling beer, few precautions are necessary beyond clean bottles and good corks, and allowing the beer to stand in the bottle for a few hours before it is corked; if the latter precaution be neglected, the bottles frequently fly. Table-ale is frequently bottled, when intended for early use, by placing in each bottle four or five good raisins; the slight fermentation that takes place makes the beer rapidly effervescent. About two years ago a patent was taken out in France for making beer from a prepared extract of malt and hops, which being mixed with water and boiled, obviates all the ordinary labour of brewing. This extract may be prepared by boiling down hops and malt to a strong decoction, and then straining and evaporating it to the consistence of a very thick syrup over a slow fire, and if possible in such a way that the aqueous portions may escape without allowing much air to enter the vessel. There is no reason why beer made by boiling this extract in water, and fermenting it in the usual way, should not be good; but as the preparation of it for domestic use requires great care and attention, the trouble in the first instance will be equal to that of the process of ordinary brewing. If the extract can be purchased ready made, the experiment of making beer in this way may be tried. The process of fining beer is as follows:—For a hogshead of beer, dissolve two ounces of isinglass in about a quart of stale beer, whisk this up into a froth, and stir it down well into the cask, then bung down tight. The whites of eggs may be beaten into a froth and used in the same way, but isinglass is preferable. In five or six days the beer will be quite fine. A cheap kind of beer is sometimes

made by fermenting the liquor obtained by boiling mangel-wurzel or treacle, and fermenting in the same way as for malt and hops; but what is gained upon the purchase of these ingredients is lost in the quality of the article. As far as flavour and nutrition are concerned, it is much better to take even a small quantity of genuine beer than a larger quantity of these imitations. In some parts of Sweden the dried watercress is used as a substitute for hops, and is said to render the beer more wholesome.

BROCOLI. The kinds of brocoli most used are the green and dwarf sulphur-coloured. For the autumn crop the seed is sown in April, and planted out in June; for the spring crop sow in May or June. It is transplanted in warm beds, where it remains till July, when it is again transplanted, and treated in the same way as cauliflower. Care should be taken to prevent the grub attacking this plant. No further direction is necessary for cooking this vegetable than is given for cauliflower, which see. When the brocoli is cut, let the stalks stand, which will supply a good crop of sprouts for later use.

BRUSHES, TO CLEAN. Dissolve half an ounce of pearlash in a pint of boiling water; pass the brush through it until it is clean; then pour over it clean boiling water; dry slowly before the fire.

BUG. An insect very common in old houses, and which generally secretes itself in walls, the crevices of furniture, and in bedsteads. Its bite is venemous, and in some constitutions even dangerous. Various nostrums are advertised as having the property of driving this insect from its habitual haunts, but not one of them seem to be entitled to serious credit. When bugs are in the walls and floors, all the crevices should be stopped with glazier's putty; and before the walls are re-papered, the old paper should be stripped off, and at least one coat of oil paint be laid on. If they are in bedsteads, the bedstead should be taken to pieces, well washed and dried, and aqua-fortis laid with a brush in all the holes and crevices, or some size may be made and laid on with a brush; this, when dry, is an eternal prison for the bugs, and also for their eggs. Another very good plan is to put spirits of wine on every part of the bedstead that is suspected, doing this by portions at a time and setting fire to it: this will not injure even a polished bedstead, if the part be immediately rubbed up with a cloth covered with a little bees-wax. Where bugs are very numerous, and they are in situations which cannot easily be got at, there is but one effectual remedy—fumigation. To effect this, remove from the room all coloured objects which would be injured by the vapour of the brimstone, paste up the windows and the fire-place in such a way that no air can enter, then place in the centre of the room an iron pan containing three or four ounces of brimstone, broken into small pieces, and having in the centre two or three bits of twisted linen rag; light these, and leave the room; with some strips of paper paste over every crevice of the door on the outside, and having completed all these arrangements let the room remain closed for twenty-four hours. Then enter it, and having opened the windows and fire-place, let the air enter freely for two or three days before inhabiting the room, in order to get rid of the smell of the brimstone. This destroys not only the bugs, but also their eggs in every crevice of the room and its furniture. When bitten by a bug, wash the bite with strong salt and water, and immediately afterwards apply three or four times volatile alkali. This neutralizes the venom, and prevents inflammation. The same means may be adopted for the sting of bees, wasps, gnats, &c.

BURNS. Ordinary burns or scalds may be safely treated without the necessity of calling in surgical aid; but if the injury has penetrated deeply, it is better to adopt that course. If the skin be not entirely destroyed, or the injury to the flesh be only superficial, the frequent application of ether will, by its rapid evaporation in carrying off the increased heat of the part, not only remove the pain, but prepare the way for a speedy cure. The application of a kind of salve made according to the instructions given under the head RUST is also a powerful remedy. Cotton wool applied immediately, and kept on the wound until it has perfectly healed, has also been found of great value, even in burns and scalds of the most serious nature. The mode in which this remedy acts has not been very clearly explained; some attribute the cure in a great degree to the exclusion of the external air; others, to a peculiar property in the cotton. The results, however, have been of too decided a character for a doubt to be admitted as to the excellence of the practice. The application of cold water is a fine remedy in burns and scalds, if it be repeated very frequently and with

perseverance, until the excess of heat be carried off by evaporation; in most cases nothing further than this is necessary, except covering the part afterwards with oil of almonds and with gold-beater's skin, or adhesive plaister. The application of scraped potatoes is a very old domestic remedy, and is good on the principle of the abstraction of heat; but it should be repeated frequently to be effective. The use of cold water, however, is much more efficient, and is still more easy of application.

BUTTER. This is one of the most agreeable articles of food, and although its use has been forbidden by many physicians in dyspeptic cases, there is little evidence to prove that it is unwholesome for any, if taken with moderation, whilst it is with the healthy used almost without restriction. In cookery it is almost indispensable; but it is less wholesome when it has undergone a culinary process than in its natural state. The French use butter in their cookery to a much greater extent than the English. Even in the cuisine bourgeoise, where economy is studied, it forms a very large item of expenditure. Its use in France is so much more extensive than in England, because not only does the French cook consider it necessary that most of the dishes should be prepared with a large quantity of butter, but many things are served up floating in it, and the French seldom leave any of the sauce. The lower orders particularly seem to prefer this to the solid food, and when the latter is eaten, clear the plates of the sauce by dipping bread in it. It is a prevailing opinion in England that butter so impedes the digestion as to bring on bilious disorders; but it is not found that in France, where at least four times as much butter is used in the preparation of dishes as in England, bilious complaints are more prevalent; and the English who visit Paris, and indulge freely in all the rich dishes of the restaurants in the Palais Royal, do not complain of being bilious to the same extent as in England. It is, indeed, said that the injurious effect of butter is counteracted by the use of the ordinary acid wines as a dinner beverage; there may be some truth in the observation. Very little practice is necessary in choosing butter. The colour is no criterion, for the butter-makers give any shade of colour they please; but there is a sweetness of smell and taste about the good article which distinguishes it from an inferior quality, and in these no person can be mistaken. Butter is made from cream by agitation in a churn, by which the serous parts of the milk are separated from the unctuous parts, and the former being pressed and beaten together, a compact mass is obtained. The quality of butter depends essentially, of course, upon that of the milk from which the cream is obtained; but much depends also upon the degree of care and cleanliness observed in the manufacture. The quantity varies with the quality of the cream, but it is calculated that about ten pounds weight of good milk will produce two pounds and a half of butter. In order to obtain the largest possible quantity of cream, the milk should be kept in shallow dishes, in a temperature of about 50° to 55° of Fahrenheit. In summer, this degree of temperature may be obtained by a regulation of the means of admitting the external air; and in winter, where the extent of the dairy will admit of the expense, it may be kept at that heat by pipes containing steam or hot water. The milk should not be put into the pans immediately after its being taken from the cow, if in summer; but in winter it must be set without delay. In many dairies the cream is not churned until it has acquired a sour taste, and it is said, that in such case the butter is of a superior quality; care, however, must be taken that it be not too sour. Much of the butter that is brought to market is from cream of this description, as it requires much more labour in churning than cream that is quite fresh. The milk should be skimmed when it has set thoroughly; in summer from ten to twenty hours are sufficient; double that time is required in winter. The cream, when collected from the pans, is put together, and stirred frequently, until it is churned, which cannot be too soon. It may stand, however, more or less time, according to the weather, and is always fit for use when it has merely a slightly sour taste, without being actually sour. In Britanny, where very fine butter is made, the process of churning is much expedited, when the cream is tardy in separating, by adding from time to time a little fresh milk from the cow; this contributes materially to give the requisite consistency. The churn, in warm weather, after having been carefully scalded, should be plunged repeatedly in cold water; in winter it may be brought near the fire, but the degree of warmth should never be greater

than to bring up the temperature to what it would be in moderate weather without the aid of fire. When all the buttermilk has been carefully got out by beating and kneading, and the butter has been well washed, it should be put into clean cloths and placed in a cool situation. In England, it is customary to mix a small portion of salt with what is even called fresh butter; this gives it an agreeable flavour, and keeps it from turning so soon as it might otherwise do. In France, salt is only put to the butter which is intended for sale as salted butter, for the consumer adds salt to the fresh butter in using it. Every article used in the manufacture of butter should be scalded, and then dipped in cold water. Butter is also made on the Continent from the milk of asses, goats, and sheep; but it is, generally speaking, inferior to that of cow's milk, and is used only where the latter cannot be obtained. The natural colour of good butter is a slight yellow, and that which is eaten within two or three days after the manufacture is considered to be the most wholesome. The best periods for salting butter for market, or for keeping for domestic use, are the months of May and September. The process of salting is simple; it consists in kneading in the salt, making the butter more or less salt according to the length of time it is intended to be kept; a pound of salt to fourteen pounds of butter is the usual quantity; but this is not sufficient, if it be intended for exportation. When salted, it should be put into jars, with a layer of salt at top and bottom, then be closely covered. The butter, when put into the jars, should be well pressed down; but as, notwithstanding this precaution, it will, in the course of a short time, detach itself from the sides of the jar, and cause a vacant space, the air thus created would, without a further precaution, deteriorate the quality of the butter. To prevent this, strong brine should be poured over the top of the jars when the butter is put into them, and allowed to remain for several days before the layer of salt is laid on. The brine will fill up all the interstices; and if, after the time mentioned, the jars be uncovered and the salt laid on, and then covered again, the butter will remain good for a much longer period than it would do without this precaution.

The following method of salting butter, however, is recommended by the "Almanac de France," as being superior to any other:—To two parts of common kitchen salt add one of loaf-sugar, and one of saltpetre; pound them together, and then knead an ounce of this mixture with twelve ounces of butter, taking care that it enter every part of it. It is then to be put in dry earthen jars, which are to be covered over air-tight. Before the salt is used, it must be well dried in an oven, or before a fire. The saltpetre used in this quantity, so far from having any injurious effect, is said to improve the wholesomeness of the butter. A week after the butter has been put into the jars, pour over it a sufficient quantity of strong brine, made with hot water; afterwards set to cool, to fill up all the vacant space left by the settling of the butter.

When it is desired to keep fresh butter from becoming rancid for a few days, it should be carefully kneaded, and washed in cold water, which is to be changed several times. This being done, the butter is to be kept in water, in a cool place, and the water is to be changed every morning.

Buttermilk, the fluid which is pressed out of the curds in making cheese. It is the common beverage among the Irish poor; is very refreshing and wholesome, in small quantities for those who do not take much exercise in the open air, and in any quantity for hard-working persons. It may be sweetened and flavoured with liqueur. For this purpose, it should be hung up in a thick cloth and allowed to drip for two or three days, when it acquires a certain thickness; the sugar and flavouring ingredient are then mixed with it. Buttermilk may also be eaten in a solid form by pouring two quarts of boiling new milk upon four quarts of fresh buttermilk, and allowing them to remain without stirring until firm, when the top part is taken off, and the remainder put to drain in a sieve. It is afterwards put into a shape for an hour, some cream, sweetened or not, being served at the same time in a separate dish. A little isinglass may be boiled in the milk.

CABBAGES. The variety of this vegetable is very great. The mode of raising is from seed, and afterwards transplanting them. Where they are required to be had very early in the season, the plants are raised in hot-beds. The cabbages most used in summer are, the Curly Yorkshire, the Early Dwarf Yorkshire, the Early Dwarf, and the Early Sugar-loaf. The mould in which the plants are put should be rich, and abundantly manured; the time of sowing for the summer cabbages

is in July or August of the preceding year. In about two months after the sowing, which is done by just covering the seeds with mould, the plants are thinned out and transplanted at sufficient distance from each other to give them room to grow strong. About a month afterwards, the remaining plants are to be transplanted, giving plenty of room between each plant. The ground round the plants should be frequently hoed up, and the earth drawn round their stems. The roots and stems may be allowed to remain in the ground after cutting off the cabbages, in which case a good supply of sprouts will be obtained in the following spring. Cabbages for winter use should be sown in the beginning of March, transplanted in May, and a second time in June. They will be fit for use in the autumn, and in sheltered situations will be good until the following spring. The best sorts for winter are the White Strasbourg, of which the Germans make their sour krout, the Large Drum, the Sugar-loaf, the American Cabbage, the Scots, the Savoy, and the St. Denis. When the seed of cabbages is gathered, it should be carefully dried and put by in bags. The seed should never be kept more than one year before it is used. In order to prevent the action of slugs upon cabbage plants, they should be strewed early in the morning with wood ashes; lime is frequently used, passed through a sieve, as the wood ash should be, but wood ash is preferable. The plants, when young, should always be placed in a sheltered situation. The red cabbage, for pickling, is sown in August, and transplanted in April. Savoys are sown in April, and planted out in June; but if they be wanted for the autumn, the seed should be sown at the latter end of January. The Scotch kale is sown towards the end of June, or beginning of July, and transplanted in August. The rows should be a good width apart, and sufficient room must be left to allow the plants to grow firm. Most gardeners concur in opinion that it is advisable not to plant cabbages for two years together in the same ground, as they impoverish the soil; every second year, therefore, the ground which had been used for cabbages should be employed for some light crop. Brussels sprouts should be sown early in April, and transplanted in June. As this plant requires great moisture, it should be abundantly watered, particularly when transplanted. They must be well weeded through the summer, turning up the earth from time to time; and finally earthed up in October for use during the winter. The sea-kale should be sown in a sandy and light soil, mixed with rich mould, and strongly manured. Mrs. Dalgairn, in her "Practice of Cookery," says, the best manure is sea-weed. The seed is sown in March, about two inches deep, in trenches about thirty inches deep, in a triangular form, leaving a space of from two feet to two feet and a half between the plants. In October or November, the bed is covered with rotten manure, the plants having been carefully weeded during the summer; and the same plan is followed in the second year. In the end of the autumn of the third year they are fit for blanching, which is done by covering them with blanching pots, and filling the vacancies with good dung, —covering the pots to the depth of a few inches. They will be fit to cut very early in the following spring. A less difficult and expensive mode of blanching is by strewing over the plants a quantity of dry leaves, and covering them with dung; but when it is desired to eat this vegetable in perfection, the care of the beds should always be entrusted to an experienced gardener. The care and expense of bleaching scientifically are amply repaid by the superior flavour of the vegetable.

To Boil Cabbages. Trim off the outer leaves, cut them down in quarters, and set to soak for an hour in cold water; then put into boiling water with sufficient salt, and boil till tender. Take care to drain them well in a colander before serving, pressing with a plate to more effectually remove the water. The water in which cabbage has been boiled should never be thrown down the sink in the kitchen, as the smell is very disagreeable. It should be thrown away out of doors.

To Boil Sea-kale. Let it soak some time in cold water, then put into boiling water, and boil gently till tender. Serve on toast with melted butter, in the same way as asparagus.

Brussels Sprouts. These are boiled in the same way as cabbages. The French, however, generally serve them up with a little butter, salt, and pepper, and a few table-spoonfuls of velouté sauce.

Cabbages with Bacon, French way. Boil the cabbages for a quarter of an hour, with bacon cut in small slices. Then take out the cabbages and put them into cold

water for a few minutes, press them well, and put them again into a saucepan with some gravy, and the bacon which has been boiled with them, adding salt, pepper, parsley, and chiboles, and two or three cloves. Let all this simmer together till the gravy is very much reduced in quantity; then take out the cabbage, drain it, and serve it up with the bacon at top.

Cabbages with Cream. Mash the cabbages, slice and blanch them, boil them in water with a little salt, and when they are nearly tender, take them out and dip them in cold water; after which put them into a saucepan with some cold butter, adding as much cream as will cover them, and cook gently for a quarter of an hour; then serve up.

Stuffed Cabbages. Take two good-sized cabbages, soak them for twenty minutes in scalding water and salt, then dip them in cold water, take out a portion of the centre, and fill it with chopped veal and fat bacon seasoned with salt, pepper, and other spices, and made into a stuffing with eight yolks of eggs; then tie up the cabbages to keep in the stuffing. Put at the bottom of a saucepan some slices of bacon, carrots, onions, and sweet herbs; over which place the cabbages, moistening them from time to time with good stock. Let the whole stew over a slow fire for at least an hour and a half, after which drain the cabbages, press them a little, and serve them up, without the herbs with which they have been cooked, with espagnole, or any other such sauce. Remove the strings defore serving.

To Pickle Red Cabbage, see Pickles.

CAKE. A composition of flour and other ingredients baked in an oven. Cakes when plain are by no means unwholesome; but when rich they are indigestible, if eaten in considerable quantity. With this, as with all food, however, the sensations of the individual are the best criterion. Many grown persons eat cake almost to excess, without injury to the general health. As a general rule, cake should be given to young persons in small quantities; for, although there may be no immediate symptoms shewing its unwholesomeness, the probability of indulgence in luxuries of this kind ending in permanent injury to the system is great. The habit of stuffing young children with sweet cakes is a very improper one; for the best that can be said of them is, that they may not always injure a stomach which is naturally strong; but it is certain that none but a very strong stomach will bear this kind of food long without injury to the digestion. Cakes are, perhaps, less objectionable than the other descriptions of pastry; but parents who value the permanent health of their children will do well to keep them as much as possible from this, unless it be of the plainest kind.

Almond Cake. Blanch a pound of sweet, and four ounces of bitter almonds, pound them in a mortar with some rose water, until they become a paste, and add a pound of pounded loaf sugar, and a little brandy. Then whisk separately the yolks of thirty and the whites of twenty eggs, add the yolks to the almonds and sugar, stir in the whites, and mix all well together. Butter a tin pan, and pour the cake into it; strew the top with finely powdered sugar, and bake in a quick oven for about an hour.

Almond Cake. Put a quartern of flour upon a pie board, and make a hole in the middle to receive a piece of butter the size of an egg, a little salt, a quarter of a pound of fine sugar, and half a pound of sweet almonds pounded very fine. Knead the whole, and form it into a cake. When baked, cover it with sugar, and glaze with a salamander.

Small Almond Cakes. Pound half a pound of blanched almonds, and two or three bitter almonds, adding white of egg to prevent their turning to oil; then add a pound of sugar, a little orange flower water, and a few spoonfuls of cream. Make a flour paste in the usual way, of the thickness of a crown piece, which is to be cut into rounds or squares, and covered with the preparation of almonds. Bake in tins in a hot oven, and dredge with sugar.

Banbury Cakes. Having made some puff paste, strew some well cleaned currants over it, and roll it out to a moderate thickness. Cut it into round cakes, and bake upon floured tins. When taken out of the oven, strew finely powdered sugar over them, and set them by to cool.

Bordeaux Cakes. Make a paste with white of egg well beaten, and powdered lump sugar, to a consistency proper to cut into shapes. Flavour with oil of cinnamon, and bake in tins in a slow oven.

Breakfast Cakes. Mix a pound and a half of flour with three quarters of a pound of butter, previously melted, a little good milk or cream, and a tea-spoonful of salt; mix it well, and roll it into round balls; bake in a hot oven on floured tins.

Brioche. Take a quartern of fine flour, knead a third of it with some yeast

and a little lukewarm water. The paste, which should be very soft, must be left to rise for half an hour in winter, but not at all in summer. Then knead the remainder of the flour with a little salt, six eggs, half a pound of butter, and some lukewarm water; when this has been well kneaded, spread it out, and place what is risen upon it, kneading the whole well together; put it in a clean cloth, and leave it for about eight hours. At the expiration of this time, divide it into pieces of the proper size, form into cakes, touch them over with yolk of egg, and bake in a moderate oven.

Caraway Cakes. Mix a pound of pounded loaf sugar with two pounds of flour, half a pound of butter, and a small handful of caraway seeds; make them into a paste with five eggs well beaten, a little orange water, and a small glass of ratafia; roll it to the thickness of a crown, cut them into shapes, and bake on floured tins in a quick oven.

A Common Cake. Beat a pound and a half of butter to a cream, and mix it with three quarterns of dough; add a pound of good brown sugar, the same quantity of well cleaned currants, a little nutmeg, and, if liked, a few caraway seeds; beat all well together, and bake in a buttered tin for an hour.

Cream Cake. Put a sufficient quantity of flour on a pasteboard; make a hole in the middle, in which put half a pint of clotted or very thick cream, and a little salt. When it has been kneaded lightly, let it stand for about twenty minutes, and add half a pound of butter; roll it out in the manner of puff paste, and make it into small cakes. Touch them over with yolk of egg, and bake in an oven.

Croquants. Knead well together a quartern of flour, a quarter of a pound of butter, the whites of two eggs, a glass of orange flower water, and a tea-spoonful of salt, into a firm paste; beat it very thin, and put it upon patty pans. Bake them in a cool oven for twenty minutes, and when cold lift them and fill the patty pans with any preserve.

Rich Currant Cake. To four pounds of well dried flour, add the same weight of fresh butter, well washed in rose or orange flower water, five pounds of currants well cleaned and dried, two nutmegs grated, a pound of candied lemon and citron cut small, half a pound of blanched almonds, pounded in rose water, and the yolks and whites of thirty eggs, beaten separately; beat the butter with the hand until it becomes a cream, then add the sugar and the eggs gradually, then the rest of the ingredients, adding, last of all, a wine glass of brandy and a little ratafia; beat the whole well together for an hour, and put it into a buttered cake pan, lined with buttered paper; bake in a moderate oven for about four hours, and when done, cool gradually.

Darioles. Mix a quartern of flour with half a pound of butter, a little salt, and two glasses of water; knead the whole together into a firm paste, and roll it to the thickness of half a finger; cut it into bits about the size of a small patty pan, which form into moulds, with an edge about half an inch high; when they have been baked for about a quarter of an hour in a moderate oven, pour into each some cream which has been mixed with a little flour, some powdered sugar, and a very little salt; when done, strew sugar over them.

Dutch Cake. Make a thick paste of the yolks of a dozen eggs well beaten, half a pint of good cream, sugar to the palate; roll this paste out rather thin, and cut it into shapes, and fry in boiling lard.

Economical Cake. Take as much sugar as will weigh six eggs, and half the weight of flour; beat the eggs well, add the sugar gradually, and lastly the flour, with a little lemon peel grated, a little ratafia, and a few caraway seeds; bake in a tin mould in a quick oven.

Family Plum Cake. Take half a quartern of roll dough, procured from the bakers, spread it with the hands on a pie board, cover it with half a pound of butter dotted about, strew over it half a pound of moist sugar, half a pound of currants, well washed and dried, two ounces of caraway seeds, a few cloves, a little mace, and half a nutmeg, well pounded; roll the whole together, and put into a pan; then beat three eggs in a cup of lukewarm milk, and pour to the other ingredients, beating the whole together with the hand for three quarters of an hour; put it into a buttered pan, and bake in a moderate oven for an hour; when done, turn it out. It should not be cut for three or four hours after.

Feuillantines. Having made a puff paste, roll it out to the thickness of half a crown; put it in a tart pan with some cream over it; cover it with a light crust, and bake.

Frost or Icing for Cakes, &c. To a pound and a half of sugar finely pounded

and sifted, add the whites of eight eggs well beaten, and added to the sugar very gradually; mix with it the juice of a small lemon. When it has been beaten very light and white, place the cake before the fire, pour the icing over it, and smooth over the top and sides with the back of a spoon.

Gauffres. To two pounds of fresh butter, add the same weight of dry flour and twelve eggs, well beaten. First mix the eggs and butter in a basin, with a little salt, then shake the flour in gradually, and add two spoonfuls of good yeast; then mix with the above a quart of good cream, stir it well together with a wooden spoon, and set it by for an hour or two. The first time you use the gauffre iron, grease it with a bit of fat bacon. When served, strew them over the top with sugar.

Gauffre aux Pistaches. Follow the directions given for German gauffres, substituting pistachio nuts for part of the almonds.

German Cake. Mix well together a pound and a half of finely powdered loaf sugar, two pounds of well dried flour, and a few caraway seeds; make it into a stiff paste, with the whites of three eggs beaten in a little milk; roll it out very thin, cut into shapes, prick, and bake upon buttered tins.

German Gauffres. Blanch a pound of sweet almonds, and cut them into small thin chips, put them into a vessel with three quarters of a pound of powdered sugar, and a small quantity of candied orange flowers; mix these ingredients well up with whites of eggs, beaten with a little good cream, and bake them in shapes. Serve hot, with sugar strewed over them.

Girdle Cake. Rub six ounces of sugar into two pounds of flour; add a little salt, make it into a paste with some good milk or buttermilk; roll it out, cut into shapes, and bake upon a girdle.

Honey Cakes. To two pounds and a half of dried flour add a pound of honey, three quarters of a pound of pounded loaf sugar, half a pound of citron, and the same quantity of orange peel, cut into thin strips, and an ounce together of ginger and cinnamon, pounded; melt the sugar with the honey, and mix in the other ingredients; roll out the paste, cut into forms, and bake on floured tins.

Iced Cake. Take two pounds of flour well dried, a pound and a half of fresh butter, two pounds of pounded lump sugar, ten eggs well beaten, half a pint of good milk or cream, half a pound together of candied citron and lemon peel cut into thin strips, a nutmeg grated, a wine glass of ratafia, and the same quantity of orange flower water; beat the butter to a cream with a wooden spoon, and add the other ingredients, and when well mixed, two table-spoonfuls of good yeast. Let it rise before the fire for half an hour. Bake it in a buttered tin for three quarters of an hour. Immediately on taking it out of the oven, brush over the top with white of egg, and cover over thick with powdered sugar; glaze with a salamander.

Italian Gauffres. Beat well together eight eggs, a pound of loaf sugar finely pounded, six ounces of cream, as much milk, a little orange flowers, and the rind of lemon grated; mix the whole well together, taking care that the batter is not lumpy; bake in gauffre irons, as for ordinary gauffres.

Kentish Cakes. Rub four ounces of butter into three quarters of a pound of flour; add some caraway seeds, and half a pound of loaf sugar finely pounded; mix these into a stiff paste with a little water, roll out to the thickness of a crown piece, cut them out with a glass or into squares, prick them, and bake on floured tins.

Cake en Losange. Having made a puff paste, roll it out to the thickness of half a finger, cut it into lozenges the width of two fingers, and glaze them over with the yolk of an egg; bake for a quarter of an hour, and glaze with sugar and a salamander.

Lancashire Cake. Beat well the yolks of twelve and the whites of seven eggs for half an hour, add a pound of pounded loaf sugar, half a pound of flour, and the peel of a lemon grated; beat all well together, and bake in a floured tin.

Meringues. Whisk to a froth the whites of twelve eggs, and when well raised, add some powdered sugar and grated lemon-peel. Continue whisking lightly to mix those ingredients, but without melting the sugar; put the meringues in little portions about the size of half an egg upon a sheet of white paper, and place them under a cover that will contain hot ashes on the top; when they are done on the outside, and of a good colour, remove them from the paper, take out the part of the inside which is not done, and supply its place with sweetmeat; join the two sides of them well together again, and serve as dry as possible.

Navarre Cakes. Rub two pounds

of butter into three pounds of flour, add a pound and a half of Brazil sugar, and mix the whole well together with eight eggs well beaten; divide the paste into small portions rather larger than a walnut, and bake upon floured tins.

Orange Flower Cake. Form a mould of writing paper, folded and plaited round in the form of a dripping pan, the edge being made about the depth of two inches. For a large cake, put two pounds of loaf sugar into a stewpan with two large glasses of water, and boil to a strong syrup, as for marmalade; then put in half a pound of orange flower leaves, and boil them till the sugar begins to crystallize, turning quickly all the time with a wooden spoon. Have ready a little fine sugar beat up with white of egg; put this into the sugar, stir it well together, and pour the cake into the paper mould, holding the bottom of the stewpan over the cake while it is hot, to prevent its sinking.

Pistachio Cake. Pound about two dozen pistachio nuts, and as many sweet almonds blanched, adding from time to time a little white of egg, to prevent the almond from turning to oil; when they have been well bruised, take them from the mortar; then mix a small quantity of flour in a little cream, but not made too thick; to this add the nuts as above, with three large table-spoonfuls of sugar pounded; add four eggs well beaten, and a quarter of a pound of butter, previously melted; mix well together, and bake in a mould; turn out while hot on a plate, and cover with powdered sugar.

Cake de Plomb. To a quart of flour add an ounce of salt, two ounces of sugar, a pound and a half of butter, and twelve eggs; mix the whole well together. If it is too firm, add a little milk; let it stand half an hour, and then add half a pound more butter. Place the cake in a mould, and bake it in a slow oven.

Plum Cake. When a pound of fresh butter has been well washed in water, to which has been added a little rose water, beat it on a marble slab until all the water is out of it, then put it into a large bowl, and prepare the following ingredients:— Three quarters of a pound of lump sugar beaten fine, three quarters of a pound of currants well washed and dried, a quarter of a pound of almonds blanched and cut into small bits. two ounces of preserved citron or lemon peel, a nutmeg, and the rind of one lemon grated. Then take the yolks of six eggs, and the whites of three, to be separately beaten; this done, beat the butter with the hand until it becomes quite a cream, adding by degrees the eggs, and then the dry ingredients, which must have been previously well mixed, and lastly a glass of brandy. Beat the whole well together for an hour; then line a hoop sides and bottom with buttered paper, and bake in a moderate oven for an hour and a half. This cake should not be cut till the following day.

Portuguese Cake. Peel and bruise half a pound of sweet almonds, and mix with them the juice of three oranges, and the pulp well chopped; put this into a dish, and add two ounces of fecula or flour, the yolks of six eggs well beaten, and half a pound of powdered sugar; then add the whites of the eggs which have been beaten separately; mix the whole well together, and put it into a tin well buttered, and bake in a slow oven; cover it with powdered sugar, and glaze with a salamander.

Potato Cake. Mix a pound of potato fecula well dried with a pound of pounded loaf sugar; then beat separately the yolks of fifteen and the whites of twelve eggs; mix the whole together, and whisk all till quite light; heat a tin shape, butter it, pour in the cake, and bake in a moderate oven for nearly an hour.

Poupelin. Put a pint of water into a stewpan, with a little salt and a piece of butter the size of an egg; when it has boiled, take it off the fire, and put in a quartern of flour; replace it on the fire, and stir it till the paste thickens and begins to adhere to the vessel; then put it into another stewpan, and stir in as many eggs, one at a time, as will make the paste become soft, but without being liquid; butter the inside of a cake pan, put in the paste, and bake for two hours and a half; when done, cut through the middle, remove any of the paste which is not done, rub over the inside with butter, powder sugar over it, and glaze with a salamander.

Queen Cakes. Wash a pound of butter in a little orange flower water, beat it to a cream with a large wooden spoon, a pound of finely pounded loaf sugar, a pound of well dried flour, three quarters of a pound of currants, eight eggs well beaten, a little grated nutmeg, and two ounces of bitter almonds pounded; add the sugar to the butter, put in the eggs by degrees, and then the flour and the other ingredients, adding last of all half a wineglass full of brandy; beat the whole

well together for an hour, and bake it in small buttered tins in a brisk oven.

Raspberry Cake. Take half a pound of dry raspberries, and a pound and a quarter of sugar; when the sugar has been sufficiently boiled and scummed, throw in the raspberries, adding the white of an egg beaten with a little cream; mix the whole well together, and having given the whole a boil up, turn it out into moulds.

Rice Cake. Whisk separately for an hour the yolks of eight and the whites of six eggs; add to them half a pound of rice flour, three quarters of a pound of finely pounded loaf sugar, and the peel of a lemon grated; beat a pound of butter into cream, and mix the above ingredients well with it; bake in a buttered tin in a moderate oven.

Rice Cake. Wash some rice well, and having split it in boiling water, add some sugar, scraped lemon peel, and milk, and cook them together till very thick; mix the yolks of four eggs with the rice; turn the rice out into a large dish with a buttered paper at the bottom of it, cover it with the yolk of an egg, and put it into a quick oven.

Rich Cake. Beat separately the yolks and whites of eighteen eggs, to which add a pound and a half of pounded loaf sugar, a pound and a quarter of flour; beat all these well together for some time, and put it into a well buttered tin, and bake in a moderate oven.

Rock Currant Cakes. Clean and dry a pound of currants, and add the same quantity of flour, well dried, half a pound of beaten sugar, half a pound of butter, the yolks of eight, and the whites of six eggs, well beaten separately, and a little nutmeg and cinnamon; mix the whole well together, the butter having been first beaten to a cream; drop the paste in small quantities on buttered paper, and bake on tins in a quick oven.

Another way. Mix a quart of thick cream with about twelve table-spoonfuls of flour, the yolks of eight eggs, well beaten, six table-spoonfuls of finely pounded loaf sugar, a little rose water, and half a glass of brandy or ratafia; beat all well together; heat the wafer irons, put into them a table-spoonful of the batter, and turn the irons that it may bake equally. While hot, roll them round a stick.

Cake, Souffle a la Rose. For a pound of sugar take a handful of picked rose leaves, cook the sugar to a strong syrup, then throw in the rose leaves, then let the sugar again boil up; beat up the white of an egg and mix with the sugar, stirring well the whole time; when the sugar begins to rise a second time, take it off and turn it out into moulds. A little carmine may be added in beating up the egg to heighten the colour.

Rout Cakes. Rub into two pounds of flour a pound of fresh butter, washed in orange-flower water; then add half a pound of well beaten loaf sugar, the same weight of candied orange and lemon peel cut into strips, and a quarter of a pound of well dried currants; mix all these ingredients well together with five eggs, well beaten, and half a glass of brandy or ratafia, or a little of both; drop this paste in small rough knobs upon floured tins, and bake in a quick oven; they will require but a very short time to bake, as they must not be high coloured.

Cake a la Royale. Put a piece of butter, about the size of a walnut, into a stewpan with five or six spoonfuls of flour, two ounces of sugar, a little lemon peel shred very fine, a little salt, and a wine glass full of water; stir it over the fire till it becomes thick, and begins to adhere to the vessel; then take it off the fire, and stir into it an egg, adding more eggs by degrees until the paste softens, but without becoming liquid; then put into it two or three bitter almond biscuits, and some dried orange flowers cut fine; cut the paste into little cakes about the size of a dollar, place them upon buttered paper, touch them over with yolk of egg, and bake for half an hour in an oven not too hot.

Savoy Cake. Take as much fine sugar as will weigh against twelve whole eggs, and as much fine flour as will weigh six eggs; then break the eggs, keeping the whites and yolks separate; add the yolks to the sugar with a little rasped lemon-peel, and beat them up well together; whip the whites of the eggs, add them to the flour, and then gradually mix the whole together, stirring well with the whisk as you mix; when the operation of mixing has been thoroughly performed, have ready a cake shape, butter it well, put in the ingredients, and bake it in a moderately hot oven for an hour and a half; when done, turn it out gently on a dish. It should be of a fine gold colour, but if it is too dark, mix some white sugar, the white of an egg, and the juice of half a lemon, and beat well together with a wooden spoon till it is very white; cover the cake with this glace; let it be thoroughly cold before serving.

Scotch Cake. Prepare the following ingredients :—Four pounds of well dried flour, two pounds of good butter, half a pound of candied citron and lemon peel, the same quantity of pounded loaf sugar, a quarter of a pound of sweet and half the quantity of bitter almonds blanched, and half a pound of caraway comfits ; cut the citron and lemon peel into thin strips, the almonds into small chips, and mix them with little more than half of the flour, part of the comfits, and the sugar ; melt the butter, and when nearly cool pour it into the flour, mixing it briskly all the time ; then form it with the hands into a large round, about an inch thick, using the remainder of the flour to make it up with ; cut it into four, pinching each part round the edge with the finger and thumb ; prick and strew the remainder of the seeds over them ; bake on paper or floured tins in a moderate oven.

Seed Cake. To three pounds of well dried flour add the same quantity of fresh butter, washed in water, to which a little orange flower has been added, and the same weight of finely powdered sugar, twelve ounces of sweet almonds, blanched and cut into small chips, a pound of candied orange and lemon peel, and three quarters of a pound of citron in thin slips, two nutmegs grated, a few caraway seeds, the yolks of twenty-four and the whites of twenty eggs beaten separately ; first beat the butter to a cream with the hand, then add the sugar and the eggs gradually ; next the flour a little at a time, then the other ingredients, finishing with a large wine-glassful of brandy ; butter the tin well, and pour in the cake, covering the top with caraway comfits ; bake it in a moderate oven.

Seraglio Cake. Boil together for a moment, in a little water, a small quantity of sugar, a quarter of a pound of butter, a little grated lemon peel, a little salt, and as much flour as will make a firm paste ; shake the saucepan well over the fire, until the paste separates from the sides of it ; then remove it, and while it is yet warm, add an egg well beaten, and mixed with the paste until it adheres to the finger ; then remove it entirely from the fire, and add as many more eggs, one by one, as the paste will absorb, with macaroons broken fine, orange flowers cut fine, some grated lemon ; form the cakes into whatever shape is desired, and bake.

Shrewsbury Cakes. Beat to a cream a pound of fresh butter ; add the same quantity of well dried flour, a pound of sugar pounded and rolled with a bottle, an ounce and a half of caraway seeds, and six eggs well beaten in a little orange flower water ; add, last of all, half a glass of ratafia, and mix the whole well together ; make it into a paste, roll to the thickness of a dollar, cut into shapes, and bake on floured tins.

Sponge Cake. Beat well together for an hour with the hand the following ingredients :—Two pounds of well dried flour, a pound of finely powdered loaf sugar, the yolks of twelve and the whites of ten eggs beaten separately, the juice of two lemons, and the grated peel of one, half a glass of orange flower water, the same quantity of brandy, and half the quantity of ratafia ; then butter a tin, line it with buttered paper, put in the cake, and cover over the top with sifted white sugar, and bake it for an hour.

Sussex Cakes. To two pounds of well dried flour, mix three quarters of a pound of pounded loaf sugar, four ounces of sweet and one ounce of bitter almonds pounded in a little orange flower water, and a pound of fresh butter beaten to a cream ; mix these well together, bake in small tins, well floured, or drop on floured tins.

Sweet Cakes. To a pound and a half of well dried flour, add the same quantity of fresh butter, washed in orange flower water, and half a pound of pounded and sifted loaf sugar ; mix the flour and sugar together, rub in the butter, and add the yolks of three eggs beaten with a little cream ; make it into a stiff paste, roll to the thickness of a crown piece, cut into shapes, and bake on a floured tin.

Tea Cakes. Take a pound of flour, half a pound of butter, nine ounces of pounded loaf sugar, the peel of a lemon grated, a few caraway seeds, the yolks and whites of three eggs beaten separately ; mix these together into a stiff paste, roll it out, and cut it with a glass, and bake upon tins.

Royal Tea Cakes. Mix well together a pound of dry flour, a pound of powdered sugar, a quarter of a pound of fresh butter, the peel of a lemon grated ; beat four eggs with a little orange flower water, and a small glass of ratafia ; and form those ingredients into a paste, which roll out to a proper thickness, cut into shapes, and bake upon floured tins.

Tipperary Seed Cake. Wash a pound of butter in a little orange-flower water, and beat it to a cream ; then mix into it by degrees a pound and a half of

pounded loaf sugar and sixteen eggs well beaten; add a pound of well dried flour, half a pound of sweet almonds, blanched and pounded in a little rose water, two ounces of caraway seed; beat the whole well together for half an hour, pour it into a buttered tin lined with buttered paper, and bake in a quick oven for two hours.

Victoria Cake. For this cake, which requires much care to make well, the following ingredients are necessary:—Six pounds of flour well dried, five pounds of fresh butter, two pounds of well beaten lump sugar, a pound and a half of candied citron and lemon peel cut in thin strips, a pound of sweet almonds blanched, cut into small chips, and steeped in brandy or rose water, seven pounds of currants well dried and cleaned, two nutmegs grated, a little pounded mace, the yolks of twenty-four and the whites of twelve eggs well beaten separately, a pint of good fresh yeast, three pints of cream, and a large wine glass of orange flower water; first mix the spice with the flour, melt the butter and cream together, and when cold add it gradually to the flour, stirring it all the time; add the yeast to the eggs, and strain them into the flour, and then add the other ingredients, and beat the whole well together for half an hour; line a well buttered cake pan with paper, also well buttered; pour in the cake, and bake in a moderate oven. A cake of this size will require from three to four hours to bake.

Rich Wine Cakes. Mix well together a pound of well dried flour, a pound of powdered loaf sugar, and a pound of butter previously melted; to these add half a pound of well cleaned currants, and a glass of ratafia; roll out the paste to twice the thickness of a dollar, cut into fancy shapes, and bake upon floured tin.

Wafers. To half a pound of powdered lump sugar add the same quantity of flour, and half a pound of fresh butter, a little grated lemon peel, and some orange flower water; pound the whole in a mortar to the consistence of paste, roll it out very thin, and cut into form; put them on an iron baking plate with a braising pan over them; serve hot, with sugar strewed over them.

CAMBRIDGE DRINK. This is merely a mixture of equal quantities of good home brewed ale and soda water; it is highly refreshing, and of very agreeable flavour.

CAMPHOR. A fine aromatic gum, the powder of which is very useful for putting into furs and other articles to keep away insects. This powder is made by putting a few drops of spirits of wine, according to the quantity of camphor upon this article, when it will fall to pieces, and may be rubbed in a mortar into a fine powder. Dissolved in spirits of wine, camphor is a remedy for flatulency and colic, and it has even been used, taking a few drops at a time, in water, and very frequently with excellent results, in cholera. If soap, cut into shavings, be mixed with strongly camphorated spirits of wine (say one drachm of camphor to one ounce of spirit), and dissolved by heat, either placing the bottle in hot water, or holding it for some time before the fire, it forms an excellent liniment for sprains and rheumatism. Mr. Hutchins, the celebrated dentist, recommends the cleaning of teeth by camphor in the following way:—Pour into a glass of cold water a large tea-spoonful of camphorated spirit; the camphor will rise to the surface like a cream; take this on the brush, and clean the teeth with it; the teeth and gums are thus kept in order, and caries is checked.

CAPERS. To preserve capers, put them as they are gathered into a jar with strong vinegar and salt, and repeat this daily until all are gathered, taking care to have two inches of vinegar over the capers, then tie over the jar with skin; if the capers be put into a cool place, and a little fresh strong vinegar be added from time to time, the capers will remain good for four or five years.

CAPILLAIRE. An agreeable syrup used as a beverage, with cold water, or to flavour punch or other mixtures. Boil five pounds of lump sugar with three pints of water, and one ounce of capillaire, (the herb called Maiden-hair, from Canada;) skim this frequently, and continue the boiling until the syrup becomes thick; then filter through a jelly bag, add five drops of neroli, and when cold put into bottles.

CAPON. The instructions given under the head of Fowl will apply generally to capon; the following additional receipts are from the "Cuisinier de la Cour":—

Capon Roasted. Having properly cleaned and trussed, cover it with slices of fat bacon and writing paper, and roast before a clear fire; baste first with a little butter, and afterwards with its own gravy;

when done, serve with the gravy. It is usually sent to table surrounded in the dish by watercresses which have been for some time previously seasoned with salt and vinegar. When stuffed with truffles, the truffles are to be first fried in butter, with salt, pepper, and nutmeg.

CAPON WITH RICE. Having drawn and trussed it, cover it with slices of bacon, and put it into a stewpan with half a pound of rice, well washed, an onion stuck with cloves, a bay leaf, a bunch of sweet herbs, and some good gravy or stock; let it cook gently over a slow fire; serve it on a dish with the rice round the capon.

CAPON AU GROS SEL. Having singed and trussed the capon, stew it gently in some good stock, with some turnips and carrots, a little parsley, a small bit of garlic, some pepper, and nutmeg; when the capon is well done, take it off and keep it hot by the fire; then take the liquid in which it was stewed and reduce it over the fire to a very small quantity; pour this when done over the capon, and serve. This is called capon au gros sel, as when eaten the coarse bay salt is served with it.

CARAWAY. The seeds of the caraway plant are much used in biscuit making, and also to flavour particular dishes. They are finely aromatic and warm, without being too exciting to the stomach. Hard biscuits with a few caraway seeds in them are recommended by some medical men to dyspeptic patients. A warm and pleasant cordial may be made with these seeds by steeping about an ounce of them in a pint of brandy for a fortnight, and then adding a pint of strong syrup. To grow the plant, choose a moist soil, and sow the seed in the autumn, soon after it is ripe. The plants are to be thinned out in the spring.

CARBANZA. A large kind of pea, grown extensively in South America, Spain, and other warm countries. In Spain it is cooked with meat, both in the green and dried state, and is also prepared as a distinct dish in various ways. It is exceedingly nutritive, and of agreeable flavour. Any of the receipts for cooking peas may be adopted for Carbanzes.

CARDOON. The seed of this plant should be sown in May, in a bed four feet wide and two feet and a half in height, and should be very frequently watered; as the seed will sometimes fail, two or three should be put together, and when they come up, the strongest plant should be kept. In September they should be tied, in fine weather, with three or four bands of straw for blanching, leaving the top free, forming a hillock of mould round the stem. The straw bands are to be left on for at least three weeks, taking care to water the heart of the plant frequently. The bands are then taken off, and the plant is cut for use. From the plant which has been raised on the bed others may be set in the open ground in the month of March. To do this, make holes a foot wide and a foot deep, at a distance of three feet from each other; fill them with rich dung, having on the top a few inches of mould; set a plant in each hole; when planted, water, and cover them over with a garden pot; after this, water them from time to time, and give them a hoe at the foot. These plants will be generally fit to bind in June or July. Cardoons which are to be eaten in autumn are to be sown the middle of April. They should be watered every evening. Towards the month of October, the strongest are to be tied up. At the approach of the frost, they are to be sheltered from the wind by mats, or any other means.

CARPETS, TO CLEAN. Having had them carefully beaten, lay them down and rub them over with a brush dipped in ox-gall and a little water, (see OX-GALL.) When this is done, use plenty of cold water, still brushing, and remove the water with a large sponge; then rub as dry as possible with clean coarse cloths. If there be stains which this process of cleaning does not remove, try the effect of the prepared soap (see SOAP), or any of the modes prescribed under the head of STAINS. The carpets must dry gradually.

CARROTS. This is one of the most useful roots for the kitchen; it does not appear to have any strong medicinal property, or any quality which renders it unwholesome. As it contains a good deal of saccharine matter, it is considered nutritive, and is given to cows and horses with great advantage. They thrive very well on it, and appear to relish it more than any other root. It is a popular notion among English grooms that the skin of a horse fed for some time upon carrots and only a small portion of corn, becomes supple, and his coat fine. It is not improbable that this notion is well founded, for any food that has a tendency to nourish without fatiguing the digestion, must necessarily, by improving the skin, have an effect upon the coat. It is not in England

alone that carrots are used occasionally as food for horses. In some parts of Germany and Holland, where horses are fed chiefly on a bread made purposely for them, carrots dried and reduced to powder form one of the ingredients. Carrots thrive well in a light sandy soil, and it is said that pigeon's dung mixed with the ground prevents the attack of insects. The ground for carrots should be dug very deep, and well manured. When sowing carrot seed, the best way is to mix the seed with some earth, as by that means it can be sown more regularly. When the seed has been sown, the bed should be trodden well down, as from the lightness of the seed it would not otherwise be properly covered with the mould. It is desirable, where convenient, to sow carrots for two or three years successively in the same bed. When the plants have attained a growth of four or five inches, thin them out, leaving the strongest at about four inches asunder. Where parts of the bed are thin, the best of the plants pulled up may be transplanted to supply the vacancies, but this can only be done when the ground has been well watered. After a good shower of rain is the best time to thin out the carrot bed, as otherwise the plants are apt to break off. The sowing takes place in April, and where a succession is required, another sowing should be made in about a month afterwards. Carrots may be well preserved for winter use by taking them up when full grown, which may be known by the withering of the tops. Let them lie for a day or two on the ground, after digging them up, to dry, and then place them in boxes, in layers, placing dry sand or very dry earth between each layer. Carrots are used in almost all kinds of soup, and stews, and, indeed, in every dish of which any vegetables form part; but they are also dressed to use separately. In the general way, they are boiled in water, and served plain; but on the Continent they are dished up in a variety of ways, and form very agreeable dishes.

Puree of Carrots, is used to give their flavour to soup, if desired, and is made by boiling them in water till very tender, and then squeezing them through a sieve. The puree of other vegetables is made in the same way, and is of use where the flavour of any particular sort is required without the substance.

Ragout of Carrots. Boil some carrots which have been neatly cut round, and in pieces of two inches long, in water, for twenty minutes, then take them out, and having drained them in a sieve, put them into a stewpan with some good gravy, a little French white wine, a bunch of sweet herbs, and a little salt and pepper. Thicken the sauce, if necessary, with a little cullis, and serve.

Stewed Carrots. Scrape and wash the carrots, and having blanched them, cut them in slices. Make a sauce with a slice of butter, some salt and pepper, and some shred parsley, moisten with some milk, and thicken the sauce with the yolks of three or four eggs. Let them stew a short time, and serve with the sauce. A few slices of bacon may be added, and served with it.

CARVING. Although it is now very much the custom, in many wealthy families, for the butler to remove the dishes from the table and carve them on the sideboard, thus saving trouble to the master or mistress of the house, and time to the guests, the practice is not so general even amongst what are called the higher classes of society that general instructions for carving will be uninteresting to them, to say nothing of the more numerous class, who, although enabled to place good dishes before their friends, are not wealthy enough to keep a butler if they were so inclined. Good carving is, to a certain extent, indicative of good society, for it proves to company that the host does not give a dinner party for the first time, but is accustomed to receive friends, and frequently to dispense the cheer of a hospitable board. The master or mistress of a house who does not know how to carve, is not unfrequently looked upon as an ignorant *parvenu*, as a person who cannot take a hand at whist, in good society, is regarded as one who has passed his time in the parlour of a public house, playing at cribbage, or all fours. Independently, however, of the importance of knowing how to carve well, for the purpose of regaling one's friends and acquaintances, the science, and it is a science, is a valuable acquirement for any man, as it enables him, at a public or private dinner, to render valuable aid. There are many diners out who are welcome merely because they know how to carve. Some men amuse by their conversation; others are favourites because they can sing a good song; but the man who makes himself useful and agreeable to all is he who carves with elegance and speed. We shall now give a few general instructions, with engravings of some joints, poultry, &c.,

recommending, at the same time, to the novice in this art, to keep a watchful eye upon every superior carver whom he may meet at dinner. In this way he will soon become well versed in the art and mystery of cutting up. Mrs. Rundell, in her "Domestic Cookery," says :—

"The carving-knife for a lady should be light, and of a middling size, and fine edge. Strength is less required than address in the manner of using it; and, to facilitate this, the cook should give orders to the butcher to divide *the joints* of the bones of all carcass-joints of mutton, lamb, and veal (such as neck, breast, and loin); which may be easily cut into thin slices attached to the adjoining bones. If the whole of the meat belonging to each bone should be too thick, a small slice may be taken off between every two bones.

"The more fleshy joints (as fillet of veal, leg or saddle of mutton, and beef) are to be helped in thin slices neatly cut and smooth. Observe to let the knife pass down to the bone in the mutton and beef joints.

"The dish should not be too far off the carver, as it gives an awkward appearance, and makes the task more difficult. Attention is to be paid to help every one to a part of such articles as are considered the best.

"In helping fish, take care not to break the flakes, which in cod and very fresh salmon are large, and contribute much to the beauty of its appearance. A fish-knife, not being sharp, divides it best on this account. Help a part of the roe, milt, or liver, to each person. The heads of carp, part of those of cod and salmon, sounds of cod, and fins of turbot, are likewise esteemed niceties, and are to be attended to accordingly.

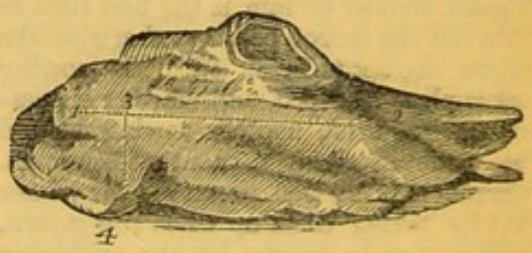
"In cutting up wild-fowl, duck, goose, or turkey, for a large party, if you cut the slices down from pinion to pinion, without making wings, there will be more prime pieces."

Aitch, or Edge, bone of Beef. Before helping the guests, a thick slice (say an inch thick) should be removed the whole length of the meat, that part not being prime, as it has been exposed more immediately to the action of the water, and wants flavour; then help in thin slices. Serve a little of the firm, or soft part, according to the taste of the guest. Remove the skewer with which the meat is kept together before you serve it at table, and replace it, if necessary, by a silver skewer.

Round of Beef. Take off the outer part, then help in thin slices, keeping the whole surface even. The fat also should be cut thin, and a little be given with each portion of the lean. If the dish be garnished with carrots, serve some to each guest. It is customary to pour a little of the liquor in which the meat was boiled, into the dish, for, generally speaking, a good deal of gravy is required with round of beef.

Sirloin of Beef. In England this is generally carved end ways, beginning at either end. In France it is cut through the middle; and this is also done sometimes in England. The under part is the most tender, and is preferred by many persons; this should be sliced cross ways. Help a little of the fat, and inquire if any guest prefers the outside. The inside of the sirloin is sometimes made into a separate dish, by cutting it up with some of the fat, and pouring over it some gravy and shalot vinegar, with a little salt.

Calf's Head. Cut slices from 1 to 2 in the figure, near the bone. At 3, the throat sweetbread, help a slice from 3 to 4; cut out the eye, and divide it in two.



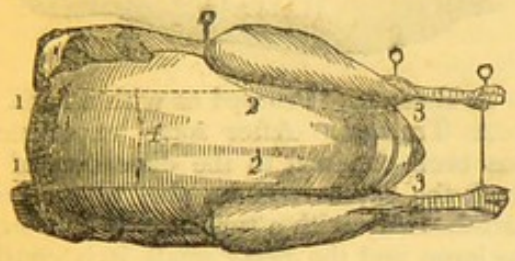
If the jaw-bone be taken off, there will be found some fine lean. Under the head is the palate. As different persons have different tastes, consult that of each before you help the guests.

Duck. Cut some slices from the breast, and proceed as with a goose.

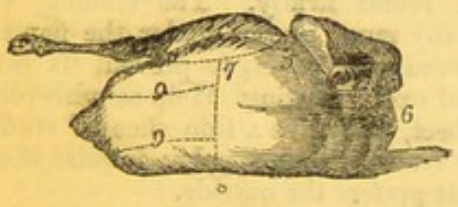
Fish. This, generally speaking, should be carved with a fish slice, and should be detached neatly from the bone. In serving a cod's head and shoulders, take the flesh from the back-bone, holding the spoon at the same time towards the middle of the fish as it lies in the dish, to receive the portion detached by the slice, and with each portion give a little of the sound, which lies under the back bone. As many persons like the gelatinous parts which lie about the head, the guest should be asked if there is any part there which he prefers; a little of the liver should be given, if it is dressed, with the cod.

A Fowl. Lay the fowl on a plate, then fix the fork in the centre of the breast, and

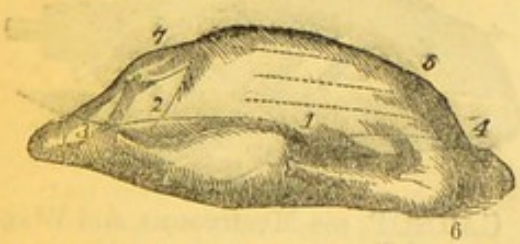
with the knife cut through the joint 1, as far as 2, and without further cutting pull of the wing. To remove the leg, insert the knife at 2, cutting downwards as far as 3, give the blade a sudden turn; turn the fowl, and proceed as before with the other limbs. Remove the merrythought at 4 by a sharp and dexterous cut,



and bending it back; next remove the neck bones 5 to 6, by putting the fork through each, and wrenching it up carefully. The breast is next to be separated from the back, by cutting through the sides of the fowl; cut the back, by following the lines 7, 8, and 9; the side bones will then be parted; as the fowl is dissected, lay the different portions on the dish.



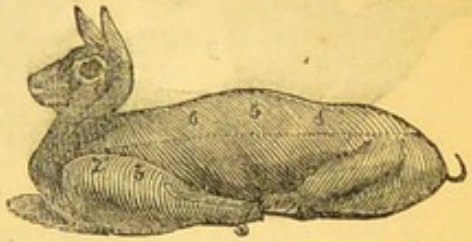
Goose. After cutting a few slices off the breast, the legs should be removed, which is done by cutting in the direction 1, 2, 3; then the wings, 4 to 1; and the merrythought, 5 to 6. Then displace the apron according to the line of 7, 2, 3.



Under this is the seasoning, part of which must be served to each guest. To take off the wings, insert the fork in the small end of the pinion, and press it close to the body; then put in the knife, and divide the joint down. Beside the wings there are two side-bones, which should be taken off, as also the back and lower side-bones. The rump, when *devilled* with pepper and salt, is a favourite part with many.

Ham. The common way is to cut cross ways, beginning at the hock; but many persons cut the slices long ways. No other direction is necessary than to cut thin.

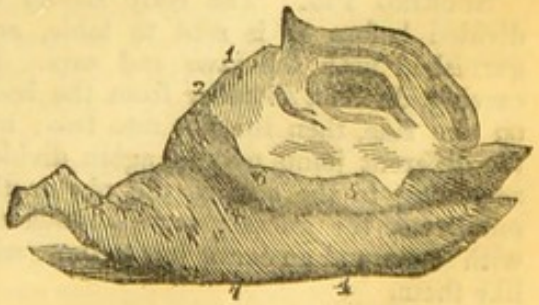
A Hare. Cut first as many slices as possible out of the back, then pass the knife under each shoulder, at 1, and cut down as far as the rump. Then remove the shoulders in the direction of 1, 2, 3, and separate the legs from the body. Cut the backbone through in three places, 4, 5, 6. The stuffing, part of which should be given to each guest, will be found inside. The back and legs are the best parts. Cut off the ears at the roots, as some persons like them much, as also the head and brains. To divide the head, insert the point of your knife at the top, and cut it through down to the nose.



Fore Quarter of Lamb. Separate the shoulder from the breast and ribs. If grass lamb, the shoulder being large, put it into another dish. Squeeze the juice of half a lemon on the other part, and sprinkle a little salt and pepper. Then separate the gristly part from the ribs, and help either shoulder or ribs according to the taste of the guest.

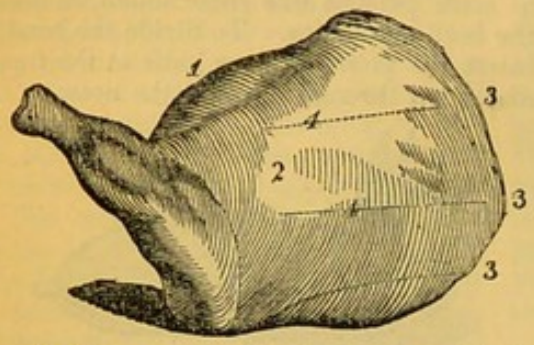
Haunch of Mutton. Follow the same directions as for a haunch of venison.

Leg of Mutton. Begin at 2, between the knuckle and further end, by cutting thin deep slices to 3. If the outside is not fat enough, help some from the side of the broad end in slices, from 5 to 6. As there are fine slices in the back of the leg, turn it up, and cut the broad end, but longwise. To cut out the cramp-bone, take hold of the shank with your left hand, and cut down to the thigh-bone at 4; then pass the knife under the cramp-bone, in the direction 4, 7. If the leg be a wether, which is the best, it will be known by a round lump of fat at 1.



Saddle of Mutton. Slice thin from the tail to the end, beginning at the back-bone; help slices of fat from the sides.

Shoulder of Mutton. The engraving represents a shoulder lying with its back uppermost. Cut first in the hollow part in the direction of 1, 2, deep to the bone. The best of the fat is on the outer edge, and is to be cut out in thin slices in the direction 3. If the hollow part cut in the line 1, 2, is eaten, some delicate slices may be cut out on each side the ridge of the blade-bone, in the direction 3, 4.



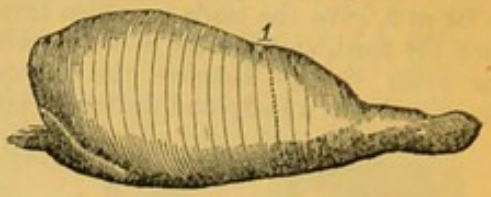
A Pheasant. Having removed the skewers and sent the pheasant to table, fix the fork in the centre of the breast; slice it down the middle, and take off the leg and wing on one side. Do the same on the other side, and then cut off the slices of breast you divided before. Be careful in taking off the wings not to cut too near the neck, as you might hit on the neck bone, from which the wing must be separated. Cut off the merrythought, by passing the knife under it towards the neck. Cut the other parts as in a fowl. The breast, wings, and merrythought are the most esteemed; but the leg has a high flavour, and, like the leg of the fowl, is preferred in many parts of the Continent.

Partridges. The partridge is cut up in the same manner as a fowl. The prime parts of a partridge are the wings, breast, and merrythought; but the bird being small, the two latter are not often divided. The wing is considered as the best, and the tip of it is reckoned the most delicate.

Pigeons. Cut them in half, either from top to bottom, or across.

Sucking Pig. The body should be divided before it is sent to table, and garnished with the jaws and ears. In carving, divide a shoulder from the body on one side, then the ribs into two; but the different joints may be again divided according to the size of the pig or the number of the guests; serve abundantly with sauce, and an ear or jaw to those who like them.

A Leg of Pork. Cut in the direction to 1 2, and slice from both sides alternately. If roasted, the joint must be turned over for the seasoning.



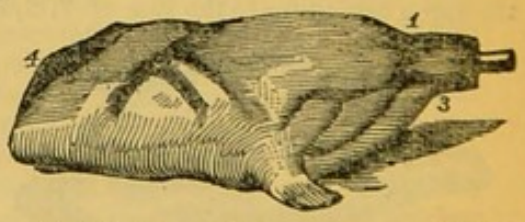
A Rabbit. Proceed as with a hare.

A Turkey. After some experience has been obtained in the dissection of a fowl, the carver will be able to proceed satisfactorily with a turkey. If the bird be large and the party small, it is considered more delicate not to dissect the joints, but simply to cut off the flesh from the breast and other white parts. In this case what remains may be cut up and hashed, or curried for another day.

Breast of Veal. Separate the ribs from the brisket, and help of either, according to the choice of the guest.

Fillet of Veal. In dressing this the bone should be taken out, and the meat tied round firmly. The stuffing, (see Veal) must be put under the flap and covered with paper, to prevent its being dried up in roasting. Help as with round of beef, and give a thin slice of stuffing and fat with each supply; inquire if any guest prefers the outside.

Haunch of Venison. Cut deep in the line 1, 2, 3, to let out the gravy; then begin at 2, and cut deep to the end, 4; help in thin slices, with a little fat to each person.



CATSUP, see Mushrooms, and Walnuts, and Tomata.

CAULIFLOWER. There are three sorts of cauliflower—the tender, the hardy, and another sort between the two. The tender is the early sort, but it is not the best; the advantage of it is, that it succeeds best in dry seasons, and in strong soils, but it has a tendency to run rapidly to seed. It is sown in the end of January, and when the plants are well formed they are transplanted, and again the third time, in the month of May, under glasses, until they are quite fit to place in the open

ground. The soil should be well broken and manured. The hardy, or winter sort of cauliflower is sown in the end of August, and is transplanted twice or thrice before the next April, giving them air from time to time; when finally transplanted, they must be watered gently every second day, increasing the quantity of water in the month of May. The other sort of cauliflower is sown and treated in the same way. When planted out, they should be carefully hoed and weeded, and they will be much improved by occasionally throwing round them the sweepings of the stable.

To Boil Cauliflower. After trimming them, put them in cold water for two hours; put them in boiling water like other vegetables, with a little salt, and boil them about twenty minutes, or more if they are large. Serve with melted butter. Some serve them as sea-kale, on toasted bread.

To Preserve Cauliflower. After trimming them carefully, taking off all the leaves, place them to soak in some salt and water for a few minutes, after which cut them into cross slices, put them into boiling water, and let them boil about three minutes. They are then to be taken out and drained; after which they are to be laid on a frame of wicker-work, or clean matting, and exposed to the sun for two days. They are then to be put into a very slow oven, and gradually dried; but as the heat of the oven will not be sufficient for one baking, the drying must be repeated two or three times, for if they were to be placed in any other than a very slack oven the effect would not be produced. When they are thoroughly dry, they must be put by in paper bags for use. The cauliflower, thus preserved, can be cooked either in the usual way of boiling or with milk, but it is more frequently served up with a rich gravy. The French fry and dress cauliflowers in various ways, but this is a vegetable which does not improve in flavour by any cooking out of the plain way.

CAVIAR. The prepared roe of the sturgeon, (see Sturgeon.) Caviar is made in Russia by rubbing the roe through a sieve and salting it. It is then dried and sprinkled with fish-oil, and compressed for exportation.

CELERY. This plant imparts a very agreeable flavour in cookery, and is also very good in salad, but it does not yield much nutrition. It is said to have some medicinal properties, as a sedative. There are seven varieties of celery, but only three are used,—viz., one with hollow, the other with solid stalks, and one with large red stalks; the best is the long celery, but it does not stand the winter so well as the shorter kind. Celery should be sown at different periods, so as to be able to transplant the plants in various seasons. In England, the first sowing should not take place before the end of March or the beginning of April, and the second early in May; but in France, the first sowing generally takes place in the beginning of January. The plants of the first sowing will be ready for putting into nursery beds in about a month. The seeds are sown in the first instance in a warm bed, with about six inches of mould, and under glasses, giving them air from time to time. When the plants are removed, they must be put into beds of rich earth, at a distance of about four inches from each other, being well watered and shaded from the sun for the first few days. The same plan is to be adopted with the successive sowings. Most of the plants are ready for putting into trenches and blanching in about five or six weeks from the transplanting. If the ground should be dry, they should be watered. They are planted in trenches a foot and a half deep, the bottom covered to the depth of six or eight inches with good rotten dung. Plant them at about four inches asunder. To blanch them it is only necessary every four or five days to draw the earth up close about the plants, and this must be continued as long as the plants continue growing, merely leaving the upper part of the heart and leaves uncovered. The sowings should continue at intervals of about three weeks, so as to keep up a regular succession during the winter. Celery is not considered at perfection until there have been some sharp frosty mornings.

Fried Celery. Blanch the celery in some rather strongly salted water, and let it cook gently in a little consommé, or strong stock. Take out the celery, draw it, and dip it into batter; then fry in some boiling dripping. When it is done, it is to be powdered with sugar, and candied with a salamander.

Celery Fritters. Cook the celery in a saucepan with a little fat bacon, salt, and sweet herbs, moistening with rich stock, and covering the whole with a few slices of bacon and some oiled paper. When they are thoroughly done, take them out and soak them for some time in

brandy and sugar, then dip them into thick batter, and fry, covering them with sugar, and candying as above.

Celery in Imitation of Preserved Ginger. Cut the blanched part of the celery in pieces, and boil it in water with a large quantity of ginger until it is quite tender, then throw it into cold water and allow it to remain an hour. At the end of this time put it over a slow fire in good syrup, with some pieces of ginger, and let it remain simmering for an hour. Cool it again, and in the mean time thicken the syrup by further evaporation. Put the celery in again, and repeat the same process. After a third simmering in this way, taking care to keep the syrup thick, put the celery into pots, and cover with a syrup. The stalks of lettuce, taking off the outside, prepared in the same way, make a very agreeable article of dessert.

Celery Salad. The celery is to be cut up in small pieces and mixed in the usual way of other salads, but with the addition of a considerable quantity of mustard. It is either eaten alone or with a little beet-root.

Stewed Celery. Having trimmed the celery, leaving only the tender leaves, aud washed it, put it into a saucepan with boiling water to blanch, and when it has become sufficiently tender to yield to the pressure of the finger, take it out, and throw it into cold water; then mash it up with a knife in the same way as chicory or endive. Put it into a saucepan with a bit of butter, a little salt, whole pepper, and a small quantity of nutmeg. Pour upon it about half a pint of mixed stock and velouté sauce; or, for want of these, water mixed with some good gravy, and let it reduce until it has become thick. It is then to be served in a dish garnished with slices of bread fried in butter.

CELLAR. Persons who are desirous of preserving, and even improving, the quality of wine and beer, must be very careful in the mode of constructing this important appendage of a dwelling. Count Chaptal, in his admirable treatise on the art of preserving wines, gives the following directions:—The cellar should be situated to the north, as the temperature is much less variable than in any other position. It should be deep, and the temperature kept as equable as possible. It should be slightly damp, but never in excess. The light should be moderate; total darkness is very injurious, as it contributes to decay. The cellar should be as much as possible in such a situation as not to be affected by the circulation of carriages or any other shocks, as they are calculated to turn the wine. All green wood, vinegar, and other articles liable to fermentation, should be excluded from it. A cellar to be good should be always vaulted. M. Julien, in an article upon cellars, says, that if the cellar be too damp, the casks should be placed upon horses, and that the parts underneath them are to be frequently swept. Where damp is in excess it is also necessary to make openings to let in the air. If the cellar be too dry, the evaporation of the wine becomes so great that the quality is injured by the vacuum. If this dryness be occasioned by the air that enters the cellar, the opening should be partially planked up. Particular care should be taken not to construct cellars in marshy ground, or any other spot where mephitic vapours are likely to rise.

CERVELAS. Commonly called in England, Saveloys. A kind of sausage made of chopped pork, veal, and bacon, strongly spiced. This meat, being chopped together in about equal quantities, and not too fine, and salted, and strongly spiced with pepper and other spices, is put into skins rather shorter and thicker than the common sausage, and is boiled before eating. They are sometimes smoked by exposing them for a few days to the smoke of a wood fire, but must in that case be first cooked before used. They are boiled for two or three hours in stock, with fine herbs, chiboles, &c., and are served cold. Cervelas are also made with carp and eels in the following manner:—Having taken out the bones of the fish, chop it up with some fresh butter, parsley, shalots, chiboles, and season with salt and spices; mix with this some hard boiled eggs, chopped, and fill the skins of any length or form desired with the mixture; smoke these cervelas for three days, then cook them in a mixture of equal quantities of French white wine and water, with some onions, carrots, fine herbs, salt and pepper. For cervelas in French charcuterie, see Pork.

CHARCOAL. This is made from wood, and is an important fuel for cookery. The manufacture is very simple; the wood is cut into the shape required, and is then burnt, excluding the air. As charcoal gives out in combustion a great quantity of carbonic acid gas, cooks should be careful to have a free current of air where it is used, as the gas alluded to is dangerous to health and even fatal to life,

if burnt in a close room, for whilst the charcoal gives out this dangerous gas it also destroys the oxygen of the air, which is its vital principle. In France, suicide is frequently committed by burning charcoal in a room, after having previously hermetically closed the doors, windows, and fireplace. The powder of charcoal is an excellent anti-putrescent, and is much used for the purification of water and other similar purposes. The animal charcoal made from bones is of a still better character; when fresh made it is used for purifying oils, and in the manufacture of sugar. It has also the singular property of giving the appearance of age to new red wines, by mixing about half an ounce with a bottle of wine, and letting it stand for a day, then filling it off; but it discharges a great part of the colour. A bottle of new port wine treated in this way will acquire the flavour of very old port, and have its tawny colour. Animal charcoal may be made in a small way, by putting some fresh bones in a close square or oval iron vessel, with a hole in the top, in which a tube of about a foot in length is to be fitted; then luting on the top, and placing the vessel on the fire, leaving it until it becomes red hot, and all the olefiant gas has escaped by the tube up the chimney. It may be easily ascertained when the charcoal is fully prepared, by putting a light to the tube; if the vapour does not take fire, all the gas is burnt out, and the bones are reduced to charcoal. This is then to be taken out, powdered finely, and put by for use in a very closely stopped bottle. In some manufactories of animal charcoal, the olefiant gas is collected to light the works; but its smell is very offensive. The best tooth-powder is animal charcoal.

CHARCUTERIE. The name given in France to a pork-shop; it is derived from the words *chair*, flesh, and *cuite*, cooked, which make when joined, cooked meat. The person who prepared the meat was called *chaircuitier*, and still retains the name with the omission of the letter *i* after the *u*; thus the pork butcher is called charcutier, because, unlike the ordinary butcher, he sells various preparations of pork in a cooked state. The charcutier, although he deals principally in pork, also vends poultry, dressed in a peculiar manner, such as turkey, the bones of which are taken out, and the meat seasoned, and pressed into a mass, from which purchasers are supplied by weight; and pheasant, partridge, fowl, and other pies. The chaircutier in France is, as to the facility of obtaining articles of meat ready dressed, what the ham and beef shop is in England, but the style of carrying on business is very different; the chaircutier has great variety, and a bachelor who breakfasts at home may have four different preparations weighed for his halfpound, each being accompanied by a small quantity of well salted gelatine to improve the relish. The chief articles of a charcuterie are dinde farcie, turkey, prepared as above stated; fromage de porc, a composition not much unlike cooked sausage meat; brawn, ham, and fromage d'Italie, another composition of pork; pigs' feet broiled, and sold either hot or cold; sausages of various descriptions, cerviles, &c. (For the mode of preparing most of these articles see Pork.) The charcuteries in France are a great convenience to bachelors, for not only do they always contain a great variety of cold articles, but sausages, pork chops, pigs' feet, &c., are sent out at a moment's notice.

CHEESE. The curds of milk made up into a solid mass. The milk is coagulated by the addition of rennet, which is applied when the milk is warm (see Rennet); the coagulation having taken place, which will be more or less speedy according to the strength of the rennet, the curds are divided small by the cheese knife in the cheese tub, and when no more coagulation can take place, they are collected into two or three separate vessels, when they are broken into still smaller particles; the whey must have been previously all poured off, so as to leave the curd free from it. Whilst the process of crushing the curd is going on, salt, in the proportion of a handful to six gallons of milk, is to be worked in; this process completed, the curds are to be put into a tub, with holes at the bottom, to allow the moisture to drain off, and a clean cloth having being spread in it, the curds are laid in by degrees, breaking and pressing all the time; then, when the tub is full, another cloth is spread over the top, and a thick board made so as to fit the tub closely at the sides, is laid over: the tub is then put into the cheese-press, and, as the cover falls, the moisture is forced through the bottom, and the curds become a solid mass. In order that the pressure may be more certain, the power of the press must be applied gradually; when the tub has been under the press for an hour and a half, the cheese is

taken out and placed in hot water for two hours, to harden the skin; it is next wiped dry, wrapped in a clean cloth, and put again into the cheese tub or vat, also well dried; the tub is now again submitted to the action of the press, and allowed to remain for seven or eight hours, the cheese having been previously pricked in every part with a small bodkin, to the depth of two inches. In order that the cheese may be very compact, it must, for three or four days, be pressed again two or three times, for three or four hours each day; it is then put to dry, and turned every day. If the quantity of milk from a single milking be not sufficient for the quantity of cheese that is to be made, the milk of a previous milking may be added; half of it is to be boiled and added to the other half, and the cream which had been previously taken from it; and these being well mixed are to be poured upon the new milk and stirred up. The cheese may be coloured by tying up some arnotto in a bag, and placing it in some warm water; in a few hours the water becomes richly coloured, and can be added to the milk from which the cheese is to be made, until the desired shade has been obtained. The varieties of cheese of different counties depend upon the qualities of the milk, and the peculiarities of the process. The preparation of Stilton cheese, for instance, differs materially from that adopted for most cheeses: the whey is removed very slowly, and the curds are broken as little as possible; they are then put into cold water for twenty minutes, and the water being drained off, the curds are broken, and the salt added with some newly churned butter, or a quart of fresh cream, in the proportion of a pound to fifteen gallons of milk; these being all well worked together, they are put into the cheese vat, and placed under a very slight pressure, (about a pound and a half;) the cloth being changed at least twice a day, the cheese remains under the press for a week, and made up in the mould. Some Stilton moulds are made in such a way that pressure may be applied to every part. The Bath cream cheese is made as follows:— Three gallons of new milk are mixed with one gallon of hot water and a pint of cream; more rennet is of course used than if no water were used; when the curd has formed, it is slightly broken, and the whey is dripped off; four or five quarts of cold water are then poured on the curd, which is again slightly broken, and this process of washing and breaking is repeated. The curds are then drained, and two quarts of boiling water is poured over them; most of the whey is squeezed out, the curds are drained and put on to the press for three or four hours in the vat, when the cheese is turned and pressed for the same length of time; the cheese is then ready to eat. It is not customary to add salt, or if so, very little. In what is called new cheese, new milk is turned by rennet, a little hot water having been added to the milk; the curds are divided but not broken, and hung up in a cheese cloth for half an hour; they are then divided again with the cheese knife, and hung up in a fresh cloth for several hours, then put into the press for a night, and the following day the cheese is taken out, and each side is rubbed with salt; in two days it is fit for use. In France, what is called new cheese is made in this way as well as in England; but the cheese called cream cheese, which is used for dessert and for evening parties, whipped up into a sort of froth, and flavoured with different fruits, is made very differently. Three pints of new milk and a pint of cream are made warm, and coagulated by a piece of the stomach of the calf, or a little liquid rennet; the curds are then drained and squeezed in a cloth. For dessert this is eaten with sugar, or it is whipped up with sugar and served in shapes; the juices of fruits are also sometimes added, and the cheese is frequently iced. The cheese called Neufchatel cheese is a new cheese in which there is a large proportion of cream, the curds being well salted; they are either eaten fresh, or wrapped up in paper and put for several months in a dry cellar; at the end of that time only the heart of the cheese remains good, but that is excellent. The best cheese in France is the Roquefort; this is made with sheep's milk, and resembles in flavour and appearance a very fine Stilton, particularly when old, as it acquires the fine blue mould peculiar to Stilton cheese. The celebrated Gruyere cheese is made from the milk of the cow and the goat mixed. The Neufchatel cheese appears to owe the high esteem in which it is held from the superior quality of the milk in the locality where it is manufactured. With the exception of the Roquefort cheese there is nothing in France, however, to be compared with the cheeses which are made in England. Many persons who are *gourmets* in cheese put wine into it, and keep it in this state for

a long time before eating it, others put beer; it is a question, however, whether the flavour or quality of the cheese be improved by this treatment. The "Encyclopedie Domestique" states that all cheeses are very much improved if they be wrapped for a month in cloths dipped in a mixture made by pouring vinegar upon alkalised nitre, (nitre which has been burnt with pulverised charcoal) until all effervescence has ceased, moistening the cloths daily with this mixture.

CHERRIES. Almost all cherries are more or less indigestible, but the most so is the Bigarreau cherry. The juice of the cherry, however, is refreshing, and far from unwholesome. The produce of the cherry tree is much increased, and the fruit brought to ripen early, by digging in lime round the foot of the tree, and watering it from time to time with warm water.

CHERRIES IN BRANDY. Take some fine ripe and large cherries, cut off half of the stalks, and put them into a large mouthed bottle, with a few cloves and a little cinnamon. Prepare some very thick syrup, in the proportion of a quarter of a pound of sugar to a pound of cherries, and a quart of brandy. Mix the brandy with the syrup, and when it is cold, pour it over the cherries. Cork carefully, and tie over with parchment.

For CHERRIES IN TARTS, &c., see PASTRY.

COMPOTE OF CHERRIES. Cut off a portion of the stalks, and put the cherries into a pan, with just enough sugar and water to cover them; give them a few boils, and serve them cold in their syrup.

CHERRY JELLY. Take out the stones as carefully as possible, so as not to lose the juice, and having added a pound of currant juice to every twenty pounds of cherries, and half a pound of sugar to each pound of the whole, cook over a sharp fire, stirring the fruit gently. When done, proceed as with currant jelly.

CHERRY MARMALADE. Take out the stones, and remove the stalks, and reduce the cherries to one-half their bulk over a slow fire. Then make some syrup of double the weight of sugar to the cherries, using very little water, and when the syrup has become quite thick put in the fruit, and let them cook together until the marmalade is thoroughly done.

TO PRESERVE CHERRIES DRY. Stone the cherries, crushing them as little as possible, and having made some very strong syrup, give them one boil in it, then take them off the fire, and let them stand for several hours. Repeat this process twice, then take out the cherries, powder them with white sugar, and put them on a tin, or on plates, to dry. When dry, put in boxes. The syrup may be used for making cherry jelly, or for fruit tarts.

CHERVIL, (in French, CERFEUIL.) A plant very little known in England, but greatly used in France to give flavour to soups, salads, and sauces; it is highly aromatic and exciting, and should be used in small quantities. It is of two kinds; the common and the musk. The common chervil is used in cookery. It may be sown at any time of the year. Persons who like the flavour of this plant, and wish to introduce it into their kitchen gardens, should obtain, in the first instance, a little of the seed from France. The mode of using chervil there for salads is to chop it very fine, and serve it in a plate separately from the salad, so that each guest may help himself according to taste. It has a high reputation in France as a medicinal herb, used externally. The warm vapour from the decoction of chervil is said to be a sovereign remedy for external hæmorrhoids, and is used also as a fomentation in cases of colic. The leaves dried, and smoked as tobacco, are recommended for asthma.

CHESNUTS. The fruit of the chesnut tree. In England they are eaten roasted for dessert, and they are also sometimes boiled. In Portugal they are partially boiled, then dried in an oven and made into flour, which is used for bread by the poorer classes; in this state they are nutritive, but difficult of digestion. In France, chesnuts are boiled, and used for stuffing turkeys and other poultry, when roasted or stewed. They are also torrefied and ground, for the purpose of being used as coffee, the flavour of which, however, they no more resemble than roasted corn. They may be boiled, and the skins having been removed, candied in the same way as filberts, (see FILBERTS), but they are not worth the sugar which they require. The only really pleasant mode of preparing chesnuts is roasting them; when eaten raw they are highly indigestible. The flour of chesnuts is mixed with tallow in France for the manufacture of an economical candle, which burns slowly, but gives a poor light.

CHICCORY. This is a species of endive, cultivated in France to a great extent, but very little known in England.

It is used on the Continent, both in the green and the blanched state. The blanched is prepared in the same way as celery, and the green in the same way as spinach, (see SPINACH). The blanched part is also used for salad; and, having a strong bitter, is considered wholesome. But one of the greatest uses to which chiccory is applied in France is for the adulteration of coffee, by drying, baking, and reducing to powder, the long roots thrown out in blanching. This powder improves very much the colour of coffee, but it has a medicinal flavour which is not very agreeable. See COFFEE.

CHICKEN. The mode of rearing chickens is simple; all that they require being a good dry flooring, which may be made of beaten chalk, a quantity of dry litter, and ashes here and there for them to roll themselves in, and a good quantity of sandy gravel, which should be frequently changed, as without this precaution they would want the most essential means of aiding digestion. These observations, of course, refer only to the enclosed poultry yard; where the hen has free liberty to roam, she will take care to lead her little ones to those spots most suited to their wants. The ordinary food of young chickens is a peculiar kind of small groats, which they devour with avidity; but it is very important, when they are in a state of confinement, to throw them, from time to time, small worms, grubs, or other insects; but the most essential recommendation for the rearing of chickens is, that the poultry yard should have a southern aspect, for without this precaution great numbers will be lost by cramp. Many attempts have been made, both in England and France, to hatch chickens by artificial heat, and thus increase the stock by rendering the sitting of a hen unnecessary, and allowing her to go on laying without the loss of time now required for hatching and rearing her brood. In Egypt, enormous quantities of domestic poultry are reared by artificial means; there, however, the climate is so favourable to this mode of production that very little extra heat is required. This is not the case in Europe, where the whole process must depend upon artificial heat, and that kept up with great regularity, day and night, as a variation of very few degrees, either above or below the necessary temperature, which is about 100, would be fatal to the process. The first attempts to hatch eggs by artificial heat were made with ovens heated by hot air; these, however, were found to vary so much in temperature, that the experiment was soon abandoned. The next attempt was by steam, but here also the difficulty of regularizing the temperature to a fixed point, was experienced. This has been got over by a very ingenious kind of valve, which regulates the steam in such a manner as to be invariable. The inventor of this mode of proceeding has exhibited publicly in London, a sort of cupboard, fitted up with shelves lined with flannel, in which the eggs are placed, and which is warmed by steam admitted through pipes. The front of this cupboard is glazed, so that the operator may ascertain the period of hatching, and remove the chickens. On leaving the shell the little animal begins to feed upon a portion of it, and upon some groats which are placed there for the purpose, and in a few hours may be taken from its cupboard and put into a box covered with glass, where groats and water are provided for it. This box is heated at a lower degree of temperature than the cupboard in which it was hatched, but at a higher degree than the open parts of the room. The transition from the cupboard to the body of the room would be too rapid; after having been, however, for a few hours in this medium temperature, the birds are put into a part of the room which is railed off, and in which there are sleeping boxes, also heated, but not too high. Some of the birds would not at first take their food but by the force of imitation, they no sooner, however, see the more quick and lively birds feed than they follow the example. Care is taken that too many do not sleep in one box, for, if they were crowded, the weaker birds would be trampled on and destroyed by the more healthy. The temperature of the body of the room is not so much elevated as to debilitate the poultry, but is sufficient to prevent attacks of cramp from cold. A pamphlet has been written on this mode of artificial breeding, which would make it appear to be a lucrative concern as a speculation; this is not the case, even when conducted upon a large scale, and certainly upon a small scale it would have the effect of doubling the cost of rearing domestic poultry. It may, however, be tried where expense is not an object, as a means of hatching eggs which are brought from foreign countries with a view to the improvement of our own breed. The rapidity with which steamers arrive from distant

parts would enable those who are fond of experiments of this nature to try them with every chance of success, for an egg that is not more than eight or ten days old may be hatched upon this system. As food, the flesh of the chicken is light, succulent, and digestible; and is at the highest perfection when the bird is about seven or eight months old.

Chicken au Blanc-manger. Put a pint of milk into a saucepan with a little thyme, two bay leaves, and a little coriander seed, and boil it until it has reduced one-half; then strain it, and put it again into the saucepan with a piece of crumb of bread, and leave it on the fire until the bread has absorbed all the liquid; then mix with the bread a dozen almonds cut very fine, a little salt, grated nutmeg, and the yolks of five eggs; mix the whole well together, and put it into the chicken, which has been well cleaned and singed, and sew it up to prevent the seasoning coming out. Then cover it well with slices of bacon, and cook before a clear fire. Serve with some rich sauce.

To Boil Chicken. When properly cleaned and trussed, put it in boiling water, and let it boil gently for half an hour. Serve with parsley and butter, or with the following sauce:—Melt in a teacupful of milk a large table-spoonful of butter kneaded in flour, beat up the yolk of an egg with a little cream, stir it into the butter, and heat it over the fire, stirring continually.

Chicken a la Bourgeoise. Put into a stewpan a slice of butter, two onions cut in slices, and on them the chicken which has been well cleaned, singed, and trussed, with its breast downwards. Cover it with two more onions cut into slices, a bunch of fine herbs, a little salt, and a bay leaf. Let it stew on hot ashes, or a very slow fire. When it is half done, throw in half a tumblerful of French white wine. Strain the sauce, and serve with the chicken.

Fricasseed Chicken. Having cut up a chicken, washed and drained it, put it into a stewpan with a slice of butter, a bunch of sweet herbs, two bay leaves, some mushrooms, two or three cloves, a little nutmeg grated, and a slice of bacon, moistening the whole with a little good stock, and half a tumbler of French white wine. Let it cook over a brisk fire till the sauce is almost all consumed; then dredge in some flour, and moisten with a little warm water, and season with salt and whole pepper. Let it stew again till the sauce is almost consumed. When ready to serve, add the yolks of three eggs beat up with milk, and thicken over the fire, but without letting it boil, then add some lemon juice and serve.

Another way:—Put half a pint of water into a stewpan with a slice of butter, a little salt, and pepper; set it over the fire and stir altogether, till it is about to boil; then put in the chicken which has been cut into pieces and skinned, with two or three small onions cut fine, and a little nutmeg grated, and a small blade of mace. Stew it for three quarters of an hour, and a little before serving add the yolks of three eggs beaten up with a little cream; stir the egg in gradually, and do not let it boil.

Chicken Fried. Cut a chicken into quarters, and soak them in warm water for a short time. Then put them in a saucepan with some stock, the juice of a lemon, salt, pepper, parsley, two shalots, a bunch of fine herbs, and a bay leaf, and let them stand over some hot ashes for two hours. At the expiration of that time, take them out, and having drained them, rub them over with the white of an egg beat up, and dredge them with flour; fry them to a good colour, and serve. Garnish the dish with fried parsley.

Grilled Chickens. Having washed them well, and wiped them dry, cut them down the back, and flatten them. Put them on a gridiron, and when they have become hot, take them off and baste them well with butter, and strew a little pepper and salt on the inside, which part must be first laid towards the fire. Baste them very frequently, and let them broil slowly for half an hour. When served, pour melted butter over them, with some stewed mushrooms.

Chicken a la Jardiniere. Having cut the chickens in two, and flattened them, brown them in a frying pan with a little butter. Let them lay for an hour in a seasoning made as above, and then broil them on a slow fire, basting them from time to time with some of the seasoning. When done to a good colour, serve with a sauce made with some good gravy, a little lemon juice, salt, whole pepper, and a little chopped parsley, thickened over the fire with the yolks of two eggs, well beaten.

For other Sauces for Poultry, see Sauces and Essences.

Chicken en Matelotte. Put into a stewpan a little brown roux, a little good stock, a tumbler of French white wine, about a dozen small white onions which have been previously parboiled, a bunch

of parsley, a bay leaf, a bunch of fine herbs, and a little salt, and pepper. Boil all these together for half an hour, then put in the chicken, which has been previously cut into quarters and browned in a frying-pan with a little butter, and let it boil gently for about an hour. Serve with the sauce in which it has been dressed, passed through a sieve.

Chicken with Onions. Blanch some small onions in boiling water, and take off the outside skin, then boil them in some well seasoned consommé until tender, and strain them. Having roasted the chicken, pour the gravy which comes from it on the onions with a little good sauce; give the whole a boil up, and serve with the chicken. The chicken may be stuffed, before roasting, with some forcemeat, the liver chopped fine, a little parsley, chibols, and mushrooms, pepper, salt, and a little grated bacon. Cover the breast with a slice of bacon, and writing paper, when roasting.

Chicken a la Montmorency. Clean and truss the chicken, lard the upper part, and fill the inside with the liver cut fine, a little bacon, and the yolks of eggs boiled and cut into small balls. Stew it gently in a stewpan with some good gravy, and serve with a rich brown sauce.

Chicken a la Persellade. Cut the chicken into pieces, and put it into a stewpan with a little consommé, some salt, and whole pepper. When the liquor has been reduced one-half, and the fowl is tender, add some parsley which has been scalded and chopped very fine. Before serving, squeeze a lemon over it.

Chicken Pie. Cut the chickens into joints, take off the skin, and having washed and dried, season them well with salt, pepper, and grated nutmeg. Lay them in a dish with the livers, gizzards, and hearts, well seasoned, and add a little good stock, a wine glass of French white wine, a few pickled mushrooms, and the yolks of three or four eggs boiled hard. Lay a few slices of ham and some forcemeat balls between the parts of the chickens. If the chickens are small, do not divide them, but roll a piece of butter in the above seasoning, and put in the inside of them. Cover the dish with a puff paste, and bake for an hour. A little rich seasoned gravy may be made hot and poured into the pie before serving.

Chicken a la Poele. Split a chicken in two and put it into a stewpan, with a bit of butter, two shalots, a little parsley, and two bay leaves. Dredge with a little flour, and moisten the whole with a little stock or good consommé and a tumbler of French white wine. Let it boil gently until the sauce has become thick, when skim off the fat and serve.

Roast Chicken. Draw and truss the chicken, and cover the breast with a slice of fat bacon; baste it first with butter, and afterwards with its own gravy. Cover the breast with a sheet of buttered paper; but which must be removed about ten minutes before the chicken is done, that it may become of a good brown colour.

Stewed Chicken with Peas. Cut up a chicken, and put it into a stewpan with some peas, a slice of butter, a bunch of fine herbs, and a few small white onions; moisten the whole with some consommé or good gravy. Let it stew until the chicken is quite tender, and serve, being careful to skim off all the fat.

Chicken a la St. Menehond. Put the chickens into a stewpan with a tumbler of French white wine, a slice of butter, salt, and whole pepper, a bunch of fine herbs, two or three cloves, and a little grated nutmeg. Stew the whole over a slow fire, until the sauce has acquired the consistence of jelly, and adheres to the chickens; then take them out, rub them over with egg, and cover with bread crumbs; then broil them of a good colour, and serve either plain or with sharp sauce.

Chicken Stuffed. Put a handful of grated bread crumbs into a saucepan with a pint of milk, and boil it till it becomes very thick, and then let it cool. When cold, mix it well with parsley and green onions chopped very fine, a little thyme, a bay leaf, a bit of butter, pepper, salt, and the yolk of three eggs. Put this stuffing into the chicken, and roast it between slices of bacon. Serve with a sauce made of a little brown roux, a little stock, a minced anchovy, a little salt, and grated nutmeg, and a squeeze of lemon juice, the whole thickened over the fire.

Chicken a la Tartare. When the chicken has been parboiled, cut it in two, and let it soak for two hours in some butter melted for the purpose, and seasoned with salt, pepper, and a few champignons, parsley, and green onions, chopped fine; then cover it with grated bread crumbs, and broil. It may be served either plain or with some sauce à la Tartare.

CHIMNEYS, TO CLEAN. Make a mortar hot, and rub up in it three parts of saltpetre, two parts of salt of tartar, and

one part of flour of sulphur. Put as much of this as will lie upon a sixpenny piece in a fire shovel, and hold it over a clear fire, near the opening of the chimney. As soon as it begins to boil it will explode, and the sudden concussion in the chimney will cause the soot to fall without any danger to the operator. If one operation be not sufficient, repeat it.

CHIPOLATA. A foreign ragout. Blanch two dozen of carrots, two dozen of turnips, the same quantity of large chesnuts and onions; let these stew for some time over the fire, with some consommé and a little sugar. Having fried separately a dozen sausages and a dozen slices of bacon, add them with two dozen champignons and a few spoonfuls of espagnole sauce to the vegetables, adding from time to time a little consommé or gravy. These are to stew for an hour.

CHIVES. This is a very hardy herb, and will grow in almost any situation. The mode of propagation is by parting the roots in the spring or autumn. It is recommended to cut them very frequently in summer, as they shoot out again rapidly, and become more tender from frequent cutting. A chive bed should be renewed every three or four years.

CHOCOLATE. A preparation of cocoa. The old way of manufacturing chocolate was to heat a large iron mortar, by putting fire into it; and having cleaned it, then the cocoa and sugar were beaten into a paste, which was afterwards worked by hand with a roller on a table until it became almost liquid; it was then put into moulds, and became hard as it cooled. Of late years, the manufacture of chocolate is chiefly carried on by machinery; and the price has been consequently reduced; but as it is very difficult to detect the adulterations by the mere taste, it is almost impossible to get it genuine, unless it be made expressly for a consumer who is willing to pay a higher price to have it pure. The chocolate which has the greatest reputation is that made in Spain and at Bayonne. But this character seems to have no other foundation than the care with which all inferior cocoa is rejected, and perhaps the more judicious selection of the aromatics used in the preparation; for both in Spain and in Bayonne much too large a quantity of sugar is introduced, that article being cheaper than the cocoa itself. Some manufacturers adulterate their chocolate with flour as well as sugar. The chocolate to be preferred is that called on the Continent "chocolat de santé," as it contains the least quantity of sugar and fewer aromatics. The chocolat à la Vanille is the favourite beverage among the aristocracy; the price of it varies according to the quantity of the Vanilla which is used. As far as health is concerned, there should be no more sugar in chocolate than what is sufficient to render it agreeable to the taste, and it should be very slightly aromatized; for when it is carefully manufactured, the flavour is agreeable without the aid of aromatics. As the process of manufacturing chocolate is tedious and laborious, it is hardly worth while to make it for one's own use; but if it be desired to do so, all that is necessary is to select the best cocoa, carefully excluding every part that is unsound, and to adopt the process mentioned above. When the chocolate is to be used, it should be scraped into a fine powder, and boiled either with water or milk, frequently turning the stick which is sold with the chocolate pot to make it froth. On the Continent generally it is made much more thick than in England; an ounce of chocolate does not make more than one moderate sized cup. In Spain only a small cup full is made with an ounce of chocolate, and it is served up with sweet cakes, a decanter of fine spring water, and a cake of very fine sugar, which is either dissolved in the water or eaten; no milk is used. In the coffee-houses in Paris it is either served "à l'eau" or "au lait," according to order, and cakes made of flour, eggs, butter, and sugar, are served with it. Good chocolate at breakfast is considered very wholesome, if only a small quantity be used, and fresh water be taken with it; for if it be thick, and unless it be so, it is not pleasant, it is too heavy for the stomach without this dilution. One of the most wholesome breakfasts of chocolate for weak stomachs is the following:—Take half an ounce of chocolate finely powdered, mix it with a dessert spoonful of arrowroot, and boil them together gently, adding a small quantity of milk. A preparation called Racahout des Arabes, which has been puffed into notice, and is sold at a high price, is nothing more than a mixture of chocolate powder and arrowroot; and even the fecula of potatoes is sometimes substituted for arrowroot, as being far less expensive. Persons who are travelling can have with them their prepared powder of chocolate and arrowroot, and by simply pouring boiling water or milk upon it, a very agreeable beverage is obtained; but if it

be convenient to boil it, the preparation is improved in flavour, and is more easily digested. This mode of taking chocolate is very valuable for children and invalids; the latter class frequently find it light of digestion, when both tea and coffee would disagree with them. As far as economy is concerned, it is almost impossible to have a cheaper and a more elegant breakfast at the same time. In taking chocolate, if the oil which remains in it should be unpleasant to the stomach, let it stand, when made, till it is cold; then remove the oil from the surface, and warm the chocolate again. Medicated chocolates are sometimes used with benefit, but they ought not to be taken except under medical advice. The tonic chocolate sold on the Continent and by some agents in London, as chocolat au carbonate de fer, is made by mixing with it, when being manufactured, carbonate of iron, in the proportion of four or five grains to each square or ounce. This is a very agreeable way of taking the carbonate of iron, as it does not impart the slightest taste to the chocolate; but the same effect is produced by throwing the carbonate of iron into the domestic chocolate whilst it is boiling. Persons who require gentle tonics may use this preparation regularly every morning with advantage; and in many cases the quantity of iron may be doubled, and even trebled; but the habit of taking tonic medicines in any form should never be practised except under medical advice. The purchaser of chocolate should look particularly at the colour; if it be of a deep red brown, there is reason to believe that it has been made from good cocoa, and is unadulterated. When the colour is dark without a red tint, the cocoa is not of good quality; and if it be pale, the quantity of sugar is in excess, or flour has been introduced.

CIBOLS. This plant is very much used for giving a flavour to dishes; it is raised from seeds which are sown in July; in October the leaves fall off, but in January they begin to shoot out again, and are fit for use in March.

CIDER. The fermented juice of the apple. Cider may be made from apples of all kinds, but those which have an excess of acidity are preferred; and for ordinary beverage the small crab apple is much used abroad. The best cider in England is made in Herefordshire and Devonshire, and the best in France is made in Normandy. Cider is not a wholesome liquor for persons who do not take a great deal of exercise in the open air, as it creates flatulency and not unfrequently colic; persons who are fond of it, and with whom it disagrees in the ordinary mode of drinking it, should add a little carbonate of soda, and drink it whilst in the state of effervescence; in this way it seldom does harm, and is very agreeable to the taste. The apples should not be gathered until they are full ripe, which is indicated by their beginning to fall from the tree; when gathered, they should lie in heaps under cover, but open to the air, in order to promote the evaporation of the excess of moisture; and as soon as they begin to turn without perishing, they are to be crushed, which may be done by beating them, if the brewing is to be on a small scale, or in a crushing mill, if a large quantity is to be used. In this state they are to be put into the cider press, in layers of about two inches thick, with horse-hair cloths between each layer, and as one pressure is seldom sufficient, the operation is to be repeated; the cider thus obtained is of the best quality. A second quality may be obtained by putting the pressed fruit again into the crushing mill with a quantity of water, and passing the whole through the press; as the juice leaves the press it should pass through a hair sieve, and be put into barrels; the fermentation soon takes place, and the liquid becomes clear, the impurities sinking to the bottom; it is to be racked off as soon as it is clear. If not very bright, it may be fined in the same way as beer; the lees may be used for feeding pigs. In Guernsey the following mode of making cider is adopted:—As soon as it begins to ferment, it is drawn off into another cask, and the lees are passed through a hair bag and set apart; as soon as the fermentation begins again, the same process is twice repeated, and the liquor from the lees, after straining, is also set aside; at the third drawing off, the liquor from the lees is added to the mass in the proportion of two quarts to one hundred; the casks are to be then closely bunged up. The cider thus made is very clear, and of excellent strength. In all cider brewing the temperature should be no more than just sufficient to promote fermentation, and if the fermentation be languid, it may be hastened by the addition of some good beer yeast. In Normandy cider is sometimes made as follows:—Cut a bushel and a half of apples into slices, and dry them in a slow oven; put these into a thirty-six gallon cask with as much water as will fill it two-

thirds, add a pint of good beer yeast, and six pounds of treacle, and leave it to ferment in the sun for some days, covering over the bunghole slightly with paper; when the vinous fermentation is complete, and before the acetous stage commences, fill up the cask with water, and bung it up tight. A month afterwards put the cider into bottle, and give the lees to the pigs; this cider will effervesce like champagne.

CINNAMON. The inner bark of a tree which grows in the West Indies and in other warm climates; it is a sweet, but at the same time rather biting taste, and is much used for flavouring dishes, pastry, &c.; it is also very useful in medicine as an agreeable aromatic, and as a vehicle for the administration of other articles. Cinnamon water, which is the chief form of this product in medicine, is made by distillation. The cinnamon must be infused for several days in an equal quantity of water and brandy, with some lemon peel and liquorice, and then distilled, being afterwards sweetened with sugar and filtered. The preparations are,—One ounce of cinnamon, two quarts of brandy, a pint of water, the peel of a lemon, and an ounce of fresh liquorice root; after distillation, add a pound of sugar dissolved in a quart of water for each ounce of cinnamon; this water may be used for flavouring dishes in all cases where the use of the bark would be inconvenient.

CITRIC ACID. The strongly concentrated juice of the lemon brought to the form of crystals. It may be used in most cases for culinary purposes, where lemon juice cannot be had. Citric acid is an effectual remedy for scurvy.

CLARIFICATION. The operation of making any liquid perfectly clear, by separating those portions which are calculated to prevent this result. The most effectual mode of clarification, as stated elsewhere, is the use of isinglass, for which, however, the white of eggs may be substituted; for this purpose the whites of the eggs are whipped up, and the liquor to be clarified is added cold by degrees, continuing the whipping until all the white of egg is completely mixed with the liquid; the liquor is then boiled rapidly once or twice and strained; in a short time it becomes perfectly clear. When the nature or quantity of the liquor will not allow of the whole of it being poured in this way on the egg, a portion of it is whipped up with the egg, and this mixture is actively stirred into the whole mass.

CLARY. A herb not much used in modern cookery. The seeds are sown in the spring, and the seedlings are transplanted in the summer.

CLOVES. The fruit of a foreign plant. It is highly aromatic in its dried state, and communicates an agreeable flavour to various culinary preparations. In the Dutch East India colonies the fruit is preserved in sugar in its green state, and forms a good dish for dessert. Clove water is a fine stomachic, either taken alone, or as a vehicle for medicine; it may be made by infusing bruised cloves in spirits of wine or brandy for a fortnight, and distilling it, then adding six times its quantity of water. Cloves enter largely into the composition of various liqueurs (see LIQUEURS). An essential oil is obtained from cloves by distillation with water, but if distilled with spirit, the oil is of course dissolved in the mass, and contributes powerfully to the aroma of the production; this oil is of a highly fragrant kind when largely diluted, but in its pure state much less so; it is frequently used in toothache; it is also used in many perfumes, but in such small quantities as rather to fix other essences than to predominate.

COALS. Although the most agreeable fire is that which is made from wood, the cost of this fuel is so considerable, that none but wealthy persons can use it. Good coals in England, where they are cheap as compared with the price on the Continent, cost two-thirds less than wood as fuel; and even in Paris, where fire wood is very much cheaper than in London, and coals are nearly twice as dear as in the British metropolis, it has been found, by a long series of experiments, that to obtain the same degree of heat and warmth from coals and wood there is an economy of one-third in favour of the former. Coals burnt in a close vessel for gas-making yield three principal results:—sulphureted hydrogen gas, which is passed after distillation through beds of lime, which take up the sulphur, and afterwards through water, which washes out the ammonia from the gas; secondly, tar; and thirdly, an ammoniacal water, which is generally called ammoniacal liquor; these are abstracted from the smoke of the coals. When burnt in an open fireplace, the gas and a certain portion of sulphur form the combustion, the greater portion of the tar, ammonia, and sulphur, pass up the chimney. There is nothing injurious to health in the burning of coals in open

fire places or in stoves, where there is a free egress for the sulphur and ammonia; but if the chimney or stove smokes, the lungs and the head may be very seriously affected by the quantity of sulphur and ammonia which enters the room; and instances have been known of suffocation from a coal fire left burning in a bedroom in a chimney of imperfect draught. How far the external atmosphere in large cities is affected by the smoke from the chimneys in weather when it does not rise freely, is a disputed point with chemists. M. Darcet, the celebrated French chemist, walked for several days through the streets of London, with prepared test papers for sulphur and ammonia stuck in the band of his hat; and from the rapidity with which they were discoloured, he came to a conclusion that the air was impregnated with sulphur and ammonia to a high degree, and that it was therefore very unwholesome. On the other hand, however, some chemists affirm that the sulphur, ammonia, and tar, contained in the smoke thus emitted in a modified state, tend to prevent some fatal diseases; and, under this impression, large coal fires were burnt in the streets of Paris during the prevalence of the cholera. Where coals are very dear, an economical fuel may be made as follows:—Take fifty pounds of good Newcastle coal in the state of dust fifty pounds of dry sand, fifty pounds of pounded chalk, and twenty-five pounds of the pitch made by the evaporation of gas tar, and known under the name of mineral pitch; melt the pitch in a large iron pan, and stir in the other articles; make the whole, when it is getting cool, into a sort of cake, and when dry break it into pieces of about the size of ordinary coal; a fire is then made of it in the usual way. It would appear from some experiments which were made with this mixture for steam-engine purposes, that it gives forth as much heat as pure coal; but for domestic use it is liable to a serious objection, as, however great the draught of the chimney may be, the pitch when in combustion emits a highly disagreeable odour. The fumes of gas tar have lately been much used in medicine in pulmonary diseases, and are said to effect extraordinary cures by inhalation; but the remedy should be used with great care, as a large dose would be injurious. It is a general opinion that persons employed upon gas works are never attacked by pulmonary consumption; and the exemption from that cruel malady has been attributed by some to the frequent agitation of the gas tar when removing it from vessel to vessel, and by others to the vapour from the vessels through which the gas passes, and which are frequently uncovered. It is however quite erroneous to suppose that there are no instances of consumption amongst the persons employed in gas works, for several have been recorded.

COCKROACHES. These insects, although otherwise harmless, are a sad nuisance in kitchens and pantries, for they attack different kinds of food. Various modes of destruction are resorted to; some persons at night and before going to bed (the cockroach rarely appears in the daytime or whilst a light is burning) strew the floor with wafers, which are mixed up with mercury or lead, and these being devoured by the cockroaches, they are poisoned; others keep a hedgehog in the kitchen, and generally speaking, this animal soon removes the intruders; the most simple mode of destruction, however, is to set in the place most frequented by cockroaches a large earthen pan, well glazed on the inside, and nearly filled with water, containing several pieces of bread; against the outside place a sloping piece of wood for the cockroach to crawl up, it will do so, and fall into the pan, from which it will be unable to extricate itself, if the sides of the pan be glazed. There is a very ingenious trap of this description sold, with a shelving plate of glass for the inside; the cockroach having crawled up the wooden frame of the trap and reached the glass, loses its hold, and falls into the chamber of the trap, which should contain a reservoir of water. Be careful, when the cockroaches are removed in the morning and apparently dead, to crush them, or to throw them into some place from which they cannot return. We are informed by an eminent naturalist, who lives in this country, that his servant, having removed one morning from the trap about two hundred cockroaches seemingly drowned, to make assurance doubly sure poured over them boiling water, and then threw them in front of the house; in less than three hours the influence of the sun had revived nearly the whole of them, and they were again crawling about in full vigour. The tenacity of life in the beetle tribe is very great. It is related of Sir Joshua Bankes that he once received a letter from Calcutta, announcing a present of a splendid collection of Indian beetles; when the case arrived, great was the mortification of Sir Joshua at finding

all the beetles, with the exception of a large one, which was crawling about with a large pin through his wing, partially devoured; this beetle had got loose, and fed upon the others during the voyage. The story appears fabulous, but the fact is not absolutely incredible. Many cats devour cockroaches, but they do not thrive on the food; they become thin and languid, and not unfrequently die, as if they were poisoned.

COCOA, see CHOCOLATE. A very wholesome and nourishing article; but a portion of its oil should be removed if the stomach be delicate. The preparation of cocoa for the table is very simple:—The cocoa should be ground, and boiled either with milk or water, and allowed to simmer for a long time. If it be boiled in water (milk is only to be used by those with whom it does not disagree) let it get thoroughly cold, and remove the fat which floats on the surface, then warm up for use. Half an ounce of the ground cocoa is sufficient for a pint of water, which should be reduced in boiling about one-fourth. Many persons find cocoa a very digestible beverage, when neither tea nor coffee will agree with them.

COFFEE. Coffee was first introduced into France in the year 1669, by the Turkish ambassador Soliman Aga, but many years elapsed before it came into general use. It was hardly known in England before the year 1752. The discovery of it is attributed to an Arabian priest, who was afflicted with a disease which plunged him frequently in sleep. He observed his goats one day feeding on the flowers and fruit of the coffee plant, and noticed that immediately afterwards their natural vivacity was much increased: the priest adopted the remedy; was cured of his malady, and the fame of the discovery was spread. For some time, however, it was used exclusively as a medicine; the torrefaction of the berry and its use as an article of diet were not the work of a day. It is now little used as a medicine; a decoction of the unroasted berry is sometimes ordered as a diuretic, but as the action is very inferior to that of other diuretics, the administration of it in this form is rare. Medical men are much divided in opinion as to the influence of coffee as a diet on the human frame, when taken in moderate quantity; but very serious consequences are known to result from it when taken in excess. Generally speaking, the moderate use of coffee taken at breakfast is favourable to digestion; but some persons are unable to take it without a large quantity of milk, whilst others, with whom it disagrees with much milk, find it wholesome with a very small portion of that article. There are many instances of persons who found coffee injurious in the ordinary mode, deriving great benefit from a small cup of strong coffee after dinner, without either milk or sugar; the most delicate nerves, instead of being further debilitated by its use in this way, are braced by it, for a tone is given to the stomach which assists the process of digestion. Strong coffee in its natural state, without the addition of milk and sugar, is at first unpleasant; but with a little practice the aromatic bitter becomes highly agreeable. Coffee at night generally prevents sleep, but with some it has a directly contrary effect. The mode of drinking coffee in France is very different from that which is usually adopted in England; the infusion of coffee, which is of great strength, is taken at breakfast with five or six times the same quantity of boiling milk. After dinner, a small cup is taken, without milk, but with at least four times the quantity of sugar which an Englishman would use; and either brandy is mixed with the coffee, or a small glass of it or of some liqueur is taken immediately afterwards; the French consider this to be necessary in order to correct the exciting effect which the coffee would otherwise have upon the stomach. If, however, the brandy performs any salutary part, it is that of correcting the acidity which a large quantity of sugar is calculated to produce. In the coffee houses of France, brandy is frequently mixed with the coffee and then set on fire; when the flame is burnt out, the coffee is used. This is generally allowed to be a very unwholesome beverage, even for a strong stomach if long indulged in, and fatal to a weak one. The mixture is called *gloria*. In almost all cases of long-standing disease of the stomach or bowels, the use of coffee is strictly forbidden by French physicians, who assert that there is no chance of cure except by a temporary abstinence from this delightful beverage; but the moderate use of it is never prohibited where the symptoms produced do not clearly indicate that it has an injurious effect. In cases of poisoning by opiates, the use of very strong coffee, with lemon juice, is frequently found highly beneficial; thus shewing its fine stimulating properties. On the whole, it may be said that coffee is one of the most cheering and whole-

some articles of diet, taken with prudence, and one of the most dangerous if carried to excess. The best coffee is the Moka; but on account of its high price it is generally mixed, even by the upper classes, with that of Bourbon, Cayenne, and Martinique. The Bourbon coffee is next in quality to Moka. Moka coffee is but little used amongst the middle classes; and many persons who do not regard expense, prefer taking it mixed with that of Bourbon, or Martinique. Some of the coffee from our own West India islands is, however, quite as good as that of the French colonies. The French have long enjoyed a high and exclusive reputation for their mode of preparing coffee, for which they are supposed to have some secret process. The secret, however, consists simply in having it roasted a very short time before it is used, making it very strong, and when taken with milk, using a large quantity of the latter article. There has been a great deal of charlatanism about the mode of making coffee; some pretend that if coffee be made by filtration the astringent property is obtained in excess; whilst others assert that if it be exposed to open ebullition, even for a moment, all the aroma is carried off. There is probably little truth either in one or the other statement, but it is certain that coffee may be made better than by filtration or long open ebullition. The late Emperor Napoleon, who was a great amateur of coffee, of which, however, he made a moderate use, is said to have given instructions to his cook to prepare it in the following way:—For three or four persons, two ounces of recently burnt and ground coffee are put into an empty coffee pot of the ordinary kind, with a small piece of isinglass; this is held over the fire, and shaken by the hand so as to prevent the burning of the coffee; when a smoke is seen to issue from the pot, water at the boiling point is poured upon it in a sufficient quantity to supply six breakfast cups, in the proportion of one-third of coffee to two-thirds of milk; the coffee pot is taken from the fire before the water is added, but being heated, the coffee boils gently as the pot is held in the hand; the ebullition is sufficient to bring out all the fine properties of the coffee without carrying off the aroma; a cup is then poured out, and returned again to the pot, to allow the powder to precipitate, and in two or three minutes the coffee is perfectly clear, and is used with boiling milk; some of the best families in Paris now adopt this plan, which is certainly superior to any other in use. If coffee be made by filtration, the quantity used must depend upon the taste of the consumer; but if strong coffee be required, less than one ounce for one person, or two ounces for three, and that supposes the coffee itself to be good, cannot be used. The common filtering pot will answer every purpose; it is quite unnecessary to go to the expense of any of the new inventions which are so pompously announced. Dr. Rattier, a French physician, recommends the following simple and economical mode of preparing coffee, which has the advantage of being made by cold infusion:—Take four ounces of fresh roasted coffee, ground in the usual way, and pour over it in a decanter a pint of cold water; shake it up two or three times; then cork the decanter, and let it stand twenty-four hours; at the expiration of which time filter it gently through fine linen or the common filtering bag, and put it into a clean bottle. Two table spoonfuls of this coffee poured cold into a breakfast cup of hot milk make an excellent beverage; all the aroma of the coffee is retained, and the whole strength has been extracted by the maceration in cold water; this is proved by pouring boiling water on the grounds and tasting the infusion, which will be found insipid. The essence of coffee, which is sold in bottles for the use of travellers, is thus prepared:—Take four ounces of coffee, to which add a pint and a half of water; boil it for a quarter of an hour gently, then let it stand until it is cold; then pour off the clear liquid, and evaporate it slowly over a fire, or in a sand bath, until it is reduced to a mere liquid extract, in quantity not exceeding three ounces; this is to be put into a bottle and kept for use; two tea-spoonfuls of this extract will suffice for a cup of hot water or milk: as the extract has an empyreumatic flavour, it is only a substitute for coffee made in the regular way, when the latter is impracticable. If intended to be kept a very long time, good spirits of wine, in the proportion of one-fifteenth, should be added to the extract when it is bottled. It is customary with the grocers on the Continent, and perhaps with some in England, to adulterate their coffee when sold in the ground state with a powder called chicorée, which is prepared from the baked root of a cultivated species of dandelion. As this powder costs only two sous per pound in France, whilst coffee of the ordinary kind is sold

at forty sous per pound, the temptation to fraud is great; medicinally, the admixture of the chicorée is said to correct the heating and over-stimulating properties of the coffee, and its colour is improved, but the flavour is much injured. The fraud may be easily detected by wetting a little of the ground coffee, and rolling it with the finger; if it adhere, the presence of the chicorée may be suspected; or if a quantity be thrown into a glass of water, the chicorée will unite more readily with the liquid than the coffee, and instantly impart to it a deep colour. As, notwithstanding the severe penalties inflicted upon grocers who are found to use this article, immense quantities of it are still introduced annually into England, every person who wishes to have pure coffee should purchase it in the berry, and grind it at home; and in large families it is important, if the parties are amateurs of good coffee, that they should also roast it themselves. Close coffee roasters may be had at most of the ironmongers' shops, and the process of roasting is very simple. If this cannot be done, care should be taken to purchase the article from a grocer who has fresh roasted coffee at least once in every three days; without this precaution it will be in vain to expect to drink coffee as good as they make it in France. Coffee in that country, and on the Continent generally, is more roasted than in England; this is not an advantage, the aroma is much destroyed by over roasting; it is therefore possible to make better coffee in England than on the Continent, if the same quantity be used, and the same process of making be observed. In some parts of England, spices, even mustard, are introduced, to improve, as it is said, the flavour of the coffee; nothing, however, can be added to good coffee which will not rather injure than improve its flavour.

COLD CREAM. An article used for burns, inflammations, &c., and as a cosmetic; it may be thus made:—Dissolve before the fire a cake of white wax, cut into shavings, in a pint of olive oil or oil of sweet almonds, and half an ounce of spermaceti; wash this mixture in repeated waters by beating it about with a wooden spoon; then wash it in the same way in rose water, beating it for more than half an hour; pour off the water, and beat up with the cream six drops of otto of rose; put into pots, and tie over with pieces of wet bladder.

COLUMBO WATER. This beautiful bitter preparation is much used in some parts of South America to provoke appetite and promote digestion, for of all the bitters it is that which acts as the most safe stimulant; it is made as follows:—Take four drachms of the bruised Columbo root, one drachm of bitter orange peel, and two drachms of the fresh liquorice root; add a quart of cold soft water, and simmer as gently as possible over a slow fire until half the bulk of water be evaporated; then strain the liquid and filter it add to this about one-sixth part of good brandy, and bottle it up for use. Take of this mixture the third of the contents of a wine glass, filling up the glass with water, about an hour before dinner.

CONFECTIONARY. The different articles of confectionary will be found under the heads of fruits, &c., which enter into the composition.

CONSOMME. A very important article in French cookery; it is made by boiling down meat of any kind with vegetables, until the essence is obtained. Consommé should be perfect jelly when cold; the best consommé is made as follows:—Take four pounds of beef cut in slices, four fowls, and two cabois' feet, fill up the space with Bouillon gras, adding a little water, and skimming from time to time; water alone may be added instead of Bouillon gras, if longer time be taken in making the consommé; the quantity of vegetables is the same as in making French stock, Bouillon gras (see Soups.) When sufficiently cooked, strain through a cloth.

CORIANDER. A very fine aromatic plant, the seeds of which are much used in medicine on account of the agreeable warmth which they impart to the stomach, they are also used in the kitchen. For the cultivation of the plant adopt the same course as with the caraway (see Caraway). The best way of using coriander for the kitchen is to bruise two ounces of the seed, and put it into a bottle with four ounces of spirits of wine. This must stand for a fortnight, or three weeks, and then be filtered off. A few drops may be used for dishes, or pastry, where coriander seed forms a part of the formula. A cordial may be made with the coriander seed as with caraway seed, adding about a quarter of an ounce of the latter, and a small piece of cinnamon.

CORKS. It is of the highest importance in domestic economy that the corks which are used should be of the best quality. It is poor economy indeed to

purchase bad corks because they are cheap. When corks are good, and they are previously squeezed in the instrument which is sold for that purpose, so as to allow for their swelling in the neck of the bottle; the precaution adopted by some persons of rendering them impervious to air and liquid is seldom necessary. When this is required, however, it is done by dipping the corks two or three times in a mixture of two thirds of virgin wax and one third of beef suet, melted, and baking them in an oven until dry. In using these corks they must not be squeezed. They do not communicate any bad smell or taste. As a further security against evaporation, it is customary to dip the upper part of the neck of the bottle, when corked, in wax, or resin. The best mixture is two pounds of resin, one pound of burgundy pitch, a quarter of a pound of yellow wax, and a small quantity of red mastic, all melted together. This is sufficiently firm, when cold, to adhere well, and not so firm as to chip off.

COSMETICS. The term usually applied to washes and pastes for the skin, to remove freckles, and give the skin a delicate appearance; they are of various kinds; amongst those which are highest in repute are the waters distilled from the orange flower, the elder flower, the melon, the cucumber, and from strawberries; asses' milk and goats' milk are also used. A compound lotion is also made by beating up six ounces of rye flour with the whites of four eggs and a pint of vinegar; another, called *Eau de Beauté*, is made by dissolving half an ounce of balsam of Tolu, a quarter of an ounce of balsam of Peru, and a quarter of an ounce of benzoin, in a little spirit, and mixing it with a quart of river water and a pint of rose water. A third is prepared by boiling two calves' feet and a pound of rice in ten quarts of water, until reduced to six; then adding a quart of milk, two pounds of fresh butter, and the whites and shells of ten fresh eggs, and boiling for half an hour longer, straining when cold. Distilled lily water, and water distilled with bean flour, are also much used, and have each their advocates. The favourite water in Paris for removing freckles, is an ounce of alum and an ounce of lemon juice in a pint of rose water. In England, the favourite cosmetic is milk of roses and almond paste, (see MILK OF ROSES, and PASTE.) There are various pomatums also which are renowned as cosmetics (see POMATUM.) All these mixtures, whatever may be their real virtues, can have little effect where the skin is not kept in good order by regulation of the stomach; if that be disordered, and the skin be harsh and dry from disease of the system, cosmetics can do little good.

COSTMARY. A herb but little used either for medicine or the kitchen. It grows freely in a dry soil from the seed sown in spring, or from slips and cuttings.

COWHAGE. This is the hairy covering of the pod of a bean which grows freely in Jamaica and other West India islands. The bean is little used for food, probably on account of the labour and difficulty of removing this hairy covering, the particles of which are so irritating that if any of them get upon the skin they produce a most unpleasant and severe itching. Viewed through a powerful microscope, cowhage appears like tremendous and sharp saws, and the spectator is no longer astonished that it should produce such irritating effects. This article is sometimes mischievously and cruelly put into beds, for the purpose of teazing, as it is called, the occupants; and it has been strewed over ball rooms where, as the dance proceeded, the cowhage was driven upwards, and attacking the skin of the dancers led to painful results, for the more persons who have it upon the skin scratch the part, the more violent becomes the itching. Cowhage, however, may be adopted for better purposes than the wanton torment of our fellow creatures; it is a powerful and the only safe remedy for worms in the intestines, and having only a mechanical action, it may be given to the most delicate infant; all that is necessary being to mix it with a little jelly or thick water gruel (the latter is preferable,) taking care that it does not touch the skin of the face or hands; there is no danger in the contact with the moist part of the lips, consequently nothing is more easy than to administer it with a spoon. The dose for a child may be from five to ten grains, or even more, for it is not medicinal; and an adult may take from fifteen to thirty grains without the slightest inconvenience. In most of the books on domestic medicine, the dose for an adult is given at from five to ten grains, but the writers evidently knew little of the modus operandi of the article. The effect of this remedy in general worm cases, (we have no proof of its having been beneficial in cases of tapeworm, but we do not see why it should not also attack the tapeworm) is astonishing. Although

from the moment of its being placed within the mouth it ceases to produce the irritation which it causes to the outer cuticle, it acts upon the skin of the worm, and so irritates it that it looses its hold upon the intestines, and soon dies; it is then expelled by the natural course of evacuation, or its expulsion may be hastened by the administration, twelve hours after taking the cowhage, of a dose of castor oil, or any other simple purgative. The writer of this article has used cowhage very extensively in his own practice, and has never had a single failure; in some cases, where patients had previously been under a long course of mercurial medicines for the expulsion of worms without relief as to the disease, but with great injury to the system, two or three doses of cowhage have sufficed for a perfect cure. In administering this remedy also he fell upon a valuable discovery, which he has since turned to good account in cases of chronic indigestion. A gentleman, fifty years of age, who had been suffering from dyspepsia for more than thirty years, had at length a rather severe attack, in which there were a few of the symptoms usually exhibited when worms are numerous in the intestinal canal; the cowhage was administered merely as an experiment, as, if there were no worms, it could create no inconvenience; it was soon evident that the patient had not worms; but as he fancied that the cowhage improved his digestion, it was continued for ten days, in doses of fifteen grains night and morning; at the end of this period he began to enjoy such health as he had not known for thirty years, and has ever since been well, taking occasionally three or four doses of cowhage, and now and then having recourse to a plain lavement for the removal of obstruction in the lower bowels. The success thus unexpectedly obtained in this case has led to the adoption of the same curative means in others, and always with immense benefit. The effect is probably produced by an irritation of the lining of the intestines, which, although not sufficient to create uneasiness, is sufficient to rouse the parts to healthful action. Our readers are aware that it is the practice of many physicians to recommend to dyspeptic patients the use of bread in which there is a large portion of bran; this is on the same principle, but the desired effect is rarely produced, whereas by the use of cowhage it is certain; and as the effect is wholly mechanical, it may be taken in all cases with perfect safety. Cowhage may be purchased at Apothecaries' Hall, or of any wholesale druggist, but there are few retail druggists who keep it; they will, however, always procure it upon application. It is sold in its pure state, that is to say, detached from the bean pod, at from 1*s.* 6*d.* to 2*s.* per drachm; but if it were in more general demand it might be sold at a very good profit for one shilling per drachm; but even at two shillings the dose of fifteen grains costs only sixpence, and five or six doses of fifteen grains will suffice in most cases. The most economical way of purchasing it is to have the bean itself, which is sold at from eight to twelve shillings per pound, and to remove the hairy covering by scraping it off with a knife, wearing gloves to prevent any of the cowhage from touching the hands; in this way a dose will not cost much more than two-pence. There is or used to be a preparation of this article called Chamberlayne's Cowhage Electuary, but as nothing is known as to the exact quantity of the cowhage contained in the electuary, we recommend the purchase in the pure form, and the administration of it in thick gruel, as preferable to any other vehicle.

CRAB. A shell fish, the flesh of which has nearly the same properties as that of the lobster. Crabs are seldom eaten in any other way than cold; the soft meat which fills the large shell, dressed with vinegar, oil, &c., is very rich, and seldom agrees with a delicate stomach. It is always advisable to take after it a very small quantity of good French brandy, mixed with its own bulk of water. The different modes of dressing recommended for lobsters may be adopted for crab, (see Lobster.) In the West Indies there is a land crab which is considered a great luxury; it is made into soup, and dressed in a variety of ways.

CRANBERRY. A fruit but little used in England, but which is in some esteem in Russia and Sweden, where it grows abundantly. The use of cranberries is in England chiefly limited to pies and puddings. They are preserved as follows:—For every pound of the fruit use two pounds of sugar; pour a little water into the preserving pan, then a layer of sugar, and then a layer of fruit; boil gently for twenty minutes, and skim.

CREAMS AND CUSTARDS.

Cream. The fat and rich part of the milk which rises to the surface (see Milk

and Butter). Although cream in its natural state disagrees with many persons, there are others who can take it without inconvenience, although milk would disagree with them. The richness, goodness, and quantity of cream, depend of course upon those of the milk from which it is obtained. It is said that if a little of the water in which potatoes have been boiled be mixed with the milk which is set for cream, the cream will rise more rapidly and abundantly. Cream may be kept for some time by adding sugar to it, and reducing it by very gentle heat in the water bath (see Water Bath) to three-fourths of its original quantity. The same effect may be obtained by setting the cream in a wide-mouthed bottle in a saucepan, and boiling until the quantity of cream be reduced. Cream is used in a variety of ways for pastry, and is served in its natural state for dessert, whipped up, and mixed with the juices of fruits, &c.; in France these mixtures are simply called *crêmes*. The following are the favourite French preparations of cream without the aid of heat:—

Chocolate Cream is made by pounding the chocolate into a paste with a little water, and whipping it up with the cream, in which the sugar has been previously dissolved, using also a little more gum Arabic than in the first receipt.

Coffee Cream is made by whipping up a little of a strong infusion of coffee with the cream, sugar, and gum.

Creme en Mousse. Take a pint of fresh cream, a quarter of a pound of pounded loaf sugar, and a tea-spoonful of powdered gum Arabic, dissolved in a little orange flower water; whip into a froth, and serve.

Creme au Liqueur. Increase the quantity of sugar and gum, and whip up with the cream, in which the sugar and gum have been previously dissolved, a wine glass of any liqueur, according to choice.

Creme aux Fruits. Adopt the same process as above, adding a wine glass of the juice of strawberries, raspberries, or other fruit instead of liqueur.

Vanilla Cream. Boil a small piece of vanilla in a little cream; when cold, add the cream to that which is to be whipped.

In the summer, all these creams should, if possible, be frozen, to prevent the froth from falling; the vessel in which they are made should be imbedded for a short time in pounded ice mixed with salt.

We subjoin some of the favourite preparations of creams in England.

Burnt Cream. Beat and mix well together the yolks of six eggs, two table-spoonfuls of flour, the peel of a lemon grated, and four or five bitter almonds; sweeten with lump sugar, and stir over the fire till it comes to a good thickness, and pour it into the dish in which it is to be served; boil some pounded loaf sugar in water until it turn brown, and then pour it over the top of the cream in fantastic figures.

Coffee Cream. Having dissolved an ounce of isinglass, boil it with two quarts of cream, and mix it with a pint and a half of very strong coffee; sweeten well, whisk it for ten minutes, put it into custard cups, and let them stand in a pan of boiling water until they become firm.

Cream for Fruit Pies is made by boiling new milk with grated nutmeg or cinnamon, two or three peach leaves, or a few bruised bitter almonds, and a sufficient quantity of sugar to sweeten it, then straining the cream, and when cold beating up with it the yolks of eggs, in the proportion of four to a quart, and warming the whole over the fire until it thickens. This is eaten cold with fruit tarts, or with any fresh fruits at dessert. If one-fourth of the quantity be rich cream, instead of the whole being milk, it will be improved.

Honeycomb Cream. Pound and sift a pound of lump sugar, and mix it in a China bowl, with some strained lemon juice; then from a lip jug pour about two quarts of good cream over the sugar and lemon, holding the jug as high as possible to cause a good froth. Stir well at table before helping.

Italian Cream. Having sweetened a pint of cream, boil it with the rind of a lemon, cut very thin, and a small stick of cinnamon; strain and mix with it a little dissolved isinglass; while hot, add to it the yolks of eight eggs well beaten, and stir it till quite cold.

Another way: this is made by thickening in a saucepan a pint of good milk, the beaten yolks of three eggs, a table-spoonful of potatoe or wheaten flour, about two ounces of sugar, and some grated lemon peel, stirring constantly. It is served in the following way:—cover the bottom of the dish with some sponge cake, dipped in white wine or liqueur, (the latter is preferable,) and pour the cream upon it; whisk the whites of two new laid eggs and half an ounce of pounded and sifted sugar into a good froth, and cover

the cream with it, or lay the froth in detached portions, of almost the size of a large apple, in the cream. If the cream be covered with the froth, it may be browned with a hot shovel.

Lemon Cream. Mix in a pint of cream, well sweetened with loaf sugar, the yolks of five eggs and the whites of three, a table-spoonful of flour, a glass of ratafia, or liqueur of any kind, a little orange flower water, and the grated rind of a lemon, or the peel ungrated. Beat these well together and put them on the fire, stirring until thick, like custard, then strain the cream and put it into a dish; when cold, sift over some fine white sugar. It may either be browned with a salamander or not. Another lemon cream is made without boiling, by sweetening a pint of cream with sugar rubbed over the rind of two lemons, and as much more sugar, pounded, as may be necessary; then adding juice of the lemons and the grated peel, very fine; whisk up the whole well, and serve the froth upon sponge biscuits dipped in wine.

Neapolitan Cream. Dissolve half an ounce of isinglass in half a pint of water, by boiling, and then add a pint of rich cream. Set this, when it has had one boil, to cool, having previously sweetened it with fine sugar; and when about half cold, beat up with it the yolks of four eggs, a glass of liqueur, and a little grated nutmeg, and a few drops of essence of lemon; when cold, put it into a shape.

Orange Cream without Mould. Take the strained juice of twelve oranges and heat it over the fire, adding sufficient sugar to make it sweet; skim frequently. When the sugar has dissolved, take off the juice and let it stand until cold; then mix with it a pint of cream, in which the yolks of twelve eggs have been beaten up, and warm the whole over the fire until it thickens; serve in custard cups or glasses. The flavour will be improved by adding the juice of one lemon. A lemon cream may be made in the same way, using only four lemons instead of twelve oranges; it may be further flavoured by orange flower water, or with the essence of lemon.

Orange Cream in Mould. Boil an ounce of isinglass in rather more than half a pint of water till reduced to one half, and add the strained juice of four oranges and one lemon; when the solution of isinglass is nearly cold, stir into it a pint of cream well beaten up into a froth, with sufficient sugar to sweeten the whole mixture well, and stir until it begins to set, then put it into a mould.

Pink Cream. Having picked some red currants from the stalks, put them into a closely covered jar, and set it over the fire in a pan of cold water, and let it boil for three hours, then strain the juice through a sieve, and sweeten to taste; when cold, add cream in the proportion of a quart to a pint of the juice, and whisk it well.

Raspberry Cream. To a quart of cream add six ounces of raspberry jam, pass it through a fine lawn sieve, mix it with the juice of a lemon, and sugar to taste, and whisk to a good froth; serve in glasses or in a shape.

Strawberry Cream. Same as raspberry.

Solid Cream. Mix with a pint of cream two ounces of pounded loaf sugar, the juice of a lemon, a glass of liqueur, or brandy, or rum, and work them well together by pouring for some time from one jug to another.

Solid Fruit Cream. Cream may be prepared with apples, peaches, apricots, &c., by boiling them in a very light syrup, after coring and peeling, or stoning, until they are sufficiently soft to press the pulp through a sieve; they are then sweetened, and beaten up with the whites of eggs which have been well whisked, and cream is laid round them. For apple cream the fruit may be boiled in a little plain water.

Spanish Cream. Boil two ounces of isinglass in a pint of water till quite dissolved, and mix it with two quarts of good milk; stir it over the fire till it begins to boil, then let it cool a little, and add gradually the yolks of twelve eggs, well beaten, a large glass of white wine, and a little ratafia; pour it out into a dish, sweeten to taste, and when cold put it into shapes.

Stone Cream is made by boiling a quarter of an ounce of isinglass in a little water, and boiling it with a pint of sweetened cream, stirring it well; pour this into a dish in which have been placed preserved fruit, such as apricots, cherries, &c., with some lemon juice (say two or three table-spoonfuls,) and some grated lemon peel.

Swiss Cream. Boil the grated peel of a good sized lemon, and rather more than half a pound of white loaf sugar in a pint of cream, thickening with a spoonful of flour previously mixed up with a table-spoonful of lemon juice; this is to be

added very gradually as the cream warms, and the whole is to be carefully stirred; when it is taken from the fire, stir till nearly cold, and serve in a glass dish garnished with preserved fruits, or candied orange and lemon peel. There is another dish called Swiss Cream which is eaten hot; it is made by whisking up in a basin or deep dish, previously made very hot, the yolks of eight eggs with half a pound of pounded loaf sugar, the grated rind of a lemon peel, and half a pint of white French wine.

Whipt Cream. Sweeten a quart of cream, and add to it a little rose water, or the juice of some ripe fruit; whisk it well in a deep dish, and take off the froth as it rises, and heap it upon a dish, or into glasses. It may be iced when made, if desired, and coloured by the application of a little carmine.

Another way: take a quart of good cream, sweeten it with pounded sugar, and give to it any desired flavour, such as rose, by adding two or three drops of otto of rose, or a little rosewater, orange flower, (see Neroli,) or lemon, by rubbing sugar upon the rinds of lemons, or using a little essence of lemon, (see Essential Oil,) or the expressed juice of any fruit, as raspberries, currants, strawberries, &c.; whisk the cream well into a thick good froth, putting it to drain as it rises, in the same way as recommended for syllabub, (see Syllabub,) till all is whisked; then put the whole into a dish, or serve in glasses. If it is required to give colour to this or other creams, it may be done by putting the colour required, such as carmine, arnotto, &c., in a bag, and putting it into boiling water, squeezing out the colour in the same way as with a blue bag; filter the liquid, and add it to the cream before whisking, until the desired tint is obtained.

An almost endless variety of receipts for creams might be given, but they are merely varieties, and the above are quite sufficient to enable the cook or housekeeper to exercise invention. It may be well to observe that not only the fresh juices, but also the marmalades of any fruit, may be made up with creams according to the ordinary process of cream making, either plain whipped, or boiled with or without isinglass, and that all creams to be eaten cold are much improved by being frozen.

Custard. Having sweetened two quarts of good milk, boil it with a stick of cinnamon, and the peel of a lemon; strain; and when a little cool, mix in gradually the yolks of twenty eggs, well beaten; stir it over a slow fire till it becomes pretty thick, then pour it into a basin and add a tablespoonful of orange flower water, and a small glass of ratafia; keep stirring it occasionally till cold, and then put it into cups.

Almond Custard. Blanch half a pound of almonds, and pound them in a mortar with a little rosewater; then add a quart of cream, and the yolks of twelve eggs well beaten; sweeten to taste with lump sugar, and stir over a slow fire until it becomes thick, but without allowing it to boil; serve in cups with sugar sifted over the top.

Biscuit Custard. Break into small bits two dozen macaroons, and the same number of small ratafia biscuits, pour over them a hot custard, and stir well until the whole is well mixed; pour it into a trifle dish, and pour over it the whites of two eggs well whisked for an hour with a little red currant jelly; grating nutmeg over the top of the whole.

Lemon Custard. Squeeze the juice of eight lemons into a deep dish with half a pound of pounded loaf sugar; boil two quarts of cream with the peel of a lemon, and four ounces of pounded lump sugar, and pour into the dish; it will keep for five or six days.

Orange Custard. Strain the juice of twenty oranges, and sweeten with pounded loaf sugar; stir it over the fire till hot, and when nearly cold add to it the yolks of twenty eggs well beaten, a quart of cream, and a glass of ratafia; put it again into the saucepan, and stir it over a slow fire until it thickens; serve in cups or glasses, or in a dish.

Rice Custard. Mix a quart of milk, a pint of cream, two ounces of ground rice, ten bitter almonds blanched, and pounded with a little orange flower water; sweeten to taste, and stir altogether till it nearly boils; then add the yolks of five eggs, stir, and let it simmer for a minute; serve it in cups with sifted loaf sugar on the top.

CREOZOTE. An essence obtained from the distillation of wood. It has a high tar flavour, and leaves a taste in the mouth which is got rid of with difficulty. It appears, however, to have some precious sedative properties; it has been long used as a remedy for the toothache, and where that distressing pain is susceptible of cure from any other application than the instrument of the dentist it is really excellent

In 1839 the author of an interesting work, called "The Hand Book to Paris," announced that it was a remedy for sea sickness, and from diligent inquiry we find that if not exactly what has been announced by some—viz., a preventive, it is superior to anything hitherto announced for that afflicting malady. An English physician, for some time resident at Boulogne, gives the following account of it in a letter to a friend:—"I had for some time recommended my dyspeptic patients to take occasionally four or five drops of the creozote in water, and had witnessed the most happy effects from it in many cases of indigestion which had baffled the ordinary course of practice, when I saw an extract from a little work, called the 'Paris Hand Book,' announcing that creozote was a remedy for sea-sickness. Having frequently to cross the channel, and being a great sufferer from sea-sickness, and concluding from analogy that it might really be of service in tranquillizing the nerves, to which in their deranged state we owe the most painful effects of sea-sickness, I resolved to try it. In four voyages after I had tried this remedy, by taking six drops a few minutes before I started, and four or five drops on sugar when on board, I had no sickness; whereas on all previous occasions I was more or less ill, and sometimes dreadfully so. On my fifth voyage, which was a very rough one indeed, the creozote did not prevent my vomiting, but to my great satisfaction, and I may say astonishment, considering what I had previously suffered in rough weather, I had no straining in getting rid of the contents of the stomach, and when the vomiting, which did not last five minutes, was over, I was able to walk about the deck and enjoy the voyage, instead of lying prostrate, as I had hitherto done, and suffering acutely. I have now used the creozote on the whole about ten times; in eight of the voyages I was not ill, even for a moment; in the other two I was sick for only a very short time, and recovered almost immediately. I strongly recommend you to try it, for it is a very safe remedy, as there is nothing narcotic in its sedativeness, but you must make up your mind to an unpleasant flavour; at least such is the general opinion on the subject, and some of my lady patients who used it tell me they were not sick, but would rather have been so than have had the unpleasant taste of the medicine in their mouths; they were I think not to say a *little* fastidious, for to me the taste is by no means disagreeable." The testimony borne to the creozote in the above letter as a remedy for indigestion, and the certainty that there is nothing in it which can disagree with the stomach, warrants the trial in cases of this description, particularly those in which the derangement of the nerves is indicated by a pain at the pit of the stomach.

CUCUMBERS. These are always more or less indigestible, but they are much more digestible when cooked than in their raw state; they are also of a cold nature, and should never be eaten without pepper. There are four species of cucumbers for the table, two early, and two of late cucumbers; the seed of the early sorts should be sown in the month of May, in a common bed, taking care to cover the ground with mats during the night, and also in the day-time, if the weather be cold; in the following month, plants must be taken up and put separately in garden pots, which are to be placed in a hot-bed under glass frames; before the frost arrives, they will be beyond danger. The culture of the common or late cucumber is very simple; the seeds are to be sown in a hot-bed early in the spring, and when the plants are sufficiently large for transplanting, they are to be placed in open ground richly manured. The mode of raising the early cucumber in France is as follows:—The seeds are sown in a hot-bed, having only four inches of earth, in November or December, under bell glasses, about a dozen seeds under each glass; a month afterwards the plants are placed in another hot-bed, about four under each glass; and a month afterwards they are transplanted into a third bed, the manure of which is less abundant, and with about eight inches of mould; this bed is under glass frames, and the plants are placed at about two feet distance from each other. When the plants are sufficiently strong, they are trimmed or cut off above the second leaf; air is admitted from time to time, and when the weather is warm; these plants are watered with water which has been slightly warmed by adding about two quarts of boiling water to five gallons of cold water. In cold weather, care is taken not to expose the plants to the air. The seeds of the cucumber are not gathered until the vegetable begins to fall to decay, they are then washed carefully and put to dry; they will remain good for seven or eight years.

Bedfordshire Cucumbers. In the southern counties of England, pickling

cucumbers are easily raised without any artificial heat, being sown in drills in the open ground. The earth is made fine and level, and shallow circular hollows are formed with the hand, a foot wide, and half an inch deep in the middle; the distance between each hollow is three feet and a half, and the distance between the rows five or six feet. Eight or ten seeds are deposited in each cavity; this is done in the beginning of June. When the plants appear, they are thinned out to three or four, the weakest or less healthy being rejected; they are watered occasionally, according to the state of the weather; the cucumbers are gathered chiefly from the middle to the end of August. Vast quantities of these open ground gherkins are taken to the London market; the valley of Sandy, in Bedfordshire, has been known to furnish ten thousand bushels of drilled cucumbers in one week.

To Eat Cucumbers in their Raw State. Take off the rind of the cucumber, then cut it in very thin round slices, and let them lie in salt for about a quarter of an hour, to carry off a portion of their water; take away the salt, and serve the cucumber with vinegar, oil, and pepper. If chopped onion be served with it, the dish is much more wholesome.

Cucumbers a la Maitre d'Hotel. Cut them in rather thick slices, and stew, or rather fry them in a saucepan with butter, pepper, salt, chopped parsley, and cibols or a little onion.

Cucumbers in Milk. Cut the cucumbers in small squares, after taking off the rind, and put them over the fire in a saucepan with salt, until they become tender; have a milk sauce ready, thickened with flour and white of egg, and properly sweetened; the cucumbers are to be taken out and strained, and put into this sauce, which is to be served up hot.

Cucumbers a la Poulette. Let the cucumbers simmer over the fire with butter, then thicken with flour, and moisten with cream and beef-stock; when taken from the fire, add to the same the whites of two or three eggs previously beaten up; heighten the flavour with a little vinegar.

To Pickle Cucumbers. (See Pickles.)

CURDS. The term applied to that portion of milk which is separated from the whey by the addition of rennet or any acid. Curds and cream form a favourite dish in many parts of England; it is made by turning new milk with rennet, draining the curds from the whey, and pressing them into a mould; when quite cold the whey is served in a dish, covered with rich sweetened cream and nutmeg, and with the addition of any other flavour, such as the fresh juice of fruits, or ratafia, &c., beaten up with the cream. The dish called Naples curd is made by boiling a little cinnamon or nutmeg for a few minutes in a quart of milk, then stirring in the well-beaten yolks of eight eggs, and a little white wine; boil, and then strain through a sieve; the curds of this are to be beaten up with a little orange flower water, and powdered sugar to sweeten them; put into a mould to give shape to the curd; and when compact, serve in a dish covered with a little fresh and sweetened cream. Curds, although considered by many persons to be a light dish, are heavy of digestion, and should not be eaten by persons of delicate stomachs. Curds and whey are merely milk turned by rennet, and a little sweetened; the curds and whey are served together.

CURRIE POWDER. A hot preparation, very much used in India. The best is made there, but little of it finds its way to Europe; what is sold at the oil shops is generally of English manufacture. The following are some of the best known receipts:—Pound six ounces of coriander seed, three ounces of black pepper, an ounce and a half of fenigreck seed, one ounce of cummin seed, three ounces of turmeric, and three quarters of an ounce of Cayenne; sift through muslin, and dry it thoroughly for several hours before the fire, stirring repeatedly; then bottle, and cork very tightly. If the powder be made for the use of persons who have lived much in India, and been accustomed to eat currie there, the quantity of Cayenne should be increased to an ounce, or even an ounce and a quarter. Another preparation of currie powder is made by omitting the coriander seed, doubling the quantity of turmeric, and substituting for the coriander two ounces of ginger; in fact, if turmeric and Cayenne be made the basis of the powder, the other ingredients may be varied according to taste.

Currie. Any dish strongly seasoned with currie powder. From the large quantity of spice used in curries it will readily be conceived that they are to be used with moderation; where the stomach, however, will bear the excitement, currie has the effect of stimulating the appetite, and creating a relish for the plainer dishes.

Dry Currie. Cut up a fowl, or a

rabbit, or part of a loin of veal; fry the meat in butter with three or four minced onions, and when done, powder it with a table-spoonful of currie, and a tea-spoonful of Cayenne pepper; then stew the meat and onions in a stewpan, with a pint of water and a little rich gravy of any kind, adding enough salt to give flavour; when the meat has stewed long enough to become quite tender, add a little vinegar, or lemon juice, and five minutes afterwards serve the dish.

Another Currie. The meat is to be cut into small pieces, and fried with slices of onions; in the meantime, pound in a mortar two onions, an apple, and a head of garlic, with a glass of sherry; when well pounded, strain the juice through a sieve, and add a table-spoonful of currie powder, two spoonfuls of turmeric, and half a tea-spoonful of Cayenne pepper; now put the meat into a stew pan with this mixture and a little salt, and add a pint of French white wine, or the same quantity of water; stew gently until there be very little liquor left; then squeeze in a table spoonful of lemon juice, and serve. This dish is sometimes made by putting the meat on skewers with alternate slices of onion, and frying in that state before stewing; it is in this case called Kebobed currie.

Fish Currie is made by stewing any fish cut into pieces, with sufficient water to cover it, and the same proportion of currie powder as for meat, adding pepper, and salt, and a few onions and shalots, fried brown in a good quantity of butter, say a quarter of a pound to two good sized mackarel; in order to increase the flavour, the fish before being put into the stew pan may be well powdered with turmeric and a little Cayenne pepper. Cold fish may be prepared in the same way, and served either as a separate dish or in a *vol au vent;* on the Continent, the latter is preferred. As many of the bones as possible should be removed before the fish is put on to stew, rice being served with this as with all other dishes of currie. If the fish is to be eaten cold, it is not to be stewed at all; the cold fish from the preceding day is to be arranged as neatly as possible, so as not to have the appearance of having been previously on the table; and vinegar, in which onions, shalots, garlic, ginger, nutmeg, cloves, salt, pepper, and currie powder have been boiled, is to be poured boiling hot over the fish, which is to stand in a close vessel for a few hours; the quantity of the spices must depend upon the quantity of fish and the discretion of the cook.

To Curry a Fowl. Skin the fowl, cut it into small pieces, and lay them in cold water for an hour; mince an onion, and put it into a saucepan with two ounces of fresh butter, and a little flour stirred in by degrees; when it is well browned add three pints of water, and put in the fowl, and a large table-spoonful of currie powder; these are to boil until the fowl is quite tender; just before serving, add the juice of half a lemon. Boiled rice is to be served with this or any other currie in a separate dish. Some cooks brown the fowl in the butter before adding the water, and others use stock instead of water, or water with some rich gravy; a rabbit cooked in this way is a favourite dish; the remains of rabbit or fowl may be dressed in the same way. Veal is also frequently made into currie, either fresh, or the roast veal of a preceding day: if veal previously dressed be used, it should be cut into thick slices, and when the butter has been prepared as above, put into it, with some good gravy and the currie powder; if the veal be fresh, it should be from the neck, cut into cutlets, and the liquor in which it is to be stewed should be previously made from the trimmings; the cutlets are to be fried in the butter before the gravy and currie powder are added; in this case, instead of thickening the butter with flour, let the gravy from the trimmings when strained be thickened.

Curried Frogs. The following dish was frequently served at the table of one of the foreign ambassadors at Paris—the same process may be adopted for a chicken:—Take the hind legs of four dozen frogs (or a chicken cut up,) blanch them in a pint of milk and then set them by; now add to the milk two onions cut into slices, some salt, two large mushrooms cut up, a table-spoonful of currie powder, and a little Cayenne pepper, boil these very gently for half an hour, then add the frogs and stew very slowly for another half hour, squeeze in the juice of half a large lemon, and serve.

Indian Currie. Mrs. Dalgairn gives the following as the mode of preparing this dish; it must be observed, however, that there are scarcely two cooks in India who dress their currie in precisely the same way:—"Stew in two ounces of butter, for ten minutes, a tea-spoonful of Cayenne and one of Jamaica pepper, a dessert-spoonful of pounded coriander seed, six small onions, and two heads of garlic minced; cut the fowl or rabbit into small pieces, and cover it with the curd

of sweet milk; put the whole into a stew pan with as much boiling water as may be desired for sauce, and let it simmer till very tender."

The rice to be served with currie should be of the best quality, and should be washed perfectly clean; it may then be boiled in a bag, or as follows:—Boil half a pound of rice for about twenty minutes in a quart of cold water, then put it to drain in a sieve, after which dry it before the fire to get rid of all superfluous moisture, stirring it from time to time, and serve it very hot.

CURRANTS. This is a very agreeable and wholesome fruit, common to many countries, and useful in a variety of preparations. In its raw state the currant is said to be a corrective of bile, when eaten in the morning fasting; and with the exception of its being a little flatulent, when eaten to excess, this fruit seldom produces inconvenience. The juice of the black currant is used a great deal when prepared as a jelly for sore throats, and the leaves infused as tea are also considered a good remedy for cold. The currant tree may be propagated by cuttings, and will grow freely in most soils. When trained against a wall, with a good southern aspect, the fruit attains a larger size.

Black Currant Paste. The best way of making black currant paste is to dissolve an ounce of isinglass in about half a pint of the filtered juice, and equal weight of sugar, put them in a stew pan, and let them simmer for at least an hour, then pour out the juice into a very shallow tin mould, and when it is cold and quite hard cut it into pieces. The juice of the black currant makes a fine liqueur which is called by the French Ratafia de Cassis (see Ratafia.)

Currant Jam. Boil the currants with an equal weight of sugar, scumming them well; if there is no objection to the jam being rather solid, a portion of the juice may be poured off, and made into jelly, as under.

Currant Jelly. For this purpose choose the fruit very ripe, bruise them, and press out the juice into a large earthen vessel, cover it well, and set it by in a cool place for six days; at the expiration of this time remove the film that covers the top of the juice, and pour it off very carefully into another vessel; weigh the juice and put it with half its weight of lump sugar into a large saucepan, set it over a slow fire, being careful to scum it well, let it simmer for an hour, or until you find by pouring a few drops of the liquid on a cold plate that it becomes when cold of the consistence of jelly, then pour it into small pots, and when cold put over each pot a piece of writing paper soaked in brandy, covering the whole with bladder or parchment. Red and black currants alone are used for making jelly. Where the flavour is liked, a fourth part of raspberries may be mixed with the currants.

Compote of Currants. Having made a very strong syrup, pick a pound of fine currants, wash them and drain them well, and put them into the syrup and let them boil up three or four times pretty sharply, taking care to scum them carefully.

Currant Jelly without Boiling. Proceed as in making jelly for boiling, taking care, however, to have the currants very ripe, and not to wash them, putting a pound of powdered sugar to a pound of juice, and passing the whole through a jelly bag; when the jelly is in the pots, put them to stand in the sun for two or three days; this jelly has a finer flavour than that which is boiled, but does not keep so long. In powdering the sugar for this, as in all preparations where powdered sugar is ordered, it should not be triturated in a mortar, or even crushed. as is the common practice, with a rolling-pin; it is a singular fact, that beating or crushing sugar converts a portion of it into starch, and therefore diminishes its sweetening property.

Syrup of Currants with Raspberries and Cherries. Take two pounds of red currants a little before they are ripe, a pound of fine cherries, and the same quantity of raspberries; stone the cherries, and having pressed the juice out of all the fruit, pass it through the sieve and put it into the cellar for twenty-four hours, then take off the crust and strain through a jelly bag. In order that the juice may be finely perfumed by the raspberries, the better plan is not to squeeze out their juice with that of the currants and cherries, but to place the raspberries in the juice of these fruits for about a day and then squeeze them, and add their juice to the other; when the whole of the juice has been well filtered, put to half a pound of juice a pound of white sugar broken into small pieces, and place the whole in a stew pan over a slow fire when the sugar has entirely melted, without allowing the mixture to boil, take it off and bottle it. This is a very refresh-

ing syrup in hot weather, mixed with water, and may be also used with benefit in cases of fever.

CURRANT WINES. (See WINES.)

For the use of currants in pastry, see PASTRY.

CUTS. For an ordinary cut, no other measure is necessary than closing the edges of the wound as well as possible by pressure, and applying over it slips of diachylon plaster, to exclude the external air; over these may be laid slips of court plaster, to secure the others, and a linen rag may be tied over the whole. The common plan of applying oils, balsams, brandy, &c., is worse than useless. If the cut be very severe, the aid of a surgeon should be called in.

DATES. The fruit of an African tree; in their dried state, as they are imported into Europe, they are not very delicate eating. Stewed in the same way as dried plums, they are said to be good for coughs and colds.

DIGESTION. Under the head INDIGESTION, the reader will find practical rules for the prevention and cure of that distressing state of disease, particularly as connected with food. In order, however, that the article in question may be better understood, it may not be amiss here to give a short account of the digestive process; the article DIGESTION in the "Penny Encyclopædia" being the best description, as regards simplicity and comprehensiveness, which has been published on the subject, we think we cannot do better than quote it here. "The process of digestion comprehends the entire series of changes by which the crude aliment is assimilated into arterial blood. These changes are effected by organs which, viewed collectively, comprise a most extensive apparatus commencing at the mouth and ending at the lungs.

"The first changes upon the food are effected in the mouth, where it is mixed with mucus and saliva. Torn to pieces by the teeth in the operation of mastication and softened by the secretions of the mouth until it is reduced to a pulp, it is then collected by the tongue and formed by that organ into a mass called a bolus. The bolus of food thus prepared is carried by the tongue to a muscular membranous bag called the pharynx, situated at the back part of the throat. The pharynx, as soon as it receives the bolus, contracts firmly upon it, and by a proper muscular action delivers it to the œsophagus, a long muscular tube which extends from the pharnyx to the stomach. The bolus of food does not descend along the œsophagus by its own weight, for a person can swallow while standing on his head, and many animals have obviously to convey their food along the œsophagus against gravity. The food when it enters the œsophagus is transmitted along the tube by a powerful contraction upon it of the strong fasciculi of muscular fibres of which it is composed.

"By the œsophagus the food is conveyed into the stomach, where it is converted into a fluid termed chyme. The chyme when duly prepared in the stomach is transmitted to the small intestines, in the first portion of which it is converted into a new substance called chyle. In its passage along the second portion of the small intestines the chyle disappears, being taken up by a set of vessels named lacteals, which convey it through a double series of glands called the mesenteric glands, to the thoracic duct. By the thoracic duct it is conveyed through the abdomen into the thorax, where it is poured into one of the large veins, the subclavian, which returns the blood from the upper parts of the body to the right side of the heart, to be, by the right heart, propelled into the pulmonary artery. By the pulmonary artery the chyle now mingled with venous blood is conveyed to the lungs, where it undergoes its ultimate change, and is converted into arterial blood. The large intestines meantime carry out of the body that portion of the food which has not been converted into chyle."

The structure of the different parts of the extensive apparatus concerned in carrying on this series of changes, a structure fitting them in the most admirable manner for performing the specific offices assigned them, will not be here described, as we shall confine ourselves strictly to an account of the phenomena of digestion.

"The food, torn, as has been stated, into minute fragments by the operation of mastication, softened and brought into the state of a pulp by its admixture with mucus and saliva, and raised nearly to the temperature of the blood by the warmth of the mouth, is received into an extensive chamber, the stomach, where it is constantly maintained at a temperature of 100° of Fahrenheit, and kept in a state of gentle but almost unceasing agitation by a peculiar motion of the stomach, effected by its muscular fibres, and called, from its

striking resemblance to the motion of the earth-worm, peristaltic. The essential phenomena which take place on the introduction of the food into the stomach are the following:—

"The food on entering the stomach is not arranged indifferently in any part of the chamber, but is detained in the great extremity, or that portion of the stomach wich is near the entrance of the œsophagus, termed the cardiac extremity. This portion of the stomach, during the actual process of digestion, appears to be cut off from the rest by a contraction of the circular fibres of the muscular coat, called the hour-glass contraction, by which about a third of the length of the stomach towards its small or pyloric extremity is separated from the great or cardiac extremity. The food received in the cardiac extremity is slowly dissolved; this solution takes place at the surface; 'in proportion as it proceeds, the dissolved part is rolled off the rest by the peristaltic action of the fibres of the stomach and carried to the pyloric portion,' where it accumulates. Thus the undissolved and the dissolved portions of the food are in different parts of the stomach; the undissolved portion in the cardiac, and the dissolved portion in the pyloric extremity.

"A remarkable change takes place on the inner or mucous surface of the stomach, the moment a portion of food comes in contact with it. This change has been seen to take place in the stomachs of animals, laid open during the process of digestion for the purpose of affording an opportunity to observe the phenomena, and even in the human stomach, which, in more than one instance, has been completely exposed to view in consequence of wounds accidentally inflicted. The mucous coat of the stomach, which is of a pale pink colour when the stomach is empty, becomes of a bright red colour when excited by the contact of food. Over this reddened surface are visible, more especially when it is examined through a magnifying glass, innumerable minute lucid points, from which distils a pure limpid and colourless fluid. This fluid, as it is discharged, is absorbed by the aliment in contact with the surface of the stomach, or collects in small drops and trickles down the sides of the stomach to the more depending parts, and there mingles with the food and dissolves it. This fluid, the true solvent of the food, is termed the gastric juice. It has been ascertained to be the efficient agent in digestion, and its solvent power has been demonstrated by a series of most decisive experiments long ago performed by Spallanzani and others. This distinguished physiologist swallowed a metallic tube perforated with holes and filled with flesh; he allowed the tube to remain in the stomach four hours, and then contrived to throw it up by exciting vomiting mechanically. The flesh in the tube was found to be thoroughly soaked with the fluid of the stomach; its surface was in a dissolved state, being soft and gelatinous, and moreover it had wasted from fifty-three to thirty-eight grains. Subsequently Dr. Stevens induced a person practised in swallowing pebbles, to swallow a hollow silver sphere, containing raw or cooked flesh, or vegetables, and perforated with holes that would admit a crow quill; the sphere was voided in about forty hours perfectly empty. Next Mr. Hunter observed that the great extremity of the human stomach is sometimes found after death in a softened state, and even in a state of partial solution, the coats of the stomach being dissolved by its own gastric juice, and the edges of the opening appearing pulpy, tender and ragged, and even the parts adjacent to the stomach, as the spleen, the diaphragm, and the lungs, being in like manner softened.

"This solution of the food is wholly different from the spontaneous resolution which warmth and moisture tend to produce in it. Exposure of the food to warmth and moisture decomposes it by the process of putrefaction; but the gastric juice is antiseptic, and stops the putrefying process even after it is considerably advanced. The solution of the food by the gastric juice is a chemical operation, and the gastric juice is a chemical agent, the exact nature of which is now clearly ascertained. Spallanzani discovered that the gastric juice is of an acid nature. Some years ago Dr. Prout ascertained that this acid is the muriatic. Dr. Prout's experiments were repeated by some distinguished chemists in France with different results; but the accuracy of Dr. Prout's conclusions was afterwards confirmed by the experiments of Tiedemann and Gmelin, and they have received a fresh confirmation by the more recent experiments of Bracconnot and Blondelot, so that it may now be considered as established that the agent by which the solution of the food in the stomach is effected is muriatic acid or chlorine. If meat and

gastric juice be enclosed in a glass tube, and kept at the temperature of the human body, a product is obtained closely resembling the fluid formed by the solution of the food in the stomach. If meat be enclosed in a glass tube with dilute muriatic acid, and kept at the temperature of the blood, a perfectly similar product is obtained.

"The muriatic acid constituting the essential ingredient of the gastric juice is conceived to be derived by an act of secretion from common salt, muriate of soda, contained in the blood. The alkali, the base of the salt, is retained in the blood to maintain the alkaline condition essential to its healthy constitution, while the acid is liberated and poured, in the form of gastric juice, into the stomach to accomplish the solution of the food.

"After the food has undergone the action of the gastric juice, it loses its sensible properties, and is converted into the homogeneous semi-fluid mass which has received the name of chyme. Specific differences are distinguishable in chyme, according as the food from which it is formed has consisted of vegetable or animal matter, and according as it has contained fatty or oily substance, or has been destitute of them. Usually, however, it consists of a pultaceous mass, of a greyish colour; it has a sweetish taste, and is slightly acid. The character common to it, from whatever kind of food it may have been produced, and therefore distinctive of it, is its acidity.

"Gradually, as it is formed, the chyme accumulates in the pyloric extremity of the stomach. When the accumulation amounts to a certain quantity, the pylorus relaxes, and allows the chyme to flow from the stomach into the first portion of the small intestines, the duodenum. Here it is mixed with the mucus of the intestines, with the pancreatic juice, and with the bile. The bile, slowly and at intervals, a drop about twice in a minute, flows into the duodenum, and diffuses itself over the neighbouring surface. On coming in contact with the chyme, the bile imparts to it its sensible qualities, its colour and bitterness. But in a short time a spontaneous change takes place in the chyme. It separates into a whitish tenacious fluid termed chyle, and into a grey pulp: the first is the nutritive part of the food, the second is its excrementitious portion. If fat or oil, whether of vegetable or animal matter, have formed part of the aliment, the chyle is of an opaque white colour; if not, it is of a greyish colour. It differs in its chemical character from chyme; for chyme is acid: chyle, on the contrary, is alkaline.

"The chyle, together with the excrementitious portion of the food, is slowly transmitted along the small intestines. The progress of the chyle is rendered slow, partly by its own tenacity, in consequence of which it adheres with some degree of firmness to the villi, and its progress is still further retarded by the *valvulæ conniventes*, which act as partial valves. In its course through the small intestines, the chyle gradually disappears, being absorbed by the lacteal vessels, so called from the milk-like fluid they contain. The lacteals commence by open mouths on the surface of the villi. Loaded with chyle, the lacteals penetrate the coats of the intestine, pass between the layers of the mesentery, and enter the first order of mesenteric glands. In the mesenteric glands the lacteals unite freely with each other, and become exceedingly convoluted. On emerging from these glands the lacteals pass, still between the layers of the mesentery, on to the second order of mesenteric glands, which they enter, and in which they present the same convoluted appearance as in the first order. On emerging from the second order of mesenteric glands, the lacteals pass on to the receptacle of the chyle, which forms the commencement of the thoracic duct. In the receptacle of the chyle terminates another system of absorbent vessels, termed lymphatics, from the colourless and pellucid fluid, called lymph, which they contain. From the receptacle of the chyle, the chyle and lymph commingled flow into the thoracic duct, by which tube they are transmitted through the abdomen and thorax to the left subclavian vein, where they are mixed with venous blood. Together with the blood contained in this great vein, the chyle and lymph are sent by a direct and short course to the lungs.

"The result of the successive changes thus wrought upon the food by these progressive steps of the digestive process, is to approximate the crude aliment more and more nearly to the chemical condition of the blood. 'This is accomplished partly by the gastric and intestinal juices, and partly by matters combined with the food, highly animalized in their own nature, and endowed with assimilative properties, as the salivary secretion mixed with the food during mastication; the

pancreatic and biliary secretions mixed with the food during the conversion of chyme into chyle; the mesenteric secretions mixed with the elaborated chyle of the mesenteric glands; and, lastly, organized particles which have already formed a part of the living structures of the body, mixed with the chyle under the form of lymph in the thoracic duct.'

"In the stomach, by the agency of the gastric juice, a superfluity of water is chemically combined with the original element of the nutritive matter contained in the food, by which the solution of the food is effected. This Dr. Prout terms a reducing process, because, by its combination with water, the nutritive element is reduced to a weaker state. This element Dr. Prout conceives to be albumen, although he states that he has been unable to detect true albumen in the stomach when none has been present in the food. 'Though the proportions,' he says, 'of the different ingredients of the chyle, as ultimately formed, are liable to be much varied, according to the nature of the food, yet whatever the nature of the food may be, the general components and character of the chyle remain always the same. The stomach must therefore be endowed with a power or faculty, the agency of which is to secure the uniform composition of the chyle by appropriate action upon such materials as circumstances may bring within its reach. For indeed the chief materials from which chyle is formed, namely, the albuminous and oleaginous principles, may be considered as already fitted for the purposes of the animal economy, without undergoing any essential change in their composition. But the saccharine class of aliments, which form a very large part of the food of all animals (except of those subsisting entirely on flesh,) are by no means adapted for such speedy assimilation. Indeed, one or more essential changes must take place in saccharine aliments previously to their conversion either into the albuminous or into the oleaginous principles. Most probably, under ordinary circumstances, these essential changes are altogether chemical, that is to say, they are such as do take place, or rather would take place, if the elements of the substances thus changed in the stomach could, out of the body, be so collocated as to bring into action the oppositions necessary to produce these changes. Thus the saccharine principle spontaneously becomes alcohol, which is merely an oleaginous body of a weak kind. When therefore in the stomach it is requisite that sugar be converted into oil, it is probable that the sugar passes through precisely the same series of changes it undergoes out of the body, during its conversion into alcohol. We cannot trace the conversion of sugar into albumen, because we are ignorant of the relative composition, and of the laws which regulate the changes of these two substances.'

"If the indications of albumen in the chyme be not well marked, albumen is largely developed in the chyle of the small intestines, while, in that of the mesenteric glands and the thoracic duct, a large portion of the watery particles in the chyme of the stomach and the chyle of the intestines is removed, so that the action of the mesenteric glands seems to be the converse of that of the stomach, namely, a completing power by which the albumen is progressively brought nearer and nearer the condition in which it exists in the blood.

"It is the office of the large intestines into which only a very small portion of chyle enters, to prepare the excrementary part of the aliment for its expulsion, and to generate the force by which, when duly prepared, it is conveyed from the body. These organs possess a modification of structure adapting them in the most admirable manner for the performance of this two-fold office."

DILL. A plant very much resembling fennel in many of its properties. Distilled dill water was formerly much used as a remedy for hysteria in domestic medicine. The seeds of dill are recommended as a good carminative, and may be employed in making stomachic liqueurs.

DINNER — Mode of Serving. Of late years the mode of serving a dinner, that is to say, the order and arrangement of the dishes, has been very much changed by the introduction of French customs as regards what is called high life, but in plain families it has not undergone much variation. After the soup, which should be of two sorts if the party be large, one at the top and the other at the bottom of the table, comes the first course, which consists of boiled and fried fish, served in the same way at the top and bottom of the table; but in many families the fish is served at the same time as the soup, in order that those persons who do not take soup may not be kept waiting. The second course consists of boiled meat or poultry, with vegetables; the third, of

made dishes and vegetables; the fourth, of roasted meat, poultry, or game, (or these may be divided into two courses, making a separate course for game;) the fifth, of jellies, macaroni, tarts, and other sweet articles; the sixth, of cheese and salads; and the seventh, of dessert, after which comes the coffee. In the early part of the dinner, French white wines and hock are served, or sherry; where light wines are served it is customary to take a glass or two of Madeira after the soup and fish; as the dinner advances, the more generous French wines, such as Chambertin, Volnay, &c., may be offered; and at about the third course the servant in attendance should go round and fill the champagne glasses; indeed, there are many of the best families in England who make it a custom to serve champagne immediately after the first course, and to have the glasses filled at each course afterwards; port wine should never make its appearance before the dessert. In France, champagne wine is seldom served until a short time previous to the dessert. The French mode of serving a dinner differs essentially from the old English custom, but many of the upper classes of the English now adopt the French plan; in France, for family parties the greater part of the dinner is served at once, the jellies and dessert figure with the first dishes, thus giving a full and elegant appearance to the table, and the only change during the dinner, after the removal of the soup, is bringing in the roasted game as a separate course. Generally speaking, a round dining table is used, and the master of the house takes his seat in the centre, with the mistress of the house either opposite to him, or seated at some other part where she can pay attention to her guests; this is a much better mode than that adopted in England, for all the guests are thus more readily attended to. Coffee is seldom served at the table except at public dinners; but immediately after the dessert, the ladies and gentlemen rise and proceed to the drawing room, where the coffee is ready on a table in the centre. Just before the dessert, champagne wine is offered, and at dessert red wines of the finer kind are placed upon the table; the custom of inviting ladies to take wine in the formal English way is seldom followed, every gentleman is expected to accommodate the lady next to him, and the really absurd practice of calling out to a lady at several feet distance to do a gentleman the honour of taking wine with him is unknown. A French dinner is in fact altogether less formal and unrestrained than an English one, and the ungallant practice of gentlemen remaining a long time at table after the dessert, drinking port and claret, the ladies having withdrawn, is unknown. An immense number of families in England have altogether adopted the French habit of withdrawing from the dinner table with the ladies. In other houses, a modification of the English and French customs has been adopted, and this is perhaps the best plan; the gentlemen remain at table only a quarter of an hour or so after the ladies have quitted, which gives them an opportunity of talking over politics, agriculture, commerce, &c., without annoying the ladies with such conversation; and it affords the ladies an opportunity of a little gossip in the drawing room before the arrival of the gentlemen; the French would do well, perhaps, to adopt this habit, instead of talking over such subjects at the dinner table. At large dinners in rich French families, the courses come in regular order, and the long table is used from necessity, for otherwise it would be impossible to accommodate the guests, unless the dining room were very large; there is the same latitude as to the courses as in England, for much must depend on the taste of the entertainers.

The following account of a dinner, served in 1840, at the table of one of the French princes, will give the English reader an idea of the kind of service in high life in France; and as it will admit of any modification, by blending it with the English mode, it may be found useful. The dinner was for forty persons, and was during the spring; the dishes are of course varied according to the season:—

Soups of four sorts.

First Course. Calf's head, en tortue: beef, with sauce piquante; a quarter of lamb; a turbot.

Second Course. A fowl, with rich sauce; a hot paté of vegetables; two loins of mutton; mackarel à la maitre d'hotel; lamb's feet, with rich gravy; a ragout o. mixed meats; fricassée de poulets, with peas; a knuckle of veal, stewed; pigeons, stewed; legs of geese, roasted, and served with mashed green peas; oyster patties; stewed ducks; ox palate, with gravy.

Third Course. A paté of partridges; a ham; a Savoy biscuit; lobsters.

Fourth Course. Roasted fowls; roasted rabbits; smoked tongue; fried soles; roasted hare; roasted wood pigeons

roasted quails; fried smelts, served on silver skewers.

Fifth Course. Peas, with sugar; lettuces, stewed; French beans, plain boiled, as in England; cauliflowers, ditto; tarts of different kinds; spinach; cherry fritters; beans; poached eggs, with gravy; orange jelly; blanc-manger; asparagus; rice fritters.

Sixth Course. Salads of different kinds.

Seventh Course. Dessert of different fruits, and preserved fruits, cakes, confectionary, &c.

DISTILLATION, in chemistry, is the art of drawing off the spirituous, aqueous, oleaginous, or saline parts of a mixed body, and collecting and condensing them by cold. Spirituous distillation is produced by previously fermenting liquids containing saccharine matter, and collecting the vapour in a receiver, stopping the distillation as soon as the condensed vapour ceases to be alcoholic. Brandies, and other spirits, are in this way made from the fermented juice of the grape, or from the wort or wash of fermented grain, potatoes, or any other articles possessing the necessary properties. In distilling spirituous liquors, the period for checking the distillation is ascertained by the spirit guage, which marks the strength of the condensed vapour; but in order to have great strength, the spirit obtained by a first distillation must be distilled a second or a third time, according to circumstances, leaving behind in the still the quantity of liquid which would no longer yield spirit, or yield it only in a lower degree of strength than that required. The process of distillation for domestic purposes is very simple; it consists of a vessel placed over a fire, with a round or spherical top to collect the vapour in a larger body, a free opening for the vapour to escape, and a connecting pipe, which runs into a vessel containing cold water, and there being formed into what is called a coil, or worm, the vapour as it flows through this worm is condensed by the cold water, and flows into a receiver in a liquid state; thus, if any fermented liquor, such as wine, or a strong wort from malt, or any other grain, or from potatoes, be put into this vessel on the fire, the vapour which is driven off becomes spirituous, and that spirituous product re-distilled increases in strength, taking care, of course, that the distillation in the first instance be not carried so far that the watery vapour shall come over with what is spirituous. Where the article to be distilled requires delicacy of process, the fire should never strike immediately upon the still, but there must be two vessels; that in which the liquid to be distilled is put must fit into a boiler containing water, and the heat which drives off the vapour is received from the water in a high state of ebullition, and not from the direct action of the fire, which would in many cases, particularly in distillation of perfumes, destroy the product. Another mode is to place the still or boiler in a bath of sand, which receives its heat from a fire, and acts upon the contents of the still. Distillation in experimental chemistry, and even for perfumes, where direct heat is not injurious, may be carried on by the very simple apparatus of a glass retort, suspended over a spirit lamp, with its point luted into the mouth of a glass receiver, this receiver being put in water, which is to be renewed from time to time so as to keep it cool. The luting in all distillation on a small scale must be attended to with great care; strips of paper, or rag covered with a paste of wheaten flour, will answer very well; but whiting, or white lead, mixed with the white of egg, is better. As private distillation is forbidden by law as regards spirituous liquors for consumption, it is quite unnecessary to give any instructions for the mode of preparing and fermenting grain, potatoes, or any other vegetable, for that purpose; neither is it necessary to give a more minute description of the still and its accompaniments, as this article can be purchased of almost every tinman and ironmonger; for common distillation a tin still will answer very well, but the solidity and durability of copper make that metal preferable. Domestic distillation is of two kinds; first, for perfumed or medicinal waters made by drawing off the vapour from a boiling infusion of plants, seeds, &c.; secondly, for distilling mixtures of essential oils and alcohol. In the first the leaves or flowers of the plants to be employed are placed in the still with the proper quantity of water, and the vapour is driven over as long as it yields a fine liquid, well impregnated with the virtue of the plant, stopping the distillation when this ceases to be the case; it is always advisable to throw away what comes over for the first three or four minutes, as it has seldom the necessary degree of strength. Some plants in distillation give out a large quantity of essential oil; where this is the case, the oil may be either collected and kept separately, or left in the bulk of the liquid. If, instead

of water, the plants be distilled in spirits of wine, the spirit used should be as tasteless and odourless as possible, and the still should not be brought in immediate contact with the fire. When essential oils are distilled with spirit, the distillation should never be carried on very rapidly, but the vapour should be allowed, when condensing, to come out in large drops, and not in a continuous stream. Some distillers of perfumes are in the habit of mixing with the liquid in the still a certain quantity of fresh made animal charcoal, (see ANIMAL CHARCOAL,) which they consider to have the effect of correcting the empyreumatic flavour of some of the articles employed. Although many liqueurs and perfumes are much better when distilled than when made by infusion, there are others which do not require distillation, being equally good if infused, filtered, and kept for a sufficient length of time to mellow down. In distilling plants or flowers, of whatever kind, with water, it is essential that the leaves should be freshly collected, and that the flowers should be gathered before sunrise; the distillation should be carried on rapidly, and on as large a scale as possible, as the quality is improved by the extent of the distillation. The quantity of water used should never be more than sufficient to prevent the plants from burning, and after the first distillation, a fresh quantity of plants or leaves should be distilled with the water from the previous distillation, adding only a small quantity of fresh water, and repeating the distillation according to the degree of strength required. By the repetitions of the distillation the water will be well saturated with volatile oil, which will either, according to its specific gravity, sink to the bottom of the liquid, or float on the top, when it is to be separated from the watery liquid. It is almost impossible to get much of the essential oil from plants by a first distillation, and as it is this oil which constitutes the principal virtue, the re-distillation becomes important, for although it may be separated afterwards to a great extent, the water is well saturated by it.

DUCK. A rich flavoured bird, not so indigestible as the goose, but partaking very much of the properties of that animal. Both the wild and the domestic duck are used at table; the former is the most digestible of the two, and is generally served rather underdone, whereas the domestic duck requires to be cooked thoroughly. The observation made on the goose, as to the comparative nutrition of the old and young animal, will apply equally to the duck.

BOILED DUCK. This is not a common dish, nor is it an agreeable way of cooking the duck. Boil it for nearly an hour, and serve with onion sauce. Another mode is to stuff the duck as for roasting, enclose it in a paste with a little jellied gravy, boil up in a cloth, and serve it with brown gravy poured round it.

DUCK PIE is made as goose pie. The city of Amiens, in France, is celebrated for duck pies. The bones are all taken out, after a slight stewing with spices and white wine, then the flesh is baked in a plain thick crust. From the quantity of spice used, and there being no butter in the crust, these pies are exported to a great distance without becoming tainted. The crust is not eaten, but on the day following that on which the meat is served, the soup of the day, instead of being put into a tureen, is served in the pie crust, and this imbibes all the rich flavour of the duck and spices.

TO ROAST DUCK. Clean singe the duck, wiping it well; then season with pepper, salt, and onion, and two or three leaves of sage chopped fine; baste as for goose; a good sized duck will require from twenty minutes to half an hour. Green peas are usually served with roast duck.

TO STEW DUCK. Cut them into quarters, and fry them lightly in butter, then put them into a stew pan with a pint of gravy for two ducks, a tea-cupful of port wine, four whole onions, some parsley, two sage leaves, a sprig of winter savory and sweet marjoram, and pepper and salt; cover the vessel, and when the ducks are quite tender take out the herbs, and having heated again the gravy, which is to be thickened with a little flour, pour it over the ducks, and serve; the dish is to be garnished with the onions.

DUCK STEWED WITH PEAS, (FRENCH WAY.) Scald and draw a couple of ducks, and truss them as for roasting; boil for two or three minutes in water, and then put them into a stew pan with some brown roux, a pint of green peas, a bunch of parsley, and two or three onions; let them cook over a very slow fire till quite tender, and serve with a thick sauce.

DUCK WITH TURNIPS, (FRENCH WAY.) Having trussed a duck, make a white roux, and let it cook in it until the flesh is quite firm, then add about half a pint of water, salt, pepper, and a bay leaf;

when this boils, taking care to turn the duck that it might be cooked equally, add some parsley and chiboles, and just before the duck is thoroughly done put in some turnips, which have been previously fried in butter, and a small bit of sugar; let these cook together for about twenty minutes over a slow fire.

DYES. Although the domestic preparation of dyes for liqueurs, ices, creams, and other articles of the kitchen and housekeeper's room is to be recommended, as by that means only can it be known that there is nothing in them injurious to health, it is advisable for all other purposes to purchase the dyes ready made at the colour-sellers, who, having experience and convenience for manufacturing which few private persons possess, must necessarily supply a superior article to what can be made at home. Under the head of LIQUEURS some instructions are given for the preparation of dyes; and it may be stated here, in addition, that a beautiful straw colour may be produced by boiling the leaves of horseradish; if this dye be required for silks or other stuffs, they should be boiled with the leaves and a little alum, to fix the colour. A fine brown dye for liqueurs, &c., may be obtained from a very strong and filtered decoction of highly burnt coffee. Several new dyes for stuffs have been recently introduced into England from India; they are the *caspilly* for orange colour, the *maddi chickha* for dark red, the *poppli chickha* for bright red, the *maen* or *sahlur* for fine black, the *hurda* and *tarikay*, which are the Indian nutgall, and *toonderva* and *rekulhere* for yellows.

DYING. Generally speaking, the process of dying should be entrusted to a person who makes it his profession. The following hints, however, which have been supplied by an eminent retired dyer, will be found useful:—

SIMPLE METHOD OF DYING. Pour the colour desired into water as hot as the hand can bear it, pass the stuff to be dyed through this water as often as necessary for it to imbibe the colour perfectly, taking care not to squeeze or express it; next, hang the stuff up till it is quite cold, which will only require a few minutes, then plunge it in two pails of soft water, and afterwards in one of hard, and before hanging it up to dry, pass it through a little alum water; the process is terminated by pressing or ironing out the stuff before it is thoroughly dry.

To fix any colour perfectly, pour a small quantity of muriate of tin into the dye. This muriate may be easily prepared by dissolving some tin (a bit of an old spoon, for instance,) in spirits of salt.

Remark.—While potass *darkens* a colour, cream of tartar serves *to brighten* it.

EAU DE COLOGNE. This preparation has been long famed, particularly in France, and although it has ceased to be so fashionable an article of toilette as formerly, it is destined to remain a favourite perfume from its agreeable pungency and its fine aromatic flavour. All that has been written about it, however, as to its medicinal qualities otherwise than as an aromatized alcohol is complete absurdity. The best eau de Cologne is certainly that which is distilled from the plants themselves, and that of Farina is deservedly in high repute, for although less perfumed than some of the toilet eau de Cologne, it has a sharpness which is more agreeable to many persons than the finer perfumes. There are now several recipes for eau de Cologne published, but one of the best is that of M. Durochereau, of Paris, which was protected by patent, since expired; this preparation is so simple that any lady can prepare it; it is as follows:—Take seven quarts of good spirits of wine, and the following essential oils—Portugal, 1 oz 3 drachms; bergamot, 1 oz. 5 drachms; lemon, 1 oz.; neroli, first quality, 2 oz.; rosemary, 1 oz.; lavender, 1 oz.; essence of jasmine 1 oz. 5 drachms, mix these together, shaking them well, and at the end of fifteen days, during which the bottle or jar is to be carefully corked, distil twice; it should be then left for some months in a temperate situation; the distillation however, may be dispensed with if the mixture, after standing for a fortnight, be carefully filtered, and kept in rather a warm situation.

Another preparation of eau de Cologne is the following:—Dissolve in six quarts of spirits of wine the following essential oils, an ounce and a half of each—lemon, bergamot, cedrat, Portugal, neroli, rosemary, and lavender, and half an ounce of oil of cloves; let them stand together for a month, and then filter. This eau de Cologne improves very much with age.

The following is given by "Le Chimiste Populaire" as the genuine receipt for making Farina's eau de Cologne:—Infuse in a quart of spirits of wine at 33° a piece of benzoin about the size of a nut, and a drachm and a half of small cardamom seed; when these have stood

forty-eight hours, add half an ounce of animal charcoal, shaking the bottle well, and when it has stood for an hour, filter it through blotting paper; when filtered, add a drachm and a half of bergamot, half a drachm of oil of rosemary, two drachms of essence of lemon, half a drachm of oil of lavender, fifteen drops of neroli, and two drops of oil of cloves; shake these together, and filter again.

EAU DENTIFRICE. Take four ounces of spirit of guaiacum (which is prepared by infusing for a week an ounce of guaiacum in five ounces of spirits of wine,) one drachm of camphor, eight drops of mint, ten drops of rosemary, and six of neroli, mix together and filter; when it is to be used, put four or five drops in a wine glass of cold water, and rinse the mouth thoroughly. This mixture keeps the gums in good order, and has also a tendency to check caries of the teeth.

EAU DE MELISSE. A favourite preparation on the Continent, used in the same way as eau de Cologne.

Take Balmint, in flower,	13 ounces.
Angelica - - -	2¼ „
Hyssop - - -	1½ „
Marjoram - - -	1½ „
Thyme - - -	1½ „
Rosemary - - -	1½ „
Cinnamon - - -	1½ „
Coriander seed -	1½ „
Cloves - - - -	1¼ „
Nutmegs, bruised	1¼ „
Aniseed - - -	0½ „
Fresh lemon peel -	1 „
Spirits of wine, at 22°	10 pints.

Let all the above macerate for several days in the spirits of wine, then distil in the water bath, draw off all the spirit that will come over hot; let it undergo a second distillation, in which about one pint and a half are to be left behind in the still; this may be subsequently drawn off and kept separately. The distillation may be dispensed with by leaving the infusion for two months, then straining and filtering, but the product will not be so fine.

EAU DE MUSC. A French perfume. Take, strong rectified spirits of wine one quart, essence of ambergris one ounce, balsam of tolu one ounce, tincture of vanilla one ounce, (this tincture is made by infusing an ounce of vanilla in a pint of spirits of wine for a fortnight, then filtering it off,) essence of musc half an ounce, otto of rose six drops.

EAU SUCRÉE. A French beverage; it is merely sugar and water; a few

lumps of sugar are put into a tumbler of water, to which a little orange flower water is added. Eau sucrée is served at evening parties, and is sold at all the coffee houses. It is a favourite beverage with persons who are unwell, and is ordered even by the faculty, although in many cases sugar would seem to be injurious; probably the addition of orange flower water tends to correct the properties of the sugar. This beverage does not suit the English taste at first, but habit soon renders it highly agreeable.

EAU VULNERAIRE. A composition in high esteem on the Continent for the cure of bruises; it is also used internally in the same way as eau de Cologne. To make it, infuse in six quarts of spirits of wine at 26° a small handful of each of the leaves of sage, wormwood, fennel, thyme, rosemary, marjoram, basilic, lavender flowers, hyssop, rue, and vervain; cork the jar, and let this stand fifteen days; then strain off, squeezing the plants, and filter. A little animal charcoal should be put into the filter.

EGGS. In domestic economy, the only eggs employed are those of the common hen, the turkey, the goose, and the duck: but the three latter are never used, on account of their strong flavour, or greater cost, where the egg of the common domestic hen can be had. Eggs are best when not more than three or four days old; it is of little consequence that they should be more fresh than that; but they may be kept in a good state for all the purposes of the kitchen for several months. There are various modes of preserving them, but in every case it is important that they should be kept from exposure to the external air, and from excessive heat or cold, or damp. Some persons pack them in bran, but this is objectionable as it generates worms; others in sawdust; some in layers of straw. A good method is to dip them in lime water, then sprinkle over them the powder of lime, and pack them in cases; or they may be placed in very clear lime water in large mouthed bottles or jars, which are to be kept corked. Another mode is to dip them in melted butter, and when cold to place them in a drawer, taking care to turn them two or three times a week. The latter mode was adopted by a celebrated pastrycook in London, and his eggs were always good. The Chinese preserve eggs in the following manner:—For every ten eggs they take a pint of the ashes of cypress wood or beanstalks,

(some use potash,) half a pound or more of powdered chalk, and two ounces of pulverized coarse salt; this is wetted with a strong infusion of tea, so as to form a paste, with which the eggs are entirely covered, they are then put into an earthen vessel and hermetically sealed. It is said they will remain good for seven or eight years. The Malays possess the secret of salting eggs without breaking the shells, and they keep good for a great length of time, but they are boiled hard. The best eggs for keeping are those which are laid in October. In order to ascertain if they are fresh, hold them before a lighted candle; if they appear clear and transparent, they are good; but if there be any opacity, they are not fresh. Another mode is to hold them before the fire; if they appear damp they are fresh, for a newly laid egg has more humidity than an old one, and the humidity finds its way readily through the pores. Eggs are generally considered light of digestion; but bilious persons should not indulge in the use of them too freely. It is a common error to suppose that the less an egg is boiled the more digestible it is; it is as indigestible when slightly cooked as when quite hard; in the one case it is glairy, and offers resistance to the dissolvent juices; in the other it is heavy and oppressive to the stomach. On the Continent, eggs are seldom boiled for more than two minutes; and in some parts of the south of France, boiling water is merely poured over them. In England an egg is considered well cooked for breakfast when it has been three minutes or three minutes and a half in boiling water. It is never better cooked, as far as digestion is concerned, than when it is put into cold water and kept over the fire until the water boils. Invalids whose stomachs are very weak sometimes take the yolk of an egg beaten up raw, and mixed with sherry and sugar; this is very good if the yolk be previously slightly boiled. An excellent article for a weak stomach, when the gnawing sensation arising from acidity, and which resembles excessive hunger, is felt, is the yolk of an egg which has been boiled for about three minutes beaten up with a table-spoonful of brandy, a little sugar, and a small quantity of water. Generally speaking, omelettes and all preparations of eggs, in which they are cooked hard or nearly so, are of difficult digestion. By heat and peculiar food, hens may be made to lay during the whole of the winter. In England, some persons shut them up in rooms, and feed them with boiled potatoes highly peppered. In France and in some parts of Germany, the dairy keepers place a partition sufficiently open to admit light and air in a part of the cow-house, which is fitted up with laying boxes, and there shut up the hens, which are fed on Indian corn, with every morning a small quantity of paste, made of hempseed mixed with a little barley meal, and one sixth of pounded brick finely sifted. The warmth of the cow-house, and the highly stimulating nature of this food, cause them to lay during the whole of the winter; but by the spring their productive powers are exhausted, and they are no longer fit for anything but fattening up for the boiling pot. In English cookery, eggs form a far less important article of food than on the Continent, where they are served up in twenty different ways, from the plain *omelette aux fines herbes*, one of the most frequent dishes at the tables of the lower and the middle classes, to the most complicated preparations of the cuisinier royal. The following are some of the most favourite dishes made from eggs; the mode of using them for omelettes is shewn under the proper head.

Eggs a l'Aurore. Cut into two, ten hard eggs; take out the yolks, mince the whites, and arrange them at the bottom of the dish with some rich gravy; pound the yolks with a bit of butter, and pass them through a sieve with salt and pepper, and garnish the edges with small squares of bread; put the whole over the fire for a few minutes, and brown with a salamander.

Broiled Eggs. Take a large sheet of white paper which will cut into equal squares; fold each square double so as to form a sort of bag, which must be buttered on both sides; then take a bit of butter mixed with a little crumb of bread, chopped parsley, chives, a very small quantity of garlic, and salt and pepper; put this at the bottom of the bag; break an egg into each bag, and put over the egg a little salt and pepper, place them on the gridiron, at a good distance from the fire, long enough to set the egg, then pass over the salamander, and serve.

Eggs Brouilles. Put the eggs into a saucepan with a little butter, two table-spoonfuls of good stock, and cook over a charcoal fire, stirring frequently with a fork; when they are well set, serve them up quickly.

Eggs with Bread Crumbs. Take a dish that will stand the fire, and cover the

bottom of it with a mixture of bread crumbs, butter, a chopped anchovy, chopped parsley, chives, and a shalot, and the yolks of three eggs, all well mixed together; let these remain upon a slow fire until they are well set, then break over them seven or eight eggs, as for poaching, and add salt and pepper; cook gently until the yolks are set, but not hard, brown with a salamander, and serve up.

Eggs and Cheese. Put into a dish that will stand fire a few table-spoonfuls of good milk, break in the eggs in the same way as for poached eggs, and powder them well with rasped Parmesan cheese; cook them over a charcoal fire until they are well set, and brown with a salamander, or if you have an oven, bake them in it.

Another mode: cover your dish with a thin layer of butter, upon which place thin slices of bread and gruyere cheese; break upon this eight or ten eggs; season with salt, pepper, and a little nutmeg, and cook gently over a charcoal fire.

Fried Eggs. Cover the bottom of a frying pan with fresh butter; break in the eggs the same as for poaching; when set, take them up with a slice, and serve each egg upon fried or toasted bread, with sauce according to taste.

Eggs and Milk. Beat up six eggs with a table-spoonful of flour, two table-spoonfuls of powdered white sugar, a little salt, and a pint of milk; place the mixture in the dish in which it is to be served, and cook gently over a charcoal fire for a quarter of an hour; then brown the surface with the salamander, and serve it up as soon as possible.

Eggs au Miroir. Take a dish that stands the fire, butter the bottom of it, break in the eggs; season with salt, pepper; two table-spoonfuls of milk; cook them gently until they are set, over a charcoal fire; brown them with a salamander, and serve them up.

Eggs sur le Plat. Take a dish that will stand the fire, spread a little butter on it, and a slight quantity of salt; then break the eggs into the dish with the same precaution as for poached eggs; pour over them a little melted butter, mixed with a few table-spoonfuls of milk, salt, and nutmeg; put the dish on the fire until the eggs are done, and brown with a salamander.

Poached Eggs. Boil some water in a saucepan, with a little salt and a very small quantity of vinegar; break the eggs gently, so as not to injure the yolk, dropping them into the water, which is to be kept boiling, with care, and when they are set; take them out with a slice, and serve them up with chicorée, sorrel, or any other mashed vegetable which has been previously made hot.

Scotch Eggs. Boil them hard, and when the shell has been removed, cover them thickly with a forcemeat made as follows:—Take some veal or calves' kidney, with a slice of ham, a bit of butter, shalot, cayenne, and a green onion, all finely minced together, and mixed to a proper consistency with the yolks of eggs; dredge them with flour, and fry in boiling lard or beef dripping; serve up with a rich gravy.

Eggs en Surprise. Take twelve eggs; break a small hole in each end to blow out the contents, having first introduced a straw to break the yolk; wash the shells carefully, and put them to drain; having done this, block up one end with a little paste made of flour and white of egg, and when that is dry, fill the egg, by means of a little funnel, with raw custard, then block up the other end in the same way; boil them the same length of time as would be necessary for custard, and send them to the table as an entremet between the courses.

Eggs in the Turkish Way. Put an onion cut into slices, with some fine herbs and butter, into a saucepan, adding a little flour, salt, and pepper; when these have been on the fire a few minutes, add a glass of white French wine, and the whites of a dozen hard eggs cut into slices; when these ingredients are well united, add the yolks which had been previously set aside, and serve up very hot.

Cheese Omelette. Mix some rasped Parmesan cheese with the eggs; about a quarter of a pint of cream; beat the whole together, then add four whites of eggs whipped to a good froth, and fry in the ordinary way.

Omelette with Fine Herbs. After having well beaten up any number of eggs you may require, and mixed with them a little salt and fine herbs, throw them into a frying pan in which you have previously melted a little butter; when fried sufficiently brown, turn the omelette over on the dish in which it is to be served. To make an omelette with bacon, truffles, veal, kidney, mushrooms, &c., those ingredients must be always previously cooked and seasoned; when cold, they must be minced fine, and mixed with the eggs as above.

Omelette Soufflée. Break a dozen eggs, separate the yolks from the whites, add to the former three quarters of a pound of powdered sugar, a little orange flower water, and beat the whole together; fry it a short time in a frying pan with a small piece of butter, and then turn it out on a silver dish; place this dish on some hot ashes, and cover it with a cottage oven, on which hot ashes are also placed; cover it with powdered sugar, and when it has well risen and is of a good colour, serve it quickly.

Omelette Soufflée in a Mould. Break six eggs; separate the yolks from the whites; add to the former three table-spoonfuls of fine powdered sugar, a table-spoonful of potato fecula, four macaroons broken up, a little salt, and a little orange flower; mix the whole together; butter the mould well; beat up the whites of the eggs, and add them to the yolks, and fill the mould, but not too full; then put the omelette into a slow oven, and bake until it is of a nice brown colour, taking care that it do not become hard; when it is just sufficiently set to hold well together, turn it into the dish.

Omelette with Sweetmeats. Make an omelette in the common way, without herbs, adding thereto a little powdered sugar; before folding it, cover it with sweetmeats, and sprinkle it well over with fine powdered sugar; make an iron red hot, and form designs on the omelette by pressing the sugar with the iron.

Sweet Omelette. This is nothing but the plain omelette, upon which powdered sugar is put before it is turned; when turned, powder the outside also with white sugar, and press upon it a red hot iron; the iron should be about half an inch square, and pressed in streaks from one end to the other.

Egg Hot. A very agreeable posset, taken in many parts of England after great fatigue, and not unfrequently as a remedy for colds; in which case, however, it is not to be recommended, as it increases fever, if it fails to promote copious perspiration. The usual mode of making it is as follows:—Beat up the yolks of three eggs and the white of one in a teacupful of weak ale, with a little nutmeg; in the meantime have upon the fire a quart of the same kind of ale; when it has nearly boiled, add the eggs thus beaten up, and let the boiling finish very gently, stirring the whole time; when it has thickened, pour it into a jug containing about a quartern of brandy and three ounces of loaf sugar; have another jug handy, and pour backwards and forwards for three or four minutes before serving; white French wine mixed with about a third of water may be substituted for beer.

ELIXIR DE LONGUE VIE. A favourite domestic cordial and purgative medicine. Infuse in a quart of brandy five drachms of socotrine aloes, one drachm of saffron, one of rhubarb, one of gentian, one of cinnamon, and two ounces of powdered sugar-candy; when these have stood for a fortnight, strain and filter; from one to three teaspoonfuls are taken for a dose.

ENDIVE. The seed of this plant must be sown twice, thinly scattered; the first sowing is about the beginning of June, and the second in July; when the plants are about three inches high, they are transplanted in rows about a foot asunder and about a foot apart, taking care to water in dry weather; the blanching is effected in the same manner as for sea-kale. It is chiefly used for winter salad, and from the bitter quality contained in it it is considered a good stomachic.

ESSENCES for Meat. M. Carême devotes a great number of pages of his "Art de la Cuisine Française," to the mode of making what he calls essences from game and the high flavoured meats; there is little, however, in what he says on this subject, as to game, of any practical utility, and one must be very rich indeed to be able to purchase game for the purpose of stewing it down merely for the sake of a few table-spoonfuls of the essence, throwing away all the meat. His practice consists in stewing these meats for a very long time with herbs, and seasoning and straining off the rich gravy or essence. In Russia, many noblemen who have extensive forests have occasionally battues, in which several thousand head of game of different kinds are killed, and these are all stewed down upon the spot, and the essence strained off, which is then poured into skins and bladders, and becomes hard and fit for exportation, from the quantity of spices used, as soon as it is cold; many tons of this preparation are exported to France, England, and other countries, every year, where it is sold at from five to twelve shillings per pound; an ounce or so of this portable meat added to any ragout gives a flavour which cannot otherwise be obtained. Where expense is not regarded, M. Carême's plan of boiling down hares, pheasants, partridges, or any other game, with spices, until the gravy, when strained off, is so concentrated that

it becomes a rich firm jelly when cold, may be very useful for flavouring ragouts when the animal itself is not in season, but the expense of this preparation is quite a prohibition as regards domestic cookery. Some of his essences, however, of ordinary meats, vegetables, &c., may be made without great expense, such, for instance, as the following:—

Essence of Garlic. Chop up a quarter of a pound of lean ham, an onion, a carrot, and two cloves of garlic; put these into a saucepan with a bunch of sweet herbs, some pepper, and nutmeg; add three ladlefuls of consommé, and simmer until it is reduced one-half; then strain through a sieve. It is used with roasted and broiled meats.

Essence of Ham. Slice six ounces of the leanest ham; put them into a saucepan with two onions, two sliced carrots, a bunch of sweet herbs, half a tumblerful of champagne wine, two ladlefuls of good consommé, and two of plain veal jelly; simmer until reduced one-third; then add another half tumblerful of champagne; let these boil, and then strain through a fine sieve. This is a good essence for broiled meat and game.

Essence of Fine Herbs. Put into a saucepan two table-spoonfuls of Tarragon vinegar, four ladlefuls of good consommé, a bunch of fine herbs, and a little pepper; reduce these one-half over a very slow fire; then take out the bunch of fine herbs, and add a table-spoonful of chervil and tarragon, chopped very fine; having simmered again for a few minutes, squeeze in the juice of a lemon. This is used with steaks and chops of any kind.

Essence of Lemon with Oil. Put into a little pan a table-spoonful of chopped parsley and tarragon, a little salt and pepper, two table-spoonfuls of tarragon vinegar, six of good olive oil, and the juice of a lemon. This essence is used for broiled poultry, and game, and fish.

Orange Essence. Put into a stewpan six ounces of ham, a little nutmeg, a small bunch of sweet herbs, half the peel of an orange, a ladleful of plain veal jelly, and two of consommé; reduce these one-half, then add the juice of an orange, and strain through a sieve. This essence M. Carême recommends for wild ducks and ducklings.

Essence of Shalots with Mutton Gravy. Simmer in a saucepan two chopped shalots, a little pepper and nutmeg, and two ladlefuls of good consommé; reduce these about half, then add the gravy from two roasted legs of mutton give these a simmer together, and then strain off. This essence is served with broiled meat of any kind.

Essence of Truffles. Put into a saucepan a pound of chopped truffles, a bunch of sweet herbs, a little lean ham, half a tumblerful of Madeira, a ladleful of consommé, a little pepper and mace; let these simmer for half an hour, then add three ladlefuls of consommé, and simmer till the whole of the liquid is reduced one-half; strain through a fine sieve, and put by for use. This essence is for roasted game, and poultry cooked with truffles.

M. Carême also gives a number of preparations from fish, as essences, or fish sauces; but they are so inferior to the various fish essences sold by the oilmen in England, that it would be a waste of space to insert them.

Essential Oil. The oil which floats on the water in the aqueous distillation of plants, fruits, &c. There is a more simple mode of obtaining the essential oil of lemons and oranges than by distillation: rasp the rinds, and as soon as there is enough to fill a table-spoonful, put it into a bottle, which is to be carefully corked, and continue the process in the same way until the quantity required is obtained, thus taking care to avoid unnecessary exposure to the air, and the consequent loss of aroma. When this kind of pulp is ready, put it between two thick pieces of glass, and press out the oil, which is to be kept in a closely stopped bottle. By dissolving these essential oils in spirits of wine, they form a beautiful perfume for the toilet table.

FASTING. Although the system of fasting, when carried to excess as a religious penance, may be very injurious to health, it has frequently the contrary effect, if adopted only occasionally and for a short time; and the abstinence from butchers' meat observed by the Roman-catholics, on at least one day in the week, is calculated to produce very beneficial effects. If the same system were observed as a general rule by persons who do not take sufficient exercise to digest the usual meats when taken every day, they would frequently obviate the necessity of taking medicine.

FENNEL. A strong aromatic plant, the leaves and seeds of which in infusion are used as a remedy for flatulency, and assist the digestion; it is used in the green state also mixed with sauces, and is some-

times used as a pickle; the flavour, however, is much disliked by many persons. The mode of cultivation is not difficult; the seed is sown in the spring in the usual garden soil, and the plant thrives well without much care.

FERMENTATION. There are three kinds, or to speak more correctly, three stages of fermentation—the vinous, the acetous, and the putrefactive; but although this is the usual order of fermentation, we sometimes find that it is changed. Bodies which are thoroughly dry will not ferment; a certain degree of moisture is essential for this process. What is usually the first stage of fermentation with liquids in which there is a saccharine principle, the vinous, and which is invariably the first stage when fermentation is aided by artificial means properly applied, has the singular property of rendering liquids intoxicating which were not so before they were fermented. The process of artificial fermentation is not a modern discovery; it existed in the remotest ages, and is adopted by many tribes of savages in the least advanced stage of civilization. A certain degree of heat is necessary for the vinous fermentation by yeast; under 32° of Fahrenheit it does not take place, at 50° it goes on feebly, and at 60° it is rapid, beyond 70° it goes on too quickly, and there is danger of its turning to the acetous stage, for which a greater degree of heat is necessary than for the vinous fermentation. At a high degree of heat, or a low degree of cold, fermentation will not take place, and for the vinous stage the body must be actually liquid; although all bodies containing sugar and gluten are susceptible of fermentation in their natural condition, yet pure sugar, deprived by manufacture of its natural principle of fermentation, will not only not ferment naturally in a solution of water, but cannot be fermented by the addition of yeast, although it will undergo a certain stage of putrefaction by the decomposition of the water. Each stage of fermentation has its peculiar principle: the vinous principle of one liquid will promote the fermentation of another liquid; the matter deposited from vinegar will act as an acetous ferment; and the proximity of putrid flesh will rapidly putrefy that which is fresh. The chief principle in the yeast, which is used to promote vinous fermentation, is supposed by chemists to be gluten. The manner in which the decomposition which takes place during the process of fermentation occurs is still a mystery, although some chemists attempt to explain it. The presence of a certain portion of air seems to be necessary for the working of beer and some other liquids, but others ferment readily in the absence of atmospheric air, and their flavour is very much improved by the fermentation in vessels which allow the carbonic acid gas to escape, without admitting the external air. Acetous fermentation takes place with liquids that have undergone the vinous process, if they be exposed to the air, and a higher degree of heat than that which was required for the first stage. Beer or wine placed in casks in the sun, with the bung open, become vinegar; and the strength of the vinegar will be in proportion to the previous extent of the vinous principle. When vinegar undergoes a change, it is by putrefactive fermentation; this may, however, be prevented for a very long period by the precaution of boiling the vinegar before it is bottled; the best way of doing which is to place the bottles uncorked in water, and keep them there until the vinegar boils, corking them afterwards and sealing the corks. Strong vinegar treated in this way will keep for several years. The process called *mothering* in vinegar is the commencement of putrefaction, and is owing to the vegetable matter present; distilled vinegar, as it destroys to a great extent the vegetable gluten, which is the chief cause of putrefaction, will keep longest. The best vinegar is made from wine, because it has a larger quantity of alcohol, and is less mucilaginous than that made from malt or any other grain; but even wine vinegar requires boiling, if it be used for pickling. It is the opinion of Saussene that in the acetous stage of fermentation, nothing is abstracted, except the carbon; and that acetic acid is alcohol without carbon; but this opinion is disputed by Gaylassau and other chemists; and no attempt to restore the alcoholic property, where the acetous fermentation has taken place, by the mere addition of carbon, seems to have been successful. (For the mode of making and fermenting BEER and WINES, and for the making of VINEGAR, see the proper heads.) As regards the putrefactive fermentation, carbon, preparations of lime, or soda, and other antiputrescents, are much used for the purpose of retarding it in animal substances; pure alcohol will also prevent it, if used in sufficient quantity. Meats, deprived of their natural moisture and kept entirely secluded from the action of

the air, will resist putrefaction for a much longer period than in their natural state; but, with the exception of strong alcohol, we know of nothing that will entirely prevent putrefaction, unless it be certain alkaline solutions, which entirely change the nature of the substance to which they are applied. Strong acetic acid, made by distillation, will also check the putrefaction of meats; but all these things are of very little use in domestic economy, for although by the use of them we keep away the putrefactive fermentation, the object preserved becomes entirely useless. For the purposes of science and health, however, the discoveries which have been recently made in antiputrescent preparations are admirable; the chlorides of lime and soda rapidly neutralize the putrescent principle, and are, therefore, highly valuable in purifying the air when it is contaminated by the miasma of putrescent bodies; they have, consequently, a tendency to prevent malignant fevers. M. Gannal, a French chemist, has discovered that the human body after death may be kept for several weeks, or even months, from decomposition by simply injecting a solution of sulphate of alum, in the proportion of two pounds to a pint of hot water, by the right carotid artery. He uses three or four quarts of this liquid in summer, and less in winter, according to the temperature of the season; all the blood vessels are distended by this liquid, and as there is no part of the human body free from them, decomposition is arrested. The body of a murdered boy thus treated was exhibited for recognition at the Morgue, in Paris, for several weeks, even during the hottest weather, and with the exception of the sinking of the eyes, no change of decomposition was visible; even a portion of the colour in the cheeks remained. He seems to think that, by repeating this process occasionally, putrefaction might be prevented altogether; and that nothing more would take place than the drying up of the flesh, as in cases of embalming. His process is now rather extensively adopted in the preservation of the dead bodies of domestic animals.

FEVER BEVERAGE. The decoction of various herbs, such as balm, rue, sage, &c., or the same herbs used as tea, is a common remedy in cases of fever for promoting perspiration; but there is nothing better in such cases than drinking copiously of whey on going to bed. A great mistake, however, is generally committed in the mode of preparing this article. The quantity of strong white wine that is put in will not only neutralize the good effect of the whey, but even increase the fever. The best plan is not to use wine at all, but to turn the milk with lemon-juice. The juice of a good sized lemon put into the milk just before boiling, adding a sufficient quantity of sugar to make the whey palatable, and then straining off the curd carefully, will answer all the purpose of wine without any of its inconvenience; but if wine be used, it should be light French wine, and should never be in larger quantity than just sufficient to separate the curd. In all cases of fever, whether of the slow or the acute kind, the following mixture will be found highly useful, and it is particularly so in the slow fever of indigestion. Reduce to powder about ten grains of fresh carbonate of ammonia, put this in a rummer, which is to be filled about two-thirds with cold water, and add to it as much lemon juice as will suffice to neutralize the alkali; drink it in a state of effervescence. The quantity of lemon juice should be such, that neither the alkali nor the acid may prevail, for if either were in excess, the benefit would not be obtained. In medicine, an article called Mindererus' spirit, very much used in fevers, is made in nearly a similar manner, but the effervescence has gone off, and it has, consequently, neither the agreeable flavour, nor the mildly exciting properties of the above mixture. In many cases of indigestion, attended with obstinate costiveness, the occasional use of this beverage is found, by the tone which it imparts to the stomach, to render other remedies unnecessary.

FIGS. These are a very wholesome fruit, either in their raw or dried state. They seldom, however, come to high perfection in northern climates. In England, figs are either eaten ripe as they are gathered, or preserved in sugar; but they have not a very fine flavour in the latter state, particularly as they are gathered for the purpose when unripe. To preserve them, they are first laid in a strong brine of salt and water for eight or ten days; they are then boiled in plain water, until sufficiently tender for a pin to pass through them easily; they are next laid in a large quantity of cold water for three days, and on the fourth, boiled in strong syrup; they are then taken out and thrown into cold water again for six hours, and this operation is repeated in the whole four times, leaving them for a

longer time in the syrup at the last boiling. They may now either be put into jars with some of the syrup, in which state they make a pretty dish for a dessert, without, however, being particularly desirable for eating; or they may be well powdered with sugar, and dried in a slow oven. They may also be preserved in brandy by putting in the jar, after their last boiling, one-third syrup, and two-thirds brandy. The finest figs are grown in the Levant, where they are dried in the sun, or in ovens, and packed for exportation. In this state they are one of the finest of the dried fruits, and certainly one of the most wholesome. Some persons take figs boiled in milk for a cold; and in quinsies which are suppurating, it is recommended to apply a fig boiled in milk, and as hot as the throat will bear it, to the diseased tonsil, repeating this as the fig cools. Suppuration is frequently advanced rapidly by this application.

FILBERT, a large kind of nut, the flavour of which is very agreeable. Filberts, like common nuts, are indigestible, and should therefore be eaten in small quantities, and always without the skin. On the Continent they are used as in England for dessert; but are also preserved, and made into biscuits.

To Preserve Filberts. Blanch them, and when the skins are removed, let them simmer in very thin syrup for about an hour; put them to cool, and then set them on the fire again, adding more sugar, so as to thicken the syrup; simmer for another hour, and then let them cool. Repeat this process a third time, adding more sugar, until the syrup has become so thick as to candy when cold; take out the filberts before the syrup is cold, and cover them well with pounded loaf sugar; then dry in the sun or in a slow oven. The syrup may be used for any other preserve.

To Make Filbert Biscuits. (See Biscuits.)

A pleasant oil is extracted from filberts by pressure, but it is much inferior to olive oil for domestic use.

FIRE IRONS, etc., to clean. Rub with a paste made of one pound of putty powder and half a pound of whiting, and clean off with plain whiting. If rusty, rub with emery powder and soft soap. To prevent rust, see Rust.

FISH. This food is considered, with the exception of a few species, to be very light of digestion, and at the same time nutritive, from its gelatinous nature; indeed this quality has led some medical men to believe that fish is indigestible. We do not find, however, that this is the case as a rule, although it may be so as an exception. That fish is exceedingly nutritive is proved by the fact, that in situations where it forms the chief food of the inhabitants they are generally a hardy people, and exceedingly prolific. Montesquieu attributes the large population of China to the frequent use of fish; and we know that on the side of the Tagus, opposite Lisbon, where from the poverty of the people, fish is almost the exclusive food, the number of children in a family is nearly double the average of the interior of the country. The Romans considered fish to be such an important article of diet for the poorer classes, that there was at one time a law forbidding the venders of fish in the markets from sitting down until all their stock was disposed of, in order that this regulation might induce them to sell at more reasonable prices, and avoid a protracted market. The productiveness of fish is so great as scarcely to be credible, if the fact were not well authenticated. A female salmon weighing twenty pounds has been known to have 27,850 eggs; a moderate sized female pike 148,000; a female tench of four pounds 297,200; a female mackerel 546,681; the female of a carp of nine pounds 621,600; and a female cod the enormous number of 9,344,000. It is generally considered that the most agreeable and nutritive fish is from the sea; river fish comes next; and last in point of quality, is the fish of ponds and lakes, because they have no current; and as to river fish, the best is that which is taken out of rivers whose current is very rapid. The fish of some lakes, however, is very superior to that of others, and we find the flavour increased very much in proportion as the lakes are in an elevated situation. The best sea fish is that which feeds in rocky places; the next is the fish which swims in deep waters; and the least wholesome, that which approaches nearest to the coast. The fat of all fish is more or less unwholesome; as far as health is concerned, therefore, the fish which is the least oily is to be preferred; and where fish of an oily nature is used, it should always be made to undergo a previous boiling, if intended for stews, that the excess of oil may be got rid of. In cooking fish, as far as health is considered, the best mode is boiling, as fried fish disagrees with many

stomachs; and whenever fish is used in stews, it is always advisable to put a little wine with it to correct its aqueous quality. The common plan of taking brandy after eating fish is not perhaps a bad one, provided the quantity be very small; but if this be not the case, the corrective is much more likely to do harm than the fish is to disagree with the stomach without that precaution. (For the various kinds of fish, look to the different heads.)

Fish, mode of feeding and breeding. Fish ponds for breeding should, generally speaking, have gravelly and sandy bottoms, and shoals near the sides for the fish to sun themselves on, and lay their spawn. If the pond be destined for carp, which is the best fish for breeding, as it spawns several times in a year, the bottom should be of clay, with plenty of weeds and grass for the fish to lie in during the hot months. The pond should be drained every three or four years, and the smaller fish taken out to stock other ponds. Carp basins must be supplied by a constantly running stream, with an outlet just sufficient to carry off the excess of water; and artificial rocks, with cavities for the fish to repose in, should be rather numerous. With this precaution, there will be no danger of making the fish shy or wild by keeping the water in the basin transparent. In some parts of Switzerland, where there are trout basins of this kind, the fish are sometimes so tame that they will come and feed out of the hand. Carp, tench, &c., in ponds, may be fed with any boiled corn, or with malt grains, if perfectly fresh; malt, however, in the unbrewed state is best.

Anchovies, a small highly flavoured sea fish, chiefly used in a dried or preserved state for seasoning dishes, and as a sauce for other fish when reduced to a liquid state. In southern climates, where this fish is abundant, it is eaten fresh in the same way as the Sardinia, broiled or fried. With us, however, it is seldom seen, except in its dried or pickled state. The smaller the fish, the finer is the flavour. The pickled anchovy is sold in barrels or jars. It is either in a strong brine or in oil, having been previously salted. It is digestible when fresh, but less so when pickled. Before anchovies are used, they should be well washed and the gut be taken out. An anchovy sandwich is an agreeable food, and on the Continent anchovies are frequently served at table after the soup to excite appetite; for this purpose they are cut into slices and placed in a small dish, garnished with the yolks of eggs boiled hard and cut into halves, with a little salad oil in the bottom of the dish; they also make a dish, fried in oil and seasoned with a sauce composed of oil and vinegar, pepper, chopped shalots, chibols, and parsley, or dipped in butter and fried, and then served between the courses without sauce. In England, anchovies are eaten upon toast, which is made by frying the slices of bread in butter, and either spreading the anchovy upon the bread in the state of a paste, which is made by pounding the fish in a mortar with a little butter, after having boned it, and thrown away the head, or placed whole upon the bread when the bones have been taken out, and garnished with curled parsley. The butter of anchovies, which is used as fish sauce, is made by pounding the fish in a mortar with butter until a fine smooth thick liquid is obtained, and then rubbing it through a sieve. If it is intended to keep this for a great length of time, a little spice should be added. A great deal of the sauce which is sold as anchovy sauce is made from sprats which are salted down in layers, with a large quantity of common and bay salt and saltpetre as for other pickles, and allowed to remain for several months, with the addition of a little cochineal to give them colour, and are, at the expiration of that time, pounded and converted into imitation anchovy butter in the same way as anchovies. This is not a bad preparation, but it is inferior to the genuine article.

Bream. This fish is not unlike a perch in appearance, but grows much larger; it is a salt water fish, but occasionally comes up navigable rivers, and is partial to docks and basins. It is generally stuffed as carp or tench, and baked; but may be cooked in any of the ways directed for those fish: serve with a good sauce.

Brill. A flat fish bearing a very strong affinity to turbot both in appearance and flavour; indeed, it is by many persons preferred to that fish, from its being more easy of digestion. It is in season from January to March, and from July to September. For the different modes of cooking brill, see Turbot.

Carp. This is a very good fish when not too old, but as it lives to a very great age, many that are brought to market are not of fine quality; they should also be chosen not too fat, as they are in that case difficult of digestion. River carp are considered superior to those which are taken

in ponds; they are best in the months of March, May, and June; but the most successful fishing is in June, July, and August, when they bite freely at almost any bait. Some fishermen, in order to attract the carp, rub their hooks with a composition of musk and camphor. Four or five days before fishing, some boiled beans, mixed with honey and scented with musk, should be thrown, night and morning into the spot in which it is intended to fish. The head of the carp is considered most delicious eating, and next to that, the flesh nearest the back.

Broiled Carp with Caper Sauce. Scale a large carp, crimp it, and put it in a dish with chopped parsley, chibols, salt, pepper, and oil; when it has lain in this for about an hour to give it a flavour, broil it over a brisk fire; serve it up covered with caper sauce.

Fried Carp. Split a carp by the back, flour it, as also the roe, and fry it quickly in good lard or oil.

Fried Carps' Roes. Take some roes which have been previously thoroughly cleaned, and having boiled some water with a little vinegar and salt, put them into it, and simmer for two or three minutes; then take them out, let them drain very dry, and dip them in a light batter; fry them of a good colour, and serve them up with fried parsley.

German Mode of Cooking Carp. Cut a carp into pieces and put it into a saucepan with salt, pepper, and other spices, a few slices of onion, and one or two bottles of beer, so as to cover it well; stew this over a brisk fire until only about half a pint of the liquid remains, then serve it with its sauce.

Matelote of Carp. Cut the fish into slices, and put them into a saucepan with a few river craw fish, adding young peeled onions which have been previously scalded, and chopped mushrooms; pour under it a little roux made of flour and butter moistened with stock; add some fine herbs, red wine, salt, pepper, and a little butter; and cook over a brisk fire. In sending it to table, garnish the dish with slices of bread, cut in the form of a heart and fried in butter. Eels are generally added in making this matelote. The quantity of wine should be sufficient to form, when cooked, a sufficient quantity of liquid to prevent the fish being dry, but it should not be in excess. Matelotes may be made of any other fish in the same way.

Stewed Carp. Put into a saucepan an equal quantity of French or port wine and water; add a little mace, some fine herbs, some young onions, some whole pepper and salt, and a little scraped horse-radish; put in the carp, cover the saucepan, and let it boil very gently for at least an hour; then take out the carp and drain them, and into another saucepan put a pint of wine, two chopped anchovies, an onion, a little lemon juice, a quarter of a pound of butter rubbed in flour, a little cream, and half a pint of the liquid in which the carp were first boiled; boil these together for a few minutes, then add the yolks of two eggs mixed with cream, and the juice of half a lemon; then put the fish upon a dish, and pour the sauce over quite hot.

Stewed Roes of Carp. Simmer for some time over a slow fire in a saucepan some butter, champignons, a slice of ham, the juice of a lemon, and a bunch of sweet herbs; then add a little flour, the roes of the carp, and a little good stock; boil for a quarter of an hour, seasoning with pepper and salt; when done, thicken the sauce with two or three yolks of eggs, a little cream, and chopped parsley.

Carp with Vinegar. Put the carp into a fish-kettle and pour over a sufficient quantity of vinegar made boiling hot to cover it; let the fish simmer for an hour or more, according to size, in the vinegar; then serve upon a dish covered with a cloth and garnished with parsley, without any of the liquid. Carp dressed in this way, however, is generally eaten cold.

Cod. This fish is seldom or ever boiled whole, as they are generally too large; the head and shoulders are considered the finest part for boiling, and the part towards the tail to cut into steaks for frying. The cod is in perfection from January to June.

To Bake Cod. The thickest part of the cod should be chosen for this dish, which is to be filled with a stuffing made of grated bread crumbs, a bit of butter, the yolks of three hard boiled eggs, pepper, salt, grated lemon peel and nutmeg, and anchovy finely cut up, binding the whole with white of egg beaten up; put the whole on a dish that will stand fire with bits of butter over the top of it, and bake it in the oven for an hour. A Dutch oven is the best suited for this dish, as it requires to be frequently basted and turned; melted butter or oyster sauce may be served with it.

To Boil a Cod's Head and Shoulders. After it has been well washed, tie up, to prevent its falling to pieces, and dry

it well; put a good handful of salt into the water in which it is to be cooked, and when it boils, skim well, and put in the fish, which must be kept boiling fast for about half an hour. The liver should be always boiled and served with the fish, or it may be served as sauce rubbed up very fine with melted butter; oyster sauce and plain melted butter are also served with it.

Another excellent way of dressing a cod's head and shoulders is given by Mrs. Dalgairn:—"Wash the cod's head and shoulders well, cut off the fins, lay it on a dish, pour some boiling water over part of the fish and instantly scrape off all the black scales, taking care not to break the skin; repeat this till every part of the fish looks white, and then wash it in cold water; put it on in boiling salt and water, and boil it for a quarter of an hour; then lay it on a dish and rub it all over with the yolks of two or three beaten eggs, and strew it thickly with grated bread crumbs, mixed with pepper and minced parsley; stick it all over with little bits of butter, and put it in an oven to brown. Mix a large table-spoonful of flour with a quarter of a pound of butter, a quart of gravy, a tea-cupful of white wine, some pepper, salt, and a little grated nutmeg; mince the white meat of a lobster, slightly brown three dozen of oysters in a frying pan, and put them with half their liquor and the lobster to the gravy and other things; beat it up and pour it round the dish; garnish with cut lemon. It is not necessary to have lobster and oysters, but it is the better for both.

To Crimp Cod. Cut the fish into steaks, and lay them in a mixture of salt and water and vinegar for four hours; then boil. If to be fried, they must be rubbed over with yolk of egg beaten, and covered with bread crumbs.

Salt Cod. This fish when prepared in this manner is highly esteemed by many, and it is to be procured at a season of the year when fresh fish are scarce. Before cooking, it should be soaked for some hours in cold water, and then boiled gently, until it feels tender. It is usually eaten with melted butter and egg sauce; boiled parsnips are usually served with this dish.

Salt Cod en Blanc. After the fish has soaked for twelve hours in water, put it on in cold water, and when it begins to boil, take it off the fire and drain it; then put into a stewpan a piece of butter rubbed in flour, some pepper, and a little milk; mix the whole well together; heat the fish in this sauce, which serve with it.

Salt Cod—Belgian Way. Having soaked the cod previously in fresh water, put it into a saucepan with some sliced potatoes, a few fine herbs, and fresh butter; let it cook until the fish and the potatoes are thoroughly done.

Salt Cod with Cream. Boil the fish in water, and when done, drain it well and pull it into flakes; then put into a stewpan a piece of butter, a little flour, some pepper, with half a pint of good milk or cream, and thicken over the fire; then put in the fish and heat it well, and serve. It may be thrown into a deep dish, the top covered with yolk of egg and bread crumbs, and browned with a salamander.

Salt Cod a la Maitre d'Hotel. Wash the fish well and put it on in cold water; as soon as it boils, take it from the fire, and after it has stood for about ten minutes, take it up and drain; then place it in a dish that will stand fire, with some parsley and green onions chopped fine, a slice of butter, grated nutmeg, a little lemon juice, and a little lemon-thyme rubbed fine; put the dish over some hot ashes for a quarter of an hour, and serve.

Salt Cod, Marinated and Fried. After it has been boiled, pull it into flakes, and steep them for two hours in vinegar and water seasoned with pepper, sliced onions, a few cloves, parsley, and a shalot cut fine; then dry the pieces, flour, and fry them of a good colour, and serve with crisped parsley.

Salt Cod a la Provençale. When the cod has been boiled and drained, put into a dish that will stand the fire two spoonfuls of sweet oil, a piece of butter, some parsley and green onions chopped very fine, some coarse pepper, and a shalot sliced very fine; place the fish upon this seasoning, and pour some of it also over the fish; stew over hot ashes, and serve very hot.

Salt Cod Stewed. Put into a dish that will stand fire a slice of butter, some parsley and green onions chopped fine, pepper, and a few capers; place pieces of the fish in layers in the dish, covering each with the above seasoning, until the dish is full, then cover the whole with grated bread crumbs; stew gently over hot ashes, and brown with a salamander.

Cray Fish. A shell fish resembling the lobster in appearance and flavour, but coarser; the shell is more irregular, with projecting points, and the flesh is harder

than that of the lobster; they are generally eaten cold, as lobster, but may be dressed in the various ways recommended for that fish. There is also a species of cray fish caught in rivers, which resemble the lobster in external appearance, but are very much smaller, the largest in size seldom exceeding the smallest sized lobster; they are eaten very much in some parts of France, where they are caught in great abundance, and are served plain boiled, as a sort of entremet, at dinner; but in Paris, where they run very small and are dear, tney are chiefly used for garnishing other dishes; they are not disagreeable eating, but have a slight bitter. In the neighbourhood of Le Mans, in France, where they are plentiful and run large, they are potted in the same way as lobster, and the slight bitter taste being overpowered by the spices which are used in potting them, it would be difficult to distinguish them from potted lobster.

Doré. Commonly called John Dory in England, and in France St. Peter's fish. It is a very ugly flat fish, but the flesh is even more delicate than that of the sole; it brings a high price in the English markets, but in many parts of France is sold at a very cheap rate; latterly, however, this fish has been much in request in the French sea-ports frequented by the English; at Boulogne the same sized doré which a few years ago would have been sold for five pence will now fetch five francs. For the mode of cooking, see Sole.

Eels. This fish forms a nutritious diet; but from the quantity of oil contained in the larger sorts, they are frequently very difficult of digestion. Eels of the larger kind should never be used until a great portion of the grease has been previously extracted; this is done by boiling them very gently for some time until the oil rises, when the eels are to be taken out and set aside for use; much of the richness of the fish is indeed lost in this way, but persons of weak stomachs should not use them without this precaution. Eels are generally taken by the line, or by eel baskets, so constructed that the eels may crawl into them to get at the food which they contain, but, having once entered, are unable to escape. There is another rapid mode of taking them in rivers or harbours by what is called bobbing; this is effected by passing worsted through large worms, and tying them in bunches at the end of a rod; these bunches of worms are lowered to the proper depth, and the eels, biting at them, get their teeth entangled in the worsted, and are thus drawn out. Where they are plentiful, seven or eight are frequently taken at the same time; some dexterity, however, is required for this mode of fishing.

To Boil Eels. For this the smaller ones should be chosen. When they are well cleaned and skinned, cut off the heads, and put them into boiling salt and water, adding a little vinegar; parsley and butter is generally served with them.

Collared Eels. Having taken out the bones, and cut off the heads and tails, cover the eels with a seasoning of chopped sweet herbs, a little salt and pepper, and some grated nutmeg and lemon peel; then roll them tight, and tie them firmly with tape. The heads, tails, and bones, are to be boiled in three-fourths water and one-fourth vinegar, with an onion or two, three or four bay leaves, two or three leaves of sage, and some salt and pepper; when this mixture boils, put in the eels, and boil them until tender; then take them out and give the liquor another boil, adding as much vinegar as in the first instance, with two or three cloves, and a little whole pepper; and having done this, strain the liquor and set it by to cool; when cold, put in the fish. Mackerel, herrings, and flounders, are very good done in the same way; but in this case the fish are pickled whole, and more cloves and whole pepper are used than with eels, the sage being left out.

Conger Eel. This fish is considered in England a very coarse fish, but the same opinion is not entertained of it on the Continent, where it frequently appears even on the tables of the rich; when quite fresh, however, it eats tough, and should therefore be kept as long as possible before it is cooked. The best way of dressing it is to boil it very gently, and half an hour before serving, put it into a stewpan with some floured butter mixed with a couple of eggs, some chopped herbs, and a dash of vinegar; it may, however, be prepared according to the instructions given for fresh water eels.

To Fry Eels. Having properly cleaned them, cut them into pieces of three inches long, scoring them across in two or three places without separating them; dust them with flour, and fry them in boiling lard to a good brown. To vary the dish you may dip them in a batter, and sprinkle them with finely grated bread crumbs; serve with melted butter.

Eel Pie. Cut the eels in pieces, and put them on the fire in a stewpan with butter, spices, sweet herbs, parsley, mushrooms, pepper and salt, and a sufficient quantity of water; let them stew very gently for some time, then take them out and lay them in a baking dish, with a rich crust; bake in an oven. Truffles may be put into the saucepan, or laid with the eels in the baking dish. Before baking it is proper to add a little more seasoning, with a little of the liquor in which they were stewed, having carefully removed all the grease.

Eel patties should be made in the same way, which is merely to parboil them in plain water, and then bake with seasoning.

To Pot Eels. Having skinned, cleaned, and boned the eels, cover them well with pepper, salt, and a little Cayenne, and let them lie for a few hours; then cut them into small pieces, and bake them, closely packed in a dish, with a paste over them, to prevent any of the flavour from escaping; remove the paste when quite cold, and cover the eels to the thickness of an inch with clarified butter.

To Spitchcock Eels. Choose some large eels, and having cleaned and skinned, cut them into pieces of three or four inches long; sprinkle them with pepper and salt, beat up an egg, dip them into it, and cover them afterwards with a mixture of bread crumbs, chopped parsley, and pepper and salt; broil or fry as preferred. They may be eaten with either melted butter, parsley and butter, or with mustard sauce.

To Stew Eels. Having cleaned and skinned the fish, and cut them into pieces of about three inches long, take an onion, two or three shalots, a little thyme, parsley, two or three bay leaves, some pepper, a pint of good gravy, half a pint of vinegar, and four anchovies bruised in a mortar, and put the whole, with a pint of port, or French red wine, into a stewpan, and let them boil for about ten minutes, when take out the fish; let the sauce continue boiling until considerably reduced; thicken it with a little flour, previously rubbed smooth in a little cold water; put the eels in again, and let them boil until they are found to be tender.

Eels a la Tartare. Having skinned and cleaned a good sized eel, cut it in pieces of about four inches in length; put into a saucepan a bit of butter, some sliced carrots and onions, a little chopped parsley, and a bay leaf; brown these, and then add a little water acidulated with vinegar or some French white wine, salt, and pepper; when this sauce has been sufficiently cooked, strain it through a colander, then set it on the fire and let your slices of eel simmer in it, but not sufficiently to cook them; then take them out, and let them get cold, when they are to be covered with crumbs of bread, and broiled over a slow fire. Before serving them, put some tartare sauce in a dish, and lay the broiled slices in it, garnished with crisped parsley. The tartare sauce is made in the following way:—Take two or three shalots, some chervil, and tarragon, shred them very fine; then add some mustard, salt, pepper, and a very little oil and vinegar, stirring constantly; if your sauce gets too thick, put a little more vinegar, and if it tastes too salt, add a little oil and mustard.

Flounder. A small flat fish usually caught in rivers and harbours: in season from January to April, and in August and September. When it can be got firm the flounder is a very delicate fish, but it often has an unpleasant muddy flavour. The usual way of cooking flounders is by cleaning them well, flouring, and frying them to a good colour in boiling lard or oil. They are sometimes pickled in the same way as mackerel, when they form a very agreeable dish for luncheons and suppers.

Gudgeon. A small river fish exceedingly delicate and fine flavoured; the smaller sized gudgeon is indeed very little, if at all, inferior to whitebait. There is but one way of dressing gudgeons in perfection, which is frying; all other modes destroy the flavour of the fish. In Paris, where fried gudgeon are served at almost every table of the rich as well as the poor, they are much better cooked than in London, merely from the circumstance of their being fried in an immense quantity of lard. At the restaurants they are not fried in a common frying pan, but in deep vessels, so that the liquid fat may be very abundant, and are generally dipped in batter, or at least floured before fried; none but the smallest sized gudgeons are used for that purpose.

Gurnet. There are two kinds of gurnet, the red and grey; but it is considered a coarse dry fish; it is, however, improved by filling the eyes and gills with salt, as directed for whiting and haddocks, and letting them remain in this state for twelve hours before dressing. The usual plan is to boil them and serve with melted butter; or to bake, stuffed with veal stuffing, and

covered with a little butter; in this mode the flavour is much improved.

Haddock. This fish bears a very strong affinity to the whiting, and indeed is by many persons considered superior in flavour. It is quite free from oily matter, and may be therefore looked upon as very easy of digestion. The haddock is in season from February to May, but in December and January is in the highest perfection.

To Bake Haddocks. Cut off the heads and fins of two or three haddocks, and put into a stewpan, with an onion, some parsley, salt, pepper, and two anchovies cut up fine, a little flour, two table-spoonfuls of French white wine, and a little catsup. Boil all this well up together, and when the fish has been skinned and cut into pieces, lay them in a deep pie dish; pour the above sauce over them, and bake in an oven. Strew the bottom of the dish with bread crumbs, and strew some more over them, having seasoned them well with pepper and salt and a little grated nutmeg.

To Boil Haddocks. Proceed precisely as directed for whiting, (which see under proper head.) The same remark with regard to filling the eyes and gills with salt applies to this fish, as thereby the flavour and firmness are much improved.

Finnan or Aberdeen Haddocks. The following directions for curing the fish are given by Mrs. Dalgairn:—Clean the haddocks thoroughly, and split them; take off the heads, put some salt on them, and let them lie two hours, or all night, if they are required to keep more than a week; then having hung them two or three hours in the open air to dry, smoke them in a chimney over peat, or hardwood sawdust. When there is not a chimney suitable for the purpose, they may be done in an old cask, open at both ends, into which put some sawdust, with a red hot iron in the midst; place rods of wood across the top of the cask, tie the haddocks by the tail in pairs, and hang them on the sticks to smoke; the heat should be kept as equal as possible, as it spoils the fish to get alternately hot and cold. When done, they should be of a fine yellow colour, which they should acquire in twelve hours at furthest. When they are to be dressed, the skin must be taken off. They may be boiled or broiled, and are generally used for breakfast.

To Fry Haddocks. When the fish have been well cleaned, and the scales scraped off, wipe them dry; rub them over with the yolk of an egg well beaten, and cover them with flour or finely grated bread crumbs. Fry them to a good colour in boiling lard or oil, drain on a sieve before the fire, and serve with melted butter.

To Fry Haddocks in Sauce. Having skinned and cut off the heads, cut the fish into four pieces; then put a piece of butter and flour into a frying pan and brown it, or use a little brown roux, into which put an onion chopped very fine, and season with pepper and salt, and then pour in as much boiling water as will nearly cover the pieces of fish. When it boils, put them in, and fry to a good colour, turning as required. Serve with the sauce, garnished with fried parsley.

Halibut, a large coarse fish, cooked in the same way as sturgeon.

Herrings. This fish, although very agreeable to the palate, cannot, from its very oily nature, be considered as suited to very delicate stomachs. The herring, to be eaten in perfection, should be as fresh as possible, for no fish suffers more by keeping than this. The finest herrings caught in England are at Yarmouth, which place is famous for their mode of curing them; and at Clovelly, on the north coast of Devon. They are in season from February to July. The general mode of cooking herrings, when fresh, is by frying or broiling; but on the Continent they are cooked in other ways.

Herrings a la Bourgeoise. When the herrings have been scaled and washed, dry them in a cloth and broil them. Serve with a sauce made as follows:—Put into a stewpan a piece of butter which has been rubbed in flour, a little lemon juice, salt, pepper, and a little gravy; thicken the sauce over the fire, and pour it over the herrings.

To Broil Herrings. (See Mackerel or Whiting.) On the Continent, the favourite way of eating broiled herring is with mustard sauce, which is certainly a great improvement.

To Fry Herrings. After having scaled them and cut off the fins, gut them, leaving in the roes and melt; then wipe them in a cloth, dredge them with flour, and fry them in boiling lard or oil to a good colour. Drain them before the fire, and serve hot. Melted butter, or parsley and butter, may be served with them; many persons are partial to an onion sliced up and put into a sauce-boat, and boiling water poured over it, seasoning with pepper and salt.

To Marinate Herrings. Clean the fish well without washing. Open them so as to remove the back bone, and season them well with pepper, salt, and onion chopped very fine. Roll them up tight, and place them in a jar, and pour over them some vinegar and water in equal quantities; tie over the jar with paper, and bake in rather a slow oven for an hour. When they are cold, pour over them a little cold vinegar. They may also be pickled in the same way as Mackerel. (See Mackerel.)

To Salt Herrings. Gut them carefully, leaving the roes in the fish, but throwing away the melts. Wash them and put them into a brine strong enough to float an egg. Let them lie in this pickle for eighteen hours, after which, they must be taken out and well drained on a sieve; then pack them in a keg in layers, strewing between each layer a handful of salt, until the keg is full. Strew the top with salt and cover closely. When dressed, they are to be put on in cold water, and allowed to cook for ten minutes after they begin to boil.

To Smoke Herrings. Lay them in salt and a little saltpetre for ten or twelve hours, and follow the same directions as for smoking Finnan haddocks. (See Haddocks.)

Lampreys, as for Eels.

Lobster, a very fine flavoured shell fish, said to be highly nutritious, but which is of difficult digestion. Lobsters are eaten hot or cold, but chiefly the latter; they are also made into a rich pie, and are a fine relish when potted. In boiling lobsters, they are to be put into boiling water with salt, and kept boiling for twenty minutes or half an hour, according to size. When taken out, they should be rubbed with a little butter, to give them a gloss, and served when thoroughly cold; the shells, claws, and legs, being broken, and the body and head cut through the middle. If they are to be eaten hot, melted butter must be served with them as for any other fish; but whether hot or cold, the dish should be garnished with parsley. Hot lobster is also sometimes served in the following way:—Boil the lobster, and when cold, pick out all the meat; chop it, and mix with it some grated bread, salt, Cayenne pepper, and good vinegar, (the Indian pickle vinegar is the best for this purpose,) and work up with the mixture a little melted butter. Put this mixture into scollop shells to get thoroughly hot, and brown with a salamander.

Lobster Catsup. Pound all the meat, including the red part and the spawn, in a mortar, with a little sherry wine and Cayenne pepper, until a good paste is formed; then add by degrees more sherry, and put into wide mouthed bottles with some whole black pepper; cork the bottles and tie over with leather. A very large lobster will require about a pint and half of sherry, a table-spoonful of black pepper, and a tea-spoonful of Cayenne This catsup much resembles, when used fresh, lobster sauce. Good French white wine is preferable to sherry; but as it is not so strong, the catsup will keep less time.

Lobster Dressing. This is usually composed of the following ingredients:—Salad oil four table-spoonfuls, white wine vinegar two table-spoonfuls, the yolk of a hard-boiled egg rubbed up with the oil, and salt, pepper, and mustard, according to taste. The same dressing does for crabs.

Lobster Fritters. The following dish owes its origin to one of the cooks of Prince Talleyrand:—Chop up the meat with the red part and the spawn of tw large lobsters, very fine, with finely grated crumbs of bread, and a little butter and season with pepper, and salt, and very small quantity of chopped sweet herbs; make this into a kind of paste with yolk of egg, and having formed it into pieces about two inches in length and an inch thick, dip them into a good thick batter, and fry.

Lobster Patties. The same mixture will do for patties, with the addition of some chopped oysters, and a little white wine, and with or without chopped parsley; heat the mixture, and when the patties are baked, take off the tops, and fill them. For the mode of making the patties, see Pastry.

Lobster Pie. Pound the meat of boiled lobsters, including the red part and the spawn, in a mortar, with pepper, salt, and nutmeg; then mix with the pounded meat melted butter, in the proportion of a quarter of a pound to a large lobster, and some very finely grated bread; a little lemon juice or vinegar may be added; bake with a puff paste. This is a very rich dish, and is generally eaten cold, and in small quantities at a time. A layer of oysters may be put at the bottom of the dish, with their liquor.

To Pot Lobsters. Lay the meat, with the red part and the spawn, well seasoned with pepper and salt (with or

without a little mace, and clove powder,) in clarified butter, and bake for nearly half an hour; when cold, pound it up with the butter in which it was baked, and put into pots, covering with some more clarified butter. If it is intended to keep the potted lobster for a great length of time, the quantity of spice should be increased. A large sized lobster will require about three ounces of butter in baking. The flesh of crabs, shrimps, prawns, &c., may be potted in the same manner; or they may be picked out and baked whole for ten minutes, the jars to be tied over afterwards, clarified butter being poured over them. They must be well seasoned.

Lobster Salad. Lobsters may be cut up and mixed with vegetable salad of any kind, or made into a salad separately, by broiling them when boiled, and mixing the meat with minced onions, and pickles of any kind, green capsicums, salt, pepper, and vinegar, or lemon juice.

Lobster Sauce. (See Sauces.)

Lobster Sausages. Chop up the meat of a large lobster very fine, with two ounces of butter, which has been browned with two table-spoonfuls of flour, season well as above, and make hot over the fire with sufficient stock, or plain water, to make a mass, but not too liquid; when cold, make this up into the form of flat sausages; cover with crumbs of bread and yolk of eggs, and fry brown.

Stewed Lobster. Pick out all the meat of cold lobsters, and have ready some gravy, made by boiling the shells previously pounded roughly for a long time in water; strain this liquor, and season it with pepper and salt, and a little mace; thicken it with flour and butter, and when it is thoroughly hot, put on the lobster, and heat it up; just before serving, add a little lemon juice to increase the flavour.

Mackerel. This fish is found in different parts of the ocean, particularly on the French and English coasts, but very few are taken on the coast of Holland. Mackerel are considered to be in season from the beginning of April to the beginning of July; out of these months they are said not to be wholesome; indeed, at all times mackerel, from their oily nature, are not so good food for weak stomachs as many other sorts of fish; but where it does not disagree, it affords great nourishment. In England mackerel are seldom cooked in more than three or four ways; but on the Continent there is a greater variety. Plainly boiled, this fish is, perhaps, most wholesome; but its greatest flavour is when cut open and broiled, and well seasoned with salt and pepper.

To Bake Mackerel. The heads and tails are to be cut off, the fish being well cleaned and scraped, and then seasoned with pepper and salt, and laid in a dish with a little fresh butter, and baked in a slow oven. They may be eaten hot or cold; if hot, with any of the usual fish sauces; and if cold, with vinegar. A richer way of baking mackerel is to put a little vinegar and port wine to them, with seasoning as above.

To Boil Mackerel. Having cleaned them well, let them lie in an equal mixture of water and vinegar for a quarter of an hour, then put them on in boiling water, with a little salt, for a quarter of an hour. The dish on which the fish is served should be garnished with fennel, and a sauce served with them of melted butter with chopped fennel or parsley, or green gooseberry sauce, (see Sauces.)

To Broil Mackerel. After they are well cleaned, split them down, and having wiped them dry, rub them well with pepper and salt, and let them stand for a short time; then broil them thoroughly; when served, put a bit of fresh butter on them. The French generally broil them in buttered paper; but in either case, always serve with broiled mackerel a few chopped fine herbs, laid on with the fresh butter.

Mackerel in the Italian Way. Clean and cut off the heads of four mackerel; then put the fish in a stewpan with half a bottle of French white wine, a few slices of onions and carrots, a little parsley, a bay leaf, and some salt; stew them gently, and when they are done, take them out, drain them, and serve them with a little white Italian sauce, (see Sauces.)

Mackerel en Papillote. Clean the mackerel; and having cooked the roes in a saucepan with some butter, pepper, salt, and a little lemon juice, put a roe into the inside of each fish; and having wrapped them up separately in buttered writing paper, broil them over a clear fire; they are to be served in the paper, and eaten with fresh butter, salt, and pepper.

To Pickle Mackerel. Having cut and split the mackerel, cover them with a little thyme, parsley, and shalots chopped fine; then fry the fish carefully; when done, pour over them some vinegar boiled with black pepper, a few cloves, and three

or four bay leaves; this liquor is not to be poured upon them until it is cold.

Another mode is to cut the fish into pieces, and to cover them well with a mixture of black pepper, nutmeg, mace, and salt, reduced to a fine powder; then fry them brown in oil; and when cold, put them into a jar, and fill it up with strong vinegar previously boiled. If it is intended to keep them for some months before using, the top of the jar should have a depth of at least an inch of good sweet oil, and be carefully tied over with parchment. This is a rich preparation. The quantity of spices required for six common sized mackerel is, three nutmegs, six blades of mace, and an ounce of black pepper; a good handful of salt should be used.

To Souse Mackerel. When they are boiled, put half a pint of vinegar to a quart of the liquor in which the fish has been boiled, half an ounce of whole black pepper, two or three bay leaves, and a little mace; let these boil together for a short time, and when cold, pour it over the mackerel.

Mullet, Grey. This fish bears a very strong resemblance in appearance to salmon, except that the scales are larger; it is, when not too large, a delicate fish, and is boiled in the same way as any other fish; and when small, may be dressed according to any of the directions given for trout; it may be also stuffed and baked, as directed for carp and tench. It differs from the red mullet in as much as it requires to be gutted before cooking.

Mullet, Red. This fish is highly prized by epicures for its game flavour, which is chiefly given by its liver. As it is always in England dressed in its trail, it has acquired the denomination of Sea Woodcock. The usual mode of cooking red mullet is to fold them in a buttered paper, lay them in a dish, and bake them before the fire in a Dutch oven; throw off the liquor which comes from them into a saucepan, and boil up with a slice of butter rolled in flour, a little essence of anchovy, and a wine glass of white wine. Serve the sauce in a sauce-boat, with the fish on a dish in the paper in which they have been cooked.

Red Mullet en Marinade. Having washed and drawn them, place them in a dish with a seasoning as directed for tench; and when they are well seasoned, broil them in sheets of paper covered with the seasoning, and serve with any good sauce, allowing the paper to remain on them. They are also cooked as whitings, *en matelotte*, and *au gratin*, (see Whitings.)

Muscles. In English cookery muscles are considered to be a very ordinary dish, and are almost exclusively the food of the poor. They are also objected to on account of the injurious effects which they sometimes produce; there is reason, however, to believe that in most of the cases of what is called poisoning by muscles, and on the precise cause of which medical men do not appear to be well agreed, they were eaten to excess, or prepared without those condiments which are necessary to counteract their injurious tendency. On the Continent, where, from the mode in which they are cooked, they form a luxury rather than a main article of food, cases of poisoning seldom occur. The symptoms of poisoning by muscles are rather painful than dangerous; they appear to disorder the stomach in such a way as to prevent digestion, and to distend the intestines with flatulency, which, pressing upon all the surrounding parts, causes a swelling, or, in most cases, a sensation of swelling in the whole system. The most effectual remedy, where the symptoms are very severe, is the use of the stomach-pump to remove the exciting cause of the disease; where this cannot be applied, or the symptoms are not sufficiently grave for its application, an emetic should be taken; and as soon as possible, if effectual relief is looked for without a course of medicine, a lavement composed of a quart of warm water, two table-spoonfuls of salt, and half an ounce of camphorated spirits of wine, should be used. In France, in the few cases that occur, nothing more is done, unless the case be very serious, than to administer about fifteen grains of rhubarb, by the stomach, and a lavement. In some countries, muscles are eaten raw, like oysters; but the taste of sea weed, which they have in their natural state, is removed by steeping them previously in verjuice. They may be eaten raw with impunity, if eschalot sauce be used with them. This is made by cutting eschalot fine, and mixing it with vinegar and a good quantity of pepper.

To Boil Muscles. Having washed them clean, put them into a dry saucepan when they are sufficiently opened by the heat, remove a portion of the shells, and half of the natural liquor; then put them into a saucepan with a little butter and chopped parsley, and let them remain no longer over the fire than a sufficient time to make them thoroughly hot; they

are to be eaten with vinegar or lemon-juice.

Moules a la Poulette. This is the favourite way of eating muscles in France. Open them as above described, then clean the shells, rejecting the half of each, and clean the muscles themselves, leaving them attached to the shells; some take them entirely out of the shells: now put them into a saucepan with butter and a little chopped parsley; add a little flour, and moisten with water, or rather beef stock, if there be any at hand; when there is very little moisture left, beat up two or three whites of eggs, according to the quantity of muscles, with milk, and let them simmer in it for a few minutes; add a little vinegar, and serve them up in their sauce.

Oysters. Few articles of food are more digestible than the oyster when eaten raw, or slightly cooked; there are, however, some persons with whom oysters in the raw state disagree; in this case each oyster should be dipped, before it is eaten, in a sauce composed of vinegar, pepper, and eschalots, or mild onions, chopped fine; this is the usual mode of eating raw oysters in Normandy. It is generally thought in England wine should not be taken with oysters, as it impedes the digestion; but on the Continent this notion does not exist; white wine, such as Chablis, Grace, or Sauterne, is always taken with oysters, and no inconvenience is found to result. When eaten raw, the small oysters are to be preferred, as being more delicate; but the larger sized oysters may be used for cooking. The best oysters in England are those which are found near Milton, in Kent, and are called "Native Oysters;" the oysters found in the river Colne, in Essex, are the next in quality; and after them come the Dorsetshire oysters. The London dealers bestow great pains in preserving and feeding the oysters in tubs, containing an infusion of salt and oatmeal.

Baked Oysters. Chop the oysters fine, and then pound them in a mortar with the crumb of bread dipped in cream, a little parsley and chives, an anchovy, or a portion of one, according to the number of oysters, (there should be an anchovy to about six dozens,) fresh butter, salt, and pepper. When well pounded, add white of egg beaten up, in the proportion of one egg to two dozen oysters, and having mixed all well together, put into scollop shells, and bake in an oven until nicely brown; this is a very rich and agreeable dish.

Oysters Fried in Batter. Blanch and drain them as above, dip them in thick batter, and fry them.

Oysters en Marinade. Put the oysters in a saucepan for a few minutes, to blanch with their liquor; then put them in a linen cloth to drain for an hour; next place them for two or three hours in lemon juice, or vinegar, pepper, and salt, and a little nutmeg; dip them in batter and fry them.

Oyster Pie. Bake for rather more than half an hour in a dish, with a rich puff paste, a quart of bearded oysters with their liquor, some slices of the kidney fat of a loin of veal, white pepper, salt, and grated lemon peel; if the oysters are intended for patties, bake without a crust, and fill the patties when they are ready. For patties, however, the best way is to stew the oysters, with the seasoning as above, thickened with butter, flour, and cream; they should not stew so long as to become hard.

Ragoued Oysters. Put three dozens of oysters, with their liquor, into a saucepan; as soon as they have had their first boil, take them off, and let them drain nearly dry; now put them into another saucepan with or without herbs, according to taste, and a little butter, adding gradually half a pint of milk; keep them for a few minutes simmering; and a minute before they are taken off the fire, add about two ounces more butter, and the proper quantity of pepper and salt.

Scolloped Oysters. Take the oysters out of their shells, and put them with their liquor into a saucepan; let them get quite hot without boiling; add finely chopped herbs, such as parsley, thyme, &c., according to taste, butter, salt and pepper; put them into scollop shells, cover with crumbs of bread, and cook them on a gridiron over a clear fire; brown them with the salamander.

Oyster Soups. See Soups.

Perch. A river fish, which in France is considered so delicate that it is commonly designated the river partridge; it does not, however, enjoy so high a reputation in England, as it is usually thought to be a very dry fish. The largest and fattest fish are considered best, but they are not very digestible. The river perch is far superior to those taken in ponds, the flesh of the latter being browner and not so delicate. It is in season from June to November, but is in the greatest perfection in June and July. The perch may be cooked according to any of the directions given for carp.

Pike. An ill-looking fresh water fish, which, from its ravenous propensities, is styled the "fresh water shark." When small, or of only a moderate size, the flesh is rather delicate; but when of a large size, it becomes strong and unpalatable. The pike is a fish that affords more amusement to the sportsman than, as cooked in England, gratification to the gastronome; it is in season from July to November. Pike are exceedingly destructive to all other fish, whether in pond, stream, or river; and are so voracious, that a pike has been known to seize a fish as large as itself, and almost to be suffocated by its prey; it is not at all unusual to find in the body of a pike, when taken, two or three fish, and even a water-rat, partly digested. Although the voracity of the pike would seem to require a constant supply of food, this fish has been known to attain a great age and an enormous size, when food was by no means plentiful.

Pike a l'Allemande. Clean and scrape a large pike, and cut it into small pieces; rub them over with yolk of an egg, cover them with bread crumbs, and fry of a good colour; then rub a little butter on a dish that will stand fire, put into it a layer of sour krout, which has been previously boiled, and some grated cheese; then a layer of the fish, and a little sour cream; then another layer of krout, and so on, till the dish be full. Put some pieces of butter on the top, with some good gravy; strew bread crumbs over it, and bake for half an hour.

To Boil Pike. Wash the fish clean, and take out the gills; make a stuffing of grated bread crumbs, butter, a few oysters, and a little parsley chopped very fine, some onions, pepper, salt, some fine herbs dried and rubbed to powder, binding the whole with an egg; fill the inside and the gills with this stuffing, and sew the fish up, and put on in boiling salt and water, with a little vinegar in it, and boil for half an hour. Serve with melted butter and oyster sauce.

Pike a la Chambord. After having gutted the fish, fill the body with carp roes; lard one side of the fish, and cook it in a fish-kettle with French white wine, pepper, salt, thyme, bay leaf, cloves, and slices of onions. When the fish is cooked, garnish it with boiled sweetbread and river crawfish, and serve with espagnolle sauce.

To Roast a Pike. When the fish has been well cleaned and scaled, take out the inside, and fill it with a stuffing made of the crumb of bread, a little butter, pepper, salt, grated nutmeg, and lemon-peel, with an egg to bind it; baste it well with butter, and roast in a Dutch oven. Serve with melted butter and lobster sauce.

Stewed Pike. Put the fish into a stewpan with two or three anchovies, a bit of larded rump steak, some pickled cucumbers, two or three carrots sliced, salt, and pepper, and a few truffles. Put as much French white wine as will cover the fish, and stew gently for an hour.

Pilchard. This fish bears a very close resemblance to the herring; and is caught in large quantities on the coasts of Devon and Cornwall, but is seldom found higher up either of the channels. It is of a more oily nature than the herring, and may be cooked in the same way as that fish. The principal consumption is for the Italian market, to which part they are exported in a salted state. Those fish which are bruised in the landing are sold for manure to the farmers, and are highly esteemed; one fish, it is said, will manure two square feet of ground.

Plaice is a flat fish, in season at the same time as Brill, (see Brill,) but very inferior in quality, being generally very watery. When plaice can be got quite alive, and the tails cut off, and gashes cut across them, in the way that cod are served for the London market, (which is called crimping,) they become firmer. The large ones are generally boiled in the same manner as brill or turbot, and the smaller ones fried in the same way as other small fish.

Prawns, a small sea fish, with thick scales. It is delicious eating, and partakes of the nature and properties of many shell fish. Prawns are seldom cooked in any other way than by boiling, when they may be eaten either hot or cold. To boil prawns or shrimps, all that is necessary is to throw them, with a good quantity of salt, into boiling water, and let them remain until they have thoroughly changed colour. The flesh of prawns may be potted in the same way as that of the lobster. (See Lobster.) It is rather indigestible.

Salmon is by many persons considered the finest of all fish; but medical men are generally of opinion that it is indigestible; this, however, is only the case when the fish is not young. The flesh of a half grown salmon is tender, nutritious, and easy of digestion. There are, at least, fifty modes of dressing salmon, but broiled or boiled, with a proper sauce, (see Sauces,

is better than any other mode. We shall, however, give a few of the most approved preparations in Paris and London.

To Bake Salmon. Clean and cut the fish into slices, put it in a dish, and make the following sauce:—Melt an ounce of butter, kneaded in flour, in a pint and a half of gravy, with two glasses of port wine, two table-spoonfuls of catsup, two anchovies, and a little Cayenne. When the anchovies are dissolved, strain and pour the sauce over the fish, tie a sheet of buttered paper over the dish, and bake it in an oven.

Saumon au Bleu. Having gutted the fish, and split it, put it into a stewingpan, with sufficient white French wine to cover it and the other articles well, and to allow for loss in stewing; add a few carrots and onions sliced, four or five cloves, a few bay leaves, some parsley, and salt and pepper; let these simmer for two hours, and serve up, covered with a sauce made with butter, flour, veal jelly, pepper, and salt; garnish the dish with capers, anchovies sliced, and sliced pickled gherkins, or let these articles be tossed up in the sauce.

To Boil Salmon, (the English way.) Let the water be boiled with a good quantity of salt, and when boiling, put in the fish; boil for nearly half an hour, if the fish be whole; but if cut in slices, from ten to twenty minutes, according to the thickness; serve with lobster, anchovy, or caper sauce.

To Broil Salmon Steaks. Cut the steaks from the thickest part of the fish, nearly an inch thick; butter pieces of white paper, fold the steaks in them, and broil them over a slow fire for ten or twelve minutes; take off the paper; serve, garnished with plenty of fried parsley. Dressed in this way, they may be put round salmon boiled, in slices. Sauces:—melted butter, lobster, or shrimp sauce.

Caveach Salmon. Boil in two quarts of vinegar three heads of shalots, half an ounce of whole black pepper, three cloves, two blades of mace, and a little salt. Cut the fish in slices, and fry them of a light-brown colour in fine oil, or clarified dripping; put them, when cold, into a pan; pour over them the vinegar and spices, and put on the top eight or ten spoonfuls of oil.

Salmon Fritters. Cut small some cold boiled salted salmon; pound some boiled potatoes, moistened with cream, and the yoke of an egg beaten; mix them together, and make it into small fritters, and fry them of a light brown in fresh lard, or beef dripping; serve them with hard-boiled eggs, cut in quarters. For sauce, melt two ounces of butter, with a little cream and flour mixed, and add, when it is hot, a dessert-spoonful of soy, and two of mushroom catsup.

Kipper, or Dried Salmon. Cut the fish up the back, and take out the bone; wipe it very clean with a cloth; score it, and put a handful of salt on each side, and let it lie for three days; then hang it up to dry, and it will be fit for use in two days, and eats well with a little pepper put over it, and broiled.

Pate de Saumon. Cut some salmon steaks, and season them well with salt and pepper, then simmer them in a saucepan with slices of eels and a few anchovies when cold, put them into a fine crust and bake them.

Pickled Salmon. Cut the salmon into pieces, boil it as for eating, and lay it on a dry cloth till the following day; boil two quarts of good vinegar with one of the liquor the fish was boiled in, one ounce of whole black pepper, half an ounce of allspice, and four blades of mace. Put the salmon into something deep, and pour over it the prepared vinegar when cold. A little sweet oil put upon the top will make it keep a twelvemonth.

To Pot Salmon. Take off the head, cut the salmon in thick slices, wipe it dry, but do not wash it; pound half an ounce of nutmeg, mace, and cloves, (the least part of cloves,) half an ounce of white pepper, and some salt; chop fine one onion, six bay leaves, and six anchovies; with this season each slice; put them into a pan with very thin slices of butter between each layer; bake it. When well done, drain off the butter, and when cold, pour over it some clarified butter.

To Salt a Salmon. Cut the fish up the back, and cut out the bone; wipe it clean, and sprinkle it with salt; let it lie a night to drain off the liquor; wipe it dry; rub on it two or three ounces of pounded saltpetre; cut it into pieces; pack it close in a pot, with a thick layer of salt between each layer of fish. If the brine does not rise in a few days, boil a strong one, and pour it, when cold, upon the salmon, which must always be covered with it.

Saumon Sauce aux Capres. This is the favourite mode of dressing salmon in France. Lay the salmon, cut into thick slices, in oil, parsley, cibols, salt, and whole pepper. Stew for an hour, adding from time to time merely sufficient water to

keep it moist, then serve up covered with plain butter plentifully mixed with capers.

To Stew Salmon—the English Way. Clean and scrape the fish; cut it into slices, and stew it in a rich white gravy. A little before serving, add two table-spoonfuls of soy, one of essence of anchovy, a little salt, some chopped parsley, and chives.

Vol au Vent au Saumon. Take a portion of salmon which has been boiled, hash it up with a knife, with mushrooms, and an anchovy or two, and season well; put it into a stewpan time enough for the mushrooms to be well done, and when the "vol au vent" comes out of the oven, take off the top and put in the fish, adding a rich gravy, (see Sauces,) replace the top, and serve. The "vol au vent" will be improved, if after the fish has been put in it is placed in the oven for a few minutes. Salmon may be cooked also according to the directions for sturgeon; it may also be scolloped as oysters, using salmon which has already been boiled.

It is stated, in a work recently published, that it is wrong to cook salmon quite fresh; the flakes, it is said, are hard; whereas the oily matter by keeping for a day insinuates itself into the flesh, and renders it tender.

Sardinia. A species of pilchard, but smaller. They are taken in enormous quantities in the Mediterranean, and form one of the chief articles of food of the lower classes on the coasts of Spain and Portugal. In Lisbon they are broiled and sold in the streets, in the same way as roasted chesnuts are sold in the streets of Paris. The sardinia is generally broiled, but it may be cooked with the same variety as herrings; great quantities are preserved in the same manner as anchovies. From the excessive quantity of oil contained in this fish, it is difficult of digestion.

Shad. A sea fish; but which in the spring and summer goes into rivers to feed and fatten. The goodness of this fish depends essentially upon the locality in which it feeds; some shad are almost uneatable, whilst others are nearly as good as salmon; the shad taken at sea are generally dry and flavourless. Any of the directions for cooking salmon may be followed with this fish.

Shrimps. A small fish resembling prawns, but smaller; the flavour is nearly the same, except that it is less exquisite. Shrimps are boiled in the same way as prawns, (see Prawns,) and the flesh may be potted like the flesh of the lobster, (see Lobster.) Shrimps, when boiled, are chopped up and served with melted butter, as a sauce for various descriptions of fish. (See Sauces.)

Skate. A hideous-looking salt-water fish, and difficult of digestion, but of an agreeable flavour; it remains fresh in a high temperature longer than most other species of fish. In ordinary cookery it is boiled plain, or crimped, and served with melted butter, catsup, or some other fish sauce being mixed with it, according to taste. Crimped skate is considered the most digestible; it is certainly the most firm. The fish is crimped by drawing a knife through it, in lines, when first caught. Cooks should be careful to boil this fish thoroughly. The sauce of melted butter is improved by the addition of capers.

Skate with Black Butter. ("Raie au Beurre Noir.") Boil a piece of skate (not crimped) in the ordinary way, and serve it up with the following sauce:—Burn fresh butter in a frying pan until nearly black, adding vinegar sufficient to give a good acidity; just before the butter is done, throw in some chopped parsley. The fish is to be served up in the dish with this sauce. This is a very agreeable way of eating skate.

Fried Skate. Take slices of crimped skate; lay them for four hours in butter, with salt, pepper, cloves, a little garlic, onions, parsley, chives, and vinegar; keep it sufficiently near the fire for the butter to be melted; at the end of the time mentioned take out the slices of skate, and fry them in butter; garnish the dish with parsley.

Skate a la Sainte Menehoud. Put in a saucepan half a pint of milk, with salt, pepper, butter thickened with flour, two onions sliced, a little parsley, a little of the ordinary dried pottage herbs, two or three cloves, and a laurel leaf; let them boil; then put in the slices of crimped skate, and cook quietly; after which remove the skate and broil them, and serve them up with a remoulade. (See Remoulade.)

Smelts. May be dressed as whiting, in any form, but it is unusual to cook them in any other way than by frying. They are not to be washed, but wiped with a clean cloth, and dredged with flour, or brushed over with a feather, dipped into the yolk of an egg beaten, and rolled in a plate of finely-grated bread crumbs, and fried in boiling dripping, or fresh lard. They vary in size, and

some will be done sooner than others. When of a clear yellow brown, take them out carefully, and lay them before the fire upon the back of a sieve to drain and keep hot. Dish them, heads and tails alternately, or serve them up on a silver skewer. Garnish with fried parsley. Sauce :—melted butter.

Sole. A delicate fish, containing a very small quantity of oily matter, and, therefore, particularly recommended to invalids and persons of weak stomachs. The smaller sized soles are always to be preferred, as they are tender when cooked quite fresh; whereas the larger sort eat tough, unless they are kept for some time. The skin of the smaller sized soles, carefully dried in the sun, is a good substitute for isinglass, for clearing coffee, and various other purposes. In English cookery, soles are seldom eaten in any other way than boiled or fried; but there are many excellent modes of cooking them on the Continent.

To Boil Soles. Clean them well, and put them on in boiling water, with a little salt, and let them boil till the fish rises to the surface; when they are done. Serve with melted butter, and shrimp, or anchovy sauce.

To Fry Soles. Having taken off the brown skin, and scraped the other side, wash them well, and lay them in a cloth to dry; then rub them well over with yolk of egg well beaten, and cover well with grated bread crumbs; fry them of a good colour in boiling lard, and when done, lay them on a sieve to dry; serve with melted butter, and shrimp sauce, garnishing the dish with crimped parsley.

Fried Soles, (Italian Way.) Clean well; cut off the heads and tails, and put them into a frying pan, covering them with chopped parsley, chiboles, salt, pepper, a little powdered nutmeg, and adding a good piece of butter, previously warmed for that purpose. Cook over a quick fire, and turn the soles as soon as one side is done; when ready to serve, pour over a little Italian sauce. (See Sauces.)

Sole au Gratin. Rub a piece of butter on a silver dish; then fry for a short time some chopped fine herbs, eschalots, chopped mushrooms, and salt, and pepper; when these are nicely browned put them in the dish, and place your soles upon them; then cover the soles with grated bread crumbs; add a little butter, and a small quantity of French white wine. Cook this dish gently under a braising pan, or over a slow charcoal fire; but if the latter, brown with a salamander. Serve the soles in the dish in which they are cooked, and just before serving add the juice of one lemon, or less, according to the number of soles.

Stewed Sole. Put a large sole in a stewpan, with a few fine herbs, a bay leaf, pepper, and salt, two or three mushrooms chopped, a dash of lemon juice, and a bit of the peel; to this add a little good gravy, and half a pint of port or white wine, according to taste. Stew very gently till thoroughly done, but not to be broken.

Sprats. From the very great abundance of this fish in some parts of England, and particularly in the London market, it is very little eaten, except by the poor; and from its oily nature it is certainly not to be recommended for persons of difficult digestion. It has, however, an agreeable flavour if carefully cooked. For frying, which is the only way in which sprats are dressed, every fish should be separately wiped dry and floured, before putting into the pan; good lard or oil, in sufficient quantity for the fish to be well covered, must be used. Sprats are very frequently prepared in the same way as anchovies, for sauces, and are not a bad substitute; they are also dried and smoked like herrings, and are an agreeable relish for breakfast. Enormous quantities of this fish are used on the coast of England as manure.

Sturgeon. This fish in England is honoured with the appellation of "royal;" it is a very scarce fish, and only in season in January and February; its flesh is coarse, and it seems to owe its celebrity to its scarcity; the roe of the sturgeon, however, is a favourite dish, either fresh, pickled, or potted. It sometimes attains an enormous size, in which case it is usually cooked in portions. Like salmon, it goes into rivers to feed. It is very oily, and difficult of digestion, but is said to be very nourishing; it should never be eaten by persons of delicate stomach. From the roe of this fish is prepared the celebrated dish called caviar, which is done by pickling it, and pressing it down for exportation.

Sturgeon a la Braise. Put some slices of the fish into a braising pan, with slices of veal and rashers of bacon, a tumblerful of French white wine, a bunch of sweet herbs, two or three onions, salt, and pepper, and a little good stock, or gravy; serve with the same sauce as when roasted.

To Broil Sturgeon. Cut the fish into cutlets; rub each over with the yolk

of an egg well beaten; cover with chopped parsley, grated bread crumbs, pepper, and salt; and broil, wrapped in buttered paper. Serve with melted butter and oyster sauce.

Sturgeon en Matelote. Cut the fish into small thin slices; lay them on a fireproof dish, with a slice of butter, a little salt and pepper, and put them over a very slow fire; when the slices of fish are done on one side, turn them; when quite done, which will be in about twenty minutes, take them out of the dish, and add to the sauce a little flour, which mix well with the butter, and three or four shalots, and a little parsley chopped fine; put the fish again into the sauce, and set over the fire, but do not allow it to boil; serve with the sauce thrown over the fish, and the dish garnished with diamonds of bread, fried brown in butter and drained.

Roasted Sturgeon. Lard the sturgeon with fat bacon, and roast; serve it with Italian or Espagnole sauces, (see Sauces,) or with stewed truffles, or mushrooms.

Tench—Is a fresh water fish, closely resembling the carp in shape, but having the scales smaller, and the colour more inclined to yellow; it is in season from July to September. The flesh of the tench is not very nutritive, and is difficult of digestion, and requires to be highly seasoned to be palatable. It is dressed as follows, but may be also cooked according to any of the directions given under the head of carp:—

Tench Broiled. Scale and clean as above; then broil on the gridiron, wrapped in buttered paper; serve with melted butter, or any other sauce.

Tench, Fricasseed. Dip the fish for a minute or two into boiling water; then take it out, and take off the skin and the scales, beginning at the side of the head; then gut and wash it; cut it into pieces, and fricassee, in the same manner as chickens. (See Chickens.)

Tench, Fried. Draw and wash the fish well; then wipe it very dry; cut it open down the back; season with salt, and fry of a good colour in boiling oil or lard; serve with anchovy, or any other relishing sauce.

Tench en Marinade. Scale and clean as above, and lay them in a dish, with some sweet oil, parsley, green onions, and shalots chopped fine, a bunch of fine herbs, salt, and pepper. When they have thoroughly imbibed the flavour of this seasoning, place them between two sheets of writing paper, well buttered, covering them with the seasoning, and broil them on a slow fire; serve without the paper; pouring over them some good sauce made hot.

Tench a la Poulette. Prepare the fish as directed in the first receipt, and dress precisely as directed for Eels a la Poulette.

Thunny. A large fish caught on the coasts of Sardinia; where it is pickled in vinegar, or preserved in fine oil for exportation, being first fried in slices. It is eaten on the Continent as an entremet; stewed with fresh butter, sweet herbs, and seasoning; or again fried. It is also made into a sort of paste, by chopping and pounding in a mortar, and then put into a jar, and baked with butter, white wine, lemon juice, salt, pepper, and mushrooms. This fish was held in high esteem by the old Athenians, but it is far from being a delicacy.

Trout. A delicate river fish; caught in great perfection in many of the streams and rivers of England. It is in the best condition for the table from May to July. As trout are very seldom taken of a large size in England, they are usually fried; but on the Continent, where they are much larger, they are cooked in a variety of ways. The flesh of salmon trout is red, that of the common trout white; but the first is considered far superior. They are both cooked in the same manner.

To Boil Trout. When the fish has been cleaned and gutted, put it in boiling water, made pretty salt, and boil fast for about fifteen to twenty minutes; serve with melted butter.

To Collar Trout. When they have been well cleaned, split them down the back, and remove the bone; then dry them well in a cloth; season with black pepper, salt, and a little mace pounded; roll them up and pack them close in a dish; pour over them some vinegar, two or three bay leaves, and some whole pepper; and bake in the oven for an hour, covering the dish with buttered paper.

To Fry Trout. When well cleaned, dredge them with flour, and rub them well over with yolk of egg well beaten; then cover with grated bread crumbs, and fry to a good colour; serve with melted butter and lemon pickle.

Trout, (Italian Way.) Put a large trout, or two middle-sized ones, into a stewpan; cover them with two carrots, and four onions sliced, some parsley and chibols, two bay leaves, a little thyme two or three cloves, and salt and pepper

add two bottles of common red French wine, and boil for three-quarters of an hour; then pass all the gravy through a sieve; and having melted in another sauce-pan about a quarter of a pound of butter, mixed with three table-spoonfuls of flour, add, by degrees, the strained sauce, stirring over a brisk fire until it has become well united and thick; put the fish into a dish, pour this sauce over it, and serve.

Stewed Trout. Put into a pan some crumb of bread, with a little butter, some parsley, shalots chopped very fine, pepper, salt, two or three cloves, a little nutmeg grated, a glass of French white wine, and about the same quantity of good gravy; let it boil until it becomes thick; put the fish, which has been scaled, cleaned, and cut into slices, into another vessel, with a little stock, salt, pepper, and the juice of a lemon, and let it boil till the liquor is quite reduced; then dish up the fish, pouring over it the former sauce, and serve.

Turbot. A very fine digestible fish, common to most countries, and taken frequently at the mouths of rivers; those caught off the Scilly islands, and on the north coast of Cornwall, are of very fine quality. This fish was held in such high estimation by the Romans, that in the time of Cato a turbot was sometimes sold at Rome for 250 crowns; and it was frequently styled by the ancients, *phasianus aquaticus*, "water pheasant." Juvenal even relates that the Emperor Domitian once summoned his senators together to deliberate on the kind of sauce with which turbot should be eaten. Turbot is good at most seasons of the year, but is in its greatest perfection about June and July. To dress turbot, it should be put into boiling water, in which has been previously put a handful of salt and a little vinegar; keep it boiling fast; when it is done, it will rise from the drainer; serve with melted butter and lobster sauce. Turbot is sometimes cooked in water to which about a pint of milk has been added, and when on the point of boiling, withdrawn from the fire, and kept only at such a distance that the cooking may be completed without the water boiling. In the event of milk being added, the vinegar must be omitted. Turbot is generally considered best when perfectly fresh, but it is preferred by some after it has been hung a few days by the tail in a cool place. In all dinners of ceremony, boiled turbot should be garnished with fried smelts. Mr. Careme says that a large boiled lobster should be placed on the turbot, and this lobster be garnished with about a dozen smelts, skewered with silver skewers, three or four on each, and fixed in the lobster; the turbot should be served on a napkin.

Turbot en Matelote. Put the fish on a dish that will stand fire, and strew over it some onions cut into slices, a little salt, pepper, a bay leaf, a little lemon juice, and some butter melted for the purpose, and moistened with some white French wine; then place the dish over some hot ashes, and cover it with a braising pan. It must be moistened from time to time with a little wine, and served with some rich fish sauce.

Turbot Steaks Broiled. Cut the fish into steaks; season them with pepper and salt; dip them in melted butter, and cover them with bread crumbs, after having rubbed them over with yolks of egg well beaten; broil them of a good colour; and serve them with some rich sauce, or with melted butter.

Stewed Turbot. Mix a pound of fresh butter, a little salt, pepper, and nutmeg, some parsley and mushrooms chopped, a chopped shalot, and the juice of two lemons; cover the bottom of the fish kettle with a portion of this mixture, then put in the fish, and cover it with the remainder; add a bottle of French white wine, and let the whole stew very gently for an hour. Another mode may be adopted by taking up the fish when it has been in about half an hour, and then putting it into a slow oven, moistening from time to time with the liquor in which it has been stewed; a quarter of an hour before serving, sprinkle crumbs of bread, and grated parmesan cheese, over the fish; in either case, some of the liquor is to be served with the fish in a sauce tureen.

Whitebait. A small and very delicate fish, peculiar to the river Thames. Naturalists have long disputed as to whether the whitebait be a species of itself, or the young of a larger species of fish. The balance of evidence seems to be in favour of the former opinion. Whitebait should be eaten very fresh, as otherwise its flavour is much diminished, It is to be cooked in the same way as gudgeon. (See Gudgeon.)

Whiting. A very delicate fish, which seldom disagrees with any stomach, as it contains only a small portion of oily matter. There is, perhaps, no fish that requires to be eaten more fresh than the whiting, although many epicures, in order

to have the fish firm and flaky, prefer them to lay for a few hours with the eyes and gills filled with salt. Whiting are to be purchased almost all the year, but are in the highest perfection from January to March.

Whiting a la Bourgeoise. Put into a dish that will stand fire, a good sized piece of fresh butter; when it is melted, add some chopped parsley, mushrooms, chibols, salt, and pepper; lay the whitings over this, and having covered the dish, cook very gently over a charcoal fire; serve them in their own sauce; but just before serving, add a dash of lemon juice.

To Boil Whiting. Clean them well, and put them on in boiling water, with a handful of salt; when done, they will rise to the surface, and must be immediately taken up; skim well, while boiling; serve with melted butter, or shrimp sauce.

To Broil Whiting. Prepare in the same way as for frying, and cook on a gridiron; rubbing them over, before serving, with a little cold butter.

To Dry Whiting. Clean and scrape them, and cut them open to below the vent; take out the eyes, and fill the hollow with salt, and put salt also into the bodies; let them lie twenty-four hours; then place a small skewer across the head part, to keep them open, and hang them in a cool place in the open air. They will keep in this manner for some time, and may be either boiled, and eaten with egg sauce, or broiled.

To Fry Whiting. When the scales have been well scraped off, and the fish thoroughly cleaned, cut off the fins and wipe them dry with a cloth; then dredge them with flour, and rub them over with yolk of egg beaten up, and cover with bread crumbs; fry to a good colour in boiling lard or oil. If the fish is very large, it may be cut into steaks; but the small ones are generally preferred for frying, and are always dressed with the tails run through the eyes.

Stewed Whiting. Put the whitings into a stewpan, with some fresh butter, chopped parsley, and chibols, a little salt and pepper, and a little nutmeg; moisten them from time to time with butter and white wine; when done on one side, turn them; and when quite done, thicken with flour and butter, adding a little lemon juice.

FLANNELS, To Wash. When flannels have been washed several times they become yellow. The "Encyclopedie Domestique" says, this may be prevented in the following manner:—Mix four tablespoonfuls of flour with four quarts of water, and put it to boil; taking care to stir the whole time. When it has boiled thoroughly, put the flannel articles that are to be washed into a pan or tub, and pour over them half the quantity of this flour and water in a boiling state. When the water in the pan or tub has become cool enough to be able to hold the hand in it, wash the flannels in the usual way, but without the addition of soap. Then rinse in three or four waters; and having let them drain as much as possible, put them back to the tub or pan, and pour over the remaining flour and water, also boiling. When cool enough, wash as before; rinse well, and hang out to dry, without wringing.

FLEA. Various remedies are resorted to by good housewives to get rid and prevent the increase of this most prolific domestic torment; but the best preventive and also remedy is great cleanliness. The rooms should be frequently washed, and the bed clothes exposed to the free action of the outer air. It is said that if the body, before going to bed, be spunged over with camphorated spirit, and the sheets be sprinkled with it, fleas will not come near the person; the thing is worth trying. The camphor may be sprinkled in the bed in powder, which is made by dropping upon a lump of camphor a few drops of spirit, and then reducing it by the hand to powder.

FLESH. The flesh of young animals is most juicy and soft, but that of the older is more nourishing. The juices of old animals, says Chambers, are spirituous, gelatinous, and agreeable to the taste; but the flesh is hard and difficult of digestion. The flesh of wild animals is more light and digestible than that of tame. Nearly a century ago, Dr. Hales suggested that the flesh of animals intended for storing should be preserved by injecting them immediately after killing, with strong brine. This does not, however, appear to have been acted upon, although the practice of injecting the blood vessels of the human subject with pyroligneous acid, to keep it for the purposes of dissection, has been long adopted in many hospitals. Flesh, among botanists, is that substance of any fruit that is between the outer rind and the stone, or that part of any root which is fit to be eaten.

FLOUR. Ground corn of any kind reduced to powder. The term flour,

however, is usually applied only to the powder of wheat and rye; the powder of barley, oats, &c., is generally called meal. Flour should always be kept in a dry state, and if intended for storing, its natural moisture should be evaporated by putting it into an oven or drying stove, heated to about 170° or 180° of Fahrenheit. This heat will not only dry the flour, but also destroy the eggs of any insects which it contains. When dry, it should be packed in barrels. Good wheat flour is white, light, and when rubbed between the fingers should readily drop from them; if it adheres, moisture, or the presence of some adulterating substance may be suspected. If flour be attacked by insects, it is unfit for use, as they devour the gluten, and leave only the starch. The presence of insects may be sometimes detected by a magnifying glass, but in other cases a microscope may be necessary. The most criminal adulterations of wheaten flour are sometimes practised in England. Plaster of Paris is not unfrequently mixed with it, to increase its weight; but this may be detected by boiling, for two or three minutes, two ounces of the suspected flour in a pint of water, then agitating it, and filtering through blotting paper. If there be plaster, it will remain in the paper; this being dried, and put into a narrow glass, and a little vinegar poured upon it, the plaister will give out a smell similar to that of rotten eggs. If chalk be mixed with the flour, it may be ascertained by throwing some of the flour upon water, when the chalk, being of the greatest specific gravity, will sink immediately to the bottom; if the water be poured off, and vinegar added to this deposit, an effervescence will take place. Or a little of the flour may be thrown upon a heated fire shovel, just on the point of becoming red; the flour will burn, and be reduced to a black ash, but the chalk or plaister will remain unconsumed. Flour is not always adulterated by deleterious substances, but sometimes with articles harmless in their nature, but very much cheaper than wheaten flour. The fecula of potatoes is used to a great extent for the purpose of adulterating flour, both on the Continent and in England. Hitherto it has been exceedingly difficult to detect this adulteration; but by a recent and most beautiful experiment the presence of potato fecula in flour is detected, even though it be in the proportion of only one-fiftieth part. We owe this discovery, which is by electricity, to M. Sellier, a scientific gentleman belonging to the stamp office in Paris. It had long been known that certain vegetable substances were attracted by positive, and others by negative, electricity. M. Sellier following up this knowledge, covered a board with a coating of sealing-wax, and by means of a Leyden jar, charged one part of the board with the positive, and the other with the negative fluid. He then, with a barber's puff, charged with the flour to be experimented upon, threw a little over the board; immediately, the fecula was attracted to one side, and the wheaten flour to the other. On looking at each through a magnifying glass, the fecula was seen lying by itself, and shining like brilliants; whilst the wheaten flour, deprived of the adulteration, had a dead whiteness.

FOMENTATIONS. The name of fomentation is given to any external application to the skin by means of bandages or flannels. They are used hot or cold, according to circumstances. In cases of sprains, or other affections, where the application of heat is required, thick flannel is dipped in the hot liquid, and being slightly wrung, it is placed as hot as possible upon the part, and as it cools, another flannel is got ready. In colic, long constipation, and other affections of the bowels, the use of hot fomentations, which are usually made by boiling poppy heads and chamomile flowers in water, are frequently found to be very useful. This fomentation is, at the same time, emollient and soothing. Its strength may be increased by sprinkling laudanum upon the flannel when it has been wrung. As no danger can result from the use of hot fomentations for such affections, they may always be resorted to in the absence of a medical man, when the pain is violent, and the case is urgent. They are sometimes used in gout with advantage, and for quinsy, when it is necessary to bring the tumour to suppuration. Cold fomentations are useful in sprains, when active inflammation has subsided, and it is required to give tone and strength to the part. The best way of applying them is to put a thick bandage upon the part, and to keep pouring cold water over it. Cold astringent fomentations, mixed with extract of lead, are used for the dissipation of tumours; but this should never be done without medical advice, as a medical man only can be a proper judge as to whether such applications should be used, and great danger frequently results from an

injudicious attempt to dissipate affections of this nature. Warm fomentations to the feet, sharpened with the addition of mustard, or muriatic acid, (the latter in the proportion of two table-spoonfuls to a pint of water,) are not unfrequently ordered for the relief of pains in the head; but in such cases it is always more convenient to use the foot bath.

FOWL. The common domestic fowl is in great variety; but the flavour, although more or less delicate, has a strong resemblance. Two of the best species are the Russian, and the Normandy or Rouen fowl. The common fowl may be said to be in perfection at the end of its first season of laying, after that the flesh becomes tough and coarse; but old fowls do very well for stewing. The length of the spurs will give some idea of the age of the bird; but another plan is to lift the bird by the beak, when dead; if the beak will bear the weight of the bird, it will be advisable to dress it according to some of the modes best suited to an old fowl; if young, the beak will break readily. This will also be the case with the claws, when crushed, if the bird be young. Most of the directions given for dressing chicken are applicable to young fowls.

To Boil a Fowl. When prepared as above, dredge it well with flour, and put on in boiling water, to which may be added a little milk. A large one will require an hour to dress; and if stuffed, a longer time will be necessary. It is served with parsley and butter, white, or liver sauce, or oyster sauce.

Hashed Fowl. Cut a cold roast fowl into pieces, and then put the trimmings into a saucepan, with two or three shalots, some fine herbs, a bay leaf, pepper, salt, a slice of lean ham, and a little stock, or gravy; simmer this for half an hour, then strain it off. Put a little brown roux into another stewpan, to which add the above gravy; let it boil a minute, and then put in the fowl. Before serving, squeeze in a little lemon juice.

Fowl a la Hollandaise. Remove the bone from the breast, fill it with forcemeat, and roast it for three-quarters of an hour, keeping it covered with buttered paper. When the fowl is done, have ready some batter, made of flour, eggs, and milk, well beaten and mixed together, and pour over it; when it becomes dry, add more, continuing to do so until it is well crusted over, and of a good brown colour. Serve with melted butter, or some good brown gravy.

Fowl Pie. (See Chicken Pie, or Veal Pie.)

Fowl a la Provençale. Divide a fowl up the back, and fill it with slices of bacon; put a slice of crumb of bread over the bacon, and sew it up, and roast it. Serve with brown sauce, or gravy.

To Roast a Fowl. When it has been picked, well cleaned, and singed, cut the neck off close to the back, wash, and truss it. If the fowl is large it should be stuffed with forcemeat, as for veal. (See Veal.) While roasting, baste it well with butter, taking care it does not burn. A good sized fowl will require about an hour to roast, but it may be considered sufficiently done when the steam from it is observed to draw towards the fire. Serve with gravy in the dish, and bread sauce, in a tureen. Boiled ham or tongue are always served with fowls.

To Souse a Fowl. When a fow has been roasted, cut it into joints sprinkle it well with pepper, salt, and two or three onions chopped fine; then pour over it some boiling water, and let it stand till cold, keeping it well covered.

Stewed Fowl with Onions. Wash and prepare as for boiling, putting a little pepper and salt into it; then put it into a stewpan, with some good gravy mixed with water; stew it until it becomes quite tender, then add some small onions which have been first boiled in another vessel, and let them stew for half an hour. If the fowl is old, it will require between two or three hours to dress.

FROGS. The use of frogs as an article of food is almost peculiar to France, although from the delicacy of the dish it is worthy of figuring upon every table. As only the hind quarters, however, are used, the dish is an expensive one. The flavour resembles very much that of a very fine chicken, but is superior; and the flesh is more light of digestion than that of chicken. There are two ways of cooking frogs; the one is *en fricassee*, the other by frying them in batter.

Frogs en Fricassee. Cut off the hind legs, with so much of the loin as will hold them together. Having put them in boiling water, and subsequently allowed them to lie in cold water for ten minutes, put them into a stewpan with some champignons, a little parsley, chibols, and some butter. After having given them two or three turns with the butter, add a little flour, a glass of French white wine, a little stock, and some salt

and whole pepper. Let them stew gently for a quarter of an hour, and then thicken with some yolks of eggs, butter, and a little parsley.

Fried Frogs. Put the legs and loins for an hour in a mixture of half vinegar and half water, with some parsley, chopped onions, shalots, thyme, and two or three cloves. Then let them drain, and either flour them well, or dip them in batter for frying. The dish is to be garnished with curled parsley.

FUNNEL. An article in the form of an inverted cone, for transfusing and filtering liquids. Funnels are made of glass, tin, copper, &c. The best, as being most easily kept clean for filtrations, are of glass. In ordinary filtration, where nothing more is required than to separate from the liquid any rough particles which may be floating in it, all that is necessary is to put a little cotton, wool, or tow, into the funnel over the aperture of the spout or neck; but where transparency is wanted, the funnel must be lined with filtering paper of a single or double thickness, according to the neatness of the operation. The paper is fitted to the funnel by twice doubling a piece larger than the funnel, and folding it up in plaits in such a way that one end may be completely pointed. The upper and uneven end is then rounded off with a pair of scissors, and the paper on being opened and put into the funnel, with the pointed part downwards, may be adapted to it in every direction. The liquid to be filtered must be poured in gently, and a little at a time, so that the sudden weight may not fracture the paper. If the liquid be much troubled, some fresh charcoal, not so thick as to impede the passage, should be put into the bottom of the filtering paper. Fresh animal charcoal is the best for this purpose, but wood charcoal, if fresh, will generally answer. Powdered alum is frequently used, when the liquid is not for internal use, as for perfumes; but this must not be employed for liqueurs, or other preparations taken internally. In filtering perfumes, a covered funnel should be used to prevent evaporation during the process, leaving only a small opening for the air, to permit the passage of the liquid, which would not flow if air were entirely excluded. Filtering paper may be purchased of any stationer.

FURNITURE PASTE. To polish mahogany, or other wooden furniture, prepare a paste as follows:—Dissolve, with gentle heat, some yellow bees'-wax in spirits of turpentine, using merely enough of the latter to dissolve the wax. When it is to be used, put a little of the paste on a piece of woollen cloth, and rub the wood well with it, working it off by sharp friction with another piece of woollen cloth on which no paste has been put. A small quantity of oil of lavender, added to the paste whilst it is dissolving, is an improvement.

GAME. We subjoin the most approved modes of preparing game. Generally speaking, game is considered the most digestible of animal food. (See Aliments and Indigestion.) Many of the articles inserted under the general head Game are not, properly speaking, regarded as game in England; but we have thought it right to place them under this head, as distinguished from domestic animals.

Black-Cock. There is no bird belonging to the category of game which is held in higher repute both by the sportsman and the *bon vivant*. It is found principally, if not wholly, in the Highlands of Scotland, where it is met with in great abundance. In appearance it much resembles the pheasant, but its plumage is not so rich. The directions given for roasting pheasants and partridges are equally applicable to the black-cock; it may also be dressed in any of the ways directed for these birds, but the best way is roasting.

Grouse. A description of game in appearance very much resembling partridge, but considered of higher flavour. It is principally found on the moors in Scotland, but is also met with on some of the high downs in England. It is dressed according to all the directions given for partridge, (see Partridge,) and is also very good made into a pie, as follows:—

Grouse Pie. Having picked and well cleaned as many grouse as may be necessary, season them with Cayenne pepper, salt, whole pepper, and two or three cloves pounded; put a bit of butter into each bird, and lay them closely into a pie dish, with a little stock, or good brown gravy, and a wine-glass of port wine; cover the dish with puff paste, and bake it an hour and a quarter. If intended to be eaten cold, have ready a little rich veal gravy, and pour into the dish when it comes out of the oven.

Hare. The flesh of this animal is light of digestion, if it be young and kept a sufficient length of time before dressing; many persons keep hares until the putre-

factive stage of decomposition is far advanced; but this is unnecessary as regards the tenderness of the flesh, which is never better than just as it is beginning to turn. The best part of the hare, when roasted, is the loin and the thick part of the hind leg; the other parts are only fit for stewing, hashing, or jugging. It is usual to roast a hare first, and to stew or jug the portion which is not eaten the first day. To ascertain whether the hare be old or young, feel the fore legs just above the joint; if there be a very small protuberance, equal in size to about the half of a split pea, the animal is young; the nose of the young hare is also more pointed than that of the old, and the ears are more tender.

Hashed Hare. Cut the hare into small pieces, and put them into a stewpan with some good stock highly seasoned, a glass of port wine, a little lemon-juice, and two or three cloves; let it simmer over a slow fire. Serve with currant jelly sauce.

To Jug a Hare. This mode of cooking a hare is very desirable when there is any doubt as to its age, as an old hare, which would be otherwise uneatable, may be made into an agreeable dish. After having well washed the hare, cut it into pieces, and let it lie for about half an hour in lukewarm vinegar and water; then drain, and put into a stewpan with a little good stock, pepper, salt, two or three cloves, a shalot, and two or three green onions shred fine, a bunch of fine herbs, two or three bay leaves, and about a pint of water; let it stew for about an hour on a slow fire. At the expiration of that time, remove it from the stew-pan, and put it into a deep dish that will stand the heat of an oven; strain the liquor that may remain in the stewpan on it, adding, if necessary, a little more stock, or good gravy, a little Cayenne pepper, a squeeze of lemon, and about a pint of French white wine, or port wine. Let it bake in a slow oven for two hours, covering the dish with a coarse paste of flour and water; when done, remove the paste.

Civet de Lievre. Cut a hare in pieces, or take what remains of a hare previously roasted, of which little may have been eaten; put it into a stewpan with some fresh butter, a few slices of bacon, sweet herbs, and chopped mushrooms or champignons; when they are thoroughly heated, add a little flour beaten up with consommé or water, salt, pepper, and half a pint of white wine (French); when done, pour over the hare a thick sauce made with the liver of the hare, and serve.

Marinated Hare, Roasted. Having skinned and drawn it, lard it with bacon, and put it in a dish with some vinegar and water made lukewarm, salt, pepper, two or three onions, a shalot, two bay leaves, a bunch of fine herbs, and a piece of butter floured. Let it lie in this seasoning for an hour and a half, and then roast, basting it with the same seasoning; strain what remains; add a little gravy, and serve very hot, in a sauce-boat, with the hare.

Hare Pie. Wash the hare well, and cut it into small pieces; put them into some cold water, and let them lie for half an hour; drain in a sieve, and season highly with two or three cloves pounded, and some black and Cayenne pepper; then lay the pieces in a pie dish, with a few small slices of ham mixed with them, some good brown stock, and a tumblerful of port wine; cover the dish with puff paste. If to be eaten hot, a suet crust is very good; if the pie is intended to be eaten cold, when it is taken out of the oven, raise the crust, and fill up the dish with a rich seasoned gravy, which when cold will become a firm jelly.

Hare Pie a la Bourgeoise. Cut up the hare, preserving as much of the blood as possible; lard with bacon: season with salt, parsley, and shalot, all cut fine; then stew it with a slice of butter, and half a glass of brandy; set it over a slow fire, and when the sauce is nearly consumed, add the blood, letting it heat, but not boil; then lay the pieces of the hare closely in a dish, cover with a crust, and bake; serve cold.

To Roast a Hare. Skin and clean it, and lay it in cold water for three or four hours, changing the water repeatedly; then rub it with a little salt, wash it again thoroughly, and dry it well; mince the liver, and mix it with grated bread crumbs, a little chopped fat bacon, and a bit of butter; grated nutmeg, pepper, salt, and a little grated lemon-peel; bind the whole with an egg well beaten, put it into the hare, and truss it. When first put down to the fire, baste with warm salt and water until the blood be out of it; pour off the water, and put into the dripping-pan some milk, with which the hare must be basted till nearly done; then baste with butter, and froth it well. Serve with gravy and currant jelly sauce, as for venison.

Stewed Hare. When all the meat has been cut off into small pieces, put the bones into a stewpan with a little consommé, or water mixed with any rich gravy, a bunch of sweet herbs, some whole pepper, and two or three small onions, and boil for half an hour; then strain it and put in the hare, adding at the same time two or three thin slices of bacon, a small wine glass of port wine, a little salt, and two cloves bruised; let it stew two hours, adding a little more gravy, if necessary. Serve with currant jelly sauce.

Ortolan. A bird smaller than the lark, very fat, and of delicate and exquisite flavour. Ortolans are seldom found, owing to their scarcity and dearness, but at the tables of the rich. The usual way of dressing them is to cover their breast with bacon, and roast them, (in a Dutch oven is the preferable mode,) basting them well; place a toast beneath them; when served, squeeze a lemon over them. They are sometimes placed within an eggshell, well buttered, and cooked in hot ashes; but this does not improve their flavour. They may be also dressed in any of the modes given for quails, (see Quails.)

Partridge. A bird about the size of a chicken, and highly esteemed. There are two sorts of partridge, the red and grey legged; the latter sort is the most common, being an inhabitant of almost every country, though its flavour and size vary in different climates. This bird forms a source of great amusement to the sportsman, and also considerable gratification to the *bon vivant*. Its flesh is equally suitable to the invalid as that of the pheasant, for its digestible and nourishing properties; but this only applies to it when young, as when old it becomes tough, hard of digestion, and of disagreeable flavour. The partridge should be hung some days before it is cooked, as it becomes more tender and high flavoured. It is dressed agreeably to all the directions given under the head of Pheasant, and as follows:—

Partridges aux Choux. When the birds have been trussed as for roasting, cover the breast with a slice of bacon, and put into the inside of each bird a bit of butter, floured, and seasoned with salt, pepper, and lemon-thyme rubbed fine; fry them a short time, and then put them into a stewpan with some good gravy, a slice or two of lean ham, a small wine glass of French white wine, a little Cayenne pepper, a shalot, and an anchovy chopped fine. A short time before they are ready, put into the stewpan the hearts of three or four cabbages which have been previously boiled, and stew together till the birds are tender. Remove the slices of ham before serving.

Partridges a l'etouffade. This mode of cooking is more particularly desirable when there is a suspicion that the birds are old. Having picked, drawn, and singed them, lard their breasts with bacon, and season with salt, pepper, and fine herbs shred very fine; then put the birds into a stewpan on some slices of bacon, and place on them some slices of veal, two carrots, an onion, two or three cloves, a bay leaf, a little thyme, and a bunch of parsley; put a few slices of bacon at the top, and cover the whole with buttered paper; add half a tumblerful of French white wine, and about the same quantity of stock or highly seasoned gravy; let them simmer for about two hours, or until tender; pour over them, when served, a little sauce Espagnole, (which see.)

Partridges au Gratin. Birds which have been roasted and served at table on a former day may be made into an agreeable dish, as follows:—Put into a dish that will stand fire, a slice of butter, and when it is melted, strew in some grated bread crumbs, a little parsley, and two or three shalots shred very fine, and salt and pepper; let this seasoning brown over the fire for a short time; cut the birds into pieces, and having warmed them in some stock or gravy, with a little salt, pepper, and a squeeze of lemon juice, put them on the "gratin," and serve, with some crumbs of bread browned over them.

To Stew Partridges. Make a force-meat, as directed for pheasants, stuff the craw, and lard the breast; put a piece of butter, seasoned with pepper and salt, into the inside of the bird, dredge them with flour, and fry them in butter for a few minutes; then put them into a stewpan, with some good gravy, half a pint of French white or port wine, and a little mushroom catsup; let them stew for about twenty minutes, covering closely the whole time; take them out, thicken the gravy with a little flour, boil it up, pour it over the birds, and serve; garnishing the dish with force-meat balls, and yolks of hard boiled eggs.

Stewed Partridges, according to Mrs. Rundell's Domestic Cookery:—Truss the partridges with the wings over the back, and a skewer through the legs; cut

a piece of pork or bacon, and put it into a saucepan, with a piece of butter the size of a walnut; fry the bacon brown, and when quite done, put in the partridges, and keep turning them until they are very brown, taking care that the bacon shall be as much on the breast as possible; then add about a teacupful of gravy. Have ready some greens, or a large cabbage, boiled; when well drained, chop it with butter, pepper and salt; put it while warm, with the gravy, to the partridges, and let them stew gently for an hour, turning the birds frequently: serve up with the bacon underneath, and the greens round them.

Pheasant. A bird which ranks almost as the first amongst feathered game; it is about the size of the domestic fowl, but with the bill rather longer, and more curved. The flesh of the pheasant is most delicate, particularly that of the cock, which is larger, and of higher flavour than the hen; it should not be eaten too soon after it has been killed, indeed, it can scarcely be kept too long for game eaters. The flesh of the pheasant is strongly recommended for convalescents, as it is easy of digestion, and very nutritious. Roasting is the usual way of cooking this bird in England.

Pheasant Pie. For this dish the birds should be boned, and their heads cut off; then make a stuffing with grated bread, a little grated ham, a very small quantity of minced beef suet; season with nutmeg, pepper, and salt, binding the whole with yolk of egg, well beaten; put a little of this forcemeat into the birds, and fry them for about five minutes; then line a deep dish with slices of fat bacon, with some of this stuffing placed at the bottom; put in the birds, adding a small glass of brandy, a little more of the forcemeat, and lay slices of fat bacon over the whole; cover the dish with a coarse paste, and bake for four hours. Before using this pie, the coarse paste must be removed, and a rich puff paste substituted for it; bake until this paste is done, and serve. Mushrooms or truffles may be added to the forcemeat, and a few more put in the dish. If the pie is intended for keeping, or to be sent as a present, a large quantity of spice should be used, and the baking finished with the coarse crust, which should be nothing more than flour and water. In this case the pheasant is eaten cold, and the crust is thrown away; this, in fact, is the only way in which pheasant pie is eaten in France.

To Roast Pheasant. Pick, clean, and singe the bird; remove the craw by making a slit in the back part of the neck; the head is to be left on, and in trussing is to be turned under the wing. The directions given for roasting fowl and chicken are equally applicable to pheasant. It is served with gravy in the dish, and bread sauce and celery sauce in sauce tureens. A good sized bird will require nearly an hour to roast.

French way: Having cleaned and trussed it, as above directed, lard the breast with fat bacon, or stuff it with a stuffing made of a little grated ham, parsley, and shalots shred very fine, pepper, and salt; serve with any highly flavoured sauce. Where the stuffing is used without larding, the breast should be covered with a slice of bacon, and a piece of writing paper, buttered, placed over the whole.

That amusing work, "Physiologie du Gout," recently published in Paris, has the following on the pheasant:—

"This bird, if eaten within three days after it is killed, has nothing peculiar about it, is neither so delicate as the domestic fowl, nor so high flavoured as the quail; but, cooked at the proper point of time, its flesh is tender, and its flavour is sublime, for it has then the taste both of fowl and venison. The pheasant should not be plucked until the moment when it is fit for roasting; it should then be plucked and firmly larded. To stuff it, take two woodcocks, remove the bones, and make two separate lots of the flesh and entrails—viz., the flesh in one, and the entrails and livers in the other; chop up the flesh with beef suet, a little bacon, pepper, salt, fine herbs, and truffles; with this stuffing fill the inside of the pheasant. This is sometimes difficult if the pheasant be not fresh; but by placing over it a crust of bread, and tying round with a bit of tape, the stuffing may be secured. The entrails and livers of the woodcocks are to be prepared as follows:—Pound them in a mortar with some truffles, and a little bacon and fresh butter; spread this paste on two pieces of toasted bread, and place the bread under the bird whilst roasting. When the pheasant is cooked, serve it up on the bread. This dish is worthy of being set before angels."

Pheasant with Sour Krout. Clean, singe, and truss the bird as for roasting; and season the inside with salt, pepper, cloves, a little parsley, and chibole chopped

fine; lard the breast with fat bacon; then prepare some sour krout, and cook it with a piece of pickled pork, and a cervelas, commonly called in England "saveloy," moistening it with a little good gravy, for about twenty minutes; then remove the pork and the cervelas, and put the pheasant into the middle of the sour krout, and let it cook for about an hour; when done, put the bird on a dish, drain the sour krout and place round it, skin and cut the cervelas into slices, with which, and with slices of the pork, garnish the outer edge.

Plover. A bird rather larger than a pigeon, but bearing a strong resemblance to it in shape. There are several varieties of the plover, all equally good for the table. The eggs of the plover are held in high estimation, as possessing more nutritious qualities than the hen's egg. For dressing plover, all the directions given for the woodcock may be followed; like that bird, they are usually dressed without removing the trail.

Quail. This bird is very much in form like the partridge, but much smaller, and when fat is of very delicate flavour, but not so nutritive and easy of digestion as the partridge.

Quails with Bay Leaves. Draw and truss them, and having minced the livers, mix them with some parsley and green onions, a slice of butter, salt, and pepper, and stuff the birds with them; cover them with buttered paper, and roast; boil some bay leaves in water, make them into a sauce, with some cullis, and serve over the birds.

Broiled Quails. Singe, and draw them, and split them down the back; put them into a stewpan with a little salad oil, two or three bay leaves, and a little salt and pepper; cover them with slices of bacon, stew over a slow fire for about a quarter of an hour; then take them out, cover them with bread crumbs, and broil; serve them with the sauce in which they have been stewed, which must be strained and boiled up.

To Roast Quails. Having cleaned them, cover them with slices of bacon, and roast as directed for partridge, basting well at first with butter; serve with some Espagnole sauce.

To Stew Quails. Place them in a stewpan, with a slice of veal, three or four rashers of bacon, a little butter, salt, pepper, a little stock or good gravy, and half a tumbler of French white wine; stew over a slow fire for half an hour; then take them out, strain the liquor, and serve over the birds.

Another way: Singe, and draw them, and put them into a stewpan with a little brown roux, a glass of French white wine, some stock, parsley, and green onions, a bay leaf, and a few cloves; stew for half an hour, and serve, garnishing the dish with toasted bread.

Snipe. A bird of passage; in habits and appearance resembling the woodcock, but much smaller and lighter in colour. Like the woodcock, it visits England only at the approach of cold weather, but a few rare instances of their breeding in that climate have occurred. They are dressed precisely the same as woodcock.

Teal. A species of wild fowl, similar in appearance and flavour to the widgeon, but smaller; it is cooked in precisely the same manner as that bird. (See Widgeon.)

Venison. The flesh of deer stands first in the list of game, as being the most esteemed as to flavour, and very light of digestion. In the choice of this article, that of which the fat is thick, and bright in colour, is the best. Venison is a meat which is never eaten until it has been hung for some time; when it is desired that it should be merely tender, but without acquiring the high flavour caused by long keeping, it should be well rubbed over with powdered charcoal. For roasting, the haunch is considered the primest joint; before it is placed on the spit, it must be well washed in lukewarm milk and water, and then dried; it must next be covered with white paper well buttered, over which is laid a coarse paste of flour and water, to the thickness of a quarter of an inch; this paste is to be covered with another sheet of well buttered paper; put the joint down to a clear fire, basting with beef dripping until it is nearly done, when the paste must be removed, and the venison basted with butter, dredged with flour, till it froths, and acquires a fine colour. A haunch of venison is served with its own and also some good brown gravy; currant jelly sauce is also an indispensable addition, the jelly being beaten up and melted with port wine and sugar. A good sized haunch will require about four hours to dress. When the neck or shoulder is roasted, the paste is not used; but these joints are seldom roasted, being generally used for soups, pasties, &c.

Venison Collops. Cut two pounds of the lean part of venison into thin slices,

mince it very finely, to which add some brown roux, and beat it well together; have ready some beef gravy, which has been highly seasoned with Cayenne pepper, salt, and some port wine, in which stew the minced venison for half an hour; before serving add a little mushroom catsup.

To Hash Venison. Make a gravy by boiling the trimmings of the cold haunch in a little good stock; season with whole pepper, a little salt, and add a bit of butter rolled in flour, a little currant jelly, and a glass of port wine; when the sauce is hot, put in the venison, which has been cut into thin slices; heat it thoroughly, and serve with sippets of toasted bread.

Haunch of Venison, (French Way.) Lard with bacon, and put it into a large vessel with three quarts of vinegar, some salt, and pepper, three bay leaves, a few cloves, a bunch of fine herbs, a little parsley, and a few onions sliced; let it steep in this seasoning for two days; then roast, and serve with pepper sauce. An hour and a quarter is sufficient to cook a moderate sized joint.

Venison Pasty. The neck or breast is chosen for this dish: cut the meat into small steaks, fat and lean; season them highly with sweet herbs, pepper, both black and Cayenne, a little beaten mace, and a clove pounded; fry them lightly in butter; then line the sides and edges of a pie dish with puff paste, lay in the steaks, adding some rich gravy, a glass of port wine, and the juice of a lemon; cover the dish with puff paste, and bake it nearly two hours; pour some more highly seasoned gravy into the pie before serving.

To Stew a Breast of Venison. After washing it well, dry it, and cut into pieces; dredge well with flour, and fry to a good colour; then put it in a stewpan, with some good stock, pepper, salt, and two or three cloves; and simmer till thoroughly done.

Venison Cutlets, are cut from the neck; seasoned with pepper, and salt, and broiled; serve with a rich gravy, and currant jelly sauce.

Wild Goose. (See Wild Duck.)

Widgeon. A description of wild fowl, resembling in appearance and flavour the wild duck, but smaller. All the directions given for cooking wild duck may be followed for widgeon. (See Wild Duck.)

Wild Boar. The flesh of the wild boar is superior to that of the domestic hog. It may be dressed according to the instructions given under the head Pork.

Wild Duck, Roasted. The wild duck is seldom served in any other way in England. In purchasing wild ducks care should be taken to ascertain that they are not fishy; this may be known by opening the beak and smelling. In roasting, they should be sufficiently underdone to leave in some of the blood. In serving them, it is usual for the carver to slice the breast, and strew over it a good quantity of Cayenne pepper, and also to squeeze over it the juice of half a lemon. On the Continent, wild ducks are sometimes roasted, and when cold, are cut up, and stewed for a short time with claret, salt and pepper, and a dash of lemon juice. In this way they are not a bad dish.

Woodcock. This is a migratory bird, which only visits the southern countries of Europe at the approach of winter. Much speculation has arisen as to the country whence these birds come, as their first landing place is the Scilly Islands; great numbers of them are there killed, as for two or three days after their arrival they are so exhausted from the long flight they have taken as to be readily knocked down with sticks. After a few days rest, they again start for the main land, and are no more seen in these islands until the next season. They soon recover their fatigue, and get in good condition; they afford good amusement to the sportsman. The woodcock is such a timid bird as to frequently fall, and be picked up by the sportsman, when the closest examination has not been able to discover a wound.

Woodcock Pie. The birds must be cleaned, and drawn, and the trail made into a forcemeat, as below directed, and placed at the bottom of the dish; cover with a puff paste; and before sending to table, pour in some rich highly seasoned gravy made hot.

To Roast Woodcock. This is the usual way in which this bird is dressed in England; but, for the sake of variety, it is sometimes cooked in other ways, but without any improvement being thereby derived to the flavour. Having well picked the birds, truss their heads under the wings, and put them in a Dutch oven, with toasted bread under them, to catch the trail, and on which the birds must be served; baste with butter, and serve very hot. They may be served with melted butter in a sauce tureen.

Stewed Woodcocks. When the birds have been picked and singed, draw

them; and make a stuffing of the trail, with the addition of some bacon cut small, a little parsley, and a shalot chopped fine, the yolk of a raw egg, salt, and pepper; when these ingredients have been well mixed together, fill the woodcocks with the stuffing, sew them up, and brown them in some butter; then put into a stewpan some slices of bacon, lay the woodcocks on them, and cover with more slices of bacon; let them stew for twenty minutes, then add a little stock or good gravy, and a glass of French white wine; continue the cooking over a slow fire until thoroughly done; then serve, straining the sauce, and pouring it over the birds. Just before they are taken off the fire, add a squeeze of lemon juice.

GARGLES. A wash or lotion for the throat, which is held there for some time, the patient making a muscular effort to wash the throat thoroughly, without swallowing the liquid; as there is always, however, a chance of a small portion passing into the stomach, gargles are usually composed of harmless ingredients. The best gargle for sore throats, at any stage before suppuration, is an infusion of red rose leaves, an ounce to a pint of boiling water, two drachms of alum, and a few drops of vitriolic acid; these are strained, and about half a wine-glassful is used at a time. As the acid affects the teeth, when used frequently, the mouth should be well washed after gargling, with water in which carbonate of soda has been dissolved. In the early stage of sore throat, the best gargle is a wine-glassful of half vinegar and half water, and as much Cayenne pepper as will lie on a sixpence; if this be used as soon as the first symptom of a sore throat comes on, the chances are a thousand to one that it will disappear in two or three applications; but it might be dangerous to use it if the symptoms have been of many hours duration. In the incipient sore throat, the mechanical irritation of this gargle overpowers the morbid inflammation of disease, and the pain thus mechanically caused rapidly subsides; but if the inflammation of disease has made much progress, and has become acute, the irritation of the Cayenne pepper might rather increase than subdue it. It may, however, be laid down almost as an infallible rule, that a strong stimulating gargle in the early stage of sore throat, from taking cold, will remove all danger, particularly if the bowels be opened at the same time by some cooling purgative. Persons who are subject to quinsey should never allow the symptoms of a sore throat to go on, but check them at their first appearance, by the Cayenne gargle. As soon as the throat begins to feel sore, a dose of salts should be taken, the feet should be put into a mustard bath, composed of two gallons of water and two ounces of the flour of mustard, and kept there in the same temperature, just warm enough to be agreeable and no more, for half an hour; and the Cayenne gargle should be used once or twice. If this be done at night, the probability is that every unfavourable symptom will be gone in the morning; whereas the neglect of a few hours might lay the foundation of a long and dangerous illness.

GARLIC. This bulbous root should be used sparingly, even by persons who do not disapprove of its flavour in excess, as it is of a strongly stimulating nature. It is a diuretic and sudorific, and a decoction of it is, therefore, sometimes used in medicine to promote copious perspiration and increase the urinary secretion. It is generally considered to have anti-putrescent qualities, but these appear to have been much exaggerated; as have also its effects in asthma, and other affections of the lungs; it is used, however, beneficially for children as a vermifuge, or remedy for worms. In cookery, a very small portion of garlic improves the flavour of many dishes, and a clove introduced into a joint of meat before roasting imparts a flavour which is far from disagreeable. It is a common practice in many parts of England, as well as on the Continent, to put a clove of garlic in the knuckle of a leg of mutton. It is propagated in the same manner as shalots, planting the sets in the early part of March, and taking them up in August.

GASTRIC JUICE. A transparent fluid, secreted from the interior of the stomach, and the principal agent in digestion. From the experiments which have been made both on man and on the lower animals, it has been ascertained that during digestion this juice is acid and strongly anti-putrescent. When the stomach is fasting, this juice is neither acid nor alkaline, but has a saline taste. (See Digestion and Indigestion.)

GASTRONOMY. The term applied to the science, if so it may be called, of good eating and drinking. The French call all connoisseurs in this way *gastronomes*, and divide them into two classes, the *gourmands*, or gluttons, who devour everything that is good, and the *gourmets*

who eat but little, and that of the choicest descriptions.

GIBLET PIE. Scald and clean two sets of goose giblets; and having cut them into proper sized pieces, wash them well, and put them into a saucepan, with two or three small onions, some salt, and whole pepper; let them stew in a little water for half an hour; then put them into a pie dish with some more seasoning, and the liquor in which they have been stewed; when cold, line the edges of the dish, and cover it with a good puff paste; before serving, open the crust, and pour in a little rich white gravy, and a glass of French white wine, seasoned, and made quite hot; it will require an hour to bake. A well seasoned rump-steak placed at the bottom of the dish is an improvement.

GIN. A liquor distilled from grain, and flavoured with juniper berries. The Hollands gin is seldom sweetened, but that made in England generally is a little. In some of the Hollands gin an additional flavour is given by celery seed. Much of the English gin contains turpentine and sulphuric acid. (See SPIRITS.)

GINGER. The root of a plant exported in a dried state from the countries in which it grows to Europe. The root is also preserved, when in a fresh state, in sugar, and then becomes a fine dish for dessert. The best preserved, as well as dried ginger, comes from Jamaica. When ginger is of good quality, it has rather a full appearance in the root, grates easily, and becomes a fine light straw coloured powder. Ginger is the finest of all stomachics; it fortifies the stomach, assists digestion, excites appetite, and dispels flatulency. It is rather suited, however, to old persons, and cold constitutions, than to the young and bilious. In some of the countries where ginger grows, the leaves are mixed with other herbs and eaten as salad. Ginger, in its dried state, is reduced to powder by the druggists, sifted, and sold in bottles for use. This powder, taken in tea, prevents the debilitating effects of that plant, and is said, if used in sufficient quantity, to be a sovereign remedy for hæmorrhoids. It is also made into very small grains with sugar, which are called ginger seeds: this is a very agreeable mode of taking ginger medicinally. What are called digestive pills, which are taken before dinner, and at night, are chiefly made of rhubarb and ginger, and are the most wholesome of all preparations for aiding digestion. The tincture or essence of ginger, which may be substituted in all cases for the powder, is made by infusing an ounce of the powder in three ounces of spirits of wine, and leaving it for some days, occasionally shaking the bottle, then allowing it to settle, and filtering it. A few drops of this in tea, or any liquid, make a fine stomachic. Ginger also forms the basis of an agreeable beverage called ginger wine, (see WINES,) and of another called ginger beer,—(see GINGER BEER.)

GINGER BEER. A very agreeable and wholesome beverage when well made. It was first invented a great many years ago by a Mr. Pitt, a surgeon at Lewes, and rose rapidly into fame. Even when made as it ought to be, it is a cheap beverage, but as it is usually made, it is still cheaper, tartaric acid being used instead of lemon juice. The best way of making ginger beer is as follows:—Pour eleven gallons of boiling water upon fourteen pounds of white sugar, the juice of eighteen lemons, a pound of bruised ginger, and the rind of two lemons. When at the proper temperature, (see BREWING,) add two or three spoonfuls of yeast, and let it ferment for about a day; then put it into a cask to finish the fermentation; and when that is completed, fine it, and bung it down closely. It may be bottled in stone bottles almost immediately. Some persons boil the water and sugar together before it is poured upon the ginger; but this trouble is unnecessary, unless it be intended to add raisins, which is a great improvement; in that case, a pound of good raisins may be boiled with the water and sugar. The quantity of ginger above ordered is rather larger than would suit every taste; it may, of course, be reduced. In bottling, very good corks should be used, and the bottles must be tied over with twine.

A work called the "Economist" states that a great improvement has lately been made in the manufacture of ginger beer, by boiling green rhubarb, and extracting the juice, which is to be used instead of cream of tartar. This may be an improvement as a substitute for cream of tartar, but it cannot be one as a substitute for lemon juice.

GINGERBREAD. This article was formerly much more used than it now is, except by children. In England it is very seldom used by grown persons; but in Paris it is still frequently served with the dessert at déjeuners à la fourchette. The basis of the French gingerbread is rye flour and honey; as it is much less

spiced, and less cloying than the English gingerbread, a larger quantity of it may be eaten without inconvenience. English gingerbread in small quantities is, however, by no means unwholesome; and in travelling, where the meals are irregular, it is an excellent article to stay the cravings of hunger. Invalids also sometimes eat it with pleasure, when the stomach rejects other food. The late Mr. Jeremy Bentham is said to have made this article his breakfast for several years. The practice of giving it to children, however, in large quantities, is exceedingly injurious. Gingerbread is made in England in various ways, but treacle always forms one of the chief ingredients. There is no better mode of making it than the following:—

Three pounds of treacle are to be mixed with three pounds and a half of good flour; a pound of fresh butter, and a pound of brown sugar; five ounces of caraway seeds; six ounces of candied orange and lemon peel, cut very small; a quarter of a pound of powdered ginger; five eggs; and rather more than half an ounce of pearl-ashes; the butter is mixed with the other ingredients by being beaten to a cream. The mixture must stand for twenty-four hours; and on the following day is to be worked up like bread, and baked in a cake, of about an inch thick, in a slow oven. The same mixture, made more liquid, and without the pearl-ashes, the butter being melted instead of beaten, dropped with a spoon upon a buttered tin, makes gingerbread nuts; but it is usual to put a larger quantity of ginger. Gingerbread nuts are also made by rubbing up a pound of butter with two pounds of flour; a pound of brown sugar, and rather more than an ounce of powdered ginger. These are mixed together with as much treacle as will form them into the consistency of dough; it is then made into the form of nuts, and baked upon tins. In order to make them richer, a little powdered allspice, and powdered cinnamon may be added. Nutmeg, and the pulp of pounded almonds may also be added either to gingerbread or gingerbread nuts.

GLASS, TO CLEAN. Make with some blotting-paper a quantity of pellets of various sizes; put them into the decanters, bottles, &c., to be cleaned, with warm soap-suds very strong; shake the bottle frequently; and having poured off the mixture, rinse with cold water.

GLOVES, TO CLEAN WITHOUT WETTING THEM. Lay the gloves on a clean board, and with a hard brush clean them with Fuller's-earth and alum in powder having beaten out this powder, brush them with powdered whiting and dry bran; beat out this powder, and rub clean with dry flannel.

GOLD CHAINS, &c., TO CLEAN. Dissolve three ounces of sal ammoniac in six ounces of water, and boil the article in it; then boil for a few minutes in a quart of water, with two ounces of soft soap; wash afterwards in cold water, rub dry with flannel, and shake the articles for some time in a bag with very dry bran.

GOOSE. There are two kinds of geese, the domestic and the wild; the latter, on account of its strong flavour, is seldom eaten; the flesh of the domestic goose is very nutritious, but is so difficult of digestion as to be unfit food for delicate persons. Geese, when very young, are less indigestible; but their flesh, at that time, is viscous, and but slightly nutritious. In England, geese are eaten by all classes but in many parts of France they are considered a coarse food, and are never served upon the tables of the rich, who only eat the liver of this bird made into pies, under the name of "Paté de foie gras," one of the most indigestible and unwholesome meats of French cookery, but of exceedingly rich and fine flavour. The livers of geese used for this purpose are brought to an enormous size, either by some peculiar mode of feeding, which brings on a disease and increases the volume of this organ, or, as it is said, by the cruel practice of placing the animal in a situation where it is exposed to intense heat and denied the use of water. Independently of its use as an article of food, the goose furnishes a considerable quantity of down and feathers, and very good quills for making pens; but even the collection of these quills is attended with cruelty, as those which are plucked from the living goose are said to be the best in quality. The fat of the goose had formerly a high medicinal repute, but is now very little used except as an ointment for chapped hands. The fat obtained from roasted geese is not unfrequently used on the Continent to flavour vegetables. The giblets of the goose form of themselves, or mixed with the giblets of other poultry, a very agreeable soup or stew. In England, goose is rarely dressed in any other way than roasted, and as a pie; boiled goose is indeed eaten in some countries, but it is not

a dish that can be recommended as to flavour.

Goose Ham. When a goose is too old for roasting, it may be cured as a ham, in the same way as pork.

Goose Pie. This pie may be made in the same manner as a chicken or fowl pie; but it is usual to add to it some other poultry, having first taken out all the bones; in this case, in addition to the usual directions for making poultry pies, the bones should be broken, and having been stewed for a very long time, the gravy should be poured into the dish in which the pie is to be baked.

To Roast a Goose. When it has been well cleaned and singed, stuff it with a stuffing composed of four table-spoonfuls of grated bread, an onion, three sage leaves chopped very fine, and a well beaten egg; baste at first with butter, and afterwards with its own fat. A good sized goose will require about an hour and a half to dress. It is served with its own gravy in the dish, and with apple sauce in a sauce tureen. Mrs. Dalgairn recommends, both for roast goose and roast duck, that when brought to table, a wine-glassful of port wine, mixed with a large teaspoonful of mustard, should be poured into the body. When a goose is only about two or three months old it should not be stuffed, but merely seasoned with pepper and salt; and as at that age it has little fat, it must be basted with butter. A green goose will require one hour to cook. The French put no stuffing into a goose for roasting, but fill it with the pulp of boiled chesnuts; sometimes truffles are used.

Stewed Goose—French Dish. Lard the goose, then put it into a large stewpan, with chopped parsley, chibols and shalots, a bay leaf, a little thyme, salt, whole pepper, and a little grated nutmeg; add a pint of water, a pint of French white wine, and half a wine-glass of brandy; stew over a very slow fire for three or four hours. This dish is generally eaten cold, when the gravy is become a jelly.

Stewed Goose Giblets. Having cleaned them thoroughly, parboil them, and take the outer skin off the feet; then cut them into portions, and stew them until they are quite tender, with some good stock, or water mixed with gravy, sweet herbs, an onion, cloves, whole pepper, and a little catsup; when done, strain the sauce, and thicken it with flour and butter; then pour it hot over the giblets. Just before serving, add a dash of vinegar, or a little lemon juice. If the giblets are to be made into a pie, they should be previously stewed for about an hour, and put into the baking dish with a portion of their gravy, and covered with a rich crust.

A French writer (M. Parmentier) gives the following instructions for rearing and fattening geese:—

"As soon as the first eggs are hatched, the young birds are taken away from the mother, to prevent her abandoning the eggs which remain unhatched; they are put into baskets, covered with a cloth, and when all the eggs are hatched, they are restored to her. If the weather be warm, the young birds may be allowed to go out soon after their birth, taking care, however, to keep them out of the great heat of the sun, which would kill them. Their first food should be barley, coarsely ground, and steeped in hot milk; lettuce leaves and bread crusts boiled in milk. When the young are become pretty strong, they may remain in the sun for some hours; but in the rainy or cold weather they must be confined, and when they go out they should be kept apart from the larger birds, who would ill treat them. Until the plumage begins to get firm, their food should be barleymeal and bran; at this time, raw vegetables, such as lettuce, &c., of which they are very fond, may be given to them freely. The best food for the full grown birds is lettuce leaves, chopped and mixed up with bran and lukewarm water; but where circumstances permit, full grown birds, and goslings which are more than two months old, should be allowed to go out during the day to seek their food, and to swim, if water be near at hand; in order, however, to prevent their wandering too far, it is usual to pluck some of the feathers from their wings; this will not be necessary if the birds, when young, have been regularly fed at home, at fixed hours; they will in such case always find their way home. If it is intended to fatten them, neither the old nor the very young should be chosen for that purpose, and very noisy geese must be kept away, for the others would not fatten if they were disturbed by noise. To fatten a goose will require from forty to fifty pounds of barleymeal, and three weeks time; as soon as the geese are sufficiently fat, they should be killed, for afterwards they would fall off rather than increase in size. The proper time for fattening is the month of November. There are various modes of fatten-

ing : where there are few to fatten, they should be put into a cask laid sideways, with holes at the end, for them to put out their heads to take their food. They will feed freely, for the love of food is greater with this bird than the love of liberty; milk and boiled potatoes may be mixed with their barleymeal instead of water. In Poland, each goose is enclosed in a sort of earthen pot, only just large enough to allow for its growth, and so contrived that the excrements of the bird may fall out; in a fortnight it is generally so fat that it is necessary to break the pot to extricate it. The ordinary mode of fattening geese, however, is to put them up in a kind of hutch, so made that they have scarcely room to move, and to give them barley and other food in abundance, with plenty of water, changing their litter very frequently; at the end of about three weeks the appetite usually falls off; they are now to be crammed with barleymeal, in the same manner as turkeys, and by the end of the month they acquire a prodigious size, frequently double that which they had before their confinement. In order to cause the swelling of the liver, and give it that peculiar richness which is so admired by epicures, M. Parmentier informs us that the birds are cooped up in narrow hutches, as for the ordinary process of fattening, with bars at the bottom, to allow the excrements to fall through, and that about the twenty-second day some spoonfuls of poppy oil are mixed with the food; in a few days the obesity of the hepatic regions becomes so great that the bird is in danger of suffocation, and when in this state it should instantly be killed. He states that it is essential to keep the bird during this process of fattening in darkness. There is no notice in his work of the barbarous use of heat, to which some writers have alluded, but he admits, that in many parts of France, famous for goose livers, the eyes of the bird are plucked out, in order that it may be in darkness, and its feet nailed to the floor of the cage, to prevent motion. And this in what is called an enlightened country!

GOOSEBERRY. This is a very wholesome fruit, when fully ripe, and is agreeable when cooked in tarts, puddings, &c. (See Pastry.) Gooseberries are of various kinds, and, from careful cultivation, are frequently brought to a large size. The tree is of a very hardy nature, and thrives well in most soils; but there is no fruit in which attentive cultivation produces greater changes. It may be propagated by cuttings, but as it does not bear well for two or three years, it is usual to have the trees in their young state from a nursery ground: they seldom fail to strike root readily. Jelly may be made from gooseberries as from currants but the quantity of juice is much smaller, and the flavour is not so agreeable. The ripe gooseberry, boiled into jam, with an equal weight of sugar, makes an agreeable preserve. The green gooseberry is very much used in England for home-made wine; and as it sparkles beautifully, it is considered by many to be a very good substitute for champagne. It cannot, however, be recommended to dyspeptic persons. (See Wines.)

Gooseberry Fool. A favourite dish in some parts of England. It is made by boiling the fruit in water until perfectly tender, and then mixing them with some good milk or cream. Sweeten to taste. It is usually eaten cold.

GRATES, to clean. Grates which are not polished are first to be rubbed with a hard brush and fine sand, if there be rust or dirt; a quarter of a pound of black lead is then to be rubbed up in a mortar, with a tea-cupful of vinegar, to be laid on, and when dry, to be polished off with a dry brush.

GUINEA FOWL. The flesh of this bird, although not bad eating, is very inferior to the pheasant. It may, however, be cooked according to any of the modes directed for that bird.

GUM. The resinous juice of trees, which, being punctured, yield a fluid, that congeals as it becomes cold. Gums are more or less medicinal. The gum usually called gum-arabic does not appear, however, to have any other medicinal quality than its fine mucilaginous character; this gum is valuable in colds, urinary diseases, diarrhœa, and all other affections where it is necessary to soothe and shield the membranes from the effect of acrid substances. The value of gum-arabic in this respect may be appreciated from the fact, that if strong gum water be taken copiously, whilst under the operation of blistering, there is no danger of strangury. Gum, however, if taken to excess, renders the bowels costive; this must be counteracted by gentle opening medicine. A very pretty preparation of gum, called *sirop de gomme*, is made in France:—Boil two pounds and a half of white sugar in a pint of water; when the syrup boils, stir in the whites of six eggs, previously

beaten up with half a pint of water; having skimmed the syrup, add a quarter of a pound of gum, previously dissolved in a quarter of a pint of cold water; boil for a few minutes, and when about half cold, strain through a jelly bag, and put into bottles.

The celebrated paste for colds, called *Pâte de Guimauve*, is made as follows:—Take ten ounces of gum-arabic, broken into small pieces, half a pound of white sugar, and the whites of five eggs (not whipped); dissolve the gum and the sugar in a sufficient quantity of cold water, stirring frequently; strain through clean linen, and on the following day decant the mixture carefully, to separate any sediment; evaporate this solution over a slow fire, without boiling, until it is of the consistency of clear honey; now add the whites of the eggs at two separate times, stirring briskly, to make them mix with the mass; continue the evaporation, taking care that the paste does not burn, until it will no longer adhere to the hand. Just before taking it off the fire, stir in two drops of neroli; now pour the paste out upon a marble slab, covered with powdered starch, and roll it out to the thickness of a quarter of an inch: it is to be kept for use in a tin case. In order to prevent all danger of burning during the evaporation, it is advisable to have a vessel so contrived, like the common glue-pot, that the heat may be communicated from the water.

HAIR DYE. No hair dye has yet been invented which is not attended with some inconvenience, or which effectually answers the desired purpose. The basis of most of the powders is quicklime, and that of the lotions, nitrate of silver. The powder is thus made:—Dip six ounces of quicklime in water, and when it has fallen to pieces, pound it, and sift it through a fine sieve; then add four ounces of litharge, and two of starch, also sifted; this is made into a paste with warm water, and the hair is completely covered with it, after which an oil-skin cap is bound on, and allowed to remain the whole night. The hair is washed on the following day with soap and water, and then oiled. This gives a deep black, but with rather a purple hue; by increasing the starch the shade will be lighter. The hair lotion or water is made as follows:—Pour upon half an ounce of pure silver three quarters of an ounce of nitric acid, and expose to sharp heat to dissolve the silver; decant the liquid, and add half a pint of water; by increasing the quantity of water lighter shades are obtained.

HAIR POWDER. The use of this article is now so much out of fashion that the mode of manufacturing it has but little interest; it may, however, be briefly stated, that it is made by grinding good wheat starch to a fine powder; the most delicate way of perfuming it is to put alternate layers of powder and flowers, such as orange flowers, violets, &c., in a box, and to let them lie for twenty-four hours, then to sift the powder through a sieve, and add more flowers, in the same way, until the powder has acquired the full perfume desired. A more ready and less expensive mode is to add some essential oil to a portion of the powder, and rub it up with the mass. Hair powder, although but seldom used now for its original purpose, is a very valuable article to nurses and mothers, who apply it to children when the skin is chafed or heated. It is also invaluable to many grown persons who are troubled with a constant perspiration under the armpits, or in the lower part of the body, and which no ordinary mode of cleanliness will correct; if the part affected be washed every morning with cold water, and then powdered with hair powder, every unpleasant result will be prevented.

HARICOT, or FRENCH WHITE BEAN. The early dwarf white bean is very much used in French cookery, and ought, from its nutritious qualities, which have been proved by experiment to be greater than those of any other garden vegetable, and nearly equal to bread, to be of more general use in England. As there are several species of beans sold by the seedsmen in England as French beans, persons who wish to grow the haricot should be careful to ask for that particular sort. They grow freely in many soils, but are very liable to the slug; it is therefore advisable, when they spring from the ground, to protect them on each side by a layer of soot and lime. When fully ripe, the beans should be taken out of the pods, put into bags, and kept in a dry situation. There are several modes of cooking them, but those most frequently adopted are the following:—Boil some water in a saucepan, with some salt, and a little butter; then put in the haricots, and when they are quite tender, strain off the water; then add to the haricots a good-sized piece of butter, and let them simmer for a short time, taking care that

they do not become brown; then add a ladleful of good velouté, or any other gravy, with pepper and salt, and just before serving thicken with white of egg. Another mode is, when the haricots have been boiled as above, to put them into a saucepan with a light roux, and some rich gravy, pepper, and salt, and let them do gently for some time. To cook them with cream, take a quart of haricots, first boiled in water as above, but with the addition of salt, pepper, sweet herbs, two cloves, and a bay leaf; when they are boiled, drain the haricots in a cullender; then boil for a short time a pint of rich milk, and a few table-spoonfuls of cream, with a little salt and pepper, and a few minutes before you take off the saucepan, put the haricots into it. When the haricots are rather old, it is advisable to let them soak for a night in cold water before cooking them.

HARTSHORN SHAVINGS. These are prepared by boiling the raspings of deer's horns in water, and drying the produce, as with isinglass (see ISINGLASS). This article makes a beautiful jelly, which is lighter of digestion than isinglass, and very nutritive. It may be employed for all the purposes of diet in the same way as isinglass.

HEAT. In England, where coals are not very dear, as compared with the Continent, the expense of fuel for cooking is not so considerable as to lead to the general use of newly invented stoves or ovens, by which economy is effected; there are, however, many large establishments in which cooking apparatus of different kinds, so contrived that a small quantity of fuel may go a great way, are fitted up; indeed, very great perfection has been arrived at in the manufacture of such articles: in some cases, their use is attended by an economy of at least one half, and by a saving of great time and trouble. The Belgians, also, have made great improvements in apparatus of this description: at some of the hotels in Brussels the economy of a cooking apparatus for roasting, boiling, and baking, is, as compared with open fires, almost incredible. As far as roasting is concerned, many persons are of opinion, that meat cooked in these stoves has not the same fine flavour as when roasted before an open fire; this opinion may be correct to some extent, but the objection is not of sufficient importance to counterbalance the saving which is effected. In Paris, there are stoves for cooking by charcoal, by which a dinner for twenty persons may be prepared at a cost of about sixpence; whereas, if the various dishes were cooked over separate fires, the expense would be at least two shillings. A very ingenious mode of cooking, on a small scale, in England, is a cone, in which charcoal is burned, and upon which two, three, or more saucepans are placed, so adapted that each receives the necessary quantity of heat; by this contrivance, a dinner of four or five dishes, for two or three persons, may be cooked for about one penny. But the most economical mode of cooking, where gas can be had by measure at a moderate charge, is the gas-stove, for with that the heat may be regulated with more certainty, and is more concentrated than in any other: the stove being fitted up with proper divisions for baking, roasting, boiling, or stewing, the heat may be raised or lowered in a second by means of cocks, and if the stove be well constructed, no portion of it will escape. Meat may be roasted by gas without imbibing the slightest smell, provided the flame of the gas be kept exceedingly low; the joint should be placed in the centre of two or three circles of very small tubes, pierced with fine holes, and the gas being turned on, the flame from each should be no higher than what is barely sufficient for keeping up combustion; this precaution being carefully attended to, it is impossible to roast better than by gas. And every other process of cooking is necessarily carried on with more certainty and convenience by gas than with open coal or charcoal fires. But as regards economy, the gas stove is never useful if the gas cost more than eight or nine shillings the thousand cubic feet; at this rate, rooms may be heated by gas with great economy, but in this case the stove must be so constructed that the cold air may be heated by the gas, and pass into the room without carrying with it any of its offensive properties. It has been stated, indeed, that gas stoves are very unwholesome, by deteriorating the atmosphere; but if the air be merely heated by the gas, this result is no more than what takes place from a stove heated in any other way. If the gas be allowed to escape, the consequences must be serious, for the best of the coal gas that is made is more or less impure; and many of the gas companies, from the immense number of lights which they have to supply, frequently send out gas strongly charged with sulphur and ammonia. All persons who use gas ought

to test it themselves, both as to sulphur and ammonia, but particularly the former. The mode of testing is very simple:—Some writing paper should be saturated with a solution of nitrate of silver, and dried. When the gas is to be tried, let the flame be extinguished, and then hold a piece of this paper over a stream of unlighted gas; in proportion with the quantity of sulphur contained in the gas will be the discolouration of this test paper. If the gas be exceedingly free from sulphur, that is to say, as pure as coal gas can be made, the paper will be slightly discoloured; but if there be much sulphur in it, the surface of the paper will become very dark, and will bear evident marks of sulphur. Should this be the case, the consumer of gas who values his health would do well to discontinue its use, for although in combustion it is not so injurious as it would be in an unconsumed state, it is sufficiently so to make it desirable to prefer having less light and a purer atmosphere. The test for the ammonia is the tournesol paper, which is to be applied in the same way as the test for sulphur; if the quantity of ammonia in the gas be large, the paper will be wholly discoloured. Of late years a new stove for warming rooms by charcoal has been introduced, and much has been said of its economy; but as it has been clearly ascertained, that charcoal cannot be used with safety in any form, if it be allowed to mix with the atmosphere, these stoves, unless so constructed as to have a free draught and a pipe for the vitiated air to escape, give an economy which is not desirable. It was said by their inventor, that the charcoal sold by himself was freed from its noxious properties; but by experiments, both in London and in Paris, it has been proved, that what he called his prepared charcoal was quite as injurious as that which had undergone no preparation. Generally speaking, the use of stoves is by no means conducive to health, although they are sometimes attended with great economy: Dr. Arnott's self-regulating stove is perhaps the best that has been invented, but even this is not so wholesome as an open fireplace. Wherever stoves are used, there should always be placed upon them a shallow dish containing water, to supply and refresh the atmosphere of the room, which is vitiated by the stove. If a little vinegar be added, delicate persons will be much less liable to headaches than they would otherwise be; water alone will generally prevent this inconvenience, but it is obviated with more certainty by the addition of vinegar.

HERBS. See the different heads under the proper letters.

HONEY. Before the manufacture of sugar, honey was the luxury of the poor, and the only saccharine matter used by the rich; it was also the basis of a spirituous liquor, the honey being fermented, and then distilled: this liquor is still much used in countries where wild honey is found in large quantities, but it is by far too expensive to compete, as an article of commerce or domestic use, with the spirit distilled from wine or grain. Honey is valuable both as an article of food and for medicinal purposes; in the latter, it is much recommended in affections of the throat and lungs; like all saccharine matter, however, it is cloying and injurious to the digestion; the custom of giving bread and honey to children is therefore to be discountenanced, unless the quantity of honey be small. To extract honey from the combs, they should be sliced and laid over wire frames to drain, turning the slices when one side has drained out. The honey which flows out in this way is called primary, or virgin honey, is the best, and from its superior quality should be kept by itself. If the weather be cold, the operation should be carried on over a charcoal brazier, taking care that the heat be not too great: all dead bees, or any other extraneous substance, must also be carefully extracted. A second quality is obtained by cutting the slices into very small pieces, and letting them drain; the third quality is obtained by placing the pieces in a press, or wringing them between hair cloths. When the different kinds of honey have been obtained, they are to be put into earthen jars, and kept in a cool cellar, to prevent fermentation: should fermentation take place, the honey will only be fit for mead or vinegar. (See MEAD and VINEGAR.)

TO PURIFY HONEY. Take, for every five pounds, three ounces of powdered chalk, five ounces of charcoal powder previously washed and dried, and the whites of fifteen eggs beaten up in a pint of water; put the honey, the chalk, and a quart of water, to boil for two minutes in a vessel larger by one third than the bulk of its contents; then throw in the charcoal, mixed with the white of egg, and boil for two minutes longer, stirring well the whole time. When boiled, set it to cool for about a quarter of an hour, and

then pass it through a hair sieve or bag; as what runs off first generally is discoloured a little by the charcoal, return it to the bag until all runs off clear. Honey prepared in this way is very valuable for medicinal purposes in coughs and colds. The peculiar taste of honey may be removed, and the article rendered an excellent substitute for sugar, by boiling it well, skimming it frequently, and then throwing into it four or five times a large nail made red hot; when nearly cold, a table-spoonful of brandy is to be added to each half-pound of honey. A fine honey-water, as an article for the toilet, is obtained by infusing for four days eight ounces of fine honey, eight ounces of bruised coriander seed, three drachms of vanilla, an ounce of fresh lemon peel, six drachms of bruised cloves, four drachms of bruised nutmeg, four drachms of benzoin, and a few drops of attar of rose, in three pints of spirits of wine, and then distilling in the water bath. An excellent gargle may also be made, by infusing honey for twenty-four hours in a strong decoction of red rose leaves, in the proportion of one pound of honey to a quart of the decoction; filter for use.

Honey Water. Take of honey, one pound; coriander seed, one pound; cloves, one ounce and a half; storax, one ounce; bruised nutmegs, one ounce; lemon peel, one ounce and a half; calamus, one ounce; spirits of wine, two quarts; let these macerate in a well-stopped jar for one month, then distil. Add to the produce of the distillation half a drachm of neroli, four drops of attar of roses, a quarter of a drachm of pulverized ambergris, and a drachm and a half of vanilla; let this infuse for a week, then filter.

Another: Narbonne honey, one pound; coriander, one pound; fresh lemon peel, one ounce; cloves, six drachms; nutmegs, one ounce; benzoin, one ounce; storax, one ounce; rose water, four ounces; orange flower water, four ounces; spirits of wine of 36°, three pounds; let them infuse for a few days, and filter.

HORSE-RADISH. This is a strong pungent and stimulating root, chiefly, and indeed almost exclusively, used as a garnish for certain dishes; for which purpose it is scraped and covered with a little vinegar. It is propagated by cuttings of the knotty parts of the root, leaving one or two eyes; the soil must be rich and deep. The time for planting is early in the spring, putting the cuttings a foot deep in the earth. The roots are fit for use the second year, and the bed will last four or five years, if, in digging, the original stock be not injured.

HUILE ANTIQUE. The name given to most of the oils which are sold for promoting the growth of hair. The basis of all these compositions is, oil of sweet almonds, oil of ben, or fine olive oil; the latter seems to be quite as good as any other. The oil is perfumed either by allowing the flowers, such as jessamine, lavender, rose, &c. to infuse in it, exposed to gentle warmth; or much more expeditiously, although in that case the perfume is not quite so delicate, by adding a little of the essential oil of the flowers to the olive oil, and filtering the whole through a filtering bag, or blotting-paper Thus, if a few drops of the otto of rose b added to half a pint of fine almond or olive oil, and the whole be carefully fi' tered, we have *Huile Antique à la Rose;* and the same with lavender, &c. How far the use of these oils really promotes the growth of hair, is still a question. In many of the compositions which are sold for this purpose, spices are mixed; and probably they act beneficially, as a gentle stimulant. Lime-water of weak strength is also said to have a powerful effect in giving tone to the skin, and producing a renewal of the hair; washing with cold water, and rubbing dry with a coarse cloth is, however, better than either; a little tincture of cloves may be added to the water. The following are a few of the most celebrated compositions for promoting the growth of hair:—

Madame Leu's Huile Celebre.—Fine olive oil, one pint, four cloves, a quarter of an ounce of cinnamon, cut small; boil them together for an hour, then add a quarter of an ounce of cinnamon, and the same quantity of sandal wood; boil again for ten minutes, and filter; add half an ounce of essence of Portugal.

Huile Comogene. Olive oil, four ounces; spirits of wine, four ounces; oil of rosemary, one drachm; oil of nutmegs, a quarter of a drachm.

Naquet's Macassar Oil. Oil of ben, one quart; oil of nuts, one pint; spirits of wine, half a pint; essence of bergamotte, half an ounce; essence of musk, half an ounce; essence of Portugal, half an ounce; otto of roses, quarter of a drachm. Infuse in a bottle near the fire, for two or three hours; then set the bottle by for a week, shaking it frequently.

HYPOCRAS. A liquor made with wine, and considered to be very stomachic. Infuse in six quarts of good white wine (the white Cape, called stein, will do very well) six drachms of cinnamon, two drachms of cloves, two drachms of cardamoms, one drachm of ginger, and the fresh rind of a lemon, all pounded in a mortar, with a pound of white sugar; put the mixture into a jar, and let it stand in the sun, or near a fire, for a fortnight; then decanter carefully, and bottle for use.

HYSSOP. This herb may be grown from seeds sown in the spring, and propagated by cuttings and slips. It is now little used in medicine, and not a great deal in cookery. A poor and dry soil is best for it.

ICE. Water congealed by the action of cold. Ice is used externally in many diseases where the application of intense cold is necessary, particularly in some affections of the brain. It is employed extensively in confectionary, for freezing creams, &c., and for giving coldness to champagne and other wines. In some cases of chronic indigestion, ice is also taken internally, by swallowing it in small pieces.

ICE-WELL. The storing of ice for summer consumption is conducted as follows:—A spot which is at all times free from the action of the sun, such as a cellar, is chosen. A hole is then dug to a depth of about twenty feet, beginning with a diameter of from ten to fifteen feet, and ending in such a way that the well may have the form of a reversed sugar-loaf, large at the top, and pointed at the bottom. This is then lined with brick-work, a hole being first made in the bottom, four feet wide and two deep, under the pointed part, to receive the water which falls from the ice which may melt; over this a grating is placed, upon which the first bed of ice is laid. Before the ice is put in, however, fresh straw is laid over the grating, and as the well is filled, straw is laid against the walls, so that the ice may touch only the straw. In filling the well, the largest pieces of ice should be put in first, and this rule is to be observed for the remainder, the size of the pieces becoming smaller and smaller as the top is approached; the more closely the ice is packed, the better it will be preserved. When the well is full, straw is laid over the top, and upon that planks are laid, covered with heavy stones, to press down the straw. Where it is practicable, the entrance to an ice-well should be double, to enable the person who has to extract any ice to enter, and close the first door before he opens the second, by which he will prevent a sudden rush of comparatively warm air; but if the well be made in a cold cellar, this precaution is unnecessary, as the cellar itself forms the outer entrance. Snow may be stored in the same way as ice, by beating it into a compact mass. Dr. Cumming recommends that ice-wells should be made above ground, as he has found that the damp of the earth dissolves the ice much more rapidly than heat: he builds a well above ground, under cover, to keep off the sun, and then an inner well, leaving a space for air between the two. In this way ice will, he says, keep in the hottest weather.

ARTIFICIAL FREEZING MIXTURE. In some parts of India, and other warm countries, where ice cannot be obtained, the following artificial mode of freezing is adopted:—Instead of ice, a mixture is made of eleven parts of ammoniacal salt, ten of nitre, and eighteen of Glauber's salts; the nitre and ammoniacal salt are used in very dry powder, but the Glauber's salts are in their natural state: a quantity of water, nearly equal to that of the mixture, may be frozen by it in the hottest period of summer. Mr. Walker found that nitrous acid, Glauber's salts, and sal ammoniac, mixed, lowered the thermometer several degrees below the freezing point. In some parts of France, where it is not convenient to have a regular ice-well, a cask is sunk in the ground in a cellar, having in it a little grating at the bottom, as in an ice-well. In this cask is placed a smaller one, pierced with holes, and having a lid; the small cask is filled with pounded ice and charcoal, not pressed, and the space between the two casks is filled up in the same way, hardly pressed down; the lid of the inner cask being put on, a cloth or sack filled with charcoal is laid over, and a lid to fix on the outer cask is then put on, after which, the whole is covered with straw. In the summer, when wine, creams, &c., are to be cooled, the two lids are taken off carefully, so as not to allow much air to enter, and the bottles are placed in the mixture contained in the inner tub for half an hour, the lids and the charcoal bag being in the meantime replaced. In this way great coldness may be obtained, but the articles will not be frozen so thoroughly

as by the refrigerating mixture above mentioned.

Ices, in confectionary. Mixtures of cream, &c., frozen by the external application of ice. Ice pails are sold for this purpose, with full instructions for use. The object to be frozen is placed in an inner vessel, and this in another, the space between the two being filled with pounded ice, mixed with salt. The more rapidly the object is to be frozen, the more salt will be required, but the flavour is injured by freezing too rapidly. In the first part of the operation, the mixture to be frozen should be stirred from time to time with a spoon in the inner vessel, which, as also the outer vessel, should be of strong block tin (not sheet iron tinned). When the object begins to turn, put on the lid of the outer vessel, and allow it to remain until it is sufficiently frozen; when taken out, the iced cream or water is either to be put into moulds, or formed pyramidically, in ice-glasses. If the ice is to be of different colours, the vessel in which it is to be frozen should have divisions for each colour, as should also the mould; but in the latter the divisions must be movable, the partitions being drawn out when the ice has been well pressed in. It is advisable, however, before the partitions be withdrawn, to put the mould for a few minutes into the ice pail, to freeze a little longer. The following are the favourite preparations of ice in Paris:—

Ice Cream, without Fruit. A pound and a half of fresh milk, half a pound of fresh cream, the peel of a lemon, and twelve ounces of sugar; boil, and stir until it thickens; then take it from the fire, and strain through a sieve: set it to cool, and when cool, put it into the ice pail.

Vanilla Ice. Milk, cream, and sugar, as above. Vanilla, four drachms, cut into small pieces, and pounded with a little sugar in a mortar. Proceed as for ice cream.

Coffee Ice. As above, mixing with the milk a very strong cold infusion of coffee (see Coffee) sufficient to give flavour.

Chocolate Cream. As above, boiling with the milk and cream, six ounces of fine chocolate, reduced, by rasping, to a fine powder.

Strawberry Ice. The pulp of two pounds and a half of strawberries and of half a pound of red currants, rubbed through a sieve, and a pint of water in which the sugar has been dissolved; mix well together, and put into the freezing pail. If strawberry cream is required, take the juice of the fruit, strain it, and add it to the cream with a little lemon juice; whisk up the whole with the sugar, and set to freeze.

Raspberry Ice. Two pounds of raspberries, four ounces of currants, four ounces of cherries, sugar one pound, water one pound and a half; mix the pulp with the water and sugar, and set to freeze. For raspberry cream, use cream instead of water, and whisk up gently; or use only the juice of the fruit.

Mrs. Dalgairn, in her Modern Practice of Cookery, recommends that ices from fruits should be made as follows:—"Press through a sieve the juice of a pint of raspberries or currants; add four or five ounces of pounded loaf sugar, a little lemon juice, and a pint of cream; whisk previous to freezing." The juices of any other fruits may be used. For water ices, substitute water for cream. The ices made from the pulp of fruits, as in France, are, however, very superior, but they require more time and care.

Lemon and Orange Ices are made generally with water, and finely grated lemon-peel is usually added. For orange ice, take the juice of three large oranges and of one lemon, strained, to a pint of water, made sufficiently sweet to correct the acid. For lemon ice, use as much juice as will make an agreeable acid.

All ices may be coloured, either with carmine, cochineal, or arnatto; but as the red and purple colours are generally preferred, carmine and cochineal are chiefly used; for this purpose it is well to have some colour ready: by infusing either carmine or bruised cochineal in hot water the dye is obtained; filter it, and add the quantity necessary to the cream or water; let the infusion be made strong.

Mock Ice. Families who have no freezing pails sometimes make a sort of mock ice, by mixing half a pint of water, in which rather more than a quarter of an ounce of isinglass has been boiled, with a pint of cream, and a sufficient quantity of sugar, and the juice of any fruit; the mixture must be made before the solution of isinglass is quite cold. If there be ice at hand, this mixture is set in a mould in some vessel, and surrounded with ice; or if there be none, it is put into the coldest situation possible. The solid appearance given to the mixture when cold by the isinglass, and which, if that article were absent, could only be given by the freez-

ing pail, causes this to be a pretty good imitation of an ice, if it can be made quite cold.

IMITATION SILVER. The following preparation is said to make a very good imitation of silver, for spoons, forks, &c. :—Put into a crucible eight ounces of melchior, eight ounces of zinc, twelve ounces of tin, three ounces of copper, six ounces of arsenic, and two ounces of borax; when melted, pour into moulds, &c. The experiment may be tried with a smaller quantity.

INDIAN CORN, OR MAIZE. A particular kind of grain, which grows abundantly in the south of Europe and in tropical climates. Made into bread or cakes it is used as food for man, and is the chief food, in many countries, of horses, pigs, and other domestic animals. The flour made from Indian corn is very inferior to that of wheat. An attempt was made by the late Mr. Cobbett to introduce the cultivation of it into England, but, owing to the variableness of the climate, the attempt was a failure.

INDIGESTION. A few practical remarks on this malady, to which the name of dyspepsia is generally given, may be very useful in connexion with the considerations of the quantity and nature of food. The symptoms of indigestion are various, according to the temperament of the individual; but almost all cases are attended more or less with flatulency, and with an unpleasant sensation in the mouth. When the disease has made some progress, severe pains are also felt at the pit of the stomach and in the fore part of the head, and, where the liver is affected, pains are also felt between the shoulders; but nine cases out of ten of ordinary dyspepsia arise more from a torpidity of the lower bowels than from any actual disease of the stomach itself or from organic affections. One of the worst symptoms of dyspepsia, as regards the sensations of the patient, is the feeling of tightness about the abdomen, which some medical writers have attempted to describe as a sensation similar to that which might be supposed to be produced from tying a string round the great alimentary canal, and thus impeding the passage. Where there is much flatulency, eructations are sometimes frequent; but in other cases this relief is denied to the sufferer, and there is a constant sensation of a desire to vomit, but with great difficulty of such evacuation. The symptoms of indigestion are very much increased by taking cold, and in such cases there is always great prostration of strength. In dyspepsia of long standing the patient loses all physical energy; and, although convinced of the necessity of exercise, is frequently wanting in the moral force which would lead to physical exertion. It is generally after taking food that the symptoms of indigestion assume an aggravated form; and some who do not experience any great inconvenience from solid food, suffer very much from liquids. Whenever indigestion, in whatever form, is present, the patient should never load the stomach beyond its powers, and those meats which are most digestible in their nature should be preferred; game, tender mutton, and poultry, are the best; the white meats, such as veal and pork, should be taken only in small quantities, if at all. In laying it down as a rule that the stomach is not to be overcharged, care must be taken to avoid the opposite extreme. The starving system, as it is called, although it may be very proper in acute cases, is not so in chronic indigestion; and as to liquid, although wines and fermented liquors of any kind should be taken with great moderation, they are not to be entirely abstained from. A small quantity of wine or beer, in its pure form, or diluted with water, if it should be found too strong for the stomach, may be very useful; but the common practice of taking spirits for what is called the expulsion of wind, either in their pure state or mixed with water, unless very much diluted indeed, is highly objectionable.

A notion is prevalent that, in cases of indigestion, eating very frequently, and in very small quantities at each time, is conducive to the health of the patient; this, however, appears to be an erroneous doctrine. The eating of small quantities of food is certainly to be recommended; but the number of meals, or rather periods of eating, should never exceed three or four in the day, for unless the stomach have time for repose, it cannot perform its functions: eating hard biscuits in the intervals between meals is also injurious for the same reason. As in many cases of indigestion the patient has a sensation of hunger, and sometimes even a craving desire for food, this habit of eating frequently is created by its own sensations: the feeling of hunger, however, is not genuine; it arises from a morbid state of the stomach, and should not wantonly be administered to. The best food, in severe indigestion, is probably water-gruel, made thick,

slightly sweetened, and with the addition of a very small quantity of brandy; by taking this food for two or three days, and no other, very severe symptoms of indigestion are frequently removed, and the stomach is gradually brought to a tone which enables it to digest food of a more stimulating character. Many sedentary men are obliged to abstain entirely from the ordinary food taken by persons in health for a week, a fortnight, or even a month together; Voltaire is said to have lived for more than three months at a time on nothing but mashed potatoes, and Rousseau frequently passed three or four days together with no other food than dry bread and cold water. It is evident from experience, that by such self-mortifications as these, acute and dangerous disease may be averted, and the stomach brought to a state in which enjoyment and digestion can both go on at the same time. Of all farinaceous foods, however, gruel is certainly the best; but the patient must attend to his symptoms during the use of it. There is scarcely any case of digestion in which the stomach does not require a certain degree of stimulus; but the great difficulty is in harmonizing that stimulus with the slow fever which is going on at the same time. Whilst the patient is living upon farinaceous food, he must not conclude, from any gnawing sensation of the stomach, or from any increased symptoms of the complaint in other parts of the body, that the diet is injurious to him, for these may arise from fortuitous causes, and may be at the point of departure at the very moment when they appear most sensible; but if, during the period that he is living upon farinaceous food, he finds an increase in the clammy or metallic sensation of the mouth, it may be generally taken as an indication that the stomach is enfeebled by the diet, and that a slight change must be made. In this case, he should take a plain mutton chop once during the day, and may even try a small quantity of beer which is not too strong; he should on no account fall into the ordinary mistake of taking soups, or strong broths, under the supposition that they are light, and at the same time nourishing. There is frequently much less difficulty in digesting a mutton-chop than in the digestion of a small basin of soup; and generally speaking, food in its concentrated form is more wholesome than when in a liquid form. This observation applies, of course, only to that period of the regimen when stimulating food may be eaten. If water-gruel be not liable to the same objections as soups, it is because it is mucilaginous and lubricating, and, by the absence of any bad stimulating property, allows the stomach time to perform its own functions. In food, as well as in medicine, there is no curative process, properly so termed; the natural tendency of the system is towards its normal state—health, and the real curative process consists in removing the causes of irritation, and enabling nature to perform her own work. In ordinary indigestion, where the symptoms are not so grave as to render an exclusively farinaceous diet necessary, it may, however, be very important to abstain wholly or partially from one or both of two articles which form a considerable item in the mode of living—these are tea and coffee; but as they are treated of, under their proper heads, in relation to their effects upon the animal economy, it is not necessary here to do more than refer to them.

Pure air, sufficient but not excessive exercise, cheerful society, equanimity of temper, and everything that can promote the energy of the brain, and assist in giving tone to the stomach, that great fountain of health or disease, are the best and most effectual remedies. Sedentary pursuits necessarily contribute very much to dyspepsia, and if it is possible, they should be laid aside for a time, until the stomach has recovered its tone. When this cannot be done entirely, exercise should be taken as frequently as possible, and not taken merely by way of exercise. If a sedentary man walks out for health, the mind is still agitated by the knowledge that he is health-seeking; a person employed in an office may walk ten miles in a day for the sake of health, if he has no other object, without deriving the same benefit as he would have if he were necessarily compelled to live at a distance, and walk backwards and forwards to the same extent for the purposes of business. Even rich persons, who are able to travel, should endeavour to have some direct object of business or pleasure in view: in short, everything should be done in chronic indigestion to divert the mind from dwelling upon the existence of disease. In most cases of dyspepsia the evacuations are irregular, being attended alternately with costiveness and diarrhœa; the early symptoms, however, are generally those of costiveness, and as these are relieved for some time by stimulating the liver with mercury, and rousing the action of the

bowels by purgative medicines, this course is adopted to a very great extent, until the habit of taking medicine can no longer be dispensed with; and although each temporary relief is a seed sown for chronic and almost incurable indigestion, drugging becomes, like dram-drinking, a daily practice, and the moral energy necessary for subduing it becomes daily and daily weaker as the practice is persevered in. Medical men, more desirous frequently of relieving patients instantaneously from unpleasant symptoms, than of laying the foundation of permanent health, prescribe a mercurial pill at night and an opening draught in the morning, although perhaps the temperament of the individual may be such that the one and the other, if repeated, as they necessarily must be, will act as slow poison; but the greatest mischief is done by the use of purgative pills, sold by advertising quacks, and which are taken more or less by persons who are subject to indigestion, and who do not call in medical aid. If these persons would adopt the more simple and rational course of reducing the quantity of food in a reasonable proportion, abstaining from exciting drinks, and keeping the body and the mind actively and usefully employed, they would gradually arrive at a more healthy state of existence, and although they might have none of that sudden and factitious relief which is given by purgative medicines, they would bring the frame by degrees into a state which would render drugging totally unnecessary, and they would learn to distinguish between those cases of urgency, when opening medicines are actually necessary, and the habitual use of purgatives for chronic indigestion. The French frequently express great astonishment at the fondness for drugging shewn by the English; some of them can scarcely believe that nearly one-third of the British nation are in the habit of taking purgative pills at night, or what are termed digestive pills a short time before eating. They do not understand the principle of tearing the stomach to pieces, in order to get at the bowels, which is, indeed, in ordinary cases, quite as absurd as it would be for a man to go from London to Brighton by way of York, and they adopt the much more simple and reasonable remedy of the lavement, which is, in fact, substituting mechanical irritation for that healthy and natural irritation of the bowels which is absent in the torpidity occasioned by indigestion. Very false notions of delicacy are entertained in England, as to the use of the injecting pump; there are many persons, particularly females, who prefer one of the two evils of costiveness or drastic purging to the use of this instrument. If they would reflect, however, upon the injury inflicted by either, and upon the proofs which are afforded by Continental works on medicine of the numerous advantages attending the use of the injecting pump, their prejudices and their false delicacy could not fail to give way to such evidence. This, like all good things, may be abused, and that it is abused on the Continent is very certain; but it is an extraordinary fact, that those acute and fatal diseases which follow long continued indigestion, such as pulmonary consumption, dropsy, and sometimes diabetes, are hardly ever known to occur to persons who adopt this mechanical remedy. But the most valuable consideration, in connexion with this part of the subject, is the following:—Persons of costive habits in England attempt to keep up the evacuations necessary for health by one of two systems: either by taking a strong purgative at once, and repeating it on every occasion, the repetition becoming the greater, by the adoption of the practice; or by taking very frequently small doses of a mild purgative, hoping by degrees to obtain the desired result. Now in the latter practice, although the preferable one of the two, the mind is kept constantly on the rack, as to the state of the body; and the very consciousness of the existence of the evil, prevents that beneficial action of the nerves of the brain upon those of the stomach, which promotes digestion and evacuation. But he who has at all times this simple remedy at hand, is perfectly tranquil as to the course to be pursued; he does not become wretched and melancholy because his bowels are torpid: he knows that he can at any time, without inconvenience or danger, rouse their functions; and it frequently happens that at the very moment when about to use this instrument, nature renders it unnecessary. There is also another great advantage in the use of it: the most distressing of all the symptoms of indigestion is, without dispute, flatulency; now this is not always relieved by purgative medicines, and even when it is, it returns with aggravated force, from the use of them. There is nothing of this kind in the use of the lavement, which, on the contrary, relieves the sensation at once, and on repetition, diminishes more

and more the torpidity of the bowels, which is its principal cause. Lavements, in cases of indigestion, should consist simply of warm water, with the addition of a small quantity of soap or salt; but where there is great obstinacy, a small quantity of turpentine may be added. Proper instructions may be obtained, as to the mode of administering lavements, from any of the druggists who sell the injecting pump. The greatest sufferers from indigestion are persons of delicate nerves, and with these the symptoms assume an endless variety: they have sometimes pains in the pit of the stomach, flatulency, hypochondriasis, prostration of strength, pains in the legs, ear-ache, tooth-ache, diarrhœa, dysentery, cough—in fact, the whole train of nervous maladies; and when one symptom disappears, it is only to give way to the occurrence of another. Instructions for the cure of any one of these symptoms would be useless, inasmuch as they proceed from one and the same exciting cause. For such patients, the general instructions for indigestion must be attended to, with the additional observation, that warm clothing, frequent frictions of the skin, and occasional foot mustard baths are to be recommended. In the medical treatment of indigestion, the faculty appear to have very different views. The homœopathic doctrine has lately got much into vogue, and several important cures are said to have been effected; this is not at all surprising, for putting aside all contention as to the intrinsic excellence of this system, there are three things attending it which cannot but promote the welfare of the patient. First, the tearing system of mercurial doses and drastic purges is got rid of; secondly, strict attention to diet is imperatively imposed; and thirdly, the pomp and mystery with which the system is enforced, has a tendency to excite hope and create faith, which are so important for the cure of nervous diseases. Dr. Wilson Philip is said to have adopted the sensible and comprehensible part of homœopathy, by administering blue pill in very minute doses; and there are cases on record of persons, who after having taken, for three weeks or a month, such very small doses of blue pill as the eighth or even the sixteenth part of a grain, three times a day, have derived very great benefit. There is no mystery about the action of blue pill in such doses; they are quite sufficient, if long persevered in, to have an effect upon the system, where diet is at the same time carefully attended to, without producing any of the ordinary evils of mercurial treatment. In some cases of indigestion, the use of counter-irritants is attended with great benefit, without the necessity of adopting any other means: the application of a mustard poultice or plaster upon the pit of the stomach will not unfrequently subdue the morbid irritation by the mechanical one, and thus allow nature to assert her rights. A very simple, safe, and useful tonic medicine, in difficult digestion, is an infusion of gentian, rhubarb, carbonate of iron, and Spanish liquorice: this should be prepared, by pouring a pint of boiling water upon twenty grains of each article, and taking of the infusion about two or three table-spoonfuls three times a day; this does not act directly as a purgative, but as a mild tonic—imparts a strength to the stomach, which assists the digestion of food, and promotes evacuation; it acts upon the principle of assisting, and not of forcing nature.

INDIGO. A dye prepared from a plant peculiar to hot countries: most of the indigo comes from the East Indies. As a great deal of Prussian blue is sold for indigo, it may be useful to give the following process for detecting the fraud:—Reduce the article into fine powder, and throw it into a glass containing about four or five parts of its bulk of sulphuric acid: if the article be pure indigo, it will immediately dissolve, and the liquor will be of a fine blue colour; but if it be Prussian blue, it will be decomposed, and the colour destroyed, and the result of the operation would be sulphate of iron.

INK. To make common ink, put into a stone bottle a quart of vinegar, two pounds of the shavings of Campeachy wood, an ounce of gum-arabic, two pounds and a half of pounded nutgalls, a quart of water, a pound of sulphate of iron, and four drachms of indigo; let them stand for a month in a warm place, shaking the bottle night and morning; then strain for use. Japan ink is made as follows:—Take twelve ounces of sulphate of iron, eight ounces of sulphate of copper, twelve ounces of nutgalls, four ounces of Campeachy wood, ten ounces of gum-arabic, one ounce of indigo, and six quarts and a half of water. First, break the nutgalls, and infuse them in five quarts of water of a high temperature, but not boiling; the water must be kept at the same temperature for three quarters of an hour, being careful that it does not

boil, and keeping the vessel covered; at the expiration of that time, put in the Campeachy wood and the indigo; after it has stood ten minutes, strain it through muslin, squeezing well, to extract all the liquor, and let it cool; then pound slightly the sulphate of iron, and place it over the fire in a fire-shovel, and let it heat by degrees until the iron becomes red hot; when the sulphate has become of a red colour, and is thoroughly calcined, remove it from the fire, and when it is almost cold, throw on it a quart of boiling water; let it stand for ten minutes, and then strain it, and add it to the former infusion; dissolve separately the sulphate of copper and the gum-arabic, and add them also to the ink, which is fit for immediate use.

To DILUTE INK WHICH HAS BECOME THICK. Add strong infusion of coffee.

INTOXICATION. There is an immense number of substances capable of producing that state of the system which we call drunkenness, or intoxication. Opium has generally been considered the most powerful amongst these substances; but we have lately heard of a preparation from hemp, which far exceeds, in its intoxicating effects, the power of opium, for it produces downright madness. The French papers have contained an account of an experiment made with a small quantity of this preparation from hemp, which had been received from India, by three young men of Marseilles; shortly after they had taken a moderate dose, they were attacked with all the symptoms caused by opium when it acts inspiringly, (which is not always the case,) but in an aggravated degree: the brain of each person became excited in a violent manner; they danced, they sang, they imagined themselves to be kings and emperors, they gave vent to their joy in loud shouts, and, rushing into the street like madmen, they performed a variety of antics, and were for several hours in the same state of delirium. When the exhilarating effects of the poison had subsided, however, it was succeeded by great depression of spirits; all their muscles had lost their force, they were unable to stand upright, their eyes were sunk in their heads, and they had all the appearance of men about to expire: two of them recovered in the course of three or four days, but the third was seriously ill for more than a month; he declared, however, that, severely as he had suffered, when the first effect of the poison had gone off, his rapture was so intense, when under its exhilarating powers, that he was almost tempted to repeat the experiment. Intoxication is produced more or less by all fermented liquors, when taken in sufficient quantity to affect the brain, and if frequently repeated, seldom fail to lay the groundwork of the most frightful maladies, bodily and mental. The habit of drinking fermented liquors to excess, seems to be common to all nations, civilized and uncivilized. The inhabitants of Siberia and the north of Russia get tipsy with *brago* and *quass*, which are beers made from rye; the Tartar intoxicates himself with the *kermiss*, a fermented liquor made from mares' milk; the South American has his *chica*, from Indian corn; and the Chinese, his *facki*, from rice. Many tribes of savages manufacture an intoxicating liquor from the palm tree and other plants; and the Turks, whose religion prevents their drinking fermented liquors, find a still more fatal substitute in opium. In Europe, the chief liquids which produce intoxication are beer, cider, wine, brandy, rum, which is imported from the colonies, and gin, whiskey, and other distillations from grain: of all these, beer is the most nourishing, and a large quantity is required to produce intoxication; but if beer be taken to excess, there is no fermented liquor the effects of which are more certain. The person who uses beer with intemperance becomes fat, and is even, for a time, under a delusion that he enjoys good health, but the result is apoplexy, or dropsy, arising from diseased liver, most frequently the former. It has been observed by a French writer, that the drunken John Bull is a fat, heavy, and stupid-looking man, under the influence of beer, whilst the Frenchman, under the habitual use of brandy, is thin, desperate, and furious, but that one and the other rush with equal certainty to destruction. As strong cider contains, in comparison with strong beer, only a small quantity of alcohol, the intoxication from cider is less rapid, and as its chief element is less narcotic, the stupor produced by it is not so great as that of beer; but it has been remarked, that the results of habitual intoxication from cider are equally fatal. Wine drunkards are the smallest sufferers, if the wine is good, for the quantity of alcohol in sherry wines, when genuine, does not exceed one-sixth, and in the weaker wines it is only one-fifteenth; but as it is the habit of wine

growers to mix alcohol with the wines which they export, to give them body and additional strength, and as this admixture seems to be much more injurious than the same quantity of alcohol would be in the natural state of the wine, it is prudent to be sparing in the use of this beverage, when there is no certainty as to its genuineness. When wine is genuine, it appears in many cases to produce no permanent injury to the system, even when indulged in daily to such an extent as to produce intoxication; these cases, however, are comparatively rare. The alcohol is said to be much corrected by the tannin of the grape, particularly in the red wines, the colour being communicated by expressing it from the skins, which contain a large quantity of tannin. The most rapidly destructive liquids are those which are called spirituous, such as brandy, gin, &c. Death is the certain result of an excessive use of these, but it is death preceded by brutalization of the mind, and painful disease of the body. One of the ordinary, but most frightful results of a habit of intoxication with spirituous liquors, is delirium tremens, but the catalogue of diseases attendant upon this habit is almost endless. Dyspepsia, in its worst form, is a common symptom; dropsy, marasmus, pulmonary consumption, general debility, loss of appetite, immoderate thirst, hypertrophy of the kidney, melanosis, cyrrhosis, tubercles, fungus, hæmatoides, many hæmorrhagic diseases, and insanity—one or other of these complaints, and not unfrequently several of them, in a complicated form, await the unhappy being who indulges—if to so frightful a propensity the word indulgence can be applied—in the frequent and excessive use of ardent liquids.

The habit of drunkenness is exceedingly difficult of eradication; for just in proportion with the general excitement of the brain, seems to be the debility of those organs of reflection, which in a healthy state could be appealed to with a fair chance of success. Phrenologists say, we have an organ of destructiveness, which when brought under the control of the reasoning faculties, enables us to triumph over obstacles, and to accomplish great and glorious purposes, but which, when the intellectual powers are weakened, and the moral faculties are dormant, is the mere executive of the baser passions. This appears to be the case with the drunkard; he is persevering only in folly, obstinate only in brutality. In vain do we appeal to his morality, for he has destroyed its energy; in vain do we knock at the door of his reason, it is closed by sensuality. Where, indeed, must reason and morality be, when we see a man wasting his resources, robbing his family of the enjoyments which, in a state of sobriety, he would be able to provide for them; inflicting upon his best and dearest friends the continued spectacle of his degradation, and bringing upon himself premature old age, a whole train of bodily diseases, and preparing for a death-bed, without honour, without sympathy, without the consolatory influence of a pure conscience? Talk to such a man of his moral duties—talk to him of self-respect, of religious veneration;—if he be under the immediate operation of drink, you are addressing your remonstrances and your counsel to a madman; if he be sober, you have to do with an enfeebled intellect—with a child who has just sense enough to know that it does wrong, but not sufficient energy to do better. To cure the habitual drunkard, he should be treated as—what he is—a madman: he should be placed under restraint, and the body having been restored to something like health, his mind may be gradually acted upon. When reason has recovered her empire, there may be some hope that you will be able with effect to paint to him, in vivid and lasting colours, the disgustingness of intoxication; there is none whilst the brain is on fire, burning with an unquenchable rage, which constantly calls for fresh fuel, or when, in the rare moments of sobriety, it is in a state of debility almost as pitiable as in its excited state it is appalling. The upper members of society in England have much to answer for, for they have set the example of drunkenness: they are indeed vastly improved themselves, by intercourse with foreign nations, and drunkenness is now no longer a fashionable vice; but the improvement has not yet extended to the lower orders, and the evil habit is not so thoroughly eradicated in the class from which example should come, that it can enforce its new views with full effect upon the people. The time has passed when the one-bottle man was the positive degree of society, the two-bottle man the comparative, and the three-bottle man the superlative. The time has passed when the hospitality of the entertainer was considered to be proportioned to the quantity of wine which he could compel his guests to drink, and when he who fell last

under the table was the king of the debauch. We no longer live in the days when ministers, judges, and generals would reel into the presence of ladies, hot from the fumes of intoxication, and offensive both in gait and language. It is delightful to think that such an improvement has taken place among the upper orders, and still more delightful to know that the prudent and virtuous of the lower orders have, by the establishment of temperance societies, set an example to the mass, which thousands are following. But drunkenness is not yet a solitary vice; it is not yet one of those crimes which the national character repudiates; it is not yet an offence which men are ashamed to own; and the law which inflicts a fine of five shillings upon drunkenness, is not of that high moral order which tends to reform, by either the exposure of the offender or his punishment. If the rich man is fined, he throws down his fine, with a laugh of scorn or an expression of anger at an attempt to interfere with his right of self-management; and if the penalty falls upon a poor man, he thinks it hard that his enjoyment, for such indeed he calls intoxication, is to be taxed at the same rate as that of the wealthy man, to whom, comparatively, five shillings is but as the hundredth part of a farthing.

We have heard of various remedies for the immediate effects of drunkenness, arising from either beer, wines, or spirits; but the volatile salts seem to be the most powerful. If a few drops of liquid sal volatile be taken in a glass of water, the drunkard is immediately relieved; and by repeating the dose he is brought to a state of sobriety. This recipe will be without value to the habitual drunkard, for he finds pleasure in his degradation, but there also are many persons who suffer themselves to be led occasionally to a practice, of which their reason, even when obscured by the fumes of liquor, teaches them to be ashamed, and who may be disposed to avail themselves of the remedy.

ISINGLASS. A preparation made by boiling the skins and gelatinous parts of fish, previously well cleaned, in water; the decoction having been brought to the required consistence, is carefully dried. Isinglass is a very good glue for paper work, and is of much use in clarification, as it separates all the thick parts of a liquid, which fall to the bottom and leave the mass clear. If a piece of isinglass be boiled with coffee, the grounds are rapidly precipitated, and in a few seconds the coffee is clear. Sole skin, well cleaned and dried in the sun, will do as well for coffee, but for delicate preparations the finest isinglass, which is almost tasteless, should be used. In diet, isinglass is used to support the stomach, in the form of jelly, when more solid food would be rejected. Its nutritive properties are very great, but, like all gelatinous food, it is difficult of digestion. The jelly may be made by boiling the isinglass in water, with a little sugar and lemon-peel, then straining it, and adding, if acid be not objectionable, a little lemon-juice. A quarter of an ounce of isinglass will be sufficient for a pint of water; if more be used, the jelly will be too compact when cold. Where milk does not disagree with the stomach, isinglass may be boiled in it, and thus a very nutritive food be prepared.

JAM. A fruit boiled down with an equal weight of sugar. The fruit should be put into the preserving pan a few minutes before the sugar is added, being bruised and mashed well with a spoon. The sugar, which should be in powder, and always of good quality, so that it may communicate no unpleasant flavour to the fruit, must be well stirred up with it, and the whole should boil from ten to fifteen minutes, skimming it as much as possible. It is better to boil rather more than less than the time above mentioned.

JELLY. A transparent preserve, consisting of the expressed juice of fruit, or the essence of meat prepared with sugar, and solidified by the action of cold. All kinds of jellies should be cooked over a slow fire. Jelly is also made from isinglass and sugar, with the addition of wine, liqueurs, or other ingredients. The Marasquino jelly, which figures upon the tables of the great on the Continent, is made as follows:—Two ounces of isinglass are melted in a syrup made from three quarters of a pound of sugar; these are kept simmering on the fire for about half an hour, and then taken out and kept until nearly cold; two wine-glasses of Marasquino and half a wine-glass of Kirchenwasser are then added, and the whole is passed through a silk sieve, the passage of it being assisted by adding from time to time part of a tumbler full of filtered water; when it has all run through, it is to be put into a mould, and frozen in pounded ice. Jelly may be made in the same way with rum, Madeira, Malaga, or other wines, or with

a strong infusion of coffee prepared with cold water, according to the instructions given under the head COFFEE. A beautiful jelly is made in Russia, by whipping up the mixture of isinglass and sugar, prepared as above, with four glasses of Kirchenwasser, and the juice of two lemons; when this has become of the consistency of white of egg, it is placed in a mould, and frozen in the usual way. (For jellies from meats, see the different heads.) Jelly from the bones of animals is usually called gelatine. Until lately, this kind of jelly was supposed to contain great nutrition; but, from some experiments lately made by M. Magendie and other members of a commission of the Academy of Sciences, it would appear that it is simply an antiphlogistic aliment, the nutritive powers of which are extremely small—so small, in fact, that when continued to be used exclusively for two or three months, or even less, it is found to be destructive of animal existence. The experiments of the commission were upon a very large scale on the lower animals; and from the analogy of the nutritive functions, it is fairly presumed that a like effect would attend the long continued use of gelatine by man.

JESSAMINE. A plant which bears a sweetly smelling flower, the essence of which is much used in perfumery. As this flower does not yield in distillation either sufficient essential oil, or the flavour of it is destroyed by heat, the perfume is obtained by steeping the flowers in very fine oil, for what is called huile antique; but what is called the essence of jessamine is obtained in France in the following manner:—A layer of the flowers is spread over the bottom of a hair-sieve, and upon the flowers is laid a layer of small and detached bits of cotton wool, which have been dipped in oil of ben, that oil being preferable to olive oil, as it does not turn rancid; over the cotton are laid other flowers, and so on alternately, flowers and cotton, until the sieve is full. When these have lain twenty-four hours, the flowers are taken away, and the cotton is laid in the same way between layers of fresh flowers, and this operation is repeated, until the cotton is thoroughly impregnated with the perfume of the jessamine; the cotton is then collected, put into a press, and the oil squeezed out. If kept as oil, it must be in well stopped bottles, but the usual plan is to add to it at once some very finely rectified spirits of wine, which is as odourless as possible, and in this state the preparation is called essence of jessamine. The jonquille and other delicate flowers, which do not furnish a good essential oil by distillation, may be treated in the same way.

JUNIPER BERRY. A strong diuretic, conjoined with a tonic principle. In some parts of France, the juniper berry is fermented with barley, and made into beer. In Holland and in England, the berry is used in the distillation of gin, to give flavour. The oil of juniper, in doses of two to six drops, is a more powerful diuretic than any other known. The diuretic property of gin is wholly owing to the presence of the essential oil given out by this berry in distillation.

JUJUBES—(*Pâte de Jujubes.*) A composition for coughs and colds, made with gum-arabic and a decoction of the fruit of the jujub tree. The jujubes sold by the confectioners and druggists, however, seldom contain any of this decoction, nor does it indeed seem to be essential: when made from gum and sugar alone, the paste is not liable to fermentation, as when the vegetable decoction is mixed with it. The jujubes of commerce are made in the following manner:—Take half a pound of the whitest gum-arabic, and having broken it into the smallest pieces possible, dissolve it with one ounce of fine isinglass, in just the quantity of hot water necessary for that process, and no more. In the meantime, make a syrup with half a pound of fine loaf sugar, and the same weight of water; skim this frequently, and when it is become thick, pour into it the dissolved gum, previously strained through a flannel bag, and continue the boiling or rather simmering, skimming from time to time, until it is very thick; now set it by to cool, and when the greater part of the heat is gone off, pour in three or four drops of neroli. Before the syrup has begun to set thoroughly pour it out upon a marble slab, and roll it to a thickness of about the eighth of an inch. Before it is quite cold, pass a large flat knife, like that used to cut a round of beef, under the paste, to prevent its sticking; and when cold, either cut the paste in small sheets, which are to be kept in a tin case, or into squares and diamonds. These jujubes are a good pectoral for colds, but they have, of course, no other medicinal virtue than that of the gum, which, taken without any preparation of this kind, would be equally efficacious.

KALE. See CABBAGES.

KID. The young of the goat. This, when very young, is of delicate flavour, and is by many preferred to lamb. In Portugal, kid is a regular dish at all the eating-houses, but it is seldom dressed in any other way than roasted. It may, however, be prepared for the table in all the modes prescribed for lamb.

KILLING. The destruction of animals for the support of human life is not only justifiable, but appears from our formation, our teeth being partly carnivorous, to have been ordained by nature; and as the destruction of life by the direct hand of God is generally attended with more suffering than that which accompanies the infliction of death by human agency, when it is not unnecessarily protracted, there can be no cruelty in the operation. Unfortunately, however, the legislature is not sufficiently severe in the regulations for killing animals. Nothing can be more cruel than the barbarous mode in which oxen are sometimes killed, when by scientific means death might be rendered almost instantaneous; and even in the case of the smaller animals, required for domestic use, more expeditious, and consequently less cruel modes of killing might sometimes be adopted. In France, for instance, one has only to see the mode of preparing frogs for the table to be struck with the culpable negligence of the authorities on this subject. When the hind legs are cut off, the body and head of the animal are cast into a basket, where they remain for several hours, full of life; whereas, if they were thrown immediately into a strong solution of lime, or any other similar mixture, death would be instantaneous. It is pretended, indeed, that the cold-blooded animals have very little sensation of pain, and certainly they do appear to have less than those animals which are warm-blooded; but it is difficult to believe that, whilst the brain is capable of sensation, any animal that has received an injury can be entirely free from pain. We know that the limbs of frogs, taken from the body, and also detached portions of the eel, have muscular life even when skinned, long after their separation, but as the nerves of these portions have no longer any connexion with the brain, which is the seat of pain, there is nothing in the muscular agitation really calculated to excite horror, even in the most humane mind; but where the head and a portion of the trunk are left in connexion with each other, it is but reasonable to infer that the protraction of life is the protraction of suffering. Humanity, even if there be a doubt on the subject, would therefore prescribe the rapid extinction of life in that part of the animal which is the seat of sensation. Habits of cruelty in the mode of slaughtering animals for domestic use tend materially to brutalize the mind, and are a sad example for young persons. There is, perhaps, no nation on earth in which greater cruelty is exercised in this way than in the French; and the want of feeling displayed by the lower orders of that people in the relations between each other may, perhaps, be not unfairly traced to an early indifference as to the sufferings of animals. It is much to be desired that all persons whose duty it is to slaughter animals for human food should acquire such a knowledge of the anatomy of the animal to be destroyed as would enable them to adopt the most expeditious mode; and masters of families, who attach any importance to considerations of humanity on the one hand, and of the brutalizing effect of cruelty on the other, would do well to study this subject themselves, and insist upon the adoption of the fruits of their study by those who are in their service.

KIRCHWASSER. A spirit distilled from cherries. The best kirchwasser, or kirchenwasser, is made in Switzerland. It is a dangerous liquor, if taken to excess, as it contains much of the principle of the prussic acid; but in small quantities, and mixed with water, is a good stomachic. In France, kirchwasser is made as follows:—Infuse for four days in two quarts of spirits of wine, half a pound of the kernels of cherries, bruised; then distil until rather less than the two quarts of spirits have come over; add twelve drops of neroli, two quarts more of spirits of wine, and two quarts of water. This will be improved if about two ounces of the bruised kernels of cherries be infused in half a pint of spirits of wine for a fortnight, and the infusion added.

LABARRAQUE'S DISINFECTING LIQUIDS. These are preparations of a celebrated French chemist, for the disinfection and cleansing of the air of rooms; their bases are the chloride of lime and chloride of sodium. They may be had of any druggist, with printed instructions on the bottles.

LAMB. This meat is in perfection only from the end of December to the beginning of April. The flesh of lamb is

white, tender, and gelatinous; but if the animal has been killed too young, or before it has been sucking, for at least five months, it is not easy of digestion. The best lambs for the table are those which have been nourished from the milk of the mother alone; but the fattest are those which have sucked from several other ewes at the same time.

Lamb Chops. Having cut a neck or a loin of lamb into chops, rub them over with a yolk of an egg, well beaten; then grate some bread fine, and mix with some chopped parsley, a little lemon-peel, pepper, salt, and a very small quantity of nutmeg, and sprinkle this over the chops; after which, fry them to a good colour, and serve with a sauce made of the trimmings of the chops, a bit of butter floured, and a little mushroom catsup. They may be served without gravy, if preferred.

Lamb Cutlets. They should be cut off the loin, in small round bits, carefully trimming off the fat and skin: prepare them as above. Fry them to a good colour either in beef dripping or butter; serve with a brown sauce.

Hashed Lamb. Rub a piece of butter into some flour, with the point of a knife, until it is well mixed; then put it into a stewpan, with some mushrooms cut in pieces, and a bunch of herbs; moisten with stock, and let it stew gently till the sauce is nearly consumed; cut up some cold roast lamb into slices, and put into the stewpan, with the yolks of four eggs beat up with some milk; let it thicken over the fire, but do not let it boil: when served, add the juice of lemon. Cold roast meats of all sorts may be hashed in the same manner.

Lambs' Heads. Let the heads be well trimmed and blanched, and stew them with some good stock, a little French white wine, some parsley, a little salt, covering them with rashers of fat bacon, cut thin; when done, dish them, and pour over espagnole or pepper sauce, thickened with flour.

Lamb's Head and Mince. After having scalded the head, and carefully removed all the hair, parboil it with the pluck; then divide the head, and take out the brains; mince the heart and lights, adding an onion shred fine; put it into a saucepan, with a little good thick gravy, and a little salt and pepper; let it stew gently for about three quarters of an hour. The head should be rubbed over with the yolk of an egg beaten up, and be covered with bread crumbs; stick bits of butter in different parts over it, and brown before the fire: the liver is to be cut into slices, and fried; the brains to be formed into cakes. The head is to be served upon the mince, and the dish garnished with the liver and brain cakes.

Loin of Lamb a la Perigord. Put a loin of lamb over a slow fire, in a stewpan, with a little oil, some mushrooms, and two shalots chopped fine, salt and pepper, and keep it over the fire until it is thoroughly warmed through; then have ready another stewpan, into which has been put slices of veal seasoned, a few thin rashers of fat bacon, four or five truffles cut in slices, and half a lemon sliced; put in the loin of lamb, moisten with gravy, and stew over a slow fire; when done, the lamb should be served on a dish with the truffles, and the sauce be strained and poured over.

Lamb Pie is made in the same manner as beef pie, (which see,) choosing for the purpose either chops from a loin, or steaks from a leg.

Lambs' Purtenances. By this term are meant the head, liver, heart, lights, and feet. When they have been soaked in lukewarm water, and blanched, stew them with some stock, a few slices of bacon, a bunch of sweet herbs, some parsley, and a shalot; then put into another stewpan, some chives, onions, bay leaves, shalots, the juice of a lemon, a small quantity of salad oil, and a little good stock; let all these simmer together, without boiling. Well drain, and dish up the purtenances, placing the head in the centre and the other parts round it; serve, with the sauce strained in a sauce-boat.

To Roast a Fore Quarter of Lamb. The time required for dressing this joint is to allow a quarter of an hour to a pound. This is considered as a general rule in all roasting; but young meats require a longer time than more mature. It should be placed at first at a moderate distance from the fire, and gradually advanced; it must be well basted from time to time with butter. The gravy for it is made as for beef or mutton. When the shoulder is cut off, a lemon should be squeezed, and a little salt and pepper strewed on the rib part. The most usual manner of dressing the hind quarter is to boil the leg, (see Boiled Leg of Mutton,) and cut the loin into steaks; fry, and serve round the dish with the leg. Mint sauce is served in a tureen, and made by chopping fine some green spearmint, to which add vinegar, and a sufficient quantity of sugar

to give a certain degree of sweetness. Spinach boiled is the vegetable mostly eaten with lamb.

Quarter of Lamb Roasted, (French method.) Take a fore quarter of lamb, lard the upper side of the joint with bacon, sprinkling the other side thickly with bread crumbs, and roast it, covering the joint with writing paper, buttered, to prevent its burning. When it is nearly done, take it from the fire, and again cover the unlarded side with bread crumbs, a little salt, and some parsley chopped very fine; then place it again by the fire, to brown it. Squeeze a lemon over it before serving.

To Stew a Breast of Lamb. Put into a stewpan a glass of French white wine, some weak stock, a little pepper and salt, and a small bunch of sweet herbs; cut the lamb into pieces, and stew it in the above till quite tender; then thicken the sauce with a little roux. (See Sauces.)

Lambs' Sweetbreads. See Veal Sweetbreads.

Lambs' Trotters, (*à la Poulette.*) After having well scalded and cleaned the feet, take the bones out, and put the meat into a stewpan, with five or six large table-spoonfuls of velouté and some chopped parsley; thicken the sauce with an egg, and throw over the feet, shaking the stewpan well; add a little lemon juice and whole pepper. As the trotters are always bought in a parboiled state, they do not require much stewing, and must not be allowed to boil.

LARKS are considered very delicate eating. The usual mode of dressing them is by roasting, with thin slices of bacon fastened on their breasts. Dress with the trail, placing toasted bread under them, which is to be served with them, with melted butter and espagnole sauce, in a sauce tureen. They are also very good made into a pie, with forcemeat balls and slices of bacon, the dish covered with a rich crust. Before serving, pour into it some rich gravy.

Larks with Fine Herbs. Having picked and trussed about a dozen and a half of larks, put them into a stewpan with a slice of butter, some salt, whole pepper, and a little allspice; set it on a clear fire, and when they have been boiled up for five or six minutes, add a little parsley, two shalots, some mushrooms, all chopped very fine; let it boil up again for five minutes, and then add two large table-spoonfuls of espagnole, and the same quantity of consommé; let them stand on the fire for about five minutes more, shaking them well, and serve.

To Pot Larks. Follow the directions given for potting pigeons, (see Pigeons,) putting rather more spice.

LAUREL. The leaves of the common laurel are sometimes used in culinary preparations, to give flavour, but it should always be in very small quantity, for it contains a strong principle of prussic acid. It does not appear, however, that about the third of a large laurel leaf, in any dish, is dangerous. If laurel leaves be distilled in spirits of wine, they yield a liquor which would be poisonous if taken internally, but which has great virtue as an external application for rheumatic and other pains seated in the muscles. It has been sometimes used with effect for the face-ache, and even the tic-doloreux; the most simple and efficacious mode of application in such cases, however, is the leaf itself. Several laurel leaves, stripped of the projecting parts, to make them lie flat, are to be sewn together, and made hot before the fire; they are then laid on the part affected at night, being bound over with flannel, and are allowed to remain on until the morning. Very severe pains may be removed by this application.

LAVENDER. There are few plants more agreeable than this. The green leaves may be infused with balm and rosemary, for tea; in case of illness, the flowers distilled (see Distillation) make a fine perfumed water, and the essential oil which comes over in distillation forms a component part of many perfumes. The dried flowers, placed among linen, yield a very pleasant odour; and burnt on a piece of red-hot iron, in a sick room, purify the atmosphere. Lavender is grown in enormous quantities in France, but it is very inferior to the English—at least, the essential oil sold by the druggists is so; but this may arise from the want of care in the preparation, or from being largely adulterated with oil of rosemary. The French oil of lavender has a greater empyreumatic flavour than the English, which should therefore be always used for perfumes; but if the French oil of lavender be diluted with a third of its bulk of spirits of wine, and kept for two or three years, it improves considerably. Lavender-water, or rather, spirits of lavender, may be made without distillation in the following manner:—Take a pint of good spirits of wine, an ounce of English oil of lavender, ten grains of musk, and an ounce of essence of am-

bergris; let them stand in a well-corked bottle for a month; then filter through blotting-paper, and put by in a well-corked bottle. This is a beautiful perfume, and improves much by keeping. Lavender should be propagated in the spring, by slips, in a dry, gravelly, or poor soil.

RED LAVENDER DROPS. Steep for a week in a pint of spirits of wine as many lavender flowers as the liquid will contain, with a drachm each of powdered nutmeg, cloves, mace, and cochineal; strain, filter, and bottle. A few drops are taken on sugar or in water, for nervous attacks and in bowel complaints.

LEECHES. It is always desirable, in large families, or in the country, at a distance from an apothecary, to have a certain number of leeches in the house for use, in case of accident or inflammation. Some care, however, is to be exercised in selecting and preserving them: they should neither be very large nor very small; very large leeches are generally less active than the smaller, but if they are too small, the bite will not be sufficient to produce the flow of blood that may be required. They are to be kept in wide-mouthed bottles, covered with muslin, to admit the air and prevent their escape; and the water must be changed, in winter once a week, and in summer at least twice. In very hot weather the water should be changed every other day, and the leeches should be separately cleaned gently with the hand, to get rid of the slime, if they are much covered with it, and then be placed in a sieve before they are returned to the bottle, and cold water should be frequently poured over them. When they are required for use, those which it is intended to apply should be put into a bottle without water, for four or five hours in winter, and about two hours in summer, for they are thus irritated, and bite freely. If the weather be very cold, they may be warmed by the breath, or placed for a short time before the fire; and before each leech is applied, it should be gently wiped with a towel. The usual mode of applying leeches is to hold them one by one in a towel, until they have bitten; but this is a tedious practice. It is much better to put three or four at a time into a wine-glass, and to hold the glass over the part; in this way they almost always bite rapidly. Leeches should be kept in a very cool place, and the water which is put to them should be as nearly as possible of the temperature of that which is taken away. They must also be looked at from time to time, to see that none are dead; for a dead leech must be removed immediately—the decomposition would endanger the lives of all in the bottle. Many of the leeches which are imported from Germany are taken by throwing fresh meat in the ponds, upon which they feed, and are then taken out gorged, and comparatively useless. The best are those which are taken by men who go into the ponds bare-legged; the leech having laid hold, is immediately removed, and put into a vessel brought for the purpose.

LEEKS. Two kinds of leeks are cultivated for the table—the long, and the short; they are both very wholesome, and in a cooked state are a mild diuretic, but they have a much stronger effect if taken raw. One of the best diuretics for domestic use are the fibres from the bottom of the root, washed, and steeped for a week in Hollands gin; about half a wine-glass to be taken at night in a tumbler of water. The long leek is more productive than the short, but it does not resist the frost so well as the latter. Leeks are raised much in the same way as onions: they are sown in beds about the end of March, and are thinned out to about from four to six inches apart; the leaves should be topped two or three times during the summer, which causes the stem to swell and lengthen. Leeks are much used in soups, and they are also very good boiled, and served with melted butter, or stewed with good gravy; they may also be made into a pie in the same manner as parsley, (see PARSLEY,) using only the white parts.

LEMON. An acid fruit, the juice of which is much used for flavouring various dishes; for mixing with sugar and water, as a beverage called lemonade; for flavouring punch, and a variety of other purposes. The juice of the lemon evaporated and crystallized is called citric acid; this may be used as a substitute for the juice itself in many cases, where a pure acid is required, but it has not the fine flavour of the juice. Lemon-juice and citric acid are much used in medicine, for neutralizing alkalies, such as soda, &c., forming an effervescing draught: taken by itself, this acid is liable to the objection of all other acids, as to its effect upon the system; but in diseases requiring the administration of acids, lemon-juice appears to be preferable to all others. The outer rind of the lemon has a rich and agreeable

fragrance, and when distilled gives the essence of lemon, which alone, or mixed with other perfumes, is highly pleasant. Lemon peel is also much used to give a flavour to various culinary preparations. Sugar rubbed upon the rind of a lemon receives its essential oil, and in this state gives a fine flavour to punch or any other mixture. The rind of the lemon, when candied, by boiling it in syrup, and drying it in the mode recommended for various fruits in this DICTIONARY, is much used in making puddings, cakes, &c.; it is sold by all grocers at so moderate a price that the trouble of preparing it may easily be avoided. The juice of the lemon, mixed with clarified honey, is considered a fine remedy for coughs. The juice may be purified by adding to it fresh charcoal, finely powdered, in proportion of an ounce to a quart of the strained juice; when this has stood twelve hours, it is to be filtered through blotting-paper, put into small phials, corked tightly, and kept in a cool place. If intended to be kept for a long time, an equal weight of finely-powdered sugar should be added to it. Lemons may be kept for a considerable period, if hung up separately in small nets, and kept in a cool dry place. The dry peel of a lemon, when grated, gives a nice flavour to many dishes; a pleasant marmalade is also made from lemon, in the same way as with oranges, allowing a larger quantity of sugar, in consequence of the excess of acid, and adding to the flavour by grating some dried peel. Lemons grow in almost all southern climates, and large quantities are imported from Portugal.

LEMONADE. This is merely the mixture of lemon juice with sugar and water, forming a very agreeable beverage in warm weather, but injurious to weak stomachs, unless taken with great moderation. It is said, however, that if taken in the aerated form, it is much less likely to disagree with the stomach. The aerated lemonade made for sale is nothing more than carbonic gas forced into the lemonade by great pressure. For domestic use, the addition of a sufficient quantity of carbonate of soda to cause effervescence produces an agreeable and wholesome drink. If aerated lemonade be made for bottling, the following plan may be adopted:—Having prepared the lemonade not quite so sweet as it is intended to be, make a very thick syrup of sugar; and when nearly done, stir into it a quantity of carbonate of soda, sufficient to give about half a drachm to each bottle; pour out the syrup into a plate or dish previously oiled, and when the sugar is nearly cold, divide it with a knife into as many portions as there are to be bottles of lemonade; roll up each portion in writing paper in an elongated form, so that it may enter the bottle freely. As this will not dissolve immediately, there will be abundant time to cork the bottles without loss of gas. The bottles then being corked, and carefully tied over and sealed, the lemonade may be kept fit for drinking for two or three months.

LENTILLE. A kind of flat pea, much used in the south of France, but little known in England. The lentille is a very productive plant, and contributes largely towards the support of the poorer classes in the countries where it is cultivated. The flavour of this pea, however, is not very agreeable; it may be cooked in the same way as the common garden pea.

LETTUCES. This is an agreeable vegetable, and exceedingly sedative. The expressed juice of fresh lettuces is used with much benefit in cases of pulmonary disease, and it is also said to be a substitute, in large quantities, for opium, without any of the dangerous properties of that drug. The juice of the lettuce converted into extract is a very useful article in domestic medicine, for coughs, and difficulty of breathing; it may be made in the following manner:—Chop up four or five lettuces with their stalks, having cleaned and trimmed them, in a sufficient quantity of water to cover the vegetable; boil this over a slow fire for about two hours, then strain off the liquid; when cold, pour it off very gently, so as to leave behind any sediment that may be in it, and evaporate the liquid in a shallow pan that will stand the heat, taking care to place it at such a distance from the fire that the evaporation shall go on very slowly; when it is evaporated to such an extent as to be very thick, add to it a little thick syrup to give it flavour. The evaporation should be continued sufficiently long to yield at the utmost only two wineglassfuls of extract, which must be put into a bottle, and corked closely; when required for use, one or two teaspoonfuls may be taken in water every morning and evening, always at least half an hour after eating. The two kinds of lettuce in most general use are the coss and the cabbage lettuce, but of both of these sorts there

are many varieties. Of the former, the Egyptian green and the Versailles are the most esteemed; and of the latter, the sorts mostly cultivated are the Roman and the White Celicia or Lisbon. An early sowing may be made under a frame, in January; and when large enough, transplanted at distances of about twelve or fifteen inches. The ground for lettuces should be well manured with good rotten stable dung; an old cucumber bed is the best suited for this purpose. The seed should be sown very thin, and merely raked in. When the plants are very young, and the nights and mornings are frosty, cover the beds with matting. The principal sowing for the summer supply should be made about the end of March, if the weather be open; but in order to keep up a regular succession of plants, a small quantity of seed should be sown every three weeks. In dry weather, let the young plants be well watered, and the beds kept clear from weeds. The cabbaging of cos and other lettuces is forwarded by tying up the leaves with strands of matting; do not tie up too many of the plants at a time. The lettuce is seldom used in England, except as a salad, or to stew with peas, or in green-pea soup; but on the Continent, they are cooked in different ways, although there they are mostly used in salads.

Boiled Lettuces. Wash and boil them in boiling water, with a little salt, until tender; strain them in a colander, and chop them up; then put them into a saucepan with some fresh butter, a spoonful of flour, a little nutmeg, salt, and the juice of a lemon; let the whole boil for a quarter of an hour. This may be varied by omitting the lemon juice, adding some good cream, and thickening with the yolks of two eggs.

Stuffed Lettuces. Choose some large cabbage lettuces, and having boiled them a quarter of an hour, dip them into cold water and let them drain; then open the leaves without breaking them, and fill the centre part with a good forcemeat, and tie them up; stew them for a short time, then drain them on a cloth, dip them in a batter, and fry to a good colour. When done, cover them with bread crumbs, and serve with some white sauce.

LIGHT. This being a very important article of expenditure in a family, every practicable economy should be attempted. The cheapest light, when burnt by measure, is that of gas; but as there are many objections to the use of this light in private houses, it is seldom seen there, except in kitchens and out-offices. Whenever gas can be had for the use of the kitchen, it ought to be preferred; for the master or mistress of the house may, by means of a cock placed under their own control, regulate the quantity of light to be given, and prevent the waste which is so common in oil and candles. As regards these latter articles, it is always an economy to use the best oil in those lamps which, from their construction, give the greatest quantity of light, with the least comparative expenditure of oil. Great improvements have recently been made in the manufacture of lamps, by which an addition of at least 20 per cent. of light is now obtained without additional consumption of oil. In candles, there does not appear to be a very great saving in adopting those imitations of wax called composition candles, which are, for the greater part, made of compressed tallow, mixed not unfrequently with some white powder, to give them consistency and weight. The real comparative cost of different kinds of candles, and of the light of various kinds of lamps, can only be ascertained by the following experiment, the eye alone not furnishing a conclusive test on this subject:—A stick of deal, or any other wood, about five feet in height, and two inches square, is fixed in a stand; at a few inches from the top of this stick, place a projecting piece of wood, with a slit in it to admit of the introduction of a card; place upon the wall, at a distance of about a foot from this stick or frame, a sheet of white paper. In order to try the comparative strength of any two lights, such for instance as a candle and a lamp, place the candle in such a situation that the shadow of the card shall be thrown full upon the sheet of paper which is placed upon the wall; then bring the lamp, which has been previously kept covered, and place it at such a distance from the card that the shadow shall become double, each portion having the same strength of shade; as long as the shadow from the lamp is darker than that from the candle, the lamp must be removed more and more until the shadow has become of the same hue; when this is the case, measure the distance, first, from the shadow to the candle, and multiply it by its square. We will suppose this distance to be six feet, which multiplied by six will give thirty-six; we will next suppose that the lamp is at a distance

of twelve feet, twelve multiplied by twelve gives one hundred and forty-four; now, divide the larger number by the smaller, namely, one hundred and forty-four by thirty-six, and the result will be four, thus shewing that the light of the lamp is equal to the light of four candles. The light of different lamps, and of common candles of different descriptions, may be ascertained in the same way. The comparative cost of any particular lamp or candle is easily obtained, by ascertaining the duration of the time of burning; for instance, we will suppose a pint of oil, with which a lamp is filled, to cost one shilling, and to burn twelve hours, this will give one penny per hour; now, if four candles, weighing a pound, and costing one shilling, be lighted at the same time and burn only eight hours, then there is a saving of oil as compared with candles of one-third, for we have seen that the lamp gave the light of four candles. This mode of ascertaining the comparative powers of different modes of lighting should occasionally be practised by persons who burn gas by measure, as they will thus be able to ascertain the real cost of their light as compared with oil or candle. To do this, the gas light, which is always the strongest, is to perform the same part in the experiment as the oil lamp would do in the experiment with the candle. It may be stated here, as a general observation, that when coal gas is of a good average quality, a sixteen hole burner gives as much light as that yielded by two good lamps; by ascertaining, therefore, the cost of each per hour, the saving to the consumer may be at once ascertained.

LIME, Burnt Chalk, or Limestone. The use of lime in domestic economy, although not attended with much variety, is really important. The preparation called chloride of lime which is sold by druggists has a most powerful effect in correcting miasmatic exhalations of every kind; and these will, in spite of the greatest cleanliness, sometimes occur. A little of this liquid thrown over water-closets, which are imperfectly ventilated, immediately removes all offensive odour, and it has the same effect with drains, decayed vegetable or animal matter, &c. In the sick room, it is indispensable; as it corrects the atmosphere, and renders it wholesome, not merely for the patient, but by all who are in attendance. The powder of lime recently slacked is useful in removing stains from grease in floors, &c.; the best mode, however, is to place a piece of quick lime, previously dipped in water, over the stain, and allow it to fall to pieces where it has been placed. Lime water, which is made by putting an ounce of quicklime into a pint of water, and decanting the liquid, when the lime has been slacked and is well settled at the bottom, is one of the finest remedies known for acidities of the stomach, and to correct diarrhœa, some of this water being taken from time to time in milk. Lime water made of greater strength, and mixed with oil, is a preservative from rust; and also in its pure state for preserving eggs. The powder of lime mixed with litharge is used for dying hair. (See Hair Dye.) Lime may be also employed for cooking, but this is rather a curious than an useful process. In a tin box, so made that a drawer may contain the chop or steak to be cooked, (and these only can be well dressed in this way,) and the heat evolved from the lime may be received on all parts of the drawer, put a large piece of quicklime, previously wetted. The box must be so contrived, that none of the heat can escape.

LIME. A fruit rather smaller than the lemon, which it resembles very much in appearance, and also in its properties. The juice of the lime is, however, preferred by many punch-drinkers to that of the lemon. The lime may be used as a substitute for the lemon in almost all cases.

LIP SALVE. This is made by simmering together over a slow fire two ounces of virgin wax, two ounces of fresh suet, one ounce of spermaceti, one ounce of oil of sweet almonds, half an ounce of balsam of Peru, one ounce of honey, and a little alkanet root, bruised, to give colour; after simmering for a quarter of an hour, strain through muslin, and put into pots. Dr. Guerin recommends that lip salve should be made in the following manner:—Take two ounces of oil of sweet almonds, half an ounce of white wax, half an ounce of rose-water; set a mortar in a vessel containing boiling water, and put the wax, cut into very small pieces, into the mortar; when it has melted, take out the mortar and add the oil by degrees, beating with the pestle until it is a little cool; then mix the rose-water, or instead of that, four or five drops of otto of roses, with the mass. If it is to be coloured, rub up a little carmine with the oil before mixing it with the wax. This is a more

elegant preparation than the above, and answers the purpose equally well.

LIQUEURS. These are made in two ways, either by distillation or infusion; but there are very few liqueurs which are not nearly as good when made by infusion as they would be by the other more tedious process; it is only where the flavouring substance has a deteriorated flavour, in the form of essential oil, that distillation is necessary. As liqueurs are usually sold at a high price, and they can be manufactured at home with perfect ease, the following instructions for making them will be found useful.

Huile de Rose. Make a syrup of a pound of sugar, (see Sugar,) with just such a quantity of water as will give, when boiled, about a pint of syrup; when this is perfectly cold, add to it a pint of good white French brandy, and about ten drops of otto of rose, colouring it of a rich pink by a tincture of cochineal, which may be made by boiling some crushed cochineal in a little water, and straining it off fine. Brandy may be replaced with economy by well rectified spirits of wine, using rather less than two-thirds of the quantity of brandy; it is essential, however, that the spirits of wine should be of the best quality.

Noyeau. Considerations of health as well as economy should induce the housekeeper to make this liqueur at home, for the common mode of making it is by using bitter almonds, which, from the quantity of prussic acid they contain, may cause great injury. Sometimes, indeed, noyeau is flavoured by prussic acid itself. The richest and the best way of making noyeau is to collect the kernels of peaches, apricots, and plums, and having bruised them, put them to steep, for about a fortnight or three weeks, in strong spirits of wine, in the proportion of three ounces of kernels to half a pint of spirit; about half a dozen blanched bitter almonds may be added, for in this quantity they increase the flavour without being injurious. The syrup is then to be made in the same way as recommended above, and mixed with brandy or spirits of wine, using just so much of the clear tincture of the kernels as will give a fine rich flavour to the liqueur; this may be easily ascertained by adding the tincture slowly, and tasting it from time to time; if pink noyeau be required, the colouring tincture, as above, must be used.

Liqueur Stomachique. This preparation was long a secret; it is simply an infusion of the kernels of apricots in spirits of wine. When using apricots for jam, preserve the kernels, and having beaten them in a mortar, put the paste into spirits of wine, in the proportion of an ounce of kernels to half a pint of spirit. Infuse for a fortnight, then filter or pour off carefully. Persons of weak digestion may take a teaspoonful twice or thrice a day, in water; or the infusion may be used with safety and benefit in flavouring pastry, &c. The principle of the prussic acid resides in this infusion, but so blended with other vegetable substances as not to be dangerous, except in immoderate doses. In some cases of nervous indigestion this is a sovereign remedy; the dose may be extended to a table-spoonful by degrees. By adding some of this infusion to a mixture of strong syrup and spirits of wine, (nearly two-thirds syrup,) a fine noyeau is obtained; the quantity of the infusion is to be regulated according to taste.

Vespetro. This is a very favourite cordial on the Continent; it is made as follows:—Take equal quantities of angelica seed, aniseed, fennel seed, and coriander seed, and let them steep in white brandy or spirits of wine for about a month, shaking the bottle from time to time; when ready for use, proceed with the syrup and spirit as above, regulating the flavour in the same way as for the tincture of the kernels, but observing that as this is a stomachic cordial, and is used in some respects as a medicine, the flavour must be rather a marked one. For this liquor, as for the others, brandy, if it be really good, is to be preferred to spirits of wine; the latter ought never to be made a substitute where pure French brandy can be obtained.

Dr. Guerin, in his *Chymiste Populaire*, a work which has gone through several editions, gives the following receipts for liqueurs, with the proportion of sugar and water as stated under the head Syrup, in this Dictionary; we would recommend, however, that the syrup should be boiled, for the reasons stated in that article, observing the same proportions of sugar and water as prescribed by Dr. Guerin, but allowing for the evaporation in boiling, and deducting the quantity of spirit accordingly:—

Alkermes. Pound one drachm of cardamom seeds, one drachm of nutmegs, two drachms of cinnamon; infuse for a week in some of the spirit, then strain and filter; add to this five drops of otto of

rose, and proceed as with any other liqueur. Colour, rose colour.

Anisette. To five pints of good spirits of wine add a drachm and a half of essence (oil) of aniseed, eight drops of oil of cinnamon, and add the syrup as recommended under the head Syrup.

Baume Humain. Eight drops of oil of cinnamon, eight of oil of mace, twenty-four of essence of cedrat, and three of otto of rose.

Curaçao. Boil for five minutes in the syrup, the juice and rind of four large oranges and three bitter oranges; strain and filter; add six drops of oil of cinnamon and six drops of neroli. This is also made by simply infusing the peel of four bitter oranges in some of the spirit for a week, and adding the infusion, without the cinnamon or neroli, to the other spirit and syrup.

Creme de Portugal. Two drachms of essence of Portugal.

Creme de Jasmin. Two drachms of essence of jessamine.

Creme a la Fleur d'Orange. One drachm of neroli.

Eau de Chasseur. Thirty-six drops of oil of mint, twelve of nutmeg. A very strong cordial, and therefore called hunting water.

Elixir de Neroli. Infuse four drachms of myrrh in some of the spirit, for a week; then filter, and add twenty-four drops of neroli.

Extrait d'Absinthe. (Wormwood cordial.) One drachm of oil of wormwood, one drachm of oil of aniseed, half a drachm of fennel seed, and sixty drops of tincture of benzoin; this liqueur is generally mixed with water, and taken before dinner, to procure an appetite.

Gold Water. Ten drops of oil of mace, six drops of oil of cinnamon, and one drachm of essence of lemon; filter when the spirit and syrup are added; then put two gold leaves rubbed up in a mortar with a little honey to each bottle.

Mint. (Huile de Menthe.) Take one drachm of essence (oil) of mint. It may here be remarked, that when Dr. Guerin speaks of essences he means the essential oil of the article.

Huile Cordiale. Twelve drops of oil of mint, eight drops of oil of cinnamon, six of cloves, and six of nutmeg.

Huile de Thé. Infuse for a week two ounces of good green tea in a pint of spirits of wine.

Huile de Girofle. (Clove cordial.) Half a drachm of oil of cloves.

Huile de la Martinique. One drachm of oil of vanilla, ten drops of neroli, (see Neroli,) and eight drops of oil of cinnamon.

Huile de Rhum. This is made simply by using rum instead of spirits of wine with the syrup, without any other article.

Huile d'Ananas. (Pineapple liqueur.) Infuse for a week a pound and a half of pineapple, scraped, in the spirits of wine which is to be used; then strain off, and add the syrup.

Huile de Cannelle. Half a drachm of oil of cinnamon and three drops of oil of cloves.

Huile de Kirchwasser. Use the kirchwasser simply with the syrup, without other admixture.

Huile de Violettes. Three ounces of dried violets, boiled for two minutes with water and sugar, and when strained and filtered, added to the spirits and syrup.

Marasquino. One drachm of oil of marasquino and one quart of kirchwasser; there are to be one pound of sugar and one pint of spirit less than the general quantity ordered.

Parfait Amour. One drachm of essence of lemon, eight drops of neroli, and eight of otto of rose.

Ratafia of Raspberries. The juice of three pounds of the fruit, strained and filtered; strawberry ratafia is to be made in the same way. In order to make up for the extra liquid, the syrup should contain rather more sugar; the best plan is to boil the juice for a few minutes with a pound and a half of sugar. (For other Ratafias, see that word.)

Rosolio. One drachm of vanilla is to be put, for a week, in about half a pint of the spirit to be used; then strain and filter. Use this liquor with six drops of neroli and five drops of otto of rose; boil the syrup, before mixing, with the juice of six oranges and one ounce of syrup of capillaire; then filter and mix.

Silver Water. One drachm of oil of cedrat, four drops of otto of rose, and six drops of extract of angelica; two leaves of silver to each bottle.

All other essential oils and essences may be used in the same way, varying the quantity to taste.

The undermentioned liqueurs are generally made by distillation, by the following process:—Six pints of water are put into the still with a pint and a half of spirits of wine, in which the aromatics &c. which are to be distilled have been

infused for a few days. The distillation is to stop when a pint and a half has been drawn off; this is to be added to three pints and a half of spirit, and then the syrup, as in the foregoing receipts; the whole being filtered.

Anisette de Bordeaux. Eight ounces of green anise (the leaves), one ounce of coriander seed, and four drachms of cinnamon.

Creme de Moka. Eight ounces of well-roasted ground coffee.

Creme de Cacao, (Cocoa.) Eight ounces of ground cocoa nibs.

Creme de Noyeau. Twelve ounces of apricot kernels and eight ounces of peach kernels, broken, and infused for three weeks with a drachm of cinnamon; instead of infusing in a pint and a half of spirit, take two pints, and add the other three pints afterwards.

Creme d'Absinthe. Six ounces of green wormwood, and two ounces of aniseed, bruised.

Creme Imperiale. One ounce of cinnamon, one ounce of carrot seed, two ounces of angelica seed, and two ounces of powdered iris.

Distilled Curaçao. Infuse for forty-eight hours only, the rinds of three bitter oranges and four lemons, one ounce of cinnamon, one drachm of aniseed, and one of cloves. (Colour as for Curaçao, by infusion.)

Eau Cordiale. Two ounces of cardamoms, one of cinnamon, one of cloves, and two drachms of myrrh.

Eau de Vie d'Audaye. Two ounces of green anise, two ounces of angelica seed, one ounce of cinnamon, and one ounce of juniper berries. In this receipt only one-fourth of the usual quantity of sugar is to be used.

Eau de Vie de Dantzic. Four ounces of cocoa, one ounce of cinnamon, four drachms of mace, and the rinds of four lemons; when filtered, add a gold leaf to each bottle.

Elixir de Garus. Two drachms of socotrine aloes, the same of cinnamon, nutmegs, and cloves, three drachms of each of dried lemon and orange peel. This cordial is used medicinally in France.

Huile de Celeri. Three ounces of celery seed.

Irish Scubac. Increase the spirit and syrup by one pint each; take the rinds of two lemons, coriander, angelica, and aniseed, of each one drachm, two drachms of cinnamon, half a drachm each of cloves and mace; infuse for three days, then distil; add twelve drops of neroli. Colour a deep yellow.

Liqueur des Mille Fleurs. Among the almost innumerable liqueurs sold in Paris is one under the above name, which we are gravely assured by a very celebrated work, *L'Encyclopédie Domestique*, is made as follows:—"Collect in hot and dry weather, and when it has been dry for several days, the dung of cows in the meadows which has become quite dry from the action of the sun, choosing those which have the strongest smell of musk; infuse five ounces of it in five quarts of spirits of wine and four quarts of water for twenty-four hours, then distil slowly in the water-bath; it will yield a fine aromatic spirit, which is to be mixed with a syrup made with five pounds of sugar and four quarts of water, the whole being afterwards filtered."

Vespetro. Two ounces of angelica seed, one ounce of cinnamon, two drachms of mace, one drachm of coriander, and the rind of three lemons and two oranges—these are better without infusion; put them into the still with the spirit and water.

Many of the above liqueurs may be coloured: for red colour, use an infusion of Brazil wood; for violet, cochineal, boiled with a little alum, and filtered; for yellow, use saffron, boiled and filtered; for green, infuse trefoil leaves.

LIQUORICE. A hardy plant, which is grown very extensively for its root; it will thrive in all moderate climates, but the liquorice of Spain and Italy is in the highest reputation. In its fresh state, it is used by many of the druggists for infusions, either to sweeten other liquids or for its own medicinal virtues, which are highly pectoral; in the state called Spanish liquorice, which is the juice of the root evaporated from a strong decoction, it is excellent for colds, and has the great advantage over many other pectoral medicines of being slightly laxative, and of being harmless to the stomach, no matter the quantity which may be taken, for the worst that can happen is a little nausea from an excess of saccharine matter. In the south of France, mothers, when their children are teething, put a bit of liquorice root into their mouths, instead of adopting the absurd use of coral or crystal, which only hardens the gums, and augments the pain and danger. The plant requires a good soil, and may be propagated by cuttings from the roots, which are not fit for use until three years old.

LOOKING GLASSES AND WINDOWS, TO CLEAN. Dip a sponge in spirits of wine, and rub well over the glass; then dust well with powdered whiting, and clean off with soft linen cloths.

LOVING-CUP. A very agreeable beverage, much used by sportsmen. Toast some bread, and place it in a large cup or bowl, which will hold two quarts; grate over it some nutmeg, and pour on a quart of ale, and two-thirds of a bottle of sherry, sweetening to taste with syrup of sugar; immediately before serving, add a bottle of soda water.

LOZENGES AND PASTILLES. These are now sold at so cheap a rate, and in such variety, by the chemists and confectioners, that it is hardly worth the trouble of making them at home, where they cannot necessarily be made of such perfect shape; a few receipts, however, may be given.

BLACK CURRANT LOZENGES. Put black currants into a preserving pan, and press out the juice with a spoon; then squeeze them through a sieve, and having got out the juice, put to every pint four ounces of sugar, and half an ounce of isinglass, and boil, stirring frequently, until it is become very thick; pour this out into plates, to the required thickness, and dry in a drying stove, or slow oven, or before the fire, for three or four days; then cut out the paste into squares or rounds, and put into boxes in white paper.

ROSE LOZENGES. Triturate two pounds of loaf sugar in a mortar, sift it, and put the fine powder into a pan, with four ounces of rose water, or four ounces of water with six drops of otto of rose, dissolved in a little spirits of wine; as soon as it boils, stir in the other sugar, and then drop the syrup in drops upon a cold marble or metal slab. Peppermint, lemon, lavender, ginger, and any other lozenges may be made in the same way, by mixing the quantity of essential oil required, according to taste, in the water with which the syrup is made. The essential oils are all to be dissolved in spirits of wine previously. The essence of ginger is made by infusing powdered ginger in spirits of wine, and filtering at the end of a few days. All these lozenges may be coloured with infusions in water of carmine, cochineal, &c., adding a very small quantity of alum to the infusion, to bring out the colour. Acidulated lozenges are made by adding the solution of citric acid. Medicated lozenges are made by adding the required drug, in its liquid state, by infusion, to the syrup; but these lozenges may all be had of the chemists. Chocolate lozenges are made by mixing very finely powdered chocolate with the syrup, and dropping it in the same way; but in this case the quantity of sugar is to be less, and the water more; the chocolate should fall in drops, like a thick paste; half a pound of sweet chocolate, in fine powder, should be mixed with enough syrup to make it liquid and no more.

MACARONI. A paste made of flour in a peculiar way, and dried. It is sold by the grocers in different shapes, but generally in pipes. The best macaroni is prepared in Italy. The Neapolitan mode of cooking it is to boil it plainly in water and salt, and then put it into a soup dish, with an alternate layer of grated Parmesan cheese, sprinkling the layers with some hot gravy, and pouring over the top layer melted butter, in the proportion of half a pound to two pounds of macaroni. In France, macaroni is boiled, in the first instance, in plain water and salt, and the water being poured off, a little butter, and grated Gruyère and Parmesan cheese are added, with a few spoonfuls of cream or gravy, according to taste. Some cooks, however, in cooking macaroni, do not make two boilings, but add butter in the first instance, and boil for three quarters of an hour before the cheese is added. The most favourite way of eating macaroni is to boil it well with a little butter and water, till it has swelled properly; then taking it out of the saucepan, putting it in a fire-proof dish, and covering it with crumbs of bread, grated Parmesan cheese, and a sufficient quantity of fresh butter to keep it moist; this must be browned under a brazing pan, or by a salamander.

MACE. The second coat of the nutmeg. It was an article formerly very much used in cookery and medicine, but is now less so. It is highly aromatic, but disagreeable if in excess; as many persons dislike the flavour of mace, it should never be used in cooking for mixed parties. As a stomachic, it resembles nutmeg in its effects. Mace water may be made by distillation, in the same way as clove water: it also yields a strong essential oil.

MALLOW. A very mucilaginous plant, the decoction of which is much recommended for colds and urinary affections. In France, a paste, called "*Pâte de*

Guimauve," is sold as a remedy for coughs and colds, but no mallows enter into the composition; the basis of this preparation is gum. (See GUM.)

MANNA. The concrete juice of a species of ash, which grows in the East and in the south of Europe. It is in some countries still used as food, but in Europe it is employed as a laxative medicine for children.

MAPLE TREE. The evaporated juice of this tree is much used as a sugar in the United States; it is, however, of very inferior quality to sugar made from the cane or the beet-root.

MARJORAM is used as a seasoning for the kitchen, and as an infusion for colds, indigestion, &c. The sweet marjoram is obtained from seed sown in the spring; pot marjoram may be propagated by slips or cuttings, and will stand the winter, if placed in a sheltered border, with a dry soil.

MARMALADES. For this preparation of fruit, see under the heads of the different fruits.

MASTICS. There are two sorts of mastics necessary in domestic economy: first, for china and earthenware; secondly, for glass.

FOR CHINA AND EARTHENWARE. Burn some oyster-shells in the fire, and pound them, by beating them in a mortar until the powder is become very fine, then sift through a fine sieve, so as to have the powder impalpable; when thus prepared, put it into a bottle with a ground glass stopper, and keep it by for use. In using it, beat up the white of an egg, and having let it stand some time to settle, make a paste with some of the powder, sufficiently liquid to join closely the edges of the broken article; the pieces are to be held firmly together for a few minutes, until the mastic has set.

MASTIC FOR GLASS. Cut some good cheese into shreds, and having put it into boiling water, agitate it and press it well until it has become of the consistency of thick gruel; then mix with it a sufficient quantity of very finely-powdered quick lime to form a thin paste, and rub it over the broken edges of the glass which is to be repaired, pressing the edges closely together.

MEAD. A liquor made from honey. It is of two sorts, vinous and simple. To make the vinous mead, boil twenty pounds of honey in thirty quarts of water, and skim frequently; when this has been reduced by evaporation to one half, put half of it into a cask capable of containing the whole; cover over the bung with a piece of coarse linen, and set the cask near a fireplace to ferment; the other half of the liquid is in the meantime to be kept in bottles in a cool place, with the mouths tied over well with linen; as the mead in the cask works and leaves a space, fill up by degrees with the mead from the bottles. The working will continue for two or three months, according to the temperature; when it ceases, bung up the cask, and a year afterwards bottle the liquor: the bottles must stand for a month upright, and then be laid down in sand. When the mead has been a month in cask, add some aromatics, such as ginger, cloves, cinnamon, &c., to correct the taste of the honey. Mead made in this way is a very strong and agreeable drink. "The juice of fruits," says the *Encyclopédie Domestique*, "may be added when the honey and water are being boiled. In the Jura, the common people make a mead by boiling all that remains of the honeycombs, after extracting the honey without pressure." Simple mead is made by boiling ten pounds of honey in twenty quarts of water, reducing it one third, and skimming; fill a barrel of the proper size, leave it for four days to settle without fermentation, and draw it off for use. A very wholesome beer may be made by fermenting the mixture, when it has been boiled and strained, with some good yeast, the liquid being at the same temperature as for making beer. It may be fined and bottled in the same way as beer from malt.

MELON. There is great variety in this fruit, in size, appearance, and flavour, but little as to its properties. It is cold and indigestible, and should never be eaten without pepper and salt, drinking at the same time a glass or two of generous wine. In England, melon is usually served with the dessert, but this is seldom the case in France; it is there eaten after the soup; and it is sometimes used for making soup, almost the only mode of culinary preparation that it undergoes. To grow melons, the seed should be sown towards the end of January, in a hot bed, putting three seeds, previously soaked in water for five or six hours, under each glass; the glasses are then to be covered with straw to protect them from cold, and this kind of shelter is to be continued, if necessary, during a part of the day as well as at night, until they are transplanted, giving them air from time to

time, by raising one side of the glass, and placing under it a bit of wood or a stone. When fit to transplant, proceed as with cucumbers, and water when necessary. As the melons advance to maturity, they are to be watered, but never to excess, as that would render the fruit aqueous. The ripeness of the melon may be known by its colour, and by the stalk beginning to detach itself. If it is to be sent to any distance before it is eaten, it must be gathered before it is quite ripe; indeed, many who have melon beds prefer this plan for their own use, as the fruit does not deteriorate by being gathered in an unripe state, and kept in the house for two or three days. Slices of melon, divested of the rind and outer coating, may be preserved in sugar in the following manner:—Boil them gently in syrup for three or four minutes, take them out when cold, and lay them in cold water; repeat this operation four or five times, and then put them in jars, with some of the syrup. If they are to be preserved with brandy, this spirit should be added to the syrup in which they are placed, after the different boilings, in the proportion of one half. When eaten raw, melons frequently bring on flatulency, and sometimes cholic.

MICE. The best protector against the ravages of these little animals is a good cat; but where this is not found effectual, poison may be laid for them, as for rats (see RATS). A smaller quantity will, of course, suffice. Three or four grains of strychnine would be sufficient to destroy thirty or forty; the nux vomica alone, boiled with grain, is generally found effectual. Mice, when numerous, are even a greater nuisance than rats, as they find their way to cupboards, and render the food which they do not eat unfit for use by the dirt which they leave upon it. Traps of various kinds have been devised for catching mice: one of the most ingenious is a jar half filled with water, on which is strained a piece of parchment; towards the middle of the parchment it is cut through in different ways, and a piece of cheese is so placed, than when the mouse nibbles it the parchment gives way, and causes the animal to drop into the water.

MILK. The quality of milk may be ascertained by various scientific processes, but the smell and colour are sufficient for persons who attend to the results of experience: when the blue tint is evident, the milk is not unctuous; and when too clear, the presence of water may be suspected. If the substance of this article be good, a drop placed upon the nail of the finger will remain attached to it with a pearly appearance; if, on the contrary, it be thin, it will run off like water. The richer the quality of the milk, the more abundant is the cream; but connoisseurs agree that the richest milk does not make the best cheese. In warm weather, milk will turn in a few hours, but in the winter it will remain good for two or three days; very severe cold, however, will sometimes decompose it, unless it be kept from the action of frost: during the hottest weather, milk may be kept sweet for several days by boiling it night and morning, if a little carbonate of soda previously dissolved in water be put into it; an ounce of carbonate of soda should be dissolved in half a pint of water, and a tablespoonful be added to a quart of milk. When this has not been previously done, and in boiling the milk should begin to turn, add it immediately, and if not sufficient, increase the quantity by a few drops at a time; the flavour of milk is not injured, and as the watery parts are driven off, it becomes thicker than in its natural state. It has also been found, that if new milk be put into a closely corked bottle, and then plunged in boiling water for a quarter of an hour, it will remain good for a long period. For travelling in countries where milk cannot be had, a powder is obtained from it, by slow evaporation in shallow vessels; this is a tedious process, as the heat must be gentle, but the powder mixed with water is an agreeable substitute for milk. The milk used for domestic purposes in Europe is principally that of the cow; but asses' milk, from its greater analogy with that of the human breast, and its being much lighter of digestion, is much employed as medicinal diet for persons of weak or diseased lungs. Goats' milk, in many parts of Europe where cows are scarce, is used exclusively; it is wholesome, and being more astringent than cows' milk, is sometimes preferable to the latter. The milk of sheep is much used in France, but chiefly for the purpose of making cheese: in the fromage de Roquefort, a cheese resembling Stilton, but of a still richer quality, sheep's milk is the chief article employed. In Switzerland, cheese is made from goats' milk alone, or mixed with that of the cow, and sometimes sheep's milk is also used with the other two: the cheeses of Switzerland have, however, a high flavour, which does

not suit every palate. Of the milk of mares it is unnecessary to treat, for it rarely enters into the domestic uses of Europe. Of the nutritive properties of good cows' milk there cannot be two opinions, where the stomach digests it with facility; but with many persons it is highly indigestible, particularly if unboiled, and nothing can be more objectionable than its indiscriminate use in schools as an article of food: the old proverb of what is one man's meat is another man's poison, was never so fully verified as with this article of diet. Medical advice as to the use of milk in quantity may be taken, but generally speaking every person may judge of the extent to which it may be used, for it is one of those things which gives speedy evidence of injuriousness or benefit. In France, where the stomach has been enfeebled by bad habits, or is of itself so weak that all stimulating food is difficult of digestion, physicians prescribe a long course of milk diet: in many cases the effect is almost magical; in others, however, it is highly injurious. Some persons who are unable to digest milk in its ordinary form, either boiled or unboiled, are able to digest it with ease when made into puddings. The whey from milk, which is made either by boiling in it a little rennet, or acid of any kind, and then separating the curd, is much recommended in cases of cold, and is an agreeable drink; but if it prove difficult of digestion, some gentle tonic, such as rhubarb and gentian, with a small portion of carbonate of iron, should be occasionally used. An eminent physician has advised, that where milk disagrees with the stomach, and yet is essential, two pills, composed each of three grains of rhubarb, two of gentian, and three of carbonate of iron, should be taken daily, except in cases where there is actual disease, which renders the administration of tonics in any form improper. As a refreshing drink, milk is injured by boiling, for a portion of the serum is thus carried off. Cream is, in many cases, more indigestible than milk, but if it be whipped into a froth it is much lighter of digestion. The quality of milk depends much, of course, upon the food of the animal; but it is by no means necessary that the quantity of green food should be large: cows which are in the pasture only two or three hours in the day, and are well fed in the stable with hay, corn, carrots, and potatoes, give very rich and good milk, although in inferior quantity. Milk is adulterated in various ways: some of the vendors of milk, after diluting it with water, mix with it flour or starch and the whites of eggs, which give to it the appearance of the genuine article; it requires, however, a very slight degree of judgment and but little experience to detect these adulterations. The dilution of milk is seen by its thinness, and if a little genuine milk be boiled and its appearance be carefully watched, the housewife has only to do the same with milk which she suspects is not genuine, to be convinced whether it is so or not; the taste and smell will do the rest. A very agreeable and wholesome substitute for milk, for tea or coffee, at sea, or under other circumstances when it cannot be had, is the yolks of eggs beaten up with fresh water; two yolks are beaten up, with a spoon or a fork, in a cup, and about a wine-glass of water is gradually added; this mixture is very agreeable, and is even preferable to milk for those persons with whom the latter disagrees. On the Continent, in the preparation of whey, when it is taken medicinally, it is the custom, when the curd has been separated, to place the whey again over the fire, and to pour into it the white of an egg, previously beaten up in a wine-glassful of water, and five or six drops of vinegar; it is then filtered through blotting paper or fine linen, and served up.

MILK OF ROSES. A favourite cosmetic. The mode of preparing it is as follows:—Dissolve over a slow fire, in a glazed pan, half an ounce of spermaceti half an ounce of virgin wax, and half an ounce of white soap cut into shreds. Pound in a mortar half a pound of sweet and one ounce of bitter almonds, previously blanched by putting them into hot water, and removing the skins; now remove three-fourths of the almonds, and pour upon the remainder in the mortar the contents of the pan, pounding sharply, to incorporate them with the almonds, adding from time to time those which had been taken out, until a fine paste is produced from the whole; mix in a bottle a quart of water, a pint of rose-water, (see Roses,) and half a pint of spirits of wine, in which about ten drops of attar of roses have been dissolved. Pour three-fourths of this mixture, by degrees, upon the mass in the mortar, and work it up thoroughly; then strain the milk through a cloth. With the remaining fourth of the mixture, laid aside, work up in the mortar the pulp which remains in

the cloth, strain it, and add to the milk first expressed; before the milk is bottled, it should be strained through a fine sieve. As, notwithstanding the greatest care in the preparation, this composition will frequently decompose, it must be shaken up in the bottle before it is used. A more simple mode of preparing milk of roses is, to mix twenty drops of the oil of tartar with an ounce of fine olive oil and an ounce of almond oil, and having poured it off carefully, add it gradually to a quart of rose-water and an ounce of spirits of wine in which four drops of attar of roses have been mixed, shaking the bottle in which the whole is mixed carefully. The milk of cucumbers is a favourite cosmetic in the south of France: it is made in the same way as the milk of roses, using the expressed juice of cucumbers, instead of rose-water, and adding spirits of wine in the proportion of two ounces to a pint of cucumber juice. Any perfume, such as rose, lavender, &c., may be given to the milk, by dissolving a few drops of the essential oil of the perfume to be used in the spirits of wine. The usual perfume, however, is the essence of jessamine, in the proportion of two drachms to a pint of the juice; the essence should be diluted in spirits of wine, in the proportion of a drachm to an ounce.

MINT. A very pleasant herb as seasoning and in sauces. There are two kinds of mint in general use, but the spearmint is chiefly used for distilling. Mint-water, made by distilling the leaves, (see DISTILLATION,) is used as a vehicle in medicine, for the administration of Epsom salts, rhubarb, &c., and is also a favourite water among the good housewives for flatulency, cholic, hysterics, &c. infused in brandy or spirits of wine, with the addition of a syrup, or distilled with spirit, it forms an agreeable cordial, and is considered good where there is flatulency, but it may be laid down as a general rule, that all alcoholic drinks are bad in such cases. Where mint is used, therefore, it should either be as a distilled water, or by taking a very small quantity of the essential oil, dissolved in as little spirit as possible, and then mixed with spring water. Where distillation is not convenient, it is advisable to have a phial of what is called essence of peppermint, which is sold by all druggists, and to take two, three, or four drops of it, in a wine-glassful of water, first dissolving the oil in a small quantity of brandy. As Epsom and other purgative salts, when taken alone, are frequently found to be too cold for the stomach, it is well to have a little of this essential oil on hand. Nothing is so easy as the propagation of the plant: in the spring and autumn, this is done by parting the roots and planting them; in summer, the cuttings put deeply into the earth strike rapidly. To preserve this herb, like most others, for winter use, it is to be gathered just before it comes into flower, and dried slowly in the shade.

MOSS. The moss which is found upon rocks and trees is, in some of the northern countries, used extensively by the poorer inhabitants as food, and some species are considered highly medicinal. In England, during the last few years, Iceland moss, and the Irish moss, called Carageen, have been prescribed by the medical faculty in pulmonary and some other diseases, as an unirritating, and at the same time nutritious food. But many persons seem to have fallen into the error of supposing that it is a specific in cases of consumption, where that distressing malady admits of cure: neither the Iceland nor the Carageen moss has any specific and direct action upon the lungs; whatever good it may do must be through the stomach, by enabling the patient to keep up his strength, and thus giving to nature a better chance of struggling with disease. The Iceland moss is more medicinal, but less nutritive than the Carageen: it has a pleasant bitter, and is, therefore, tonic; but the Carageen is so much more mucilaginous than the Iceland, that, as food, two ounces of the former are fully equal to three of the latter. The mode of preparing either is exceedingly simple. If it is intended as a beverage, two ounces of it are to be well washed in cold water, and then to be put over a slow fire with two quarts of cold water, to simmer until reduced to half the quantity; it is then to be strained. A large breakfast teacupful of this should be taken every morning, on rising from bed, without sugar or milk, unless the stomach of the patient should digest milk with facility, in which case as much as one-third of boiled milk may be mixed with it; but if it be found unpleasant without sugar, a very small quantity may be used; it is decidedly better, however, as far as health is concerned, to dispense with sugar. In cases of indigestion, where the stomach at its first meal would be over excited by tea or coffee, and chocolate would be too heavy, a cup of this decoction is exceedingly useful, and two or three hours

afterwards a regular breakfast may be taken without injury. In such cases, also, a cup of the same beverage may be taken with benefit at night, and then a small portion of sherry wine or a little brandy may be added to it, with enough sugar to make it agreeable; but in pulmonary affections it is advisable to make the moss almost an exclusive food, and for that purpose the preparation of it may be varied. It should be boiled down to one-third of the quantity of water first used, and made into a jelly, precisely in the same way as the calf's-foot jelly; of this some may be taken at any time during the day. As the Carageen moss is the more palatable of the two, the jelly may be made from that; but in this case we would recommend the patient to drink also a teacupful of the plain decoction of the Iceland moss every morning. As food only, the Carageen moss is exceedingly nutritious, and by no means disagreeable, when made into soup with meat and vegetables; it is, in fact, quite equal to the far-famed bird's-nest soup of the Chinese.

MULBERRIES. The fruit of the mulberry tree. This fruit is of an agreeable acidity, and is said to be very useful in sore throats, as a jam or jelly, and also in fevers, in the form of syrup mixed with water. It enters but little into pastry in a distinct form, but gives an additional flavour to some of the other fruits. Apple jelly, also, is improved by adding a proportion of mulberry juice.

To preserve Mulberries in Sugar. Choose large and very ripe mulberries, put them gently into some strong syrup, and let them boil, covering over the pan, and shaking it gently from time to time; then take them off the fire, skim the syrup, and let them stand for two hours; they are then to be put on again, and boiled until the syrup has become exceedingly thick; pour into glasses and pots, and keep by for use.

To preserve Mulberries in a dry state. Gather them when not quite ripe, and give them a boil in syrup; then let them stand for twenty-four hours near the fire, so as just to keep warm; at the end of this time, take them out, drain them, and put them upon tins, powdering them well with fine sugar, and exposing them to the sun; when they are dry on one side, turn them, powder them in the same way, and finish the drying.

Ratafia of Mulberries. Take half a pound of red currants, three pounds of ripe mulberries, and half a pound of raspberries; put them for a very short time over the fire; then put the juice, with half a drachm of mace, to infuse for three weeks in eight quarts of brandy; now melt three pounds and a half of sugar in a pint of water, which mix with the brandy; filter the whole, and put into bottles.

Syrup of Mulberries. Choose them very ripe, put them into a saucepan, and let them break over a slow fire; then pass them through a sieve, to get out the juice; having clarified this juice by putting it through a jelly bag, add to it a quantity of very strong syrup, in the proportion of two pounds of sugar to a pint of juice keep this near the fire until it is reduced about one fourth, and when cold pour into bottles.

MULLED WINE. Boil in a quarter of a pint of water, for about ten minutes, three cloves, a bit of cinnamon, a little fresh lemon-peel, and one ounce and a half of loaf sugar; skim, and then add a pint of port wine; when the whole begins to boil, take it off, strain it, and grate in some nutmeg; serve with toasted bread. French red wine may be used, but in that case more sugar will be necessary.

MUSHROOMS. Too much care cannot be taken in the choice of this article as there are many species which are more or less poisonous; nor are even the best a very digestible food, if taken in a large quantity. As many mushrooms which are of a poisonous nature have a near resemblance to those which may be used without danger, the purchaser should deal only with those persons whose probity and experience are guarantee against danger. In cases, however, where, for want of these precautions, or from any other cause, mushrooms of a poisonous nature may have been eaten, and where medical assistance is not immediately at hand, the following treatment, as recommended by M. Orfila, should immediately be had recourse to:—On the first symptoms of poisoning, take three grains of tartar emetic in a glass of water; a quarter of an hour afterwards take a third of a second glass of water, in which have been dissolved twenty-four grains of ipecacuanha and an ounce of Glauber's salts; the other two-thirds of the mixture are to be taken at intervals of twenty minutes each. As soon as pretty sharp vomiting has been induced, recourse should be had to purgatives—the best in this case is an ounce of castor oil; if this should fail in its effect, the dose must be repeated; and if the

disease should make rapid progress, notwithstanding these precautions, and the poisonous substance should not have been evacuated, an ounce of tobacco must be boiled in a quart of water, and administered as a lavement; the usual action of which remedy is vomiting. When the poison has been evacuated, the patient must take a few table-spoonfuls of a mixture composed of mint-water or orange flower water, or plain water, if these are not at hand, and a quarter of an ounce of ether. If, in despite of this treatment, the disease does not give way, and the patient complains of severe pains in the abdomen, the part must be fomented with flannel dipped in hot water; and where a hot bath can be had, it must not be neglected. If the pain does not cease, from twelve to twenty-four leeches are to be applied. If no treatment has been adopted until the fever has become intense, and the abdomen much swelled and very painful, the tongue being dry, the thirst great, and the skin, mouth, and throat hot, irritating purgatives must not be adopted, but the patient must be bled, both from the arm and by leeches on the abdomen, and fomentations and linseed lavements be had recourse to. A very mistaken treatment has sometimes been adopted in cases of poisoning by mushrooms, by the administration of vinegar, ether, and very strong salt water. It is known that mushrooms steeped in either of these liquids lose in a short time their poisonous qualities, but these properties are transferred to the liquid itself, consequently whilst any mushrooms remain on the stomach neither the one nor the other should be employed. It is hardly necessary to state that where medical aid can be at once obtained, the stomach-pump, in the first instance, is the best and surest remedy.

Mushroom Catsup. Having skinned and peeled the large field mushrooms, crush them into a pulp, adding a table-spoonful of salt to every quart of pulp: let them stand for a day and a night; then pour off the clear liquor, and add to every quart about twenty cloves, thirty peppercorns, and the same quantity of allspice; boil very gently for about half an hour; then put into bottles with the spices. Some persons add port wine, but this rather injures than improves the flavour, and is objectionable for many sauces. A little mace may be added, but it is not essential.

Broiled Mushrooms. Take large and fresh gathered mushrooms; cut off the stalk, wash, and skin them, make little incisions in the under part, then powder them with salt and pepper; let them lay for a short time in olive oil, and broil them on both sides: they may be served up with a little fresh butter, laid on while hot; or, in the French way, with a sauce composed of good salad oil, chopped parsley, and shalots. The steeping them in oil before broiling may be omitted; this, however, is the invariable mode on the Continent.

Scolloped Mushrooms. Put the mushrooms into a saucepan, with fresh butter, chopped parsley, shalots, and a few mushrooms, also chopped up; moisten, them from time to time, with a little butter and water, mixed with flour, and stew them gently for about half an hour; then put them into shells or a dish, covered with crumbs of bread: put them over a charcoal fire for a short time, and brown with a salamander.

Stewed Mushrooms. Put the mushrooms into a saucepan, with salt, pepper, chopped parsley, young onions, or chives, a little vinegar, and some fresh butter; let them stew very gently, until they are thoroughly tender.

MUSK. An animal secretion, of strong, and, in an unmixed state, almost offensive odour, but which mixed in small quantities with many other perfumes, improves them much, and fixes the preparation: thus, a small quantity of musk in the essence of lavender, or what is called spirituous water of lavender, (see Lavender,) softens the mixture, and renders the perfume durable. Musk is generally used in perfumery in the form of a tincture, which is made simply by infusing the musk in spirits of wine, and at the end of some days filtering the infusion. Musk of good quality retains its odour longer than any other perfume. It was formerly used extensively in medicine, for spasmodic and hysterical affections, but is now rarely administered. On account of its high price, musk is very much adulterated; and in Germany an artificial musk is made, by mixing nitrous acid with some oil, which gives a precipitate; this is washed with hot water, and then has a very high odour of the genuine article.

MUSTARD. This is a very useful article, as a condiment, and is frequently employed with great benefit in medical practice. It is an agreeable stimulant, and seldom disagrees with the stomach in the quantity which is generally used

in diet; in large quantities, however, taken internally, it acts as a powerful emetic: from one to two table-spoonfuls of the powder, freshly mixed, will be found very useful as an emetic, in cases of poisoning, where medical assistance may not be at hand to prescribe other and immediate remedies. Of late years, the white mustard-seed, swallowed whole, to the extent of half an ounce three times per day, has been recommended in cases of indigestion and some other affections, and many cures have been pompously announced. It was pretended, that to the medical properties of the seed were added mechanical properties, when taken in this way, and that the gentle irritation of the round substance passing through the lower bowels, roused them to action, and mixing with the excess of mucus and slime, carried it off. There does not appear to be much truth in this explanation, nor is it by any means certain that there is any essential difference between taking, as a medicine, mustard in the seed or in a more concentrated form, such as the oil or essence which it yields when chemically treated. Where stimulants are necessary, as in some cases of hæmorrhoids, the use of mustard may be very beneficial, and as taking it in the seed is agreeable, that may be the best mode; but the indiscriminate use of this article in large doses may do great harm, where stimulants are not called for by the state of the patient. It should not be persevered in if, after a few doses, the person taking it should find no sensible improvement; and, whenever it produces a dryness of the skin, and an increase of that peculiar hard and dry sensation of the hand, which is so common in cases of indigestion, it should be laid aside entirely, or at least be suspended until the effect produced by it has ceased. There are not, however, any of the objections to the use of mustard externally, which may apply to it as an internal remedy: it is invaluable as a plaster, a poultice, a lotion, and with a foot-bath.

Mustard Plaster. Take an ounce of fresh powder of mustard, and mix it up with a sufficient quantity of water to form a paste; then spread upon cloth or brown paper, and apply it: let it remain on until the pain has become so severe that it can no longer be borne. In cases of sick head-ache, this plaster is excellent, applied to the temples, and at the same time, if convenient, to the feet; and for the ear-ache, it is also excellent, applied behind the ear. It is also very valuable in incipient or continued sore throats, applied round the neck; on removing the plaster, the pain it has produced generally ceases gradually, and disappears altogether in the course of an hour; the only inconvenience produced is a redness, which sometimes does not disappear for several days.

Mustard Poultice. Take two ounces of linseed meal, and mix with it an ounce of fresh powder of mustard in warm water to the proper thickness; put between the folds of a fine cloth, and apply to the part affected; the effect is the same as that of the plaster, but from its form, it is more applicable to the stomach, bowels, thighs, and feet. The cloth in which it is put must be fine, otherwise the effect upon the part would be impeded by it; the best way of using it is to apply it directly to the part, without the intervention of any cloth; but in this case the poultice dries upon the skin, and is removed with difficulty. This is a mild and safe counter-irritant, applied to the stomach in cases of indigestion or severe cold, and to the epigastrium, where there is torpidity of the bowels or inflammatory action. As a derivant, it may be applied to the feet and thighs, for the irritation which it produces has a tendency to equalize the circulation, by drawing the blood from one part of the system to another, and it also diminishes pain; for, in nature, a diseased and a mechanical action cannot well go on at the same time, if the latter be of sufficient power; the pain produced by the one causes a cessation of the other, and nature having been relieved by the diversion, has time to reassume the functions of health.

Mustard Foot-bath. Fill the foot-bath with water sufficiently warm to be agreeable, but not more so, for it is a great mistake to take a hot foot-bath; the blood, instead of being drawn from the upper portions of the body and head, is rather driven towards the latter in this case. Stir in four ounces of mustard, and keep the feet and legs in the bath for half an hour, adding warm water from time to time, so as to keep up the first temperature; then go to bed. In recent, or even confirmed colds, this is an excellent remedy, and will frequently ward off severe disease.

Steam Mustard-bath for the Head. Put an ounce of mustard powder into a large bowl or basin, with a drachm of camphor broken into small pieces; pour on them a quart of boiling water: hold

the head over the steam from time to time, taking care to cover the head with a cloth, so as to prevent the loss of the vapour. This is an admirable remedy in obstinate colds of the head.

Mustard Lotion for Friction.—Put two ounces of mustard into half a pint of spirits of wine, with two drachms of camphor; let the mixture stand for two or three days, carefully corked up in a bottle; then strain it off, and keep it in a bottle for use. It is good, in the way of friction, for sprains and rheumatism, and is sometimes used for gout, by laying linen which is moistened with it over the part that is affected.

Mustard for the Table. The English mode of making mustard as a condiment for food is very simple: it consists merely in mixing the powder or flour with hot water, and a little salt; horse-radish is sometimes added; in this case, a small quantity of this root must be boiled in the water with which the mustard is mixed.

French Mustard. The mustard for the table used by the French differs materially from what is used in England, for vinegar, more or less, enters into the composition, and the grain itself is not the same; the finer sorts have always the addition of aromatic herbs. Some of the French mustards are very agreeable, particularly if taken with cold meats. The common domestic mustard is made with the grain of the senevé, which is of a darker colour than English mustard-seed. It is ground up with vinegar, on a stone slab, and then put into pots for use; where herbs are used, they are steeped in the vinegar with which the mustard is to be ground up. The choice of the herbs varies with the manufacturers: some use thyme, mint, tarragon, and even garlic; others make a different selection. The English who wish to make the common domestic mustard in the French way, must provide themselves with the senevé or senvy seed; this being reduced to fine powder, may be mixed with the French vinegar, now sold by most of the grocers in England. In France, the white mustard seed is never used for the table; large quantities of it are taken medicinally, and, ground, it is used as an external remedy, in the manner stated above. In the foot-bath in France, a stronger and coarser kind of mustard than that employed for the table is used by the poorer classes, but the flour of the white mustard, which is called in France English mustard, is used by those who do not care for the extra cost. In Italy, mustard for the table is generally made up with wine.

Mustard and Cress. This is used as a small salad, and, from the bitter quality of the mustard, it is a good stomachic. It is sown early in the spring, in a sheltered border, in rows, and will be ready for cutting in a very few days. It may also be grown upon flannel frequently moistened with water, and placed by the fire-side.

MUTTON. This meat is very nutritious, and of easy digestion, and, from its being good at all seasons, is a very useful article in domestic economy; it is, however, eaten in greater perfection in winter, when it can be longer hung before cooking, by which it becomes tender and of higher flavour. This remark, however, only applies to roast mutton, for when it has been hung long it loses its whiteness, which is so indispensable a qualification when it is to be boiled. The sheep in most estimation for the table in England are the south-down, which are fed on the downs on the coast of Sussex, and derive a very fine flavour from the wild thyme, which grows in great abundance in those parts. The Welsh mutton is also much esteemed; it is very small, but of high flavour, and when well hung is little inferior to venison. The sheep most valued in France are those which come from Normandy, called *moutons de Pre-salé;* but the ordinary sorts, although very fine to the eye, are not equal in flavour to English mutton. The same remark is equally applicable to the beef. The best meat to be obtained in France is veal. The French have a very small kind of sheep in Brittany, some of which, when at full growth, do not weigh more than fifteen or twenty pounds, the flesh of which very much resembles Welsh mutton, but is, if anything, superior. The fine flavour of the mutton from these sheep is attributed to their feeding upon aromatic herbs peculiar to the country; they degenerate when they are removed to any other part of France. The mountain sheep of the Ardennes are also in high estimation.

Roast Leg of Mutton. The rule already given for roasting beef is equally applicable to mutton. The leg for roasting should always be hung a longer or a shorter time before cooking, according to the temperature of the weather. The same rule applies with regard to the time

necessary for cooking, taking care not to put it too close at first, but approaching it gradually; let it be well basted the whole time, and when served it should be placed on a water-dish or on a spirit-lamp, as no meat so soon gets cold. Red currant jelly should be served with this joint. A very piquant flavour is given to a leg of mutton by the following forcemeat:—Take bread-crumbs, a piece of butter the size of an egg, a shalot, some parsley, and a small smoked herring, skinned and boned; let these ingredients be finely chopped and mixed together, then make an incision in the part near the knuckle and introduce this forcemeat. Where a smoked herring cannot be obtained, anchovies may be substituted. For gravy, adopt the same plan as directed for roast beef. The other joints of the sheep which are usually roasted are the saddle, the loin, and the shoulder. With the latter, onion sauce is generally eaten. (See Sauces.) A clove of garlic cut up and stuck into the knuckle is a great improvement, where the flavour of that article is not objected to.

Shoulder of Mutton may be roasted as the leg; but another method of dressing it is to take out the bone, and having rolled it up, to boil it, putting it on as directed for a leg; it is best, however, to put it into a cloth. Prepare some of any sort of white sauce, to which add some thick cream and hot pickle chopped fine, which pour hot over the mutton when served; the sauce must not be allowed to boil.

Boiled Leg of Mutton. Choose a white, plump leg; put it over a fire in cold water, with a teaspoonful of salt; let the vessel be sufficiently large that the meat may be covered; when it begins to boil, skim carefully, and then let it only simmer. This joint should not be overdone; the red gravy should follow the knife when cut. Capers, chopped fine and put into melted butter, should be thrown over the joint, and some more of the same sauce be served in a sauce tureen. (See Caper Sauce.) The liquor in which a leg of mutton has been boiled may the next day be made into excellent soup, by the addition of a head of celery, some carrots, turnips, an onion, and a few split peas; all the vegetables to be cut small, except the onion, which is to be stuck with cloves. The middle part of the neck is also very delicate, boiled, and is usually preferred when broth is required; mashed turnips are usually served with boiled mutton. Many parties prefer putting on the meat in boiling water, but it is always more tender when put on in cold.

Shoulder of Mutton a la Turque. Boil a shoulder of mutton in some good stock, adding some parsley, a bunch of fine herbs, six carrots, four turnips, two shalots, two or three cloves, and pepper and salt; when done, boil some rice, which has been well washed, in the stock, and when the mutton is dished up, make two or three deep incisions in it lengthwise, and fill the openings with rice; then grate some Gruyère cheese over the whole, and brown with a salamander; some good sauce must be served with it.

Loin of Mutton Stewed. When the meat has been boned and the skin removed, put it in a stewpan with a pint of water; when done, which will be by the time the water is half wasted, take it out and strain it; mix the liquor in which it has been stewed with some highly seasoned gravy, to which add some small mushrooms, a shalot, two bay leaves, and a little parsley chopped fine, and put the meat into it, and heat it thoroughly.

Leg of Mutton Stewed. Having larded the thick part of the leg with bacon, put it into a large stewpan with some stock, a bunch of sweet herbs, salt and pepper, and two or three cloves; when done, drain it, and serve with a sauce made as follows:—Put a little stock into a stewpan, with a few capers, three or four anchovies, a little parsley, and a shalot; let the sauce boil five minutes, and serve it with the mutton.

Mutton Chops and Cutlets. (See Lamb.)

Mutton Chops with Bread Crumbs. Take away the skin, season with pepper and salt, and having beaten the chops flat, lay them in butter melted for the purpose; before the butter is cold, take them out, and cover them well with bread crumbs; then put them on the fire, and broil them rather quickly, taking care that the crumbs do not burn; they may be served with sharp sauce, or sauce of any other kind.

Chops a la Maintenon. Having beaten the chops flat, bruise the yolk of a hard boiled egg, and mix it with grated bread, salt, pepper, and chopped sweet herbs; cover the chops well with this mixture, wrap each up in white paper, and broil, turning them frequently; they may either be served up in the paper or with gravy.

Harricot Mutton. Cut a loin of mutton into chops, not too thick; fry them brown; then put them into a stewpan with

a few onions which have been sliced and fried in butter, some carrots and turnips cut it thin slices, two or three cloves, some pepper, and a little allspice; this should be put to simmer very slowly for about an hour and a half, and then be served, adding a little mushroom catsup.

Collared Mutton. The best joint for this purpose is the breast, but a shoulder may be used, if preferred. After having taken out all the bones, make a forcemeat with bread crumbs, chopped parsley, lemon thyme, and an anchovy minced; season it well with salt and pepper; when the meat has been rubbed over with an egg beaten up, cover it with the forcemeat, roll it firmly, and tie; put it on in cold water, and skim well when it begins to boil; make a good gravy, seasoned with herbs, and before serving add a little mushroom catsup.

Corned Leg of Mutton. Rub it well with salt, and let it stand for a day; then wipe it dry, and put it into beef pickle for five or six days; boil it plain, and serve with melted butter: the vegetables usually eaten with this joint are brocoli or mashed turnips.

Mutton Ham. Choose a fine hind quarter of mutton, and cut it into the shape of a ham; then pound an ounce of saltpetre, a pound of salt, and half a pound of brown sugar; let the ham be well rubbed with this, and let it lie for ten days, turning it, and rubbing it with the pickle every day; smoke it with sawdust for a fortnight, and hang it to dry. If not dressed immediately, it will require to be soaked two hours before boiling.

Mutton as Venison. Hang up for several days a large fat loin or haunch; then bone it, remove all the kidney-fat, and take off the skin; rub it well over with some brown sugar and black pepper, mixed together, and pour over it some French red wine; it must be rubbed with this mixture and be turned daily for four days, covering it all the time with the skin which has been removed from the upper part. When roasted, it must be covered with paper, and served with the same sauces as venison.

Mutton Pie. Cut the loin into steaks, removing the fat and skin, and season highly with pepper and salt, and minced onions; the kidney, sliced, should be added. When the meat is in the pie-dish, add a tea-cupful of stock, made with the trimmings of the meat, or the same quantity of water with a little rich mutton gravy, and a table-spoonful of mushroom catsup; put over a rich puff paste, and bake.

Sheep's Tongues. Parboil them, in order to remove the skin; when this is done, split them down the middle, and dip them in salad oil, in which has been mixed some parsley, shalot, and a few mushrooms, all shred very fine, and seasoned with pepper and salt; broil them after they have been covered with grated breadcrumbs, and serve with sharp sauce.

Another way: Prepare them as above, but add to the oil a little lemon-juice; then wrap up each tongue between two slices of fat bacon and the seasoning in a piece of white paper, oiled or buttered; broil over a slow fire, and serve in the papers.

Roasted Sheep's Tongues. Parboil them in salt and water, till the skin can be readily removed; then lard them with fat bacon, and put them on a small spit, wrapped in buttered paper; mix a tea-cupful of good gravy, a little lemon-juice, salt and pepper, and a bit of butter, rubbed in flour; and let the whole thicken over the fire, and serve with the tongues.

Irish Stew. Having cut the best end of a neck of mutton into chops, put them into a saucepan, with some peeled potatoes, a few chopped onions, pepper and salt, and about a quart of water; when they boil, remove them to the side of the fire, and let them simmer for two or three hours: just before serving, a little catsup may be added. What is called *Haricot de Mouton* in France is made in nearly the same manner.

Hashed Mutton. Cut cold roast mutton into pieces, dredge it with flour, and put it into a stewpan, with a slice of ham, moistening with stock or gravy and water; season it well, and let it get thoroughly hot, without boiling: when served, it should be garnished with poached eggs and fried crusts. If mutton is hashed with fine herbs, it is done in the following way:—Take a piece of butter, about twice the size of an egg, add to it about a table-spoonful of chopped shalots, and put them on the fire for a short time, but not sufficiently long to turn brown; then add four spoonfuls of finely chopped mushrooms, a spoonful of chopped parsley, and a spoonful of flour; turn them all well in, and add about a pint of good stock, or a little water and gravy, seasoning with salt, pepper, and a little nutmeg; then put in the mutton, and let it get thoroughly hot. in serving, garnish as before.

Minced Mutton. Chop the mutton very fine, and dredge it with flour; season in the usual way, and warm it up, without boiling, with a little stock, for which may be substituted some good mutton gravy and water. Minced mutton, with chicory, is a favourite dish on the Continent; it is thus prepared:—The chicory is chopped, and cooked with butter and a little consommé and espagnole sauce; in another saucepan the minced mutton is warmed with stock and seasoning; when the chicory is well done and quite thick it is put into the saucepan with the mutton, and stirred together for two or three minutes: it is served in a dish garnished with slices of bread fried in bread and butter. Another mode is, to put the chicory, boiled plain, and brought to a pulp, into the dish, and place the minced mutton over it.

Sheep's Rumps. Stew five or six rumps for three or four hours, with some stock, a carrot, two onions, a bunch of sweet herbs, and salt and pepper. If not eaten in this way, they may, when cold, be dipped in yolk of egg, well covered with grated bread, and be either broiled or fried. If eaten as a stew, boiled rice may be served with them, as curry; or the rice may be stewed with them. In Prussia, sheep's rumps are stewed with cabbage and bacon, in the proportion of half a large cabbage and half a pound of bacon to six rumps: the rumps should be blanched in boiling water for a quarter of an hour before they are put on to stew. In stewing, a few onions, parsley, chiboles, two or three cloves, pepper and salt, and a small piece of garlic are added; they are stewed with good stock, or, in its absence, with a little butter, water, and rich gravy: just before serving, a slight dash of vinegar is thrown in.

Ragout of Sheep's Rumps. Put the rumps into a saucepan with a little bacon, carrots, onions, and sweet herbs, moisten with stock, and cook them over a slow fire for four hours; then let them drain, and having become cold, joint them, and put them into a saucepan with some sweetbread previously fried in butter, the bottoms of two artichokes previously boiled, and a little chopped mushroom covered with flour; let them stew very gently, moistening from time to time with stock, until the sauce is reduced one third.

Sheep's Hearts may be stuffed and roasted or baked, in the same way as bullock's heart is, (which see.)

Sheep's Trotters. See Lambs' Trotters.

Sheep's Kidneys Roasted. Having slightly moistened the kidneys, split them, but not so as to quite divide them, and put them on a wooden skewer, first having dipped them in butter melted for the purpose, and fasten them to the spit, and roast; when served, put a bit of fresh butter on each, and season with pepper and salt. This is superior cooking to the usual mode of broiling.

Fried Kidneys. Prepare the kidneys in the same way as above, and put them into a saucepan with butter, salt and pepper, a little chopped parsley, and mushroom; when they are browned on one side, turn them, and brown on the other; then add a spoonful of flour, well mixed with a glass or two of white French wine, and two ladlefuls of espagnole or any other rich sauce; keep them on the fire, stirring them well until they are thoroughly done, but do not let them boil. At the time of serving, add a bit of fresh butter and a little lemon-juice; garnish the dish with bread fried in butter, and cut into any fanciful shape. Beef or calves' kidney may be cut into slices, and dressed in the same way.

Haggis. Having washed the heart and lights, parboil and mince them small, with a pound of suet and two large onions; add rather less than two handfuls of oatmeal, and season thoroughly with pepper and salt: mix all these articles well together, sew them up tightly in a bag, and boil for about three hours; serve with some good gravy, seasoned and thickened, or with sharp sauce. This is a cheap, but not very delicate dish, more suited to the appetite of a rough Highlander than to a stomach accustomed to more savoury dishes.

NAPHTHA. A spirituous and oleaginous substance. The naphtha for lighting is extracted from wood, coals, &c., by distillation; that which is obtained from coals is exceedingly cheap, as the gas-tar yields it abundantly, and the residuum forms a pitch which is very saleable in the market. The light from coal-naphtha is more brilliant even than that from the burning of turpentine, but it is of a most unpleasant smell, and gives out an intense quantity of smoke. In order to burn naphtha, the wick of the lamp must be exposed to a free and strong current of air.

NASTURTIUM, OR INDIAN CRESS. This plant does not thrive well in too rich a soil; it may be sown in any

situation, placing it near a wall or a tree, to which it may be attached, as it grows to the height of six or eight feet, and requires support. The flower is used in salad, and the buds or seed are pickled, and form a substitute for capers.

NEEDLEWORK. The art of needlework is one of great antiquity, and was long held in high honour, as it ought indeed to be at the present time, for although the refinements of modern education are admirable in their way, yet they are a very poor equivalent for the useful arts, when acquired to the exclusion of the latter. To dance well, to be a good musician, to have a certain degree of perfection in drawing or painting, are all good in their way; but where is the husband who would not feel as proud at occasionally wearing a shirt made by the hands of his wife or daughter, as he would be at times of eating of some dish of her preparation? No rank or position in life can excuse a neglect of this essential portion of the education of a female; for, independently of the consideration that no station is altogether secure against the possibility of a reverse, which might render proficiency in a domestic art useful, there is in needlework, as an accomplishment, quite as much elegance as in drawing and painting, and a much greater chance of proficiency. It is reserved for only one female in a hundred to become such a painter as to command admiration, and to make the art a means of support, in the event of an unexpected change of circumstances; but every female may acquire an useful knowledge of needlework for domestic purposes; and five out of ten may become so proficient as to render it an honourable source of income. There are too many young ladies in the present day who either despise this domestic occupation, or affect to be ignorant of it, lest it should be thought that their education had been homely, and these are always the females who make a display of their imperfect knowledge of music, the result of a boarding-school education, to the annoyance of their hearers, who, although too well bred to express dissatisfaction, would gladly escape from the infliction; there are, however, fortunately, some high-born dames whose minds are too truly elevated to despise what is useful, and whose precepts and example it would be well to follow. Amongst them we find none more amiable and prominent than the Countess of Wilton, who has published a large and well written volume on the "Art of Needlework," with a view of shewing its antiquity, its beauty, and its application. In her introduction we find the following delightful passage:—"The genius of needlework was twin-born with necessity, the first necessity the world had ever known; [our authoress here alludes to the labours of the first sempstress, Eve, who, although not possessed of a gold-eyed needle, sewed together the first garment prescribed by innate modesty;] but she quickly left this stern and unattractive companion, and followed many leaders in her wide and varied range She became the handmaiden of fancy; she adorned the train of magnificence; she waited upon pomp; she decorated religion; she obeyed charity; she served utility; she aided pleasure; she pranked out fun; and she mingled with all and every circumstance of life." Then, after stating that the genius of needlework had at one time been honoured and courted, the acknowledged and cherished guest of the royal and noble, reigning supreme in hall and palace, bedropped with gold, and begemmed with brilliants, our fair authoress adds, "In all the sweet charities of domestic life she has ever been a participant; often and again has she fled the splendid court, the glittering ball-room, and taken her station at the quiet hearth of the gentle and home-loving matron. She has lightened the weariness of many a solitary vigil, and she has heightened the enjoyment of many a social gossip. Nor even while courted and caressed in courts and palaces, did needlework absent herself from the habitations of the poor. She was their familiar friend, the daily and hourly companion of their firesides; and there she remained, happy in her utility, till again summoned by royal mandate to resume her station near the throne. The illustrious and excellent Queen Adelaide allured needle-work from her long seclusion, and reinstated her in her once familiar place among the great and noble." And long may her balmy influence be felt in the halls and palaces, as the focus of example! But it is not in England alone that the art of needlework, so honourable amongst the ancient Hebrews, whose kings' daughters wrought beautiful garments with their own hands; and amongst the Egyptians, the Romans, and the Greeks, in the days of their highest splendour, has again become what the world calls fashionable: the Queen of France is a notable semp-

stress, and passes much of her time in this occupation; her daughter, the Queen of Belgium, does the same; and so does the Empress of Russia. These are high examples, and those who set them are all amiable women, for there is something soothing to the mind in the pursuit, and it diverts those who practise it from many of the idle dissipations which tend to make females fretful, irritable, and haughty. "I have seen many females in England," says a German prince, whose published travels in this country have created much sensation, "who thought themselves highly accomplished because they could spoil a yard of canvas with some wretched attempt at a portrait or a landscape, or set the teeth of an audience on edge by the miserable execution of a composition of Haydn or Mozart, but have never thought them sufficiently accomplished to become good wives. I have seen others quietly at work with their needle, on plain or fancy needlework, looking like angels of benevolence, as their taper fingers laboured over an embroidered handkerchief for a father or a brother, or on the frocks or gowns for the children of a poor peasant. These are the women for wives, for they are already housewives."

Needlework is of two kinds, plain and ornamental. The former comprises a whole range of utility; the latter, what is elegant, rich, and truly artistical. Both are equally honourable in the practice, but not equally attainable, for as much taste and contrivance are necessary in the making of a bonnet as in the construction of a palace; and it is not every female who can, whatever may be her assiduity, arrive at perfection in embroidery and tapestry, two branches of the art which require, the latter particularly, a high degree of talent, and may be made the lucrative source of income, as well as of private gratification. The spirit of industry, however, which presides over the operation of plain stitching, may produce unexpected results; and, after all, if perfection in this art only be attained, the female practising it will be well rewarded by the self-approbation which arises from a meritorious occupation of time. Lady Wilton says, "Sewing is in itself an agreeable occupation; it is essentially an useful one; in many of its branches it is quite ornamental, and it is a gentle, a graceful, an elegant, and a truly feminine occupation. It causes the solitary hours of domestic life to glide more smoothly away; and in those social unpretending reunions, which, in country life and in secluded districts, are not yet abolished, it takes away from the formality of sitting for conversation, abridges the necessity for scandal, or, to say the least of it, as we have heard even ungallant, lordly man allow, it keeps us out of mischief."

Can anything more powerful than this be said in favour of the art of needlework? We think not, although we do not agree with the noble and fair authoress in her idea of the "necessity" of scandal. The necessity for vice—and can any vice be greater than scandal?—does not exist in our nature; it is the result of bad education, and is favoured by idleness. Scandal is the handmaid of idleness, as virtue is the handmaid of industry; but one is of human, the other of divine creation.

Our female readers will, we are sure, agree with us that it would be useless to attempt to lay down any instructions here for the exercise of the art, the cultivation of which we recommend; it can only be acquired practically, and no printed rules would be of the slightest benefit.

NEROLI. The essential oil of the orange flower. Three qualities are drawn off in distillation: the best quality is of a pale amber colour, and has a delicate fragrance; the inferior qualities are darker, and have an empyreumatic smell. Only the finest quality should be used in perfumes. Neroli is not unfrequently used medicinally, for the correction of flatulency, in doses of from two to four drops, taken in water.

NETTLES. A wild plant growing abundantly in the hedges and fields in England. When young, they form a favourite ingredient in the spring broth of the country people, in many parts of England, under a belief that they "sweeten the blood." Their real action is upon the kidneys, slightly promoting the secretion of urine. They are sometimes boiled and served in the same way as other plain vegetables.

NOUGAT. An article of confectionary, composed of sweet almonds and sugar. It is sold by all the confectioners in France, and is exported to various countries. It is made in the following manner:—Blanch a pound of sweet almonds, and having sliced them lengthways, let them lie in the sun for a short time, until they become slightly discoloured; now, dissolve in an iron stewpan, slightly but-

tered, twelve ounces of sugar, without water, stirring constantly, and when the sugar has melted and begins to change colour, throw in the almonds, which are to be previously made thoroughly hot in another vessel, over the fire, but without burning them; mix them well with the sugar, and as they mix range them round the sides of the saucepan, leaving about the same thickness at the bottom as at the sides; now, let the saucepan become a little cool, and turn out the mixture upon a plate; having done this, press the contents well together in the form of a thick cake, and wrap up in writing paper. It should be kept in a tin case. Nougat is served at dessert, or eaten at any time, as other sweetmeats.

NUTMEGS. Nutmegs are of two kinds, the myristica and the pyrrhosa, both from the tropics. It is the seed of an aromatic tree, and is much used in Europe as a condiment. It is tonic, stimulant, and anti-spasmodic, and is frequently given in cases of indigestion and flatulency. In cookery, pastry, &c., it is more particularly used as a spice, on account of its fragrancy and agreeable taste. The preparations of it in medicine are various, viz., infusions, tinctures, confections, &c., and as a distilled water, as a vehicle for the administration of other medicines. The essential oil is used as a perfume, and also as a friction for rheumatism.

NUTS. (See FILBERTS.) The common nut is of an agreeable flavour, but is apt to disagree with persons who are dyspeptic, and should therefore be eaten with great moderation. Nuts should never be taken without salt, which, as a condiment, has a tendency to correct their prejudicial effects, but the precise action of the salt is not known.

OBESITY. An accumulation of fat in the human body, usually arising from excessive diet and want of exercise, but sometimes dependent upon other and, indeed, unknown causes. Obesity is not always a disease, for we have numerous instances of very fat men enjoying excellent health and living to a good old age; generally speaking, however, very fat persons are not of long life, probably because they indulge to excess in good cheer, and want that fair proportion of exercise which is requisite for the human body. Sedentary pursuits, unattended with mental exertion, are productive of obesity: fat coachmen and fat publicans are very numerous, and this is also the case with butchers who are confined to their shops; it is not seen to the same extent amongst butchers who carry out loads of meat. With proper regard to diet, and abundant exercise in the open air, obesity may be avoided, except in those idiosyncrasies where there is a natural tendency to it, as a disease of the system; and in these cases it is exceedingly difficult at times to find a cure. Dr. Radcliffe recommends that the mouth should be kept shut and the eyes open; or, in other words, that the patient should eat very little food, and that of the least nutritive kind, and that the quantity of sleep should be diminished. These recommendations may be followed with discretion, but it may be dangerous to carry them too far. Females who are disposed to obesity, the great fault of which is to spoil the harmony of the human shape, sometimes resort to the most absurd and dangerous means for its prevention. Under the idea that acids will remove and prevent the accumulation, as giving gin to a dog is said to prevent its growth, they drink vinegar and lemon-juice. The remedy is sometimes effectual, but the cure is worse than the disease, for it frequently lays the foundation of some fatal malady. It is unfortunate that in Europe a slender shape should be so much regarded as the distinguishing mark of beauty, as to induce females to have recourse to such foolish and indeed criminal means of securing it. Without agreeing with the natives of some of the tribes of Asia and Africa, who consider no woman a beauty who does not weigh twenty stone, we may be allowed to observe that a little corpulence does not deform a female, and that the freshness of the complexion of most robust ladies, is an ample compensation for their rotundity of figure. A French author, alluding to the principal causes of obesity, says, "The first is, the natural disposition of the individual; nearly all men are born with certain predispositions, of which their physiognomy bears the external sign. Out of a hundred persons who die of diseases of the lungs, ninety have brown hair, long faces, and pointed noses; out of one hundred fat persons, ninety have short faces, round eyes, and obtuse noses. The second and principal cause of obesity is in the farinaceous diet which man makes the basis of his daily food; all animals fed upon farinaceous food grow fat, and man is not an exception to the rule. When sugar is mixed with this food, it becomes still more fattening, and

certain liquids, such as beer, contribute greatly to the accumulation of fat, where much farinaceous food is eaten. In 1817, when wine was very dear, many Parisians drank beer by way of economy, and gained an embonpoint which they would afterwards gladly have got rid of. A third cause of obesity is excessive sleep, and want of exercise. The human body recruits itself in sleep, and loses little, all muscular action being suspended; excessive sleep and little exercise in the day are two errors generally united in the same person, for great sleepers are averse to great exercise. A fourth cause of obesity is, excess in eating and drinking; this excess is productive of two evils: with persons whose stomachs are weak it produces indigestion; and people are astonished that so many good things taken into the stomach should turn to evil instead of profit. When the stomach is active, on the contrary, and there is not a corresponding portion of exercise, the excess of nutrition turns to obesity." The knowledge of the causes of obesity will enable most persons to avoid it, by abstaining from them; but in those cases where reasonable abstinence from good cheer, and avoiding excess of sleep, at the same time taking free exercise, do not produce the hoped for effect, the tendency to obesity is a natural disease, and it will be necessary to call in the doctor, and try the force of drugs; but these, fortunately, are very rare cases.

OIL. There are three modes of obtaining oil—by compression, by distillation, or by immersion; the usual mode is by compression. Olive oil is made as follows:—The olives are gathered in November or December, when ripe, and being carefully washed, if dirty, are laid out for several days, until they begin to turn, from overripeness; if they are used before this time, the oil is not of such good quality. They are then put into the pressing mill, and the oil is pressed out: what first comes off is the best quality, and is called virgin oil. Hot water is then poured over the lees, and they are again pressed; when the liquid that is extracted is settled, the oil is carefully separated from the water: this is the second quality. The water is poured on a second time, and the oil then collected is of the third quality; it requires nearly a month for this third expression to settle and become clear: this third quality of oil is very liable to become rancid. The best olive oils are from Aix, in France, and from Genoa and Florence; the olive oils of Spain and Portugal are inferior, both as to the quality of the fruit and the mode of preparation. Much of the olive oil that comes to England is adulterated with walnut and other inferior oils; the best mode of detecting this fraud, as oil from walnuts or seeds does not congeal so rapidly as olive oil, is to put a phial of oil in iced water: if it is pure, it will congeal throughout; if otherwise, a portion will remain liquid; and if only one-third is pure olive oil, it will not congeal at all. Walnut oil is used in many parts of the Continent instead of olive oil, and it is made nearly in the same manner; it has a strong flavour, but is frequently employed, even in Paris, in the kitchen, for frying and for pastry; in some parts candles are made of the residuum, after pressure. Oil for burning is extracted in France from various kinds of seeds; it burns with a clear light, if carefully made, but is not equal in strength to the good spermaceti oil in England. Almond oil is made thus:—Blanch the almonds, then steep them in lukewarm water for two or three hours; now pound them in a mortar, and heat the paste in a sand bath; when a portion of the humidity is driven off, put the paste in a bag, which is to be placed in a hot-press to express the oil. Olive and all other eating oils are of a very indigestible nature, and it is difficult to conceive on what principle they are supposed to correct the action of salads. Olive oil is used in cookery, for frying fish, fritters, &c., as it gives a fine colour; but, as far as health is concerned, good fresh butter is to be preferred.

Dr. Guerin, in his "*Chimiste Populaire*," gives the following receipt for purifying common lamp-oil:—"Begin by beating the oil well with a stick, and, continuing beating, add at four separate times, for twenty-five gallons of oil, a pound and a half of sulphuric acid; a quarter of an hour afterwards add half a pound of tartaric acid, in powder, and three pounds of quicklime; continue to beat this liquid for about twenty minutes, then add six quarts of water, and stir well for five minutes. Four days afterwards, draw off the oil from the water, and filter it, if it should be necessary, through a hair bag, containing a pretty thick bed of animal charcoal.

OIL PAINTINGS, TO CLEAN. Mix an ounce of spirits of turpentine with an ounce of spirits of wine; with this mixture wash the paintings gently with cotton wool, then wash with turpentine alone; if there are any stains which this will not

remove, the paintings are to be washed with an infusion of kali; when dry put on a thin varnish, composed of two ounces of mastic dissolved in six ounces of turpentine; at the end of a few days another coat of varnish, such as is sold by the colour makers for oil paintings, may be added; the preparation of this varnish being very tedious, it is always better to buy it ready made.

OLIVE. A small fruit which grows in abundance in most southern countries, particularly in Spain, Portugal, Italy, and the south of France; it is used in a salted or pickled state in many dishes, and is also served separately at table, for the purpose of exciting the palate and giving a relish to wine; in taste it is rather bitter, and it requires some habit to take pleasure in eating it. The largest olives are those of Spain, but the finest grow about Aix, in Provence; it is from this fruit we derive the salad oil. The oil from Provence enjoys a higher reputation than any other, partly from a greater care being taken in the preparation. The oil of the Spanish olive would, perhaps, if carefully prepared, be almost equal to that of Provence; the Spanish oil, however, is not only badly purified, but, as it is kept in goats' skins, it has generally a high and unpleasant flavour; next to the Provence oil that of Florence is to be preferred.

ONIONS. Medical men appear to be divided in opinion as to the medicinal properties of the onion; it appears, however, to act as a diuretic and as a sudorific; it is, therefore, common to eat a large roasted onion on going to bed, as a remedy for a cold. In the raw state onions disagree with many persons who can eat them without inconvenience when cooked, whilst others, particularly those who take great exercise, eat them raw with pleasure and benefit. In many parts of the Continent a raw onion with bread forms the daily breakfast of the peasantry, who attribute nutritive properties to this root. In Portugal the juice of the onion is used in lamps with the commoner sorts of oil, as it is supposed to have the effect of causing it to burn with a clear light; the experiment is worth trying with the commoner sorts of whale oil in England. The onion is much used in the cookery of all countries where it is grown, or into which it is imported; it gives a piquancy to ragouts and stews, but must be used in moderation, as the flavour should never predominate. There are several varieties of this root in ordinary use, but the best are the Spanish and Strasburg; the Portugal onions grow to a very large size, and are very fine when roasted; but, whether it is that the soil or climate is not so congenial to them, the seed of the Portugal onion does not attain the same size in England. The soil for onions should be light and well worked, and not have been recently manured, and the seed should be sown about the beginning of April, choosing fine open weather; a second crop may be sown in August: the bed is merely raked over, as the seed does not require to be buried deep. When the plants are high enough, thin them out to about six inches apart; choose the opportunity after some smart showers for the operation, as the plants otherwise break off; keep the bed well cleared of weeds. When they are ripe, which is known by the leaves withering, let them be drawn up, and laid out in a dry walk, turning them occasionally; they must lie in this manner for a fortnight, and then be removed into a dry loft, keeping them as much as possible from the air. For pickling, the small silver-skinned are chosen; this sort is sown about the middle of April, in a poor soil, and do not require to be thinned out so much as the other sort. Another variety of the onion, called the potatoe onion, has of late years got into very general use: they are planted in the same manner as potatoes, in a rich, well dug soil, about ten inches or a foot apart; they produce by offsets, in the same manner as potatoes, and are very productive; they grow to a large size, and are of milder flavour than the common onion.

To Roast Onions. Choose the largest for this purpose, and place them in a slow oven, or in a Dutch oven before the fire. They require a very long time to cook. Some parties parboil them before putting them in the oven, but this destroys the flavour. They are eaten with cold butter, pepper, and salt.

To Stew Onions. Take some brown roux (see Sauces), to which add a little good gravy, and a tumbler full of French red wine. Having previously boiled the onions for about ten minutes in water, with a bunch of herbs, some parsley, two or three cloves, and a bay leaf, put them into the wine-sauce, and boil. Serve with the sauce in a dish, garnished with fried bread.

Boiled Onions. After peeling, let them lie a couple of hours in cold water; then put them on in cold milk and water,

boil them till tender, and serve with melted butter poured over them.

Onion Sauce. See Sauces.

Pickled Onions. See Pickles.

Onion Soup. See Soups.

Opiate, for the Teeth. Take two ounces of cream of tartar, in fine powder, one ounce and a half of pumice stone, very finely powdered and sifted, half an ounce of powdered cochineal, and six drachms of red coral, finely powdered; having sifted all these ingredients, add twelve drops of bergamot, six of otto of rose, and as much syrup of sugar as will form the whole into a rather thick paste. Put the mixture into a pot, and allow it to undergo a fermentation, which will take place in a few days; when the fermentation has ceased, fill with the opiate small china or bright pewter pots.

ORANGE. A fine fruit, rich in juice, and the rind of which has an aromatic flavour, and gives out a fine perfume. It grows abundantly in Spain, Portugal, Italy, the Western Islands, and, in fact, in most southern climates. Strictly speaking, there are but two sorts of oranges, the sweet and the bitter; but sweet oranges vary so much in size and flavour, in some countries, particularly in China, that they almost appear like a different fruit. The juice of the orange is very refreshing, either taken in its pure state or mixed with water; and it may be used in many cases, when not over-ripe, as a substitute for lemons. The flower of the orange makes a delicious perfume, when distilled with water, and also yields the beautiful essential oil called neroli. Enormous quantities of oranges are imported into England from Portugal and from the Western Islands; the latter are the smaller kind, but they are preferable, on account of their being thinner skinned, and, therefore, more economical. These oranges are packed in rather an unripe state, and ripen on the voyage; but the orange is never eaten in perfection except in the country where it grows, as it can then be gathered from the tree in its full maturity. Although the orange, when ripe, is, perhaps, one of the most wholesome fruits, the juice only being taken, (for the flesh is very indigestible,) persons who are liable to much flatulency frequently suffer inconvenience from its use in an uncooked state.

Orange Jelly. Take ten oranges and three lemons; peel three of the former as lightly as possible, put the peel into a stewpan, and squeeze over it the juice of all the oranges and lemons; then clarify half a pound of sugar, pour the juice and the peel upon it, and boil the whole up together; after that, strain the juice, and add to it half an ounce of isinglass, previously dissolved in half a pint of water: let this simmer for two hours, and strain.

Another way: Squeeze the juice into a pan with water, in the proportion of a quart to every pound of oranges; boil gently till this is reduced to less than one-half; then strain through a sieve, and to a pint of liquor add a pound of loaf sugar; boil these together till they jelly, skimming frequently.

Orange Marmalade. See Marmalade.

Oranges in Brandy. Blanch them for a few minutes, to make them swell, then put them into cold water; having drained them, pour over them some clarified sugar, and let them stand for a few hours; then give them a boil in the syrup, and let them stand again till they are cold; repeat this three or four times; after which, put the oranges into wide-mouthed bottles, with brandy, and cork carefully.

Orange Ratafia. Put eighteen oranges, in their natural state, into a gallon of brandy, with some cinnamon and coriander seed; let them infuse for two months, then strain off, and bottle.

Candied Oranges. Peel the oranges, removing as much as possible the white part, divide them, and boil in strong syrup for half an hour; let them stand till cold, and repeat the operation of boiling three or four times, until the syrup has become exceedingly thick; then take out the oranges, powder them with fine sugar, and put them in a very slack oven to dry.

Orange Salad. This is a dish used as dessert in France, and consists simply in cutting the orange into thin slices, without peeling, and serving it with brandy and sugar.

Orange Flower Water. This is made by distillation of the orange flowers. As these are neither in sufficient abundance in England, nor of sufficient richness for distillation, a very good substitute may be made by mixing a drachm of neroli (see Neroli) with two ounces of spirits of wine, and adding a pint of filtered water. This water is used as a cosmetic, but more frequently for flavouring creams, ices, &c., for the table and pastry.

Orangeade is made with the juice of

oranges, in the same way as lemonade (see LEMONADE) is made with the juice of lemons.

ORGEAT. A beverage made from almonds. It is thus prepared :—Take a pound and a quarter of bitter almonds, and half a pound of sweet almonds, the skins of which have been removed by blanching, nine pounds of white sugar, six pints of water, and the rinds of three lemons ; pound the almonds in a mortar, with the sugar, and add the water by degrees ; then put the mixture on the fire, with the lemon-peel ; after one boil pour off the syrup, and press the almonds, to extract the milk ; add this to the syrup, and strain the whole through a fine sieve ; when cold, stir in six drops of neroli, and bottle. The orgeat, when required for use, is mixed with cold water, according to taste.

OX GALL. There are few articles so valuable as this for cleansing woollen and other articles : it combines readily with greasy substances, and assists powerfully the action of soap, which, however, in many cases may be dispensed with ; nor does it, says Count Chaptel, sensibly affect the most delicate colours. The chief objection against its use is its highly disagreeable smell ; this is got rid of in the following way :—Boil a quart of the gall, skimming it frequently, and then add an ounce of powdered alum, and leave it on the fire until the alum and the gall are thoroughly combined. When this is done, set the mixture to cool, and pour it, when cold, into a bottle which is to be slightly corked : now proceed exactly in the same way with another quart of gall, using an ounce of common salt instead of alum. The two bottles are to be put by for three months in a room of moderate temperature ; a thick sediment will take place, but, as a good deal of yellow colouring matter still remains, the contents of the two bottles, carefully poured off from the sediment, are to be filtered separately, and then mixed in equal parts, a portion at a time. The colouring matter will now coagulate and be precipitated, leaving the gall perfectly pure and colourless. It is then to be again filtered, bottled, and kept for use. In this state it preserves all its detergent properties, is free from smell, and does not spoil with keeping. It must be kept corked, however, in a cool place. Silks and all other articles of even the most delicate colours may be cleaned with this gall.

PANADA. The crumb of bread boiled into a sort of pap. It is sometimes made for children and aged persons who cannot eat solid food. To make it, put some crumb of new bread into a saucepan with a little water, and boil until it becomes a thick pap; add water and a little salt, as the bread absorbs the water which was first put in ; when it has boiled a short time stir in quickly the yolks of two or three eggs previously beaten up. Milk panada is made by boiling the bread with very little water, and adding new milk and sugar when the bread has boiled : the milk should not quite boil. Nutmeg, cinnamon, lemon-peel, &c., may be added to the water panada, and a little generous white wine and sugar may be added to it before serving.

PARSLEY. For ordinary use the curled double parsley is preferred. It is raised in drills at the edge of a bed ; and besides being very useful in the kitchen, it forms a very neat border. The seed should be sown the latter end of March, as it does not make its appearance above ground in less than a month. In the winter the parsley rows should be covered with litter, to secure a supply of green leaves ; the seed should not be sown too thick. This is a vegetable seldom used but with other herbs, as seasoning to ragouts, &c. ; in the West of England it is made into a pie, in the following manner :—Take a sufficient quantity of parsley, and having picked it carefully from the thick stalks, scald it in boiling water, and place in a cullender to drain. Cut up some breast of veal into small pieces, and having seasoned them with pepper and salt, place them in a pie-dish, in alternate layers of meat and the scalded parsley, putting in each layer a slice or two of pickled pork ; when the dish is full cover it with a suet crust, and bake in a slow oven ; when done, lift the crust carefully, and pour into the dish a large tea-cupful of good cream, in which the yolk of an egg has been beaten up. Lamb chops, a part of a breast of lamb, or a fowl, may be substituted for veal. About a dozen of raisins should be mixed in the pie.

PARSNIP. This plant requires a stronger soil than the carrot, and should be dug very deep. The seed is sown the early part of April, and when the plants are become strong they must be thinned out to about eight inches asunder. The parsnip is not a vegetable of such general use as the carrot, but it imparts an agreeable flavour to soup, in which it is invari-

ably used on the Continent, but in England it is not in much request. Boiled, and mashed with carrots and turnips, it makes an agreeable dish; and it is also used, boiled plain, with salt fish. From its containing a large portion of saccharine matter, it is considered a very nutritive vegetable. The parsnip being of a heating nature, it should not be eaten in a large quantity by persons of a warm temperament.

Parsnip Wine. See Wines.

PASTE. In perfumery, a mixture for the skin, said to have the effect of softening and beautifying the complexion. One of the pastes most in vogue is that called *Crême du Cathay*, for which a patent has been taken out in Paris, by Mr. J. M. Farina. It is thus composed:—Mecca turpentine, three grains; oil of sweet almonds, four ounces; spermaceti, two drachms; flowers of zinc, one drachm; white wax, two drachms; rose water, six drachms: mix them and put them into a sand-bath, where they are to remain until united in a fine paste Another paste in vogue is that of M. Bazin, for which he also has a patent; it is called *Pâte Axérasine*, and is made as follows:—Powder of bitter almonds, eight ounces; oil of bitter almonds, twelve ounces; white soap, eight ounces; spermaceti, four ounces; powder of soap, four ounces; cinnabar, two drachms; essence of roses, one drachm: melt the soap and the spermaceti in the oil in a sand-bath, then stir in the soap powder, (see Soap,) and when well mixed pound the whole in a mortar, adding the almond powder by degrees, then add both the essence of roses and the cinnabar, which latter must be previously rubbed up in a mortar with a few drops of essence of bergamot. When it is intended to use this paste, dissolve a little of it in water, so as to make it of the thickness of cream, and apply it with a sponge. It is said to be an excellent remedy for chapped lips and chilblains, as well as a cosmetic. Subjoined are a few of the best receipts for cosmetic pastes.

Almond Paste. With yolks of eggs pound four ounces of blanched almonds in a mortar, and when they are in a paste work in three yolks of fresh eggs and a quarter of a pint of new milk; put these over a slow fire, stirring with a spoon, until reduced to a thick paste. Just before it is cold, add a few drops of any essence, and put into pots.

Almond Paste with Lavender. Take a pound of white almond powder, sold by the perfumers, and four ounces of white bitter almond powder, and work them into a paste in a mortar, with lavender water made by infusion, (see Lavender.) The same paste may be made with eau de Cologne.

Oriental Almond Paste. Blanched bitter almonds, twelve ounces; rice flour, seven ounces; bean flour, three ounces; iris powder, one ounce; finely powdered carbonate of potass, four drachms; essence of jessamine, three ounces; neroli, three drops. Pound the almonds, adding a little water, and then add by degrees the rice, bean, and iris powder; dissolve the carbonate of potass in a little rose water and add it also; then work in by degrees the essence of jessamine and the neroli. When the paste is well beaten and perfectly smooth, put into pots; if not sufficiently liquid, add a little rose water.

Almond and Honey Paste. One pound of honey, previously clarified over the fire, one pound of white almond powder, two pounds of olive oil, perfumed with any essential oil, according to taste, and the yolks of six eggs. Pound the almond powder and the honey together; then add by degrees the oil and the yolks of eggs.

Almond Paste a la rose. Six ounces of blanched sweet almonds, and two of bitter almonds; beat these into a paste, then add two ounces of potato powder, four yolks of eggs, and a quarter of a pint of milk; work these well together, put the mixture in a pan over a slow fire, and stir until reduced to a fine thick paste; when nearly cold, add six drops of otto of rose.

Razor Paste. Razor pastes are usually made of emery, finely ground, and mixed up with lard. The following, however, is a much better mode of preparing this article:—Mix one ounce of goldsmiths' rouge with three quarters of an ounce of very finely powdered slate, and as much lard as will make it into a stiff paste.

PASTILLES, for burning. Take two ounces of benzoin, one ounce of storax, one ounce of dry balsam of Peru, one ounce of cascarilla in powder, half an ounce of cloves in powder, one drachm of ambergris, one drachm of neroli, half an ounce of nitre, and a quarter of a pound of charcoal in powder; pound them all together in a mortar, and mix them up into a paste with gum, previously dissolved in water, sufficiently strong to make a compact mass; shape the pastilles, and put

them to dry on paper. Another mode of making pastilles is to substitute myrrh and frankincense for the cascarilla and neroli; but the perfume is not so rich. A very good pastille may be made with charcoal, nitre, storax, benzoin, and cloves, in the above proportions, and a few drops of oil of thyme. The finer essences, such as rose, bergamot, &c., do not answer for pastilles; musk, however, may be added, if the smell of it be not disliked. Pastilles are very useful in sick rooms, as they correct a vitiated atmosphere.

PASTRY. Under this general head of pastry may be included all kinds of puddings, pies, and tarts. Although perfection in the art of making pastry can only be acquired by practice, yet there are some few general remarks which may materially assist the beginner. The greatest nicety is necessary in the preparation of all the materials used, whether for tarts or puddings. Care should be taken that the eggs are fresh, and that they are well beaten with a whisk. The flour should be well dried on a plate in the oven, or before the fire. The cloth in which puddings are boiled should be clean and have no musty smell from lying by; it should be buttered and well floured before the pudding is put into it. It is always desirable to have a marble slab or a large slate to make pastry on. The butter used for pastry should always be of good quality, and should be laid in cold water for some time before using. In France tarts are not made as in England, in dishes, but in standing crusts, with thin strips of the paste placed in bars across the top: preserved fruits or marmalades are generally used for this purpose, though fresh apricots, cherries, and strawberries are also dressed in this way. Before serving, they are covered over with powdered sugar, and glazed with a salamander.

To make Puff Paste. Take equal quantities of flour and butter; rub half the former into about a third of the latter, adding as much cold water as will make it into a stiff paste, and work it until the butter is completely mixed with the flour; roll it up, and beat it with the rolling-pin, which is to be well dusted with flour, and then roll it out to an equal thickness; with the point of a knife put little bits of butter all over it; roll it up, beat it a little, and roll it out again; put some more butter, and roll it as before, repeating the same operation three times, and no more. Dredge the slab and the rolling-pin well with flour, that the paste may not stick to them. The paste should be touched as little as possible with the hands, as it tends to make it heavy.

Crisp Paste for Fruit Tarts. Rub half a pound of butter into a pound and a half of flour; add three table-spoonfuls of powdered loaf sugar and the yolks of four eggs well beaten; work the whole well together with a wooden spoon, and roll it out very thin; bake it in a quick oven. Before serving, powder with finely-powdered sugar.

Rich Short Paste. Take equal quantities of flour, butter, and pounded loaf sugar; rub the butter with the flour, and mix in the sugar, rubbing the whole together till it will roll out to about half an inch in thickness.

Rich Paste for Tarts. To six ounces of powdered lump sugar add, by degrees, ten ounces of fresh butter beaten to a cream, and to these add five eggs beaten very light, a little grated lemon-peel, and some nutmeg; make it into the consistence of paste with some well-dried flour.

Rice Paste. Boil half a pound of good rice in water; when tender, drain it dry, and bruise the rice in a mortar, with a little butter and an egg well beaten; roll it out thin.

Suet Paste. Chop a pound of fresh beef suet very fine, having first cleared it well from the skin; add this to a pound and a half of flour and a teaspoonful of salt; mix it well into a stiff paste, with cold water, beating it out with the rolling-pin three times, as directed for other paste. This paste answers well for any kind of boiled fruit pudding or meat pie, where it is to be eaten hot.

Apple Tarts. Having pared and cored the apples, cut them into small bits; then put into the pie-dish a table-spoonful of brown sugar, a little grated ginger and lemon-peel, then a layer of apples, alternately, until the dish is full; cover the dish with paste as for other tarts, pressing it down all round at the edges, and opening a small hole in the top of the crust with a knife.

Red Currant Tart. Line the inside of the pie-dish with tart paste, and fill the dish up with the fruit, previously well picked and washed; mix about a third part of raspberries with the currants, and sweeten well with brown sugar; place a small teacup reversed in the centre of the dish before you put in the fruit; cover with paste, and bake in a quick oven.

Black Currant Tart. See Red Currant.

Raspberry Tart. Made in the same way as currant tart, but the fruit should not be washed. Although raspberries are often cooked alone, yet they are much better mixed with currants or cherries.

Cherry Tart. Proceed in the same way as for currants: stone the fruit or not, as is preferred.

Rhubarb Tart. This plant is used alone, or mixed with an equal quantity of gooseberries; however used, the peel must be stripped off, and the vegetable be cut into two or three strips, and into pieces about an inch long: sweeten well with brown sugar, and cover with paste.

Gooseberry Tart. When the gooseberries have been trimmed, scald them in boiling water, and then drain them; proceed as for other tarts.

Jelly Tarts. Cover the bottom and edges of a tart-dish with puff paste, and bake it; when baked, cover the paste at the edge of the dish with sugar, and glaze with a salamander; when cold, fill the dish with any kind of jelly. This is the only plan to be adopted with jelly; it cannot be put into the oven, as it would melt.

Apple Tart—(French method.) Scald eight or ten large apples, and when cold mash them with a spoon; then add to them the yolks of four, and the whites of two eggs, and mix the whole well together, adding grated nutmeg and sugar to taste; cover the inside and edges of a tart-dish with puff paste, filling the dish with the marmalade; bake for an hour: before serving, and cover with powdered sugar.

Another way: Take some rennets, cut them in halves, peel them, and take out the cores; cook them in a pan, with a sufficient quantity of sugar, a little water, a piece of cinnamon, and some lemon-peel; when they are well done, and the syrup is reduced in quantity, take them out, and let them stand until they are cold; then line a pie-dish with a rich crust, put in the apples, cover with another crust, glaze with white of egg, and bake in the oven.

Apple Charlotte. Peel and cut fifteen apples into quarters, taking out the cores, then cut each quarter into fine slices, put them into a saucepan, with a quarter of a pound of butter, half a pound of white powdered sugar, and a little cinnamon; they must be cooked over a very quick fire, taking care that they do not turn to marmalade; now take out the cinnamon, and line a copper mould with thin slices of bread dipped in butter, put the apples into the mould upon the bread, and cover them with other thin slices; then bake in an oven; when they have attained a fine colour, turn them into a dish, and send to table. This charlotte, however, is usually eaten cold.

Another way: Peel and cut out the cores of as many apples as may be required, cut them in pieces, adding sugar and powdered cinnamon to taste; boil them to a marmalade; cut some long slices of bread very thin, and arrange round a mould, and pour in the marmalade; cover the top with crumb of bread dipped in butter; place the mould on some hot ashes, covering the top also with hot ashes, or a brasing pan: a quarter of an hour will cook it.

Tartlets. Having made a puff paste, roll it to the thickness of a half-crown; with this paste line some patty-pans, which are to be filled with any kind of sweetmeats, covering them with fine strips of paste; bake for half an hour; when done, cover with sugar, and glaze with a salamander.

Mince Pies. Take three pounds of bloom raisins, stoned and cut small, a pound of orange-peel cut fine, a dozen apples finely minced, half a pound of sweet almonds, pounded in a mortar with a little white wine, a nutmeg grated, half an ounce of Jamaica pepper, two or three cloves, and a little cinnamon pounded, three pounds of beef suet finely minced, and two pounds of brown sugar; mix all these ingredients well together, adding a pint of white wine and two glasses of brandy. The mass must then be packed closely in stone jars for use, covering well with paper. When used, dredge the patty-pans with flour, line them with puff paste, and fill with the meat, cover with paste, and bake in a rather hot oven. A little more wine should be added when the pies are made.

Lemon Mince-Pies. Take as many large lemons as will weigh a pound, and having cut each of them into two, squeeze out the juice, and remove the pulp from the skins; boil them until tender, and pound in a mortar; then add half a pound of pounded sugar, half a pound of currants well washed and dried, and the same weight of beef suet finely minced. Mix all these ingredients well together, and fill the patty-pans as for the other sort of mince

pies. Some citron cut small to be added when used.

Frangipane. Put into a saucepan a pint of fine flour, and beat it up well with a dozen eggs, then add a quart of milk, two ounces of butter, and a little salt; and beat the whole up; put it on the fire, let it boil for ten or twelve minutes, stirring constantly, and taking care to prevent its sticking; then take it off the fire, and beat up with it ten sweet and two bitter almonds blanched, and three or four macaroons, all previously pounded in a mortar, with a little orange flower water, and sufficient loaf sugar to sweeten the whole; stir these well together with a wooden spoon.

Cheese-Cakes To a pound and a half of pounded sugar, add the yolks of nine, and the whites of six, eggs, well beaten, the juice of four lemons, the rind of two grated, and half a pound of fresh butter; put all these ingredients into a saucepan, stirring gently over a slow fire, until of the consistence of honey; pour it into small jars, and when cold, put paper dipped in brandy over. It will keep good for a considerable time.

Lemon Cheese-Cakes. Bruise in a mortar a pound of sweet almonds previously blanched; add to them the grated rind of four lemons, a pound of broken lump sugar, the same weight of melted butter when nearly cold, and the yolks of sixteen and the whites of eight eggs well beaten; mix all the ingredients well together, and put into patty pans lined with puff paste. Bake in a moderately hot oven.

Orange Cheese-Cakes are made in the same manner, substituting oranges for lemons.

Almond Cheese-Cakes. Blanch and pound in a mortar a pound and a half of sweet and twenty bitter almonds, add to them the yolks of twelve and the whites of six eggs, well beaten, a pound and a quarter of pounded loaf sugar, a pound and a half of melted butter nearly cold, a nutmeg, and the peel of two lemons grated, two wine-glassfuls of orange-flower water, and a little brandy. Let all these ingredients be well mixed together, and baked in patty pans, as above.

Cocoa-Nut Cheese-Cakes. Having washed and dried the nut, pare off the rind and grate it; dissolve a quarter of a pound of lump sugar in a little water, then add the nut, and stir it till it boils; when nearly cold, add the yolks of three eggs, well beaten. Mix thoroughly, and bake as above.

Rice Cheese-Cake. To half a pound of ground rice, add an equal weight of pounded loaf sugar, and melted butter, nearly cold; the yolks of eight, and the whites of five eggs, well beaten; a large glass of brandy, a little ratafia, and the peel of a lemon grated. Mix well together, and bake as above.

Maids of Honour, or Pudding Pies. Beat a pound of broken loaf sugar, with the yolks of twelve eggs, in a mortar, some blanched sweet almonds, and a few bitter, and three or four table-spoonfuls of orange-flower water. The almonds must be mixed in the last thing before the patty pans are filled. Bake as above.

Galette. This is a favourite pastry with the working classes in France, and occasionally with the upper orders. Few persons in Paris go to the minor theatres on the Boulevarts without purchasing some galette to eat there between the acts, and it is really amusing to see the pretty grisettes munching away as soon as the act drop has fallen, although their eyes may just previously have been streaming with tears at some affecting passage of a melo-drama. These transitions from mental to bodily sensitiveness, are, however, by no means uncommon in the French, who seldom allow their grief to spoil their appetite. The extent to which the common people in France indulge in galette, may be judged of from the fact, that a man who kept a shop for the sale of it near the Porte St. Martin theatre in Paris, and who had a *renommée* over his contemporaries in the same locality, sold the good-will of his shop, a place about four feet square, for more than two thousand pounds sterling. The twelfth cakes in France are merely galette marked in slices. A bean is placed in one of them, and the person to whose share this falls, is chosen king for the evening, and is expected to do all the honours, and after having chosen his queen, to make a present of champagne wine, or some other luxury, to the party.

Mrs. Rundell, in her Domestic Cookery, gives the following as the recipe for galette, and calls it a Parisian. The English housewife will see that it is neither more nor less than puff paste, made a little more solid than usual: "Take equal quantities of butter and flour, a little salt, and two eggs, (in the commoner sorts of galette, however, no eggs are used, the ingredients are merely flour, butter, and salt,) knead the whole together into a paste, roll it as thin

as a crown piece, (here, again, we must beg to observe that the Paris galette is usually rolled to twice the thickness of a crown piece,) and make it the size of a desert plate, (or much larger) mark it with a knife so as to form diamonds; put it into the oven for a quarter of an hour, take it out, beat up two eggs with a little cream, and some salt, pour it over the cake, and return it to the oven to bake for another quarter of an hour." This recipe of Mrs. Rundell's is for galette of the finer sort. The common galette has only one baking, and is usually taken from the oven two or three minutes before it is quite done, to be glazed—viz., to have a little white of egg, mixed with a very small quantity of sugar, rubbed over it, as is done with a pie crust.

Plum Pudding. To a pound of fresh beef suet, finely minced, add a pound of raisins, stoned and chopped, the same weight of currants, well washed and dried, half a pound of flour, half a pound of grated crumb of bread, the peel of a lemon grated, half a nutmeg, grated, eight eggs well beaten, two ounces of candied lemon and orange peel, half a pound of brown sugar, a glass of brandy, and a teacupful of cream; mix all these ingredients well together, put them into a floured cloth, and boil for seven or eight hours, taking care that it does not stop boiling during that time, and keeping the vessel well filled up with boiling water as it wastes; before serving, strew powdered loaf sugar over it. Serve with it a sauce as follows: half a pint of white wine, four or five table-spoonfuls of powdered sugar, and a piece of butter, stirring it till quite hot. Plain melted butter, sweetened with good brown sugar, may be also used.

Baked Plum Pudding. Scald a French roll in boiling milk, when the bread has become well soaked, drain off what milk remains, and with a silver spoon beat the bread to a pap, to which add a quarter of a pound of well-cleaned currants, a quarter of a pound of melted butter, a little lemon peel and nutmeg, grated, a few blanched sweet almonds, and the yolks of four eggs well beaten, and sweeten to palate; mix all well together, pour into a buttered pie dish, and bake for half an hour. This pudding is better when eaten cold.

Family Plum Pudding. Take a pound of flour, half a pound of beef suet, minced fine, half a pound of well washed currants, the rind of half a lemon, grated, or cut fine, a few bitter almonds grated, a little nutmeg, a pinch of salt, and an ounce of brown sugar; mix all these ingredients well together with four eggs, well beaten, and a little milk; pour into a buttered pie dish, and bake in a moderate oven for an hour. When done, turn it out, and strew it over with powdered lump sugar.

Ribbon Plum Pudding. Make a good suet paste, roll it out to an oblong shape, then cover it pretty thickly with currants well washed and dried, and a little lemon peel grated, and roll up tightly, closing at the ends; tie up in a cloth, put it in boiling water, and boil for an hour; serve with sauce made of melted butter, sugar, and white wine or brandy.

Ribbon Pudding with Preserve. Proceed as above, substituting any kind of jam for the currants. Eat with a little cold butter.

Camp Puddings. Put into a saucepan half a pound of butter, two table-spoonfuls of brown sugar, a little lemon peel, and a pint of water; when it is just on the point of boiling, take it off, and stir in half a pound of well-dried flour, taking care it does not become lumpy, and when cold, mix in six well beaten eggs; pour this mixture into small cups, and bake in a quick oven. A sauce of wine, sugar, and butter, should be served with them.

Macaroni Pudding. Mix any quantity of macaroni in some good milk, in the proportion of a quarter of a pound of the former to a pint of the latter, and when quite tender, sweeten with brown sugar, and add a little more milk, and three eggs well beaten. Bake in a buttered dish in a Dutch oven for three-quarters of an hour.

Vermicelli Pudding. Follow the directions given for macaroni pudding.

Tansy Pudding. Prepare some crumb of bread with boiling milk, as directed for marrow pudding; when it is cold, beat up well the yolks of eight, and the whites of three eggs; pound some tansy with two or three leaves of spinach, and put in as much of the expressed juice as will make the pudding of a good green colour, a glass of brandy, a little grated nutmeg, and six ounces of fresh butter: mix all these ingredients well together, sweeten to taste, and stir it over the fire in a saucepan till it is hot; bake it in a buttered dish for three-quarters of an hour. Strew the top with powdered sugar before serving.

Baked Hasty Pudding. Boil in a quart of good milk, about a quarter of a

pound of flour, until it becomes pretty thick, then put it into a basin with some butter, a little grated nutmeg, and sweeten to taste; when quite cold, mix in six eggs, well beaten; line a dish with thin puff paste, covering the bottom of it with any kind of preserve (not jelly), pour the pudding over it, and bake in a slack oven for three-quarters of an hour.

White Pudding. Boil in a quart of milk, two table-spoonfuls of rose water, to which add three eggs well beaten, three table-spoonfuls of flour, and a little salt; stir it in the milk, and just before it is taken off the fire, put in a small piece of fresh butter; when served, cover the top with currant jelly or preserve.

Oxford Pudding. Wash some rice well in several waters, and tie it up, but not too tightly, in a pudding cloth; put it on in cold water, and let it boil for two hours; mix some well-washed currants with the rice, and eat with sweet sauce, or cold butter and sugar.

Baked Gooseberry Pudding. Scald the fruit, and when quite tender, rub them through a sieve, and sweeten to taste with good brown sugar; then melt a quarter of a pound of butter in some cream, beat the yolks of six, and the whites of three eggs; grate a little lemon peel, and mix the whole well together, adding a little ratafia, and bake in a dish lined with puff paste; grate sugar over it before serving.

Boiled Gooseberry Pudding. Prepare the fruit as above, and having rolled out a light crust to a proper size, lay it on a large basin, pour in the fruit, and tie up and boil in a cloth; when done, cut a small hole in the top, and put in a good-sized piece of butter, and an egg beat up with a little cream; cover down again, and serve hot.

Another way: Take as many gooseberries as may be necessary to fill the dish, and simmer them till tender; rub them through a sieve, and sweeten; melt about four ounces of butter in some cream, and add to them, with the yolks of six, and the whites of four eggs well beaten, and a little grated lemon peel; mix the whole well together, and bake in a dish lined with puff paste.

Ratafia Pudding. Blanch a quarter of a pound of sweet almonds, and pound them in a mortar with a little orange flower water; then add half a pound of ratafia cakes, the yolks of eight, and the whites of three eggs well beaten, a quart of good cream, three glasses of sherry, and three ounces of powdered sugar. Bake in a slow oven for an hour, in a dish lined with puff paste.

Batter Pudding. To twelve large table-spoonfuls of flour, and two quarts of good milk, add twelve eggs, very well beaten, and a little salt; mix well together, and let it stand for two hours, then pour it into a well-floured pudding cloth, or into a mould, and boil for two hours and a half; serve it with a sauce made by dredging a small piece of butter with flour, and melting it with a little water, to which must be added a little wine well sweetened with brown sugar, and the yolks of two or three eggs well beaten. It must be well stirred until quite hot, but must not be allowed to boil. Add a little cinnamon, or any other spice that may be preferred.

Muffin Pudding. Split in halves as many muffins as may be required, and having put into a tin shape a layer of any sort of preserve (not jelly), put over it a layer of the muffin, then another of fruit, and so on alternately, until the shape is full enough; pour over it some warm milk, in which four or five eggs have been previously beaten up; cover the shape, and stand it in a saucepan of boiling water; let it boil in this manner for twenty minutes, then turn it out, and serve with sweet sauce. A French roll may be substituted for the muffins, and it will be better if this pudding be prepared some hours before it is boiled.

German Puffs. Mix two large table-spoonfuls of flour, with a quarter of a pint of cream, two eggs well beaten, a little grated nutmeg, four or five bitter almonds pounded in a mortar, a little ratafia, and an ounce of butter beaten to a cream. Bake these ingredients in small buttered cups for half an hour; turn them out in a dish, and serve immediately with sweet sauce poured over them.

Citron Pudding. Mix well together a quart of good cream, two large spoonfuls of flour, half a pound of powdered loaf sugar, a little nutmeg grated, the yolks of seven eggs well beaten, and half a pound of citron cut very small; add a small glass of ratafia, and bake it in a dish lined with puff paste.

Cheese-Cake Pudding. Boil two laurel leaves, and two sticks of cinnamon, in two quarts of good milk; strain it, and when nearly cold, add twelve eggs well beaten, and four in which three or four table-spoonfuls of flour have been beaten; put the whole into a saucepan, and stir it until it becomes of the consistence of cus-

tard cream; then take it off, and stir into it a half a pound of the best fresh butter, three-quarters of a pound of sugar, the same weight of well-washed currants, and a small nutmeg grated; add a large wine-glassful of brandy, and bake in a dish lined with puff paste.

Cocoa Nut Pudding. Add to the ingredients given for cocoa-nut cheese cakes, the yolk of an egg, and a quarter of a pound of fresh butter, and bake as above.

Orange Pudding. Mix well together the yolks of nine and the whites of five eggs, six table-spoonfuls of orange marmalade, half a pound of lump sugar, and the same weight of melted butter; six table-spoonfuls of grated bread, and half a pint of cream; bake in a dish lined and edged with puff paste. Add a little ratafia or brandy, when put into the dish.

Lemon Pudding. Boil four lemons in water until quite soft, keeping them closely covered the whole time, take out the pips, and pound the lemons to a paste; then add half a pound of loaf sugar, finely powdered, the same weight of fresh butter beaten to a cream, and the yolks of six eggs well beaten; mix these ingredients well together, and bake it in a tin lined with puff paste; before serving, turn it out, and cover the top with grated lump sugar.

Sago Pudding. Wash well, and pick two table-spoonfuls of sago, which boil in about a quart of water, with a little lemon peel, and cinnamon; when it has become rather thick, add as much white wine as may be necessary to flavour it well, and sweeten to the palate; then beat the yolks of five, and the whites of two eggs, and add to the above; mix together, and pour the whole into a pie dish lined with puff paste; bake about twenty minutes.

Tapioca Pudding. Soak three table-spoonfuls of tapioca for an hour in warm water; then strain, and mix it with the yolks of six, and the whites of three eggs, well beaten, three pints of good milk, some grated nutmeg, a bit of lemon peel, and a little white wine; sweeten to taste; bake in a pie dish, well buttered, and lined with puff paste.

Buttermilk Pudding. Turn a quart of new milk with a pint of buttermilk; drain off the whey, and mix with the curd the crumb of a roll grated, a little lemon peel grated, some nutmeg, some rich cream, three ounces of cold melted butter, the yolks of five, and the whites of two eggs; sweeten the whole to taste, and bake with puff paste for about half an hour.

Marrow Pudding. Pour over the crumb of a French roll, three pints of boiling milk; cover it closely for an hour; then add to it a pound of marrow cut into small bits, half a pound of raisins stoned, the same quantity of currants, well washed and dried, twelve eggs well beaten, and a little grated nutmeg and lemon peel; mix well all these ingredients with the bread and milk, sweeten with brown sugar, and bake for half an hour in a slow oven. The dish may be lined or not with puff paste, as approved. A small glass of brandy may be added when the pudding is well mixed.

Arrow-root Pudding. The proportion of arrow-root for this pudding is two large spoonfuls to two quarts of milk. The arrow-root must be first well mixed with a small quantity of milk, and when the remainder of the milk has boiled, add it to the former; when it is nearly cold, add the yolks of three eggs, well beaten, three ounces of powdered sugar, and two ounces of butter, broken into small bits; add a little nutmeg or cinnamon, as the flavour may be approved. When all these ingredients are well mixed, turn it into a buttered dish, and bake for about a quarter of an hour.

Baked Potatoe Pudding. Follow the directions given for carrot pudding; or the following:—Boil any required quantity of potatoes in their skins; when done, but not split, peel and bruise them in a mortar, with about half a pound of butter, the yolks of six, and the whites of three eggs well beaten, a little grated nutmeg, and a small glass of ratafia, or brandy; bake in a dish well buttered, in a slow oven, for about twenty minutes. Before serving, turn it out, and powder it over with white sugar. It may be eaten with sweet sauce.

Boiled Potatoe Pudding. Having boiled two pounds of potatoes, peel and pound them in a mortar with a pound of butter, previously melted for the purpose, the same weight of pounded lump sugar, a quarter of a pound of blanched sweet almonds bruised, a little grated nutmeg, and half a glass of ratafia. Boil in a cloth, or a buttered basin, and serve with sweet sauce.

Carrot Pudding. Take the red part of two or three boiled carrots, and pound in a mortar with some grated bread, some butter melted for the purpose, a sufficient quantity of sugar, a table-spoonful of any sort of marmalade; then add a little grated nutmeg and lemon peel, and four eggs well

beaten; mix the whole well together, and bake in a dish lined with puff paste.

Raspberry Pudding. Take a sufficient quantity of raspberry jam, a little good cream, the yolk of eight eggs well beaten, some sugar, and half a pound of clarified butter; beat the whole well together, and bake in a dish lined with puff paste.

Cheese Pudding. Put into a saucepan half a pound of good grated cheese, with a pint of new milk, five ounces of grated bread crumbs, and two eggs well beaten; stir well, till the cheese is dissolved, and then put it into a buttered dish, and brown it in a Dutch oven, or with a salamander. Serve quite hot.

Egg Pudding. Take the yolks of eight, and the whites of three eggs, well beaten, half a pint of rich cream, half a pound of good brown sugar, a little flour, a little grated nutmeg, and a glass of brandy; mix these ingredients well together, and having melted half a pound of butter, add them to it when it is nearly cold, and put the whole into a dish lined with puff paste, and bake in a slow oven for twenty minutes.

Transparent Pudding. Put into a stewpan a pound of good fresh butter, the same weight of lump sugar well pounded, and ten eggs well beaten; stir it over the fire until it gets pretty thick; then throw it into a basin to cool, and add to it a little grated nutmeg; bake it in a dish lined with puff paste; grate sugar over the top before serving, and glaze with a salamander.

Custard Pudding. Boil in a quart of milk, a bit of cinnamon, lemon peel, and grated nutmeg; when this is nearly cold, strain, and mix with it the yolks of eight, and the whites of four eggs, well beaten; boil in a cloth, or buttered basin, for half an hour; serve with wine sauce.

Bread and Butter Pudding. Lay into the bottom of a mould, well buttered, some thin slices of a French roll buttered, strew over them a layer of well washed currants, until the shape is half filled; then add half a pint of currant wine, or, if not at hand, brandy or rum; let this stand for about an hour, and then pour over it a quart of good milk, adding six eggs well beaten, a little grated nutmeg, and sugar; boil it two hours, and serve with wine sauce.

Bread Pudding. Cut the crumb of a French roll into thin slices, and scald them with a sufficient quantity of boiling milk; when it is cold, mash the bread, and having laid in the bottom of a pudding dish some preserved gooseberries or currants, add the bread; then pour over it some good milk, three well beaten eggs, and a little orange-flower water, and bake for half an hour. Grate nutmeg over the top when served.

Baked Ground Rice Pudding. Take any quantity of ground rice, in the proportion of a quarter of a pound to a pint of milk, and when well mixed, boil it, stirring it all the time; then add a quarter of a pound of butter, (for the same proportion of rice and milk,) and when nearly cold sweeten it to taste, and add the yolks of six and the whites of three eggs, well beaten, a little orange-flower water, a little grated nutmeg, and a small glass of brandy; bake it in a Dutch oven, or brown it with a salamander.

Boiled Ground Rice Pudding. Mix in a quart of good milk and a little orange-flower water, half a pound of rice flour, boil it till thick, then take it off the fire, and mix in half a pound of butter, a little grated nutmeg, a little lemon peel, the yolks of six and the whites of three eggs, well beaten; sweeten to taste with brown sugar, and boil it in a buttered basin thoroughly filled; serve with hot sweet sauce.

Boiled Rice Pudding. Boil half a pound of rice in water, till it is quite soft, then put into a basin, and stir into it four ounces of butter, four ounces of sugar, some nutmeg and lemon peel grated; work the whole well together, adding a pound of grocers' currants, well washed and cleaned; when the whole has been well mixed together, put it into a pudding cloth, and boil for two hours; serve with wine sauce.

Baked Rice Pudding. Wash well a quarter of a pound of rice, and let it simmer over a slow fire in a quart of milk, with a stick of cinnamon, or a few bitter almonds, till the milk begins to thicken; then take it off, and when a little cool stir in a good sized piece of butter, a quarter of a pound of good brown sugar; the yolk of four eggs well beaten, to be poured over the top, when all the other ingredients are well mixed; grate a little nutmeg over the top; bake for twenty minutes in a slow oven.

Cottage Puddings. Having cut up very fine a pound of suet, add to it about a pound of currants, well washed and dried, the same quantity of crumb of bread grated, a little nutmeg, a wine-glass of ratafia, and a little orange flower water;

mix the whole well together, and with ten eggs, well beaten, form into a stiff paste; then rub the hands well with flour, roll the paste into small balls, and fry to a good colour, keeping them briskly moved about in the frying-pan, that they may not burn; when done, serve with sugar strewed over them, and sweet sauce.

Damson Pudding. Make a batter with well beaten eggs, milk, flour, and sugar to taste, and mix in the batter some damsons stoned; boil in a buttered basin for two hours.

Carolina Snow Balls. Boil some rice in milk until quite soft; prepare some large apples as for apple dumplings, and having placed as much of the rice upon a small cloth as will entirely cover the apple like a crust; tie each up closely, and boil for two hours; serve with melted butter and sugar, or with wine sauce.

Suet Pudding. Chop some beef suet very fine, adding to it an equal quantity of flour, and a quarter of its weight of crumb of bread, grated, a little salt, a pint of milk, and six eggs well beaten; mix the whole well together, and boil in a cloth for four or five hours; serve plain, to eat with meat, or with sweet sauce.

Imitation Suet Pudding. Mix half a pint of good cream, half the quantity of milk, three eggs well beaten, three quarters of a pound of flour, a little salt, and a tea-cupful of melted butter, well together, and boil in a buttered basin for two hours.

Yorkshire Pudding. This pudding is usually made to eat with roast beef, and in the county from whence it takes its name, is a never-failing accompaniment to that joint; but it is frequently served and eaten before the meat. To make it, mix together six tablespoonfuls of flour, a little salt, a pint of good milk, and three eggs, well beaten; then put this batter into a shallow tin, well buttered, set it on a gridiron over the fire for a few minutes, and then place it under the beef that is roasting.

Flan. Under the head Galette, we give the recipe for a common, but very favourite kind of pastry in France. Flan is another equally popular preparation. It is made exactly as a Yorkshire pudding is made in England, adding, however, a little sugar, and is baked in an oven without meat over it.

Baked Apple Pudding. Choose some large apples, and when they have been pared and cored, put them into a stewpan with water just sufficient to cover them; when they have become soft, take them out, and beat them smooth, adding as much powdered loaf sugar as they may require, some fresh butter, the juice and peel of a lemon, and the yolks of five or six eggs, well beaten; line a dish with puff paste, put in the apples, and bake for three quarters of an hour. Grate white sugar over the top when served.

Boiled Apple Pudding. Prepare the apples as for apple tart, and place them in a crust in the same manner as directed for beef-steak pudding; when done, cut out a round hole in the top, and put in a piece of fresh butter, and some good moist sugar.

Apple Dumplings. Having pared and scooped out the core of six large apples, put a clove and a little grated lemon peel into each, and enclose them in puff paste; boil them in small pudding cloths, separately, for an hour. Before serving, open the top of each, and put in a small piece of fresh butter, and strew over them a little powdered loaf sugar.

Apple Cake. Peel and core a dozen good apples, and make them into a marmalade with a little lemon peel and cinnamon; when done, pass them through a sieve, and put them into a saucepan with a tablespoonful of potatoe fecula, (see Starch,) half a pound of sugar, and two ounces of butter; evaporate them over the fire, and when quite dry, beat up six eggs, and mix with them, then put the whole in a buttered mould, and bake in a slow oven.

Apple Fritters. Cut some apples into small pieces, and stew them with a little water, sugar, and lemon peel; when quite tender, add a little white wine, the juice of a small lemon, and a small piece of butter; let this cool, and mix to a batter: fry, and serve with powdered sugar over them.

Another way: Make a thick batter, composed of six eggs well beaten, three quarters of a pint of cream, a little yeast, a glass of white wine, half a glass of ratafia, a little orange flower water, and a little grated nutmeg, adding as much flour as may be necessary; peel and core three or four apples, and cut into small thin bits, mix with the batter, which must be then covered over, and stood near the fire for three quarters of an hour; drop the batter into boiling lard, and fry to a good colour. Strew sugar over them when served.

Another way: Having peeled the apples cut them into quarters, and remove the cores, and steep them for two hours in

brandy; drain and dry them in a linen cloth covered with flour; fry to a good colour, and serve, having first covered them with white powdered sugar.

Another way: Pare the apples, scoop out the core, and cut into slices about the thickness of a dollar; let them steep for some time in brandy, and then dip them in a paste made as for Brioche fritters; fry to a good colour, and glaze with sugar and a salamander.

Peach Fritters—are made the same way as apple fritters.

Apricot Fritters. For this article the fruit should not be too ripe. Cut in two as many apricots as you may require, and having taken out the stones, let them soak for an hour in brandy, with a little sugar and the juice of a lemon; drain them, dip them in the batter, and fry to a good colour. Before serving, powder them well with white sugar.

Cream Fritters. Mix a handful of well dried flour with the whites and yolks of two eggs, and the yolks of six, four macaroons, bruised, a little preserved lemon-peel, cut very fine, half a pint of good cream, the same quantity of milk, and a large lump of sugar; let the whole boil over a slow fire for a quarter of an hour, until the cream has become of the consistence of thick paste; cool it on a floured dish, dredging flour over it; when the paste is quite cool, cut it into small pieces, roll them in your hands to a round form, and fry them of a good colour; when served, powder with fine sugar.

Fritters Souffles. Mix a pound of flour, the whites and yolks of eight eggs, a spoonful of best salad oil, and a little salt, well together (the whites of the eggs having been separately well whisked) until it is of the consistence of paste. Make the paste into small balls, the size of a walnut, and fry in oil to a good colour, and serve quite hot, powdered over with sugar. The paste should be made some hours before wanted, as it is lighter.

Brioche Fritters. Take some small brioche cakes (see Brioche Cake), and having cut them in two, take out the middle part, and fill up the vacancy with cream or sweetmeats; then put the parts together, dip them in paste made of flour, a little oil, and white wine, and fry of a good colour. Cover with sugar before serving, and glaze with a salamander.

Blanc-Mange Fritters. Put into a stew-pan half a pound of ground rice, four eggs, a quart of milk, and a quarter of a pound of sugar; let it boil three hours, stirring frequently; when it has become thick, take it off, and add to it a little grated lemon peel, and a little salt. When the whole is well mixed together, spread this cream upon a dish which has been floured, shake some flour over it; and when cold, cut them into bits, and fry in boiling lard, until a good brown colour; put sugar on them, and serve hot.

Gooseberry Fritters. Prepare the batter as before directed; stewing some gooseberries, and mixing with it, instead of the apple.

Almond Fritters. Blanch a pound of sweet almonds; pour over them four table-spoonfuls of orange flower water, and in a short time after a pint and a half of cream; let them stand for two hours and a half, and then pound them to a paste; add the yolks of nine eggs, well beaten, a few Naples biscuits, pounded sugar, to taste, and mix well together; fry in butter to a good colour; serve with powdered sugar over the top.

Currant Fritters without Eggs. Stir into some mild ale, as much flour as will form it into a thick batter, and add to it a little sugar, and some currants; beat up quickly; and drop from a spoon into boiling lard, and fry to a good colour. Powder with sugar when served.

Potatoe Fritters. Pound well in a mortar, a few mealy potatoes, with a little white wine, grated nutmeg, a piece of butter, about the size of an egg, a little sugar; mix this into a paste; roll it out with some flour, cut into small round pieces, and fry to a good colour; serve with sifted sugar over them.

Common Pancake. Mix half a pound of flour with six eggs well beaten, and add by degrees enough good milk to bring it to a proper consistence; drop into boiling lard, and fry to a good colour. When served, pile them up on the dish, with sugar strewed between each. A lemon should always be sent to table with pancakes.

Fine Pancakes. To six table-spoonfuls of flour add twelve eggs well beaten, a tumblerful of white wine, half a pound of melted butter, nearly cold, the same weight of pounded lump sugar, a little grated nutmeg, a quart of cream, and a wineglass of ratafia; mix it well; beat the batter for some time, and pour very thin into the pan. When served, strew over with pounded white sugar.

French Pancakes. Beat in separate basins the yolks and whites of ten eggs mix with the yolks six table-spoonfuls of

pounded white sugar, the same quantity of flour, a pint and a half of good milk, the juice of a lemon, and half the peel grated, and a little orange flower water; add the whites the last thing; fry to a good colour, and serve with grated sugar.

Madras Pancakes. To six eggs, well beaten, add six tablespoonfuls of boiled rice, sugar to taste, a little pounded cinnamon, and a little orange flower water; mix all well together, and fry in butter to a good colour. When served, divide it into quarters, and strew over with pounded lump sugar.

German Pancakes. To the whites of six and the yolks of twelve fresh eggs, well beaten, add, by degrees, three quarters of a pound of powdered white sugar, a quart of good milk, lukewarm, half a pound of melted butter, almost cold, a little good yeast, and a large wineglassful of brandy; mix all these ingredients well together, and stir in as much flour as will bring it to a thick batter; let it stand covered by the side of the fire for half an hour; then roll it out thin, cut into square or oblong pieces, cover them with preserve or marmalade, double them, and after they have stood again for twenty minutes, fry them of a good colour in boiling lard. When served sift sugar over them.

PEACHES. This excellent fruit, according to some authors, was first introduced into Italy from Persia, by the Romans; others say that it was first brought into Gaul by the Phocians, from whence it was afterwards carried into Italy. The ancients attributed many deleterious effects to the peach. Galen himself was of this opinion; but experience has shewn that the only danger to be apprehended from it is when it is taken to excess; the same objection may be raised against any other agreeable fruit. If eaten with sugar and wine, no unpleasant effect is likely to arise. Peaches should be chosen ripe, well coloured, juicy, and of a fine odour. They refresh and gently cool the body; they are very pleasant and wholesome for young people of sanguine and bilious temperaments, but are not so good for elderly persons, whose stomachs are weaker. They are usually eaten with powdered sugar, which adds to their wholesome properties; they are also made into a delicious preserve. The leaves of the peach tree have a strong resemblance to those of the almond, but the colour of the peach blossom is a little redder. The peach tree throws out very few roots, for which reason it does not endure long. It will thrive in any soil, but grows best, and bears the finest fruit, in a warm situation and a sandy land; it will not live in a bleak and exposed position. In clearing and digging the ground in the month of November, care should be taken not to bury any of the fallen leaves at the foot of the tree. A strong bitter would be drawn from the leaves, which would communicate its effects to the fruit. To raise the tree, kernels should be planted in furrowed ground, at two feet distance from each other, so that the plants when fit may be easily transplanted. The plant should be kept well cleared of weeds, and again transplanted in two years. They require to be well watered regularly through the summer. There is no tree that requires such frequent removals as the peach tree; its productiveness being thereby considerably increased. The peach tree should be watered in the evening in warm weather with cold water, sometimes mixing with it a little of the lees of wine, particularly when it appears to wither. In order to preserve the peach tree when there is a danger of its dying, head it down in the way that willows are done, and it will again branch out finer and stronger than before. Peach trees, if not trained against walls, should be propped up with poles, as from the small quantity of roots they throw out, they have not much hold in the ground.

Peaches in Brandy. Take whole peaches, blanch, and peel them, and preserve them as hereafter directed, and put to them as much brandy as syrup; mix the whole well together without boiling. Half a pound of sugar should be put to a pound of fruit.

Preserved Peaches without Brandy. Take some peaches which are nearly ripe, peel them, cut them in two, take out the kernels, and blanch them a little; boil them gently in syrup, and leave them in it till the next day; then take them out and let them drain; now boil the syrup thoroughly, put your fruit into it, and let them simmer for a short time, after which put them into bottles. The quantity of syrup put into the bottles should be about equal to the bulk of the fruit. If they are to be preserved in their green state, they must be peeled, and the kernels taken out, destroying the form of the peach as little as possible. Blanch them over a moderate fire, in plain water; then take them out, and put them into cold water; drain them, and boil them

gently in syrup. After some time, they are to be taken from the fire, and allowed to get cold; and are then boiled again until the syrup becomes very thick; then bottle.

Compote of Peaches. Select those peaches which are the hardest to the touch; peel them, and take out the stones; boil them until they are soft, take them out, and dip them in cold water; put them on again to boil, with some clarified sugar, until no more scum rises; then take them off, and serve hot.

Peach Marmalade. Peel and cut ripe peaches, and put them into an iron pot, with three quarters of a pound of sugar for every pound of fruit, taking care that they do not burn; stir them frequently, and, when nearly done, take the kernels, which have been previously put aside, and blanched, and add them to the marmalade; put into pots, covering the top with white paper, dipped in brandy, and tying over with paper, or thin parchment.

Conserve of Peaches. Make a marmalade as above, but without adding the kernels; dry it carefully upon a hot plate, or in a slack oven; and when nearly dry, mix a quarter of a pound of the marmalade with a pound of very finely pounded sugar; press it into the form of a cake, drying thoroughly, and it will keep for almost any length of time. It cannot be dried too slowly.

Peach Ratafia. Take four quarts of good French white brandy, two quarts of peach juice, and two pounds of powdered sugar; the peaches are to be fully ripe, and of good quality; the kernels are to be taken out, put into a cloth, and pressed by a hand press; the juice from the kernels is to be added to the above mixture; and when the whole has stood together for five or six weeks, in a closely-covered jar, it is to be filtered off, and put into bottles. If it be not convenient to press the kernels, put them in a bottle with some brandy separately, having first chopped them well up, or bruised them; and when the ratafia is decantered, add the brandy in which the kernels have been steeped.

In the United States, where peaches are very abundant, it is usual to make them into brandy, which is said to have a fine flavour.

For the use of peaches in pastry, see Pastry.

PEACOCK. A large bird, of beautiful plumage, which may be domesticated nearly to the same extent as the common fowl, and be fed in the same way. The female does not begin to lay until she is three years old, and then with such secrecy, that it is necessary to watch her, in order to find the eggs. When sitting, she never leaves her nest until pressed by hunger, and returns immediately after she has taken her food. If she be disturbed much while sitting, she will take such fright as either to abandon her eggs or destroy them. The eggs of the pea-hen may sometimes be hatched by a common hen, provided it be of large size. The flesh of this bird, both male and female, was held in high esteem by the ancient Romans and some other nations; but for the last century or two it has been rarely served at table in any country. In France, however, within the last few years, it has been considered fashionable, in large parties, to serve the young of the bird when at the same age as chickens. The flesh of the full-grown peacock is coarse; but the young, if carefully fed, are delicate and agreeable eating. They may be cooked in the same way as turkey.

PEARS. The variety of this fruit is very great, but most of the eating pears are more or less agreeable. They are much less flatulent than apples, and may be eaten even in large quantities by those who could not without inconvenience eat a single apple. The finest pears known in England are the Bonne Chretienne, the Jargognel, and the Bewry; and the finest that are imported are from the island of Jersey. The common Bergamot pear is of delicious flavour. All kinds of pears are more or less astringent in their nature. The best mode of keeping pears for any length of time is to dip the stalk into wax, and hang up the pear by a string. It is also advisable, when it can be done, to gather a small portion of the branch itself with the pear, and to seal it with the stalk. Pears do not suffer from the action of the frost so readily as apples; but if they be frozen, care must be taken not to put them near the fire, for in that case they would lose their flavour, and become rotten. They should, on the contrary, be dipped in cold water and be left for some time. If the temperature be low, a little crust of ice will form round them, which, when the pears are taken out of the water, will gradually disappear, and leave the fruit almost as fresh and sweet as when it was first gathered. The winter pears form a very good dish cooked in various ways. They may be simply peeled, cut into slices, and stewed gently with a little sugar, water, cloves, and cinnamon, adding

a little lemon juice; or they may be stewed in French white wine with similar seasoning; or be baked in an oven in the same way, adding a little port wine to increase the flavour and improve the colour. The addition of a little fresh lemon-peel is also an improvement.

PEAR MARMALADE. Take ripe pears of good quality, and, having peeled them, boil them until they are quite soft; press them through a sieve, and put the marmalade over the fire; when it is become thick, moisten with syrup, and add powdered sugar in such proportion that the whole quantity of sugar employed may be equal to one pound for a pound of fruit. The sugar and fruit are to be made well hot, and stirred frequently, taking care, however, never to pass the state of simmering; when it is thoroughly heated, and of a proper thickness, put it into pots in the usual way.

PEAR JELLY. Peel and cut ripe pears into quarters, and boil them into a marmalade with water; then pass the marmalade through a sieve, so as to have only the juice, and boil it with sugar in equal portions; when it is become sufficiently thick by boiling, put it into glasses and cover over.

PRESERVED PEARS. Blanch ripe pears; then peel and cut them into quarters, taking out the cores; boil them in strong syrup for a short time, and leave them for twelve hours after boiling in the syrup; then take out the pears and drain them, and give the syrup another boil; put the fruit in again, and let it boil for a short time. The quantity of sugar used should be equal to the weight of the fruit.

PRESERVED PEARS IN BRANDY. Take some fine Bewry pears, not too ripe, and put them on the fire in a sufficient quantity of cold water, letting them simmer, but not boil; when they are sufficiently softened to yield readily to the pressure of the finger, take them out, peel them carefully, prick them with a pin, and put them on again in fresh water, with the juice of a lemon; let them boil rapidly, and when they are sufficiently done, so that a pin will pass readily through them without the least resistance, take them out, and put them into cold water. In the meantime have ready some hot thick syrup, and, having well drained the pears, pour it over them. Let them stand for twenty-four hours, and then give them a gentle boil. They are to be again taken out of the syrup and dipped in cold water; after which, hot syrup is to be poured upon them, and having stood three days, they are to have another boil; when cold, take them out, drain them, and put them into bottles; then thicken the syrup by a few boilings, and add an equal quantity of brandy. Filter the liquor through a bag, pour it over the fruit, and tie over the bottles. Any other pear of good quality may be treated in the same way.

PEAS. This is a vegetable in almost universal estimation; but it is nevertheless one in which persons whose digestive powers are not strong must indulge but sparingly; for although very delicate, it comes under the denomination of a "windy" vegetable. Great encouragement is given to the market gardeners near London to produce them very early by forcing, as for peas thus produced and brought to market about Christmas, enormous prices are obtained. There are a great variety of peas; but they may, however, be classed under two general heads—viz., "field pea," and "garden pea." For the former sort, what are cultivated for the common supply of the market, the dwarf kind is generally sown; but many of the dwarf kind are also sown in gardens, as they are very productive, and do not require the troublesome operation of sticking. The favourite kinds of early pea are the Charleton and early Reading, which are sown about the middle of October in a sheltered situation; and, if well protected during the winter, will produce a crop in May. A succession of the early sorts should be sown in January. For the later peas, such as the blue Prussian, the marrowfat, both tall and dwarf, the Spanish dwarf, and the sugar pea. The rows of the larger kinds should be at least four feet asunder; and when the plants are about eight inches high, they should be sticked, varying the length of the sticks to the usual growth of the different kinds of pea. Ground designed for peas should be allowed to remain one year without manuring, and care should be taken in covering the rows that no peas be left on the surface, as the mice would be thereby attracted, and cause great havoc to the crop. The fine flavour of the pea depends essentially upon its being gathered a very short time before it is used. Persons living in large cities, and who therefore can seldom eat peas until they have been gathered fifteen or twenty hours, can never have them so good as those who live in the country. Even where persons have gardens of their own, it is advisable to delay the time of gathering until within an hour or so of

cooking. Of late years, and since the introduction of steamers between Lisbon and England, large quantities of peas have been imported from Portugal and sold in the London market at a very early period of the season, as young English peas. The flavour of these peas, after a voyage of three or four days, is very inferior. Peas are also imported from Russia, and are sold by weight. By a peculiar preparation they are dried in Russia without destroying their colour; and as they can be had at all times of the year, they form a dish for the table when no others can be had; but are rather curious than agreeable. Peas are also preserved in tin cases, (see PRESERVATION OF MEATS AND VEGETABLES;) but they fall infinitely short in flavour of the fresh vegetables. In England, peas in their green state are seldom cooked in more than two ways, either plainly boiled and forming a separate dish, or in soup and stews; but in France, independently of their use in soup and stews, they are cooked in three different ways as a dish for the table—viz., plainly boiled, partially stewed, and with milk and sugar.

TO BOIL PEAS. Shell and wash them, then drain them in a colander, and put them on in boiling water, with a tablespoonful of salt; boil till tender, and serve on a dish on which you have placed a slice of fresh butter. A bunch of parsley or mint is sometimes boiled with them. The saucepan should not be covered while peas are boiling, and they should not be allowed to remain at all in the water when done, as they lose their colour.

STEWED PEAS. Make a light roux and dress the peas in it for a few minutes, moistening from time to time with hot water; then add salt and pepper, two or three onions, a little parsley, and chibols, and chopped lettuce; let them reduce gently until the peas are thoroughly done; and before serving, thicken with the yolks of two or three eggs, taking care that the mixture does not boil after the eggs have been put in, lest it should turn.

PEAS WITH MILK AND SUGAR. Put a quart of very young peas in water, with a piece of butter; boil them; then crush them with the hand, and let them drain in a colander; now put them in a stewpan over a brisk fire, with a little salt, pepper, and sugar, and a small quantity of parsley and chibols; moisten from time to time with boiling water, taking care to shake them frequently; and when they are nearly dry, beat up the yolks of three eggs with some cream, or good milk, and stir it well into the stewpan until it has become sufficiently thick.

TO PRESERVE PEAS. Gather them before sunrise, shell them immediately, and throw them into boiling water; when they have had one good boil, take them off; and when cold, spread them thin over a wire sieve. Place the sieve for six hours over hot wood ashes, or over a very slow charcoal fire, so as to dry them gradually, and then put them into bottles, corking them carefully. Peas in this way, if slowly dried, will keep till winter.

PEPPER. This, although now a very common spice, was at one time so scarce that it was sold at a high rate; and in war, tribute in pepper was frequently exacted instead of money. It came originally from Java, but it is now grown extensively in all the West India islands, and in most hot countries. Peppers are of various kinds, but appear to have nearly the same properties, in modified degrees. Those used chiefly in Europe are the black and white pepper, which grow in berries, like currants, and being dried, are exported to Europe; and the long pepper, which is a collection of small grains united, and forming a single body. The strongest cayenne pepper comes from the East and West Indies, but very strong is also made in Portugal and Spain. There are also various medicinal peppers, such as cubebs, &c., which are extensively used. Domestic pepper appears to be one of the most wholesome, as it is also one of the most useful, spices; but it should be abstained from in all cases where excitement of the system is to be avoided. In ordinary health, however, pepper seems to have the effect of stimulating the stomach gently to the performance of its functions; and in certain cases, it may be taken in very large quantities with great benefit. Cayenne pepper made into pills with bread has been used in indigestion with excellent results, but it is a remedy not to be trifled with. Generally speaking, however, the patient is the best judge as to whether it should be continued. If he does not find any immediate and unpleasant effects from its use, he may increase the dose to any extent, according to his sensations. Cayenne pepper is not one of those things which gives no direct evidence of its action; it either does good immediately, or harm, and must be abandoned, or persevered in according to the

indications which the patient receives. Pepper is used much more extensively in warm than cold countries, and seems there to be essential to keep up the equilibrium of heat between the surface and the interior of the body. The quantity of pepper used in some warm climates would be injurious in the colder parts of Europe. In Portugal, the peasantry sometimes pluck the capsicums from the plant, and eat them, with almost as much relish as an Englishman would have in eating a young cucumber. In Spain, also, the red pepper (powdered capsicum) enters largely into almost every dish. A liquid made from cayenne pepper, and of extraordinary strength, is imported from Jamaica. Pepper forms the basis of an electuary for hemorrhoids, called Ward's Paste.

PEPPERMINT. (See MINT.) This kind of mint is more carminative than common mint. It is used medicinally as tea, in cases of flatulency and indigestion; and as a distilled water. The essential oil is also taken medicinally; one drop on a bit of sugar, two or three times a day; or as a lozenge. Peppermint lozenges are sold by all druggists and confectioners.

PERMANENT INK. There are several modes of making this ink, amongst them are the following: — Dissolve in three ounces and a half of distilled water, or water that has been previously boiled, half an ounce of acetate, and the same quantity of carbonate of manganese. The water should be warm, to facilitate the dissolution. When the mixture is cold, colour it by adding a little gum arabic and indigo, rubbed up in a mortar. Before marking the linen, moisten the part with a mixture composed of fifty-six grains of prussiate of potash, finely powdered, thirty-eight grains of powdered gum arabic, and three drachms of distilled water. The linen is to be dried before it is marked, and, after marking, it is to be moistened with a solution of caustic potash. The liquid must be shaken each time the pen is used.

Another mode: Take chlorurate of platina, and mix with it in a bottle twice its weight of water. Having prepared the linen by a strong solution of gum arabic, subsequently dried, mark the linen with the above mixture; and when the ink is dry, go over the letters again with a weak solution of muriate of tin. This is one of the most indelible marking inks known.

A third mode: Take two ounces of pure concentrated nitrate of manganese, and mix it with two ounces of a strong decoction of nut-gall; add an ounce of common writing ink. Before marking the linen, prepare it in the same way as ordered in the first receipt.

A fourth mode: Rub in a mortar five scruples of nitrate of silver, with one drachm of gum arabic, one scruple of sap green, and one ounce of distilled water, or rain water, or water that has been previously boiled. Distilled water in any case is the best, but water that has been boiled will answer the purpose.

PERRY. A liquor made from the juice of pears. The process is the same as for cider. (See CIDER.) The commonest description of pears is generally used; and in some countries the sorts which do not ripen until after the autumn are preferred; the necessary additional sweetness being given by mixing a sufficient quantity of sugar with the juice before fermentation. The mixed juices of ripe pears and ripe and sweet apples are brewed in some parts of Switzerland, and make an agreeable beverage.

PEWTER, TO CLEAN. Scour with fine sand, water, and melon leaves; rinse in cold water; and polish with fine whiting.

PICKLES. There is great variety in pickles, but the basis of pickles is almost always the same. In nine cases out of ten the first stage is salting, and after that, all the precaution necessary is to use good vinegar. Where the articles are of a white colour, white wine vinegar should be used; but the vinegar made by the London vinegar manufacturers will answer for all ordinary occasions.

ARTICHOKE BOTTOMS AND CHESNUTS. Boil them until quite tender; the skins of the chesnuts are to be first removed by partial boiling in a separate vessel; take them out and drain them, put them into a jar with a small quantity of salt, and pour over vinegar, (cold,) boiled in the same way as for red cabbage.

BARBERRIES may be pickled with vinegar, or be merely preserved in brine. If done with vinegar, lay the bunches in salt and water for twelve hours, then pour over vinegar prepared as for red cabbage. Put into the jar an ounce of salt, three or four pieces of ginger, and a quarter of a pound of loaf sugar, for each quart of vinegar; pour over the vinegar hot. If the barberries are to be kept in salt, bruise a few of them, and add the juice to water in the proportion of one-fourth; then put the

whole barberries into a jar, pour over the liquid, and add sufficient salt to make a very strong brine.

Beet Root. Boil the root until the skin can be removed easily; having removed the skin, cut the root into slices, and put them into salt and water for twelve hours; drain them, put them into a jar, and pour over (cold) white wine vinegar, previously boiled with whole pepper and ginger; for a quart of vinegar, use half an ounce of pepper, and a good-sized piece of white ginger: if the beet root be red, use black pepper; but if white, the contrary. Any other root, such as carrot, parsnip, turnip, &c., may be pickled in the same manner.

To Pickle Cabbages. Shred the inner leaves of good firm red cabbage, sprinkle them plentifully with salt, and let them lie on a sieve for a day; put into the jar, and cover with vinegar which has been boiled with whole black pepper, ginger, and cloves. The proportions are, half an ounce of pepper, a drachm of ginger, and a drachm of cloves, to a quart of vinegar. The quantity of cloves may be increased for those who like the flavour. The vinegar should be poured over cold. Do not, either in this, or in any other receipt for pickling, strain off the spices; they are to be put into the jar with the vinegar.

Capsicums. Pour over them hot white wine vinegar, boiled with mustard-seed and horseradish; or the capsicums may be opened, and filled with mustard-seed and scraped horseradish, and then be sewn up. In this case only pour over plain hot vinegar, which has been well boiled. Nasturtiums may be pickled by pouring over them vinegar boiled with mustard-seed and horseradish.

To Pickle Cauliflower. Having trimmed the cauliflower, put it into salt and water for twelve hours; then put it either whole or in detached parts, according to the size, into a jar, and pour over (cold) white wine vinegar, previously boiled with whole white pepper. In this, as in all other cases, tie over with wet bladder and leather; and whenever the bladder is removed to take out any of the pickle, wet the bladder again, so that it may adhere firmly. The cauliflower is sometimes about half boiled in strong salt and water, before the vinegar is put upon it.

Pickled Eggs. Eggs are sometimes pickled for garnishing dishes; all that is necessary is to boil them hard in water, remove the shells, and then boil them for ten minutes in white wine vinegar and spices; put them into a jar with the vinegar and spices, and some slices of beet root previously boiled in water until the skin can be taken off easily.

To Pickle Gherkins. Gather the cucumbers small and very dry, and lay them in salt and water for five or six days, changing the water once in the time; then drain them very dry, and pour over them hot some good white vinegar, boiled as for cabbage, but with the addition of a little nutmeg; cover the whole with fresh vine or cabbage leaves, and let the jar stand for a day near the fire; then throw away the leaves and strain off the vinegar, and boil it again; pour it over the gherkins and add fresh leaves; this may be repeated a third time, if the colour of the gherkins be not sufficiently green. For domestic uses, all this trouble, however, is useless; the colour of the gherkins may be more green, but their flavour is not at all improved; above all, avoid the plan resorted to by oilmen, who generally prepare this pickle in a brass pan, in order to have a fine colour.

Hot Pickle. Boil a quart of vinegar with two ounces of salt, an ounce of ginger, half an ounce of white pepper, two or three cloves of garlic, three or four capsicums, an ounce of white mustard-seed, an ounce of allspice, and two teaspoonfuls of cayenne. This is not to boil for more than five minutes, and is then to be put into a jar. Cauliflowers, French beans, small gherkins, nasturtiums, asparagus, unripe apples, gooseberries, barberries, currants, and indeed any other fruit or vegetables, may be put into this pickle; but when vegetables are used, it is always advisable to steep them for a few hours in salt and water.

Indian Pickle. Boil in salt and water for a quarter of an hour a cauliflower, two summer cabbages, six heads of celery, a quart of French beans, and two sticks of sliced horseradish; drain and dry in the sun, or by the fire, until very crisp, having first divided the vegetables into small neat pieces; half a pound of garlic is to be put into salt for three days, and dried in the same way; have ready in a jar half a pound of bruised and washed whole ginger, two ounces of bruised mustard-seed, two ounces of turmeric, two ounces of black pepper, a quarter of an ounce of Cayenne pepper and an ounce of allspice; sprinkle these

with salt, and let them stand for a day before the vegetables are added; then put in the vegetables, and pour over them, boiling hot, two quarts of the strongest white wine vinegar.

Lemon Pickle. This is made in various ways; the following is one of the best and most simple:—Slice twelve large lemons, and put them into a jar with a pound of salt; let them lie for twelve hours; then pour over (hot) a gallon of vinegar boiled for a quarter of an hour with an ounce of garlic, (or two ounces of sliced horse-radish,) three ounces of white mustard-seed, half an ounce of whole black pepper, a quarter of an ounce of bruised cloves and nutmeg, three drachms of mace, and two tea-spoonfuls of Cayenne; tie over the jar, and leave it near the fire for a few hours; then take out the whole contents of the jar, and boil for a quarter of an hour; fill the jar again, tie over, and keep in a dry and warm place for at least a fortnight; at the end of which time strain the whole through a fine sieve, and put into bottles for use. A very good lemon pickle for immediate use may be made by taking some liquid from hot pickle, if there be any in the house, and adding to each half-pint the juice of a lemon, and the grated peel; boil for five minutes, and strain.

Lyons Pickle, generally called Yellow Pickle. Take a large cauliflower, two heads of cabbages, and five or six carrots cut into neat pieces, a quart of French beans sliced, a pint of green peas, (if in season,) and three or four ounces of garlic; cover a sieve with a layer of salt, and put them upon it, then sprinkle them with salt plentifully; after lying in this way for three days, divide them into two or three sieves, and place them in the sun to dry for ten or twelve days; put them into a jar with a quarter of a pound of white mustard-seed, or three ounces of the seed, and one ounce of ginger, two ounces of turmeric, and two tea-spoonfuls of Cayenne pepper; a quart of young onions prepared as for pickling may be added; pour over sufficient boiling vinegar to cover them completely, and leave about an inch or two of liquid above the vegetables.

Mushrooms. Take the small button mushrooms, called by many English cooks champignons; cut off the stalks, and wipe them very clean; put them on the fire in cold water, to boil for about four minutes; then throw them into cold water for an hour; boil them again for seven or eight minutes in the same way as at first, and again put them into cold water for an hour; then drain them, and remove any moisture that may remain by wiping them with a soft cloth; put them into a jar with a table-spoonful of salt, and pour over them white wine vinegar (cold) which has been boiled with spices, in the same way as for red cabbage.

To Pickle Young Onions. Peel them, and steep them in strong salt and water for four days, changing the water two or three times; wipe them perfectly dry, and put them into milk which is scalding hot, until the milk becomes cold; now drain them, and dry each separately in a cloth; after which put them into jars; pour over as much white wine vinegar which has been boiled with white pepper as will cover them completely; tie over first with wet bladder, and then with leather, and keep the jars in a dry place for use, a little ginger may be added. Some persons put the onions, without peeling, into cold water, and keep them on the fire until the water boils; then take off the outer skins, and steep them in salt and water before adding the vinegar.

Pickled Walnuts. Gather green walnuts before the inner shell is formed, which may be known by pricking them with a pin; if it goes through easily, they are young enough to pickle. Prick them in several places with a needle or pin, to allow them to imbibe the salt, and put them in strong brine for a fortnight, making fresh salt and water every three days; drain them, and put them in a jar, sprinkle them with salt, and pour over (hot) vinegar boiled as for cabbage; some shalots, garlic, or onion, may be boiled in the vinegar, if the flavour is not disliked. Some persons dry the walnuts in the sun for three or four days, after having left the brine, and before the vinegar is added.

Walnut Pickle. Pound the rinds of ripe walnuts in a mortar with a little salt; then add water by degrees, and continue to pound the whole together; pass the whole through a sieve, so as to get out a strong liquor; boil this with ginger, horse-radish, sweet herbs, white pepper, a few cloves, and salt, for half an hour very slowly; strain and put it into bottle, adding the spice; the trouble of pounding may be avoided by putting the rinds bruised into a tub with a little salt, and sufficient water to cover them, and straining off the liquor at the end of a few days.

PIGEONS. The flesh of young pigeons is very nutritious and easy of digestion; but as they become older, it becomes more heavy, but still forms a nutritive food. Pigeons are at all times suited to every constitution, particularly to those who easily digest what they eat, and who are taking constant exercise; but it is recommended that they should not be eaten too frequently, as they are supposed to have rather stimulating properties.

To Roast Pigeons. Pluck, clean, singe, and truss your pigeons, and roast them for half an hour. If you have any vine leaves at hand, put one on the breast of each; baste them with butter; before taking them up, dredge them with flour, and froth them with butter; have ready some gravy made of a little rich stock, the livers bruised up, a clove, pepper, and salt; pour over them, and serve hot.

To Broil Pigeons Whole. Cut off the wings and neck in such a way as to leave some of the skin to tie, and make a forcemeat of the livers, chopped parsley, butter, salt, pepper, and nutmeg, with the yolk of an egg; tie up the neck and rump, and then broil them gently until they are of a good colour; before serving, rub them over with a bit of butter. A gravy may be made of the giblets, or they may be eaten with butter and parsley.

Broiled Pigeons in the French Way, (*à la crapaudine.*) Split the pigeons at the back, and press them flat, but without breaking the bones too much; let them lie in olive oil, pepper, parsley, chibols, and mushrooms chopped fine, for about three hours; then take them out, cover them with crumbs of bread, and put them on the gridiron, moistening them from time to time with the liquor in which they were steeped; they must be cooked slowly, and be brought to a fine colour. The sauce with which they are to be served is to be made as follows:—Bruise an onion up in a mortar with a little vinegar, and when they are well pounded together, warm them up with a little gravy, salt, and pepper. For steeping the pigeons, butter or fine lard may be used instead of olive oil; but in that case they must be placed near the fire in order to keep the butter liquid.

Larded Pigeons. When they are trussed, cover the breasts with a fine stuffing; cover them over with thin slices of veal and bacon, securing the whole with white paper well buttered. When roasted, serve them with a rich gravy.

To Stew Pigeons. Cut four pigeons into quarters; put them into a stewpan with their giblets, a little butter, and water, lemon peel, chopped parsley, chives, salt, and pepper; stew them until very tender; then thicken the sauce with the yolk of an egg, a little flour, and cream, and butter; stew them for a quarter of an hour longer, and they are ready for use. The yolks of two or three eggs boiled hard, may be stewed with them. If they are to be stewed whole, they must be trussed, and first be fried in butter with a little pepper, salt, nutmeg, and cloves; then put them into a stewpan with a sufficient quantity of rich gravy, to which add a table-spoonful of vinegar, or two or three glasses of French white wine.

Stewed Pigeons with Peas. Take three or four pigeons, according to their size; and having drawn and cleaned them, put them into a stewpan with a good piece of fresh butter, a quart of peas, a little parsley and chibols, a table-spoonful of flour sprinkled over them, and half a pint of water; cook them over a slow fire, until the sauce is nearly all gone; then add a little salt and the yolks of two eggs, beaten up in a breakfast cupful of cream. Let them now remain till the cream has set without boiling, when they will be ready to serve.

The French way: Put the pigeons, opened, into a saucepan with salt, pepper, cloves, and a good sized piece of butter; cook them over a sharp fire for about three quarters of an hour, turning them from time to time. When they are done, take them out, thicken the butter in which they have been cooked with flour, adding a little stock and lemon juice; make the gravy boil, and pour it over the pigeons. Care must be taken to have a sufficient quantity of butter to cover them while cooking.

Wood Pigeons. The pigeon in its wild state. The flavour of the wood pigeon is by many persons considered finer than that of the domestic bird. It may be cooked according to any of the modes given under the head of Pigeons.

PINE APPLE. A fruit of exquisite flavour, which grows wild in tropical climates, and is forced in our hot houses at home. It is always eaten uncooked, except as marmalade, jam, &c., for which it may be prepared in the same way as other fruits: it is frequently cut into slices and infused in rum, shrub, and other liquids, to give them flavour. This fruit has no marked medicinal qualities.

PLUMS. All plums are more or less unwholesome; for they either bring on diarrhœa or create flatulency. The most wholesome of the plum tribe is the green gage, which is a fruit of delicious flavour. Plums of every kind may be made into marmalade, or be preserved in sugar or brandy in the same way as apricots, peaches, or apples, (see Apricots, Peaches, and Apples;) but it is advisable, before they are put into the syrup to boil, to remove their skins, which may be effected by boiling them first in plain water, until they rise to the top, when they are taken out and skinned. Plums also make an excellent ratafia, by crushing them, having first removed the stones, and putting the expressed juice into a stone bottle, with two-thirds of its bulk of brandy, and a pound of sugar to four quarts of liquid, adding a little cinnamon or cloves. When the bottle has stood for six weeks, the liquor is to be poured carefully off and put into glass bottles. In the south of France, particularly in the neighbourhood of Tours, plums are dried either in slow ovens, or in the sun, if the weather be very hot, and crushed flat, and are packed for exportation. When dried, they are called pruneaux instead of prunes, their name in the natural state. These dried plums, when dressed by stewing them very gently in a small quantity of water or wine, a little sugar, and some fresh lemon peel, are used by all classes, but particularly by the middle and lower orders, for they are too cheap a dish for the tables of the luxurious, who sometimes think they degrade themselves by offering what is cheap to their guests. When stewed in this way, for which no other attention is necessary than allowing them time to swell, they are called compote de pruneaux. They lose all their bad properties by drying and cooking; and if they be at all laxative in this way, they are not unpleasantly so, and the fixed air being expelled by drying, they are not flatulent; on account, however, of the quantity of saccharine matter that they contain, they must not be eaten to excess by persons who do not take a great deal of exercise, as they would cloy the stomach and impede digestion. The Tours plums are for the greater part sufficiently sweet to be dried without the addition of sugar, but sugar is added to those which are not sufficiently sweet of their own nature. Very good dried plums are sold in Paris at eight sous per pound, and half a pound, when made into compote, is sufficient as a dessert for eight or ten persons.

POISONS. In a work of domestic economy, it is necessary to say something of the antidotes to be employed in cases of poison by accident, from any of those substances which are occasionally used in household purposes, and particularly from verdigris.

Arsenic. The most effectual antidote for this poison has hitherto been the hydro-sulphuric acid, administered in the first instance, by which the arsenic is converted into sulphuret of yellow arsenic, which is less poisonous than the arsenic in its primitive state, and then using lime water, by which the poison is converted into an insoluble inert substance. Recently, however, Dr. Puchelt, of Berlin, has stated that he found the hydrated peroxide of iron an effectual remedy for poisoning by arsenic, and relates several cases, one of which is that of an entire family poisoned by mistaking for flour some arsenic which had been kept for destroying rats, in proof of his statement. He administers this remedy in the quantity of a table-spoonful for a grown person, and repeats the dose, if necessary, until the patient is cured. In some of the cases, the peroxide of iron was not administered until six hours after the accident, and notwithstanding this lapse of time, was found to be a complete antidote.

Potass, or other Alkaline Poisons. Administer immediately, water strongly acidulated with lemon juice, or vinegar. Each tumbler of water should contain two table-spoonfuls of vinegar, or the juice of a lemon. If neither of these can be had at the moment, endeavour to induce vomiting, by making the patient swallow a large quantity of warm water, containing a little salt; but be careful not to administer either tartar emetic, ipecacuanha, or any other irritating substance. Leave the further treatment to medical assistance.

Sulphuric, Nitric, or Muriatic Acids. The best antidote is calcined magnesia. Mix an ounce of magnesia with a quart of water, and administer every two minutes a tumblerful of this liquid, to bring on vomiting, and prevent the further action of the poison. Where magnesia is not at hand, dissolve half an ounce of soap in a quart of water, and use it in the same way. Neither potass nor soda must be employed, as they are of too irritating a nature.

Verdigris. The best antidote is the white of egg, given immediately, in large

quantities; in the meantime, medical aid must be called in, and the usual remedies be adopted.

POMATUM. A greasy substance, made from suet, perfumed or medicated. The process of making pomatum is tedious. as the fat must be thoroughly cleansed, to prevent rancidity, which would soon overpower the perfume. The mode of proceeding is as follows:—Take any quantity of beef or mutton suet, separate the membraneous parts, and cut the suet into small pieces, which are first to be washed in several waters; then pound the suet in a mortar, and drain off any moisture which may remain in it. When it has been reduced by long beating into a fine paste, melt it in a stewpan, and skim repeatedly, stirring well the whole time; when the scum has all risen, turn it out through a fine sieve, and let it get cold. Lay it by for use in a very cold situation.

Pomatum a le Rose. Take some of the fat prepared as above, and put it into the water bath, (see Water Bath,) or if you have none, into a jar, which is to stand in a saucepan containing water, and melt it; then add an equal weight of freshly gathered fose leaves, (all flowers must be gathered very dry, and when the sun is not upon them,) and leave the whole to simmer for four hours; then strain through a sieve, and pass the leaves through a press, or wring them in a cloth, to get out all the grease. Put the pomatum into a cold place, and a few days afterwards melt it again at a very slow heat, and pour it into pots. The same process is to be observed with all other flowers. A much more rapid way of making perfumed pomatums, is to melt the prepared suet, and just before it begins to get so cold as to set, and not before, otherwise the perfumes would be injured by heat, stir in a few drops of the essential oil, or essence, of any flowers, as otto of roses, oil of lavender, bergamot, &c.; but prepared in this way, there is not quite so delicate a perfume. If the pomatum is to be medicated by the addition of any drug, it is to be done in melting the grease, allowing it to remain sufficiently long in the water bath to extract all the virtues, then straining through a fine sieve, and allowing the pomatum to stand a few days before it is melted a second time. The colouring matter is to be introduced in the same way as the drugs, if it be in a solid state; but if in powder, it may be stirred in a few minutes before taking the melted fat from the fire The quantity of essence or essential oil to be used, may be ascertained by the smell; stir a little in it at a time, and continue until all the odour required is given to the mass.

Clove Pomatum. Melt two pounds of prepared suet, half beef and half mutton, and when it is beginning to melt, stir in half an ounce of oil of cloves, proceed as above stated, taking care in this, as in all cases where the pomatum is perfumed by essential oils or essences, that the second melting is performed by a very gentle heat.

Vanilla Pomatum. In this case, take two pounds of prepared fat, half of pork, (the fat from pork may be made by washing very fresh lard in several waters, and purifying it afterwards by heat and skimming, as for beef and mutton suet,) and the remainder of equal parts of beef and mutton; whilst the fat is hot, stir in one ounce of vanilla, in powder, and just as the fat is getting cool, an ounce of the essence of vanilla, which is made by infusing vanilla in spirits of wine, in such quantity as to give a high perfume. To give additional colour to this pomatum, some very finely powdered chocolate may be stirred in just before the fat is taken off and strained.

Pommade au Bouquet. Mix equal quantities of rose, jessamine, and orange pomatum, (all made as recommended in the first receipt,) mix them well, and melt them in the water bath, stirring well. This pomatum may be put into pots at once, without a second melting, as the pomatums had already been prepared, and it is to remain in the water bath only a sufficient time to melt.

Pommade a la Marechale. Take a pound and a half of prepared fat, of beef and mutton in equal quantities, and proceed as in the first receipt; whilst it is warm, stir in one ounce of powdered cloves (sifted), two grains of amber, two grains of musk, and a quarter of a drachm of neroli. Do not strain or melt a second time, but put into pots at once.

Pommade au Pot Pourri. The same quantity of prepared fat, of which one-third pork; proceed as above, and stir in half an ounce of bergamot, a quarter of an ounce of balsam of Peru, a drachm of neroli, and four grains of amber; have ready two ounces of each of jessamine, jonquille, and tuberose pomatum, previously melted, and stir up the whole together. Put into pots at once.

The above general instructions for pomatum making will dispense with the

necessity of giving further receipts for perfumed pomatums for the hair. By changing the perfumes, and their quantities, any varieties may be made. Neither will it be necessary to say much about medicated pomatums, which, for the greater part, are sold by druggists, in the forms of salves and ointments. In Paris, where the finest pomatums are made, [the above receipts have all been supplied by one of the first pomatum makers of the French capital,] all salves are also called *Pommades;* but as salves do not fall within the scope of this dictionary, only two or three celebrated receipts of medicated pomatums connected with the toilet will be added.

Pomatum to restore the growth of the Hair. Melt half a pound of prepared beef fat, and half a pound of genuine bears' grease, with one ounce of virgin wax, and two ounces of olive oil. Keep them in the water bath for two hours, with a muslin bag, containing one ounce of bruised cloves, half an ounce of cinnamon, two bruised tonquin beans, and four grains of musk; let the bag in which the spices &c. are contained be large enough to allow them to swell. Strain, and put into pots. Colour may be given by putting a little carmine into the bag. This pomatum is in high repute on the Continent, under the name of the Sultana Pomatum. Dr. Bonnetti recommends that before using it the bald or thinly covered parts of the head should be washed several times with the following preparation:—Boil an ounce of cloves in a quart of water for an hour; strain and filter; put into this when cold, one ounce of quick lime, and having shaken it up, let it settle, then decant carefully. This stimulant, which is perfectly safe, is said to have an extraordinary effect in restoring vitality; and if the hair be washed with it, it is made strong, and does not fall off.

Cucumber Pomatum. For the skin, said to have been used by the celebrated Ninon de l'Enclos. Melt two pounds of prepared lard, with three large cucumbers, peeled, and cut into small pieces; let these remain in the water bath for three or four hours; then strain and press the cucumbers, adding what comes from them to the other fat; put by to cool, and three days afterwards reduce again to a liquid, by gradual heat; set by to cool, and repeat this once more; the third time, just before the fat cools, stir in some neroli, sufficient to give a fine perfume.

Pomatum for the Lips. Take of sweet oil of almonds, eight ounces; virgin wax, three ounces; orcanette root, bruised, two ounces; put them in the water bath for one hour, then strain through a fine sieve, and beat it up in a mortar with six drops of essence of rose. Put into pots.

POMEGRANATE. A fruit common to most southern countries, about the size of an orange, but with a hard shell. The juice of the pomegranate has a very pleasant flavour, between acid and sweet, and is used, diluted with water, as a refreshing beverage. The grated rind of the pomegranate is said to have been found a sovereign remedy for diarrhœa and dysentery, when all other things have failed.

PORK. This is a very firm and close fibred meat, and is found to be highly nutritious with persons who digest it freely, but is only suited to those who take a great deal of exercise. Pork is a very useful meat in domestic economy, from the various ways in which it can be prepared for use by salting. For delicate roasting pork, the animal when killed should not weigh above five to six score. Dairy fed pork is considered the best; but all pork should be, for a certain time before killing, confined to the sty, and fed with barley meal and milk, in order to fatten and whiten the meat. Until within the last month of keeping, pork is not injured by the pigs being fed freely on vegetables. The parts mostly used for roasting are, the leg, the sparerib, and the loin. The usual time allowed for roasting meat must not be considered to apply to pork, as a leg of seven or eight pounds weight will require at least two hours and a half to roast. Pork is a meat that must be well dressed, as if underdone, it is neither agreeable nor wholesome. The consumption of pork, both in its fresh and its salted state, is much more considerable on the Continent than in England; partly from the quantity of the latter which is used for larding roast meats and poultry, and from the circumstance of the former being considered equally good in all seasons of the year, whereas in England it is seldom eaten in its fresh state during the summer months. There is no reason to believe that the flesh of the pig is of itself less wholesome in summer than in winter; but as it is a meat more difficult of digestion than any other, the English do well to eat but little of it at a time when the system is necessarily languid, and is more liable to become heated by the use of strong food.

To Roast a Leg of Pork. Score the rind, and stuff the knuckle with a stuffing

composed of two onions, shred very fine, about one dozen sage leaves, chopped up, crumbs of bread, and pepper and salt; allow from twenty to twenty-five minutes to every pound of meat, before a good fire; baste with its own fat; serve apple sauce in a tureen. A loin of pork, or a spareribs, is dressed in the same way.

To Boil a Leg of Pork. Having salted the leg previously, for about eight days, put it into warm, but not hot water, and let it boil; when the water boils, allow a quarter of an hour for each pound of meat. A shoulder of pork, or the hand, is boiled in the same way. Serve with pease pudding and young cabbages.

To Bake a Ham. Make a thick paste of coarse flour and water, and cover the ham with it, having previously soaked the meat for six or eight hours in cold water; bake in a slow oven; when cooked, remove the paste, and also the rind of the ham, after which cover the ham with raspings.

To Boil a Ham. Soak it as for baking, and put it into cold water; when the water begins to simmer, let it cook gently until it is done; allow about twenty minutes to each pound; when cooked, take off the skin, and cover with raspings. On the Continent, ham is considered to be unwholesome if not cooked for, at least, half an hour to each pound; the flavour, however, is injured by this mode of cooking.

To Roast Sucking Pig. This is a very delicate and highly esteemed dish. The following mode of proceeding is extracted from Mrs. Dalgairn's *Practice of Cookery*:—"To kill the pig, stick it just above the breast bone, running the knife into the heart; plunge it for a minute or two into cold water; rub it over with finely powdered resin, then dip into a pail of scalding water, take it out, and rub off all the hair as quickly as possible; if it should not all come off, repeat the scalding and rubbing with resin; when quite clean, wash it in warm, and frequently in cold water; cut off the feet at the first joint, take out all the entrails, and put the pettitoes, heart, and lights together; wash the pig well in cold water, and dry it thoroughly; make a stuffing of grated bread, butter, a small onion, and three or four sage leaves minced; season it with pepper and salt, put it inside the pig, and sew it up. The pig being perfectly dry, rub it over with the white of an egg well beaten; put it down to roast before a very quick fire, and under it a small basin to catch the gravy; do not flour it, and be sure to cover it well with the egg, which will crisp it nicely, and make it of a delicate light brown; it will take from one to two hours to roast. When done, cut off the head, part it and the body down the middle; mix with the chopped brains a little finely minced boiled sage, and some melted butter, add to it the gravy that has run from the pig; lay the pig on the dish, placing the shoulder of the one side to the hind quarter of the other. Observe, in roasting the pig, to skewer the legs back, so that the under part may be crisp. A pig prepared as above may be baked."

To Stew Ham. Having soaked a small ham for about three hours in cold water, boil it slowly the usual length of time; now trim it, and put it into a stewpan, with some slices of veal at the bottom, and a fowl cut up, if desired, round the sides, with carrots, and parsley, and a few parsnips, some black pepper, salt, and two or three bay leaves; put in a pint of French wine, with a teacupful of some rich gravy, and a bottle of sherry, or Madeira; let the ham simmer very gently for about three hours, then take it up, and serve with its own sauce, the fat having been previously well skimmed off. This mode of cooking a ham, with veal, or fowl, or both, may be adopted for travelling, made into a pie; when the meat has been stewed in this manner, take out all the bones, and cut the meat; have ready a crust made round and thick, with not too much butter, and lay the meat in it in alternate layers of ham, veal, and fowl; then put on the top, and bake; in order to have greater regularity of shape, the pie may be put in a well buttered mould for baking.

Ham and Eggs. Cut the ham into thin slices, and broil them; then having fried some eggs in butter, lay an egg on each slice of ham, and serve.

Ham Toast. Mix with some lean ham grated, the yolk of an egg beaten up, and some pepper; put some clarified butter into a frying-pan, and fry some slices of bread, which are to be placed before the fire afterwards to drain; now fry the ham mixture, cover the slices of bread with it, and serve.

Pork Pies. Having prepared a raised crust, cut into short steaks a loin or a neck of pork, removing the rind and part of the fat, beat them well with a rolling-pin, and season highly with pepper and salt; if to be eaten hot, take off the little ball from the middle of the crust, and pour in before serving some hot white

gravy, with a little white wine and a dash of vinegar.

To Dress Pettitoes. Parboil them with the liver, heart, and lights; mince the liver, heart, and lights; simmer in some gravy, or a little of the water in which they were parboiled, with a bit of butter mixed with flour, seasoning with pepper and salt, and two minced sage leaves; having split the feet in two, add them, and when tender, mix in a tea-spoonful of vinegar, or a little lemon juice; serve the mince with the pettitoes on it, and garnish with sippets of bread.

Pig's Kidneys and Skirts. Having cleaned them very carefully, cut the kidneys across, and the skirt into square pieces; fry in butter or dripping; brown a small piece of butter with a little flour, and a minced onion, and some boiling water, some pepper, salt, and catsup; put in the meat, and stew until tender.

To Stew Pig's Feet. Clean the feet well, and boil them until tender; then brown some butter in a stewpan with flour, and add water enough to cover the feet when cut in two; season with minced onion, salt, pepper, and sage leaves; put in the feet, and stew very quietly for half an hour; just before serving, add half a table-spoonful of vinegar, and take out the sage leaves; pig's feet, and also the head, are sometimes served and eaten cold; to do this, follow the same instructions as for sousing fish, taking care that the feet or head be first boiled very tender.

Pig's Cheek Collared. Lay two pigs' cheeks, with the tongue, in a dish, and strew it well over with salt and saltpetre; let them stand for six days, and then boil them until the bones can be readily separated from the meat. Have ready a long strip of strong linen cloth, on which place the cheek, with the skin outwards, and on it the tongue, seasoning the whole highly with Cayenne pepper, cloves, a very little mace, and salt; roll it up firmly, and boil it for two hours; when done, set it under a heavy weight until cold, when the cloth must be removed. A cow-heel may be boiled, boned, and rolled up with it.

To Make Brawn. Having divided the head down the middle, remove the brains, and cut off the ears, then let the head lie in cold water for twelve hours; boil it until the bones can be readily taken out, and when done, take off the skin as entire as possible; while the meat and the tongue are hot, chop them rather fine, and season with pepper, salt, a little nutmeg, two or three cloves, and some Cayenne; then place part of the skin at the bottom of a pan, lay on it the chopped meat, and put the rest of the skin over the top, place it under a heavy weight, and let it remain until quite cold; part of the liquor in which the head has been dressed must be boiled up with vinegar and salt, and thrown over the head. It is eaten with vinegar and mustard.

To Make Sausages. Take three pounds of lean pork, and two of the inward fat of the pig, and a slice of crumb of bread; chop the whole together very fine, and season with Cayenne and whole pepper, salt, grated nutmeg, lemon-thyme, and some fine herbs dried and rubbed to powder; mix the whole well together, and fill the skins half full; boil then half an hour. The larger skins are improved by putting in the chimney and smoking.

To Salt Pork. Generally speaking, there is little difference between the mode of salting pork and other butcher's meat, but it may be remarked that the shorter the time of salting, so that the salt penetrates sufficiently to keep pork from turning, the better will be the meat. A fore or hind leg, or any other part of the pig, will be sufficiently salted for boiling in eight or ten days, and it will not be necessary for this purpose that it should lie in brine; it must be rubbed with salt on both sides once a day; if the time of salting exceeds ten days, it may be necessary to soak the joint in cold water before it is used. Pork that is intended to be kept in store, must lie in strong brine the same as beef.

To Cure Hams. There are at least twenty modes of curing hams, but they differ merely as to the flavour which is to be communicated by the ingredients employed, and the length of time for salting. One of the simplest and best modes is to rub the ham twice a day for three days, with a mixture (supposing the ham to weigh eight pounds), of half a pound of bay salt, half a pound of common salt, two ounces of saltpetre, and two ounces of coarse brown sugar; let the ham lie in this mixture for three weeks, and after the first three days turn and rub it daily. Marle is sometimes substituted for sugar, and an ounce of black pepper is added, as also the juice of two or three heads of garlic, mixed with the salt; but, generally speaking, the more plainly a ham is cured, the more delicate will be its flavour. The Bayonne hams, which have so high a repute throughout Europe, are for the most

part cured in this plain way; many persons put their legs of pork into a brine made by boiling a quart of strong stale beer with a pound of bay salt, an ounce and a half of black pepper, two ounces of saltpetre, and three ounces of sugar; this is poured boiling hot over the ham, and it is rubbed twice or three times a day with the brine for a fortnight; the usual period for smoking a ham, where wood is used, is a fortnight, but if dried in the kitchen they require a longer time, and should be wiped daily with a coarse cloth. Hams in imitation of the Westphalia are cured as follows: rub with an ounce of saltpetre, and two ounces of coarse sugar, twice a day for two days, then boil in a quart of strong beer (stale), a pound of bay salt, a pound of common salt, two or three bay-leaves, a quarter of an ounce of juniper berries, half a pound of coarse sugar, an ounce of black pepper, and half an ounce of cloves; this mixture is to be poured boiling hot over the ham, which is to be rubbed and turned twice a day for a fortnight or three weeks: if it is to be kept a very long time before using, it should be smoked for a fortnight, and a little green wood should be occasionally used for the smoking. The ingredients above mentioned are sufficient for a ham of from twelve to eighteen pounds. The saltpetre in every case should be pounded. If a ham, no matter what the process of curing may be, has remained more than a fortnight in salt, and is to be eaten soon, it should be soaked in cold water for about twenty-four hours before smoking or drying; the best way of packing hams for storing is to put them in layers of very sweet dry hay, or in malt dust. Pigs' cheeks and tongues may be salted and cured in the same manner as hams.

To Cure Bacon. Bacon may be cured with or without the addition of sugar, but it is generally preferred if cured with sugar. For the side of a good-sized pig use a pound and a quarter of common salt, two ounces of rock salt pounded, two ounces of saltpetre, and a pound of brown sugar; rub the mixture well in on both sides, and let the pork lie in salt for rather more than a fortnight, turning and rubbing twice a day; about thirty-six hours' smoking will generally be sufficient, if the bacon is not to be kept a very long time; but if intended for long store, it should be smoked for four or five days. In packing bacon, use fresh and good hay between each side.

Bacon for Larding. Take the thick fat from a side of pork, and rub it well with salt on both sides, allowing about three-quarters of an ounce of salt to each pound; pile the different pieces on a board, in a cellar or other cool place, and put a board over the top, which is to be covered with a heavy weight. In about a fortnight hang it up to become dry.

Various Preparations of Pork peculiar to a French Charcutier. The following receipts are selected from the Cuisinier Royal, the Encyclopédie Domestique, M. Carémes Work, M. Donnet's Dictionary de la Cuisine, &c. The French have long had a high reputation for their mode of preparing these articles:

Pressed Bacon. Rub a side of fat pork with salt, in the proportion of a pound of salt to ten pounds of meat; cut the side into pieces of about eight inches square, and pile them on each other, placing a layer of salt between each; these pieces are to be placed thus piled between two boards, and a heavy weight is to be put on the upper board; when the pork has been in this state for twenty-five days in a cold situation, hang the pieces in a dry and airy situation; they may be smoked, if they are intended for store, and in salting, half an ounce of saltpetre may be added to each pound of salt.

Brawn. Having cleaned a large pig's head thoroughly, and rubbed it with salt, boil it until the bones can be removed with ease; season with salt and pepper, and lay the meat in a mould whilst it is hot, press this down with a board and heavy weight, and let it remain in a cool place for six hours; then boil for about an hour, covering the mould with the liquor in which the head was first boiled; press again after this boiling; the flavour is very much improved by adding in layers, when the mould is filled, some salted and boiled tongue in thin slices. A sucking pig may be collared in the same way.

Wild Boar's or Pig's Head Collared. Remove the bones carefully, without injuring the skin, and put into the space fat bacon and chopped truffles, mixed with salt, whole pepper, allspice, and chopped parsley, chibols, and sage; cut up its tongue, a calf's tongue, some fleed, or inner fat of the pig, fat bacon, and the brains in slips, all well seasoned. Arrange this in the head with the seasoning in layers, so that when cut it may be well marbled; after having given to the head as much as possible of its primitive form, sew it up, and wrap it in a clean cloth; then put it in a brasing pan with

the bruised bones, sweet herbs, sage, thyme, bay leaf, parsley, chibols, salt, pepper, and a few cloves; cover the head with water mixed with a bottle of wine, and let it cook gently for eight or nine hours; when sufficiently cool to bear the hand, press the head so as to get out the superfluous liquid, and when cold, garnish it in the usual way, and cover it with fine raspings.

Petit Sale. This is pork a little streaked with fat, intended to be eaten after a few days' salting; the pieces are put into the brine pan with a cloth, and a board and a heavy weight upon them, and are allowed to remain in this state only five or six days; cabbage or sour krout is frequently served with the *petit salé*.

Fromage de Cochon, (Pork cheese.) Take out the bones from a pig's head without cutting the skin, remove the flesh, separate the fat from the lean, and cut the whole in slips; do the same with the ears, and season the whole with salt, pepper, powdered nutmeg, and other spices, thyme, bay leaves, sage, and parsley, all chopped fine, the grated rind of a lemon, and its juice. Put the skin of the head in a salad bowl, and arrange in it the lean and fat of the meat in alternate layers, as also two or three pigs' tongues cut up in the same way, with a little of the inner fat of the pig and some sliced truffles, if you have any; when all the meat is used, fold over the skin and sew it up, removing any superfluous part. Put this preparation into a stewpan of little more than its own size, with carrots, sweet herbs, salt, and pepper, and moisten with a little white (French) wine; simmer very gently for six or seven hours; take it off the fire, and when merely warm put the head into a mould of the shape of a cheese, and so that a part of the head may be above the mould, and put a board over it covered with weights. This cheese is always eaten cold, with mustard and vinegar. Pork cheese is also made with the ears and tongues alone; one layer of the ears cut into strips, and one layer of the tongues, seasoned as above, and piled together in a mould, to be pressed down in the same way as the head. The mode of proceeding is altogether the same as for the head, with the exception of enclosing in a skin.

Italian Pork Cheese. Mince and pound a pig's liver; do the same, but separately, with a quantity of the inner fat of pork, equal in weight to that of the liver; mix them together and season with salt, pepper, nutmeg, coriander, chopped parsley, thyme, and sage; cover the bottom and line the sides of a tin saucepan or shape with thin slices of larding, fill the mould and cover with larding; bake in an oven; when quite cold, dip the mould in boiling water and shake out the cheese.

Dried Tongues, (*Langues Fourrées.*) Clean and trim either ox, calves,' pigs', or sheep's tongues; blanch them for a quarter of an hour in boiling water, take off the outer skin, and put them into a pickling pan packed as closely as possible; strew over them a quantity of salt, and one-sixth of its weight of saltpetre, and some sweet herbs coarsely chopped; put in another layer of tongues, and salt, and herbs, in the same way, and so on according to the quantity of tongues to be prepared; put on the top layer a board, and on that some heavy stones or other weights. At the end of ten days, take them out of the brine, put them to dry, and enclose each tongue in calf or pig gut, carefully cleaned and tied at each end. If intended for smoking, hang them in a chimney in wood smoke.

Pig's Feet a la Sainte Menehould. Clean the feet well, split them, and then tie the two halves together with string; stew them gently with carrots, onions, parsley, chibols, salt, pepper, and equal quantities of white French wine and water; when very tender, take them out and let them get cold; then rub them with yolk of egg, and sprinkle them with fine raspings, having first removed the string by which the halves are bound together; they are to be boiled over a clear fire. They form in this way a very delicate and nutritious dish, and rarely disagree, if they have been carefully cleaned, with any stomach. The wine, in stewing, may be omitted.

Pig's Feet stuffed with Truffles. The feet are first stewed as above; the bones are then carefully removed, and the spaces filled up with a stuffing prepared as follows:—Mince some cold fowl and put it on the fire with crumbs of bread and good stock, some minced truffles, pepper and salt; when the crumbs of bread have nearly drank up all the gravy, add the yolks of three or four eggs and a little cream, and stir well until the whole is nearly dry. Having filled the feet with this stuffing, tie over some thin skin to keep it in, cover the feet with yolks of egg and bread crumbs, and broil.

Black Puddings. Cut into small squares a sufficient quantity of onions and

fry them in lard, but without letting them become brown; now cut up into small squares, the size of a small nutmeg, as many pounds of the inner fat of the pig as there are quarts of blood, and mix the whole together with chopped parsley, chibols, marjoram, and other herbs, according to taste, and a little rich cream; fill the guts, tied at one end, previously carefully cleaned and laid in salt and water for several hours, taking care that every part be well filled so as to exclude all air. When full, tie them up and put them into hot, but not boiling water, to prevent their breaking; when they begin to be firm, and in pricking them no more blood comes out, let them drain and get cool. This pudding is generally eaten broiled.

White Puddings. Boil some milk and crumbs of bread to a thick pap, cut up some cold roast fowl and the inner fat of the pig, and pound them together in a mortar with the boiled milk and bread. The quantity of bread, fowl, and fat should be equal. Cut some onions into small squares, and boil them in lard until they get tender, but without browning them; add these to the mince, and bind the whole with yolks of eggs beaten up, seasoning with salt, pepper, and nutmeg; fill the guts with this mixture and dress as before. If they be cooked sufficiently in the first instance, they may be eaten cold; but they are generally broiled like the black pudding. If in dressing there appears to be any danger of the skins bursting, prick them with a pin.

Andocilles. A preparation from the entrails of the pig; a very favourite dish in the south of France, but not much eaten in Paris. Having washed the most fleshy part of the entrails, and soaked them for twelve hours in summer, and twenty-four hours in winter, put them to drain, and wipe them; cut them into slips; cut some lean pork in the same way, and some of the inner fat into small square pieces; season well with herbs and spices, all pounded together; then fill skins with the mixture, as for black puddings, and put the andocilles to salt in the brine pan; when sufficiently salted, say four or five days, they are hung up to dry, and broiled. If intended to be kept long, they should lie in salt for a fortnight.

Sausages. Chop up together two pounds of lean pork and two pounds of the inner fat; season with chibols, parsley, lemon thyme, salt, and pepper; fill the skins, and tie; the guts of poultry well cleaned should be used in preference; sage is hardly ever used in the seasoning of French sausages, but it may be added to suit the English taste; this sausage meat may be kept carefully covered in a jar, instead of being put into skins, and fried in flat or round pieces, covered with the yolk of egg and flour, or crumbs of bread. Sausages in England are seldom cooked in any other way than by frying, in which case it is necessary to prick the skin with a pin, to prevent bursting; but they are sometimes boiled in France, or put into stews to give flavour. A favourite way of eating sausages in France is with sour krout; for this purpose they are generally fried.

Saucisson de Lyon. Take six pounds of lean pork, three pounds of fat pork, and three pounds of lean beef; pound the lean pork and beef in a mortar, and cut the fat into small square pieces, about half the size of playing dice; mix well together with ten ounces of salt, six drachms of saltpetre, half an ounce of ground pepper, a quarter of an ounce of whole black pepper, and some chopped garlic and shalots, according to taste, (these are frequently omitted); work these altogether well, and let the mixture stand for twenty-four hours; then take some large-sized guts, tie one end, fill them as tightly as possible without bursting the gut, and having tied the top, put the saucissons in the brine-tub for a week, after which smoke them until thoroughly dry, in a chimney where wood is burnt. The celebrated Bologna sausages are made nearly in the same way; the general belief that they are made with asses' flesh is unfounded.

Cervelas. Chop up some pork well streaked with fat, with parsley, chibols, and a little garlic, according to taste; season well with pepper and salt, and allspice; fill guts rather shorter and wider than those used for sausages, and boil slowly for two or three hours. Onions previously cut into small pieces, and fried in lard, may be chopped up with the meat.

Italian Cervelas. Chop up four pounds of lean, and one pound of fat pork, with salt, pepper, allspice, coriander powder, and a little aniseed powder; pour over all this as much white French wine and fresh pig's blood as will make it moist without being liquid; now cut out little slips from the most fleshy part of a pig's head, and mix with the other, but without chopping these slips; fill the guts; cook as above, and smoke the cervelas until they are perfectly firm.

To Make Lard. Take the inner fat of the pork, divest it of all the membrane, beat it well, and cut it into small pieces; melt it gently in a pan, with a little water, a few bruised cloves, and two or three bay leaves; it must be thoroughly melted, and kept in that state for some time, taking care, however, that it does not become discoloured; take it from the fire, and before it has set pass it through a sieve; it may then be run into bladders for keeping.

PORTABLE MEATS, FRUITS, OR VEGETABLES. By a proper preparation, meats and vegetables may be preserved for several years in bottles or tin cases, carefully corked or soldered. The whole process consists in exposing the meat or vegetable to the action of boiling water in the sand bath, and driving off the vapour. The time requisite varies according to the article, from rather less than an hour to two hours. Pease require two hours, French beans, an hour and a half, fruits about three-quarters of an hour, and meat about an hour; but in some cases the article is to be put into cold water, and taken out when the water boils. Where a sand bath is not practicable, all that is necessary is to put a saucepan, filled with water, into a larger saucepan, also containing water, and to place the bottle or case in the smaller saucepan.

To Preserve Butter. Having washed the butter well, put it into a wide mouthed bottle, to within four inches of the mouth; put the bottle into the water cold, and let it remain until the water boils; when this is done, take the bottle out, pour the butter into a vessel, and when it is cold, take away the deposit and the whey; then put the butter again into the bottle, and let it remain in the bath until it is thoroughly melted; it is then to be corked. In corking, care must be taken to moisten the corks, and to squeeze them with the apparatus used by wine-merchants; tie over the cork with wire, and dip the mouth of the bottle in melted resin or wax. If the butter is to be preserved in a tin case, let the top be soldered on with great care.

Preserved Milk. Evaporate the milk in the bath, until a third of its volume has passed off in vapour; let it stand for two hours, and then reduce the remaining volume one-half, having previously mixed up with it the yolk of egg, in the proportion of one yolk to a quart: it is then bottled in the same way as butter. It is said that milk treated in this way will remain good for more than a year. Cream may also be preserved, and does not require so much evaporation; it should remain for an hour in boiling water. Fruits generally may be preserved in a similar manner, taking care that they be not too ripe when they are gathered, and that they be fresh when used. Vegetables must be gathered when they are in their greatest perfection, and should be carefully cleaned before they are put into the bottles. Sauces of every kind are kept good for a long time by treating them in the same way. In preserving meat, poultry, and game, they should be about a quarter cooked before they are put into the cases; when cold put them into the cases, with a little good stock, and let them remain in the boiling water for an hour. The best way, however, is to roast the meat until it is about three-quarters done, and then to keep it only half an hour in the water.

PORTER. The only difference between genuine porter and ale is that the former is made from malt dried of a much higher colour, and with a much larger quantity of hops; but there is reason to believe that drugs of various kinds have been used extensively in the manufacture of porter for sale; and that, notwithstanding the severity of the law against such adulteration, it is still occasionally resorted to. It is asserted by many writers on brewing, that not only are foreign ingredients used to increase the stimulating and intoxicating effects of porter, but that the quantity of malt is diminished in exactly the proportion of the other ingredients employed. Opium, henbane, and the cocculus indicus, are said to supply the place of alcohol; and aloes, quashia, gentian, and other bitters, that of hops. As far as the substitute of quashia or gentian for hops is concerned, the consumer can only complain of a deterioration of flavour; for as to health, gentian or quashia, if the quantity of bitter in either case be large, is more wholesome than hops; for there is a narcotic property in the hops which is wanting in gentian or quashia. It is doubtful, however, whether the quantity of hops actually essential for porter brewing is sufficiently large for the hops to act otherwise than as a tonic; and wherever we find the moderate use of porter attended with those symptoms which are frequently observed in persons who drink great quantities of it, and which not unfrequently end in apoplexy, we may fairly suspect that some narcotic drug has been used in the manufacture of the article.

The infusion of hops is a very favourite remedy with many physicians where tonics are necessary; consequently, the moderate use of genuine porter, where the quantity of malt is not very large, so as to make the alcoholic property an objection, cannot be injurious; but as even the infusion of hops would, in some cases, be highly improper, where tonics are not adapted to the system, so will porter, which is a similar production, with the addition of alcohol, be attended with inconvenience, if taken in excess, and in some cases, if taken at all. There is no doubt that the high colour of most of the porter sold by public brewers is not entirely the result of high-dried malt; and that colouring matter is used to give the porter the peculiar appearances that it possesses. This colouring matter, however, is not supposed to be unwholesome, being merely a preparation of burnt sugar; and many persons in brewing their own porter heighten the colour by the addition of burnt sugar. For further directions see Article Brewing.

POTATO. This root, which was formerly considered poisonous, is now become an essential article of food in nearly all the countries of Europe; and although it is still said that the water in which potatoes are boiled, with the skins on, is of a poisonous character, it is universally admitted that the potato itself has no such quality, and that even the skins, when cooked, are equally free from it. The varieties of the potato are very numerous; but only eleven kinds are distinctly characterized by gardeners. For the summer crop, the early dwarf, champion, and ash-leaved, are the favourites; and for the winter crop, the large and small American, and the kidney. Potatoes thrive more or less in almost all light soils, and the richer it is, the more abundant is the crop; but the quality of the potato is not increased by the richness of the soil. To propagate them, they are cut into pieces, leaving two eyes or buds to each piece. They are planted in drills for the early crop in the beginning of March, leaving a space of about fifteen or sixteen inches between each plant, and covering with about four inches of earth; the rows should be separated by a distance of a little more than a foot. The early, or new potato, will be ready about July, or earlier, if forced. They should only be dug up as they are wanted, as in this state they will not keep long. The potato for store should not be planted until nearly the end of April, and should not be dug up until the tops are become of a yellow colour, indicating that the potatoes are ripe. In storing the winter potato, care must be taken to prevent the action of frost. This is best done, where circumstances will admit of it, by digging pits in the ground, and lining them well with straw, then covering over the mouth of the pit with straw, upon which earth is placed. Where this cannot be done, they must be kept in dry cellars, or outhouses, covered with straw and earth. In some parts of England it is a popular notion, that potatoes kept in a coal-cellar, without any other precaution than keeping the door closed, never become frozen. To prevent the germination of potatoes when stored, Mr. Webbster recommends that they should be watered for four or five days together with a mixture of ammoniacal liquor and water, in the proportion of one ounce of the former to a quart of the latter. Strong brine, however, he says, will answer the same purpose. A great part of the fine flavour of potatoes is extracted by the common mode of boiling them in water; a far preferable mode is to cook them by steam, covering them well over, that none of the steam may escape.

Potatoes, to boil. Wash, and put them in sufficient cold water to cover them; let them boil very gently, and when it is found, by the application of a fork, that they are beginning to get soft, throw off the water, strew a little salt over them, and let them stand on the fire uncovered for about two minutes; then cover them, and set them by the side of the fire to keep hot. It is very desirable to choose the potatoes nearly of a size, as otherwise the small ones will be broken before the larger ones are thoroughly dressed.

Mashed Potatoes. Boil the potatoes in the ordinary way; when done, peel and mash them, with a good slice of butter, and a little cream; set them over the fire again, for a few minutes; put them in a dish, or in shells, and brown with a salamander.

Potatoes a la Parisienne. Peel the potatoes, and boil them in water in which has been thrown a small handful of salt; when done, dry and mash them, and put them into a stewpan, with a small piece of butter, and about half a pint of water, or a little milk; boil the whole, and keep stirring till it becomes quite thick; then throw it into another vessel,

and beat it up with some yolks of eggs, till it becomes of the consistence of a soft paste; then make it up into small balls, and fry in boiling lard, until they are of a fine brown colour. They must be served hot, with some white sugar powdered over them.

Potatoes with White Sauce. Put into a saucepan a small slice of butter, with a little flour, diluted with a little stock; to which add some salt and pepper, and thicken it over the fire; having boiled the potatoes, peeled them, and cut them into slices, pour this sauce over them, and serve hot. To vary the flavour, some minced capers or a little chopped parsley may be added to the sauce.

Fried Potatoes. Take a little flour, two eggs beat up with a little water, a spoonful of oil, a little salt and pepper, and make into a thin paste, taking care that it be not lumpy; wash and peel some raw potatoes, and after cutting them into thin slices, dip them into this paste, and fry them in some boiling lard, until they are of a good brown. Before serving, which should be done as hot as possible, sprinkle a little salt over them.

Potato Balls. Boil some potatoes in water, or steam them, as most convenient; when done, peel, and mash them; then take some cold meat of any sort, and having minced it, and added a little salt, pepper, a small bit of butter, some parsley, and shalots, all chopped fine, mix it with the potatoes in equal quantities; form it into moderate sized balls, dipping them into some white of egg; flour them, and fry to a good colour; serve hot.

Ragout of Potatoes. Boil some good potatoes in water, but take them off before they are quite ready; then peel, and cut them into slices, and put them into a stewpan, with a piece of butter, a little French white wine, a little velonté, or Espagnolle sauce, or some white roux; set them over a slow fire until they are thoroughly cooked. Be careful to skim off the grease well from the sauce; when done, add a little bit more butter, and serve hot.

Potatoes a la Provençale. Cut some potatoes, after being boiled, into tolerably thick slices, put them into a stewpan, with a little good oil, some parsley, chibols, a little garlic (if approved), and let the whole stew together; then add a little salt, whole pepper, lemon juice, or a little white wine vinegar; serve hot.

Potatoes with Mushrooms. Boil some potatoes in salt and water; when done, cut them into slices, and put them into a stewpan, with some mushrooms and shalots shred fine, and a large slice of butter; let them stand a few minutes on the fire; add a little flour, moistened with a little good stock, or velonté, and a little pepper and salt; let the whole stew together for about a quarter of an hour; then add the yolks of two eggs, and a little white wine vinegar.

Potatoes with Cream. Flour well a piece of butter, and put it into a stewpan, with a little salt and pepper; mix them well together, and add a glass of cream; stir the sauce till it boils; then cut into slices some potatoes, previously boiled; put them into the sauce; and when warmed up, serve hot. A little grated nutmeg may be added to vary the flavour.

Potato Cake. Boil, peel, and mash some potatoes, and to a pound of this add the yolks of eight eggs, and a quarter of a pound of powdered sugar; when this is well mixed, add the peel of a lemon, grated, and its juice, and the whites of half the eggs; put the whole into a pan that will stand fire, having first buttered it, and bake in the oven.

POT POURRI. The name given to a mixture of flowers &c. salted, and kept in a china jar. Put a gallon of rose-leaves, gathered dry, four ounces each of bay salt, finely pounded, allspice, cloves, brown sugar, two ounces of gum benzoin, one ounce of orris root, an ounce of spirits of wine, and any fragrant flowers, particularly lavender. When these are mixed, strew over them six ounces of common salt.

POULTICES. The following are some of the best preparations known:—

Common Bread Poultice. Put four ounces of crumb of bread into a pint of milk, and boil together over a slow fire; when nearly ready, add half a drachm of powdered saffron. It is to be thoroughly mixed in a pulp, and laid on warm on a cloth. It is good in all cases of ordinary inflammation and for common sores.

Emollient Poultice. Boil for an hour two ounces of elder flowers, and four ounces of marshmallow root, previously cut fine; strain, and mix with the water two ounces of linseed into a poultice.

Russian Poultice, for Gangrenous Wounds and Ulcers. Eight ounces of the lees of beer, eight ounces of honey, and a sufficient quantity of linseed to form

a mass; laid on cold. Another antiseptic poultice is made by mixing up six ounces of barley meal with boiling water, and adding an ounce of bark, and a drachm of powdered camphor. (See CAMPHOR.)

ANODYNE POULTICE. Boil poppy heads and the leaves of the nightshade; and when boiling hot make up a poultice with linseed.

MUSTARD POULTICE. Mix an ounce or more of fresh flour of mustard, according to size, with warm water, rather thick; lay this on a cloth; and before applying it, lay between the mustard and the skin a covering of very thin tissue paper; this prevents the mustard from adhering, and enables the patient to remove the poultice, from time to time, if the pain should be too great.

POULTRY YARD. We find under this head some judicious remarks in Mrs. Rundell's "Domestic Cookery." Mrs. Rundell states that the best age for setting a hen is from two to five years, and that those hens which have tufts of feathers on their heads are usually preferred. She proceeds as follows:—

"Some fine young fowls should be reared every year, to keep up a stock of good breeders.

"Let the hens lay some time before you set them, which should be done from the end of February to the beginning of May. While hens are laying, feed them well, and sometimes with oats.

"Broods of chickens are hatched all through the summer, but those that come out very late, require much care till they have gained some strength.

"If the eggs of any other sort are put under a hen with some of her own, observe to add her own as many days after the others as there is a difference in the length of their sitting. A turkey and duck sit thirty days. Choose large clear eggs to put her upon, and such a number as she can properly cover. If very large eggs, there are sometimes two yolks, and of course neither will be productive. Ten or twelve are quite enough.

"A hen-house should be large and high; and should be frequently cleaned out, or the vermin of fowls will increase greatly. But hens must not be disturbed while sitting, for if frightened they sometimes forsake their nests. Wormwood and rue should be planted plentifully about their houses; boil some of the former, and sprinkle it about the floor, which should be of smooth earth, not paved. The windows of the house should be open to the rising sun; and a hole must be left at the door, to let the smaller fowls go in: the larger may be let in and out by opening the door. There should be a small sliding board to shut down when the fowls are gone to roost, which would prevent the small beasts of prey from committing ravages.

"When some of the chickens are hatched long before the others, it may be necessary to keep them in a basket of wool till the others come forth. The day after they are hatched, give them some crumbs of white bread, and small, or rather cracked, grits, soaked in milk. As soon as they have gained a little strength, feed them with curd, cheese-parings, cut small, or any soft food, but nothing sour; and give them clean water twice a-day. Keep the hen under a pen, till the young have strength to follow her about, which will be in two or three weeks; and be sure to feed her well.

"If a sitting hen is troubled with vermin, let her be well washed with a decoction of white lupines. The pip in fowls is occasioned by drinking dirty water, or taking filthy food. A white thin scale on the tongue is the symptom. Pull the scale off with your nail, and rub the tongue with some salt, and the complaint will be removed."

If it be required to fatten fowls or chickens rapidly, Mrs. Rundell tells us to, "Set rice over the fire with skimmed milk, only as much as will serve one day; let it boil till the rice is quite swelled out; you may add a teaspoonful or two of sugar, but it will do well without. Feed them three times a-day in common pans; give them only as much as will quite fill them at once. When you put fresh, let the pans be set in water, that no sourness may be conveyed to the fowls, as that prevents them from fattening. Give them clean water, or the milk of the rice, to drink; but the less wet the latter is when perfectly soaked, the better. By this method, the flesh will have a clear whiteness, which no other food gives; and when it is considered how far a pound of rice will go, and how much time is saved by this mode, it will be found to be as cheap as barley-meal, or more so. The pen should be daily cleaned, and no food given for sixteen hours before poultry be killed."

Of DUCKS and GEESE, she says,—

"Ducks generally begin to lay in the month of February. Their eggs should

be daily taken away, except one, till they seem inclined to sit; then leave them, and see that there are enough. They require no attention while sitting, except to give them food at the time they come out to seek it; and there should be water placed at a moderate distance from them, that their eggs may not be spoiled by their long absence in seeking it. Twelve or thirteen eggs are enough. In an early season, it is best to set them under a hen; and then they can be kept from water till they have a little strength to bear it, which, in very cold weather, they cannot do so well. They should be put under cover, especially in a wet season; for though water is the natural element of ducks, yet they are apt to be killed by the cramp, before they are covered with feathers to defend them.

"Ducks should be accustomed to feed and rest at one place, which would prevent their straggling too far to lay. Places near the water to lay in are advantageous; and these might be small wooden houses, with a partition in the middle, and a door at each end. They eat anything; and when to be fattened, must have plenty, however coarse, and in three weeks they will be fat.

"Geese require little expense, as they chiefly support themselves on commons or in lanes, where they can get water. The largest are esteemed best, as also are the white and grey. The pied and dark-coloured are not so good. Thirty days are generally the time the goose sits, but in warm weather she will sometimes hatch sooner. Give them plenty of food, such as scalded bran, and light oats; and, as soon as the goslings are hatched, keep them housed for eight or ten days, and feed them with barley-meal, bran, curds, &c. For green geese, begin to fatten them at six or seven weeks old, and feed them as above. Stubble geese require no fattening, if they have the run of good fields."

We have the following as to Turkeys:—"They are very tender when young; as soon as hatched, put three peppercorns down their throats; great care is necessary to their well-being, because the hen is so careless that she will walk about with one chick, and leave the remainder, or even tread upon and kill them. Turkeys are violent eaters, and must therefore be left to take charge of themselves in general, except one good feed a-day. The hen sits twenty-five or thirty days; and the young ones must be kept warm, as the least cold or damp kills them; they must be fed often, and at a distance from the hen, who will eat everything from them; they should have curds, green cheese parings cut small, and bread and milk with chopped wormwood in it; and their drink milk and water, but not left to be sour; all young fowls are a prey for vermin, therefore they should be kept in a safe place, where none can come; weasels, stoats, ferrets, &c., creep in at very small crevices.

"Let the hen be under a coop, in a warm place exposed to the sun, for the first three or four weeks; and the young should not be suffered to go out in the dew at morning or evening. Twelve eggs are enough to put under a turkey; and when she is about to lay, lock her up till she has laid every morning; they usually begin to lay in March, and sit in April. Feed them near the hen-house, and give them a little meat in the evening, to accustom them to roosting there. Fatten them with sodden oats or barley for the first fortnight; and the last fortnight give them as above, and rice swelled with warm milk over the fire twice a-day; the flesh will be beautifully white and fine-flavoured. The common way is to cram them, but they are so ravenous that it seems unnecessary, if they are not suffered to go far from home, which makes them poor."

"Pea-Fowl," says Mrs. Rundell, "must be fed in the same way as turkeys." She adds, "they are so shy that they are seldom found for some days after hatching; and it is very wrong to pursue them, as many ignorant people do, in the idea of bringing them home; for it only causes the hen to carry the young ones through dangerous places, and by hurrying she treads upon them. The cock kills all the young chickens he can get at, by one blow on the centre of the head with his bill; and he does the same by his own brood before the feathers of the crown come out; nature therefore impels the hen to keep them out of his way till the feathers rise."

"Guinea Hens," she says, "lay a great number of eggs, but their young require great warmth, quiet, and careful feeding, with rice swelled with milk, or bread soaked in it." She tells us to put two peppercorns down their throat when first hatched.

We have the following on Pigeons:—"Bring two young ones at a time, and breed every month, if well looked after and

plentifully fed. They should be kept very clean, and the bottom of the dove-cote be strewed with sand once a-month at least; tares and white peas are their proper food; they should have plenty of fresh water in their house; starlings and other birds are apt to come among them, and suck the eggs; vermin are likewise their great enemies, and destroy them. If the breed should be too small, put a few tame pigeons of the common kind, and of their own colour, among them. Observe not to have too large a proportion of cock-birds, for they are quarrelsome, and will soon thin the dove-cote.

"Pigeons are fond of salt, and it keeps them in health; lay a large heap of clay near the house, and let the salt-brine that may be done with in the family be poured upon it."

Her directions conclude with RABBITS. "The tame one brings forth every month, and must be allowed to go with the buck as soon as she has kindled; the sweetest hay, oats, beans, sow-thistles, parsley, carrot-tops, cabbage-leaves, and bran, fresh and fresh, should be given to them; if not very well attended, their stench will destroy them, and be very unwholesome to all who live near them; but attention will prevent this inconvenience."

PUNCH. A name given to a mixture composed of water, spirit, sugar, and acid. The punch most generally made is composed of equal parts of rum and brandy, but any mixture of spirits, or one spirit alone, if there be acid with it, is called punch. Punch is very much improved by the addition of a small portion of the peel, or by rubbing the sugar which is to be used over the lemon before it is cut. The precise portions of spirit and water, or even of the acidity and sweetness, can have no general rule, as scarcely two persons make punch alike. Medical men almost all agree that this is one of the most unwholesome ways of taking diluted spirits, as the acid seems to acquire some new property when mixed in this manner.

A punch called the DUKE of NORFOLK'S PUNCH, which is used cold, is in high esteem. To make it, the thin parings of six lemons and six oranges are to be steeped in a gallon bottle of brandy for two days; a syrup is then to be made with three pounds of white sugar, and when it is quite cold, it is to be added to the strained brandy, a gallon of water, and the juice (strained) of eighteen lemons and eighteen oranges; this is to stand for six weeks in a closely-corked jar, and then to be bottled.

MILK PUNCH is also a preparation frequently used, when cold, in parties; there are several ways of making it, but one of the best is the following:— Steep the rinds of a dozen common-sized lemons for two days in two quarts of brandy, make a syrup of a pound and a half of sugar, and when nearly ready, add to it the juice of the lemons, and a grated nutmeg; add these to the brandy, and then a quart of new milk, boiling hot; this being done, strain through a jelly bag and bottle. If a large quantity be made, using the same proportions, the brandy and syrup may be put into a cask with a nutmeg, not grated, but merely broken; the boiling milk is then poured into the cask, but not in so large a quantity; a quart will suffice for ten quarts of brandy; the cask is to be carefully bunged up, and the liquor not to be bottled off until it is perfectly fine; a third of the number of lemons may be replaced by Seville oranges.

TEA PUNCH. Make an infusion of the best green tea, an ounce to a quart of boiling water; put before the fire a silver, or other metal bowl, to become quite hot, and then put into it half a pint of good brandy, half a pint of rum, quarter of a pound of lump sugar, and the juice of a large lemon; set these a-light, and pour in the tea gradually, mixing it from time to time with a ladle; it will remain burning for some time, and is to be poured in that state into the glasses; in order to increase the flavour, a few lumps of the sugar should be rubbed over the lemon-peel. This punch may be made in a China bowl, but in that case the flame goes off more rapidly.

PUTREFACTION. Under this head we have to consider the relative time required for the decomposition of meat, poultry, and game, and the means of retarding it when necessary; meat is decomposed sooner or later, according to the quantity of natural juice that it contains; and hence it happens that the flesh of young animals decays more speedily than that of old animals. Experiments have been made to ascertain the length of time during which butcher's meat, poultry, and game of different kinds, will keep fresh under precisely similar circumstances. The following were suspended separately, and at considerable distance from each other, by hooks, exposed to a free current

of air during the warm weather, and for a second experiment, in winter; each being removed as it became tainted. It was found that moor-game, and the flesh of wild boar, remained sweet for six days, in summer; whilst the former, in winter, was good for fourteen days, and the latter for ten; venison remained sweet four days in summer, and eight in winter; pheasants, four in summer, and ten in winter; turkeys, geese, beef, and pork, remained untainted for four days in summer, and eight in winter; hares, capons, and old fowls, were good for three days in summer, and six in winter; partridges, two days in summer, and eight in winter; mutton, two days in summer, and six in winter; veal, lamb, chickens, and pigeons, two days in summer, and four in winter. These experiments are given on the authority of a celebrated writer on gastronomic matters, M. Burnet; but it is quite evident, that the circumstances under which they were made, although conclusive, perhaps, as to the relative periods of decomposition, are by no means so as regards the time during which these articles may be kept fresh during the winter. That must depend necessarily upon the temperature, and upon the locality in which they are placed. Everybody knows that cold is very favourable to the preservation of meat; in the north of Europe it is kept fresh for a very long time by being buried under snow; and in warm countries, decomposition may be retarded considerably, by placing the meat in ice-houses, or in very cold cellars. If packed in bran immediately after the animal is cut up, and put into a cold cellar, the period of decomposition is still more protracted. In attempting to keep meats fresh, care should be taken to preserve them from the contact of metals, and to hang them at a distance from each other, so that the decomposition may not be accelerated by the development of the galvanic fluid which they contain. Experience has also taught us that the decay of meat is much retarded by depriving it of the bones. The desiccation of meat by expelling its juices, is the most certain way of preventing decomposition; thus it is that smoked meats, and those from which the watery parts have been evaporated by artificial means, are little subject to decay; but in this case the flavour and a great part of the nutrition are carried off. Vinegar, spices, and volatile oils, are frequently used for preserving meat, but we do not find that the decomposition is retarded for any great length of time. It is said, however, by a French writer, that if coriander seed be pounded with the vinegar, meat covered with this acid will remain good during the whole of the summer. In salting meat, when intended to be kept for a great length of time, it should be beaten and chopped up, and a composition of fine salt, nitre, and a little alum, be rubbed in; after a few days the meat is to be put into a press, and all the juice squeezed out. If this meat be then made up into cakes with very dry flour, and baked, the composition will remain sweet for months; this, however, is a preparation which has little value in domestic economy, although it might be very important for the supply of an army on a long march, or at sea. Meat may also be kept for a considerable time by covering it well with salt and spices, and packing it very closely in cases, to the entire exclusion of the air. If meat be covered with cold water, and sweet oil poured upon it, decomposition will be retarded; and if several pieces of live charcoal be thrown into the water, the meat will remain good still longer. Sulphur will have the same effect, but it imparts an unpleasant flavour. Veal boiled in cold water, with an addition of iron filings and oil, will putrefy in twenty days; but if boiled with iron filings and sulphur, it will remain good for two months. Mr. M'Sweny poured boiling water upon some iron filings, and having placed a piece of meat in it, covered the top with sweet oil; at the expiration of seven weeks this meat was perfectly fresh. If water that has been boiled in order to expel the oxygen, which hastens decomposition, be poured upon meat, and sulphur and iron filings be added, the whole being covered to a thickness of two inches of oil, and placed in a cold cellar, it will remain good for a very great length of time, particularly if the top of the vessel be hermetically closed, so as to exclude the external air. In order to prevent the flavour of the iron and sulphur from reaching the meat the latter may be previously covered with rather a thick coating of melted fat, allowed to get cold before it is put into the water. The Dutch export a great deal of poultry to their colonies by roasting it about two-thirds, and pouring upon it in pots a large quantity of melted lard; when this poultry arrives, it is taken out, and the roasting being completed, it is said to be almost as good as if eaten within a few days after it was killed. This plan of partial roasting has some-

times been adopted in England for game and other meats intended for a long journey. If meat, or game of any kind, be put into a large quantity of good sweet oil, and closed up, it will remain fresh for an extraordinary period, and with still greater certainty if several pieces of live charcoal be thrown into the oil before the vessel is closed. When the meat is to be consumed, it must be put into a press that the oil may be squeezed out; the flavour, however, is by no means the same as that of fresh meat, and the only object gained is the entire absence of the putrefactive process.

PYROLIGNEOUS ACID. The condensed vapour of green wood. It is a very powerful anti-putrescent, more so, indeed, than camphor. Meat put into this acid will resist decomposition for an extraordinary length of time, but it is rendered unfit for use by the action of the acid.

QUINCE. A fruit of peculiar flavour, seldom eaten in its natural state, and not much used in the kitchen, except for jellies and marmalade; some cooks, however, add a few slices of quince to apple, plum, and other fruit pies. The jelly is made of the juice, after boiling the fruit cut into slices with water, say five quarts of water to six pounds of fruit, until the fruit is thoroughly cooked; it is then strained, and the liquid is made into jelly in the ordinary way, with half of its weight of sugar. The fruit for this purpose should not be quite ripe, and the jelly should be made over a slow fire. The marmalade may be made like that of any other fruit. A pleasant ratafia is also made from the raw juice of ripe quinces, in the proportion of half brandy and half juice, with sugar and spices, as for any other ratafia. The dried seeds of the quince, slightly boiled, make a fine mucilaginous drink, and are also used as an emollient gargle for sore throats.

RABBIT. The flesh of the wild rabbit is of more delicate flavour, and lighter of digestion, than that of the domestic rabbit, but neither is very nutritious. It is hardly necessary to observe that wild rabbits vary in flavour according to the herbs and plants on which they feed. The inferiority of the domestic animal may be attributed chiefly to the difficulty of feeding it abundantly on green food, for if much be given to it in its confined state, it is liable to disease; whereas, in its wild state, exercise and open air prevent accidents of this kind. In England, rabbits are roasted, boiled, or stewed, and there is not much more variety in the modes of cooking it on the Continent. It may be also made into pudding, or pie, or curried, in the same way as a fowl.

Boiled Rabbits. This is usually served smothered in onions, and is an agreeable dish; but it may be boiled plain, and served as boiled fowl. If it is to be smothered with onions, the best way of cooking is to thicken the water in which it is to boil with a bit of butter covered with flour, and just as it boils, to add a pint of milk, with salt and whole pepper; then put in the rabbit, with a good quantity of onions cut into quarters, and let it stew gently until it is tender; when it is ready, take out the onions, put them into a separate saucepan with a little milk, butter, flour, and salt; when the sauce is well mixed, put the rabbit upon a dish, and pour the sauce over it.

Fricaseed Rabbit. Proceed as for fricaseed fowl.

Gibelotte. This is the favourite way of dressing a rabbit in France, and as a rich dish it is decidedly the best. Cut up a rabbit, put it into a saucepan with butter, and small slices of bacon, and brown it; then take it out of the saucepan for a few minutes, and put in a tablespoonful of flour, which is to be lightly browned; put back the rabbit and bacon, and add a little stock, and French wine, either white or red, some chopped mushrooms, and sweet herbs; stew, and about a quarter of an hour before it is done, add small-sized onions, previously browned in butter.

Rabbit en Poulette. Cut up the rabbit, and blanch it in boiling water; then drain, and put the pieces into a saucepan with some butter; let them fry for a short time, but not long enough to become brown; now put in half stock and half French white wine, with a little flour to thicken, a bunch of sweet herbs, salt, pepper, chopped mushrooms, or champignons, and an onion; just before the rabbit has stewed quite tender, take out the herbs, and thicken with yolks of eggs; add the juice of a lemon a few minutes before serving.

To Roast Rabbit. Having trussed the rabbit, stuff it with a stuffing made of the minced raw liver, with grated bread, a little grated ham, butter, chopped parsley, a little lemon-thyme, salt, and pepper, the whole bound with an egg; sew it up, and roast before a sharp fire, basting with butter. On the Continent they are gene-

rally larded for roasting. They may be served with gravy or melted butter, sharpened with a little lemon pickle.

Stewed Rabbit. Cut it up, and stew with butter, in the proportion of three ounces for one rabbit, an onion cut up, whole pepper and salt, some sweet herbs, chopped mushrooms, and a slice of ham, putting only just enough water to cover the rabbit; a few minutes before the rabbit is thoroughly done, take out the herbs, and thicken the gravy with yolk of egg, beaten up with a little cream, and a teaspoonful of flour. If a brown stew is required, fry the rabbit, before putting to stew, in butter, till it is well browned; then proceed as above, and add a little walnut catsup to the gravy before serving.

Fecundity of the Rabbit. The author of a recent work on Australia, in advising colonists to turn their attention to the breeding of rabbits, says, "The rabbit is invaluable in a new colony, for this animal in a state of nature increases in number with prodigious rapidity, and is excellent food two months after birth. The squatter, who, on leaving Sydney to locate himself in the interior, should have with him one male rabbit and twenty females, would, in a short time, find the family increased by at least a hundred young, which in two months would be fit to eat, besides keeping the females for breeding, with only two or three males. The doe produces young, sometimes ten in number, every two months; but we will suppose a production of five at each litter, which, for twenty does, would give 600.

The first year, say	600
The 50 females born in January, would litter four times in the first year, viz.—in June, August, October, and December, which would give for the year	1000
Those born in March would produce in August, October, and December	750
Those of May, in October and December	500
Those of July, in December . . .	250
The 125 females of the 250 born in June, would produce in November	625
To these add the original male, and the 20 female rabbits	21
Making a family of	3746

Buffon observes that these animals increase so prodigiously in localities which are favourable to them, that the earth becomes unequal to their subsistence; and if ferrets and dogs were not in existence to keep down the increase, they would render the country a desert. Fortunately, however, there is a way of preventing this mischief, without keeping the rabbits in hutches. They may be confined in warrens; and when they become too numerous, the excess may be killed for the skins, which meet with a ready and advantageous market. The Bishop of Derry obtains from a single warren not less than 12,000 skins annually, which may be valued at 24*l.* per 1000, without allowing anything for the flesh. Buffon quotes an author who had accustomed an entire family of rabbits to return to their hutches at night from the fields, on his whistling to them. "However distant they might be," says he, "I saw the patriarch of the family, the moment the whistling was heard, place himself at their head; and although he was the first to arrive at home, he would stand aside and see every rabbit enter before he did so himself." By feeding his rabbits occasionally with the leaves and bark of the juniper tree, and with bay leaves, this gentleman imparted to the flesh of his tame rabbits the flavour peculiar to the flesh of this animal in its wild state.

If the statement made by Buffon is correct,—and we see no reason for disputing it, first, because, although he was occasionally erroneous in his opinion of the character of animals, he would not lightly quote the above fact from any author, without being well convinced of the practicability of such an education; and, secondly, because we have daily instances of instinct bordering very closely upon intelligence, where pains are taken to develop it,—it suggests the practicability of doing much more with the rabbit than has hitherto been done. The most extraordinary instance, and that too within our own knowledge, is that of a pig, which, when very young, was made a pet of by a lady, and which, when grown up, would stretch himself on the rug before the fire in the drawing-room, and there sleep soundly, as a dog would do, answering when awake to the voice of his mistress, and being quite as cleanly in his habits as a well-bred dog would be.

How to clear One Hundred and Twenty Pounds a Year by Breeding Rabbits. Under this title a little pamphlet has been published in Paris, and appears to have excited considerable interest, having run to not less than eighteen

editions. Without pledging ourselves for the statement of the author, we think we shall render a service to the public by giving it. After describing the sort of hutches in which the rabbits are to be kept,—and which may be of any shape, so that there be grooves to allow all the urine of the animals to run off into reservoirs lined with lead, that it may not mix with the food, and engender disease, the food itself being separated in each hutch as much as possible, by a kind of rack and manger,—the author, M. Mallan, says,—

"In order to begin in a small way, purchase a male and four female rabbits, of the ordinary species, which is much preferable to the fancy rabbit, being more productive, some of the females producing as many as fourteen young at a litter, whereas fancy rabbits are much less prolific. In order that there may be no waste of food, the rabbits should have three meals daily, taking great care also to keep up an equal temperature, excess of heat and cold being alike injurious to the animal. The hutches should be very spacious, and the full complement may be 400 females and 50 males, in 90 hutches, the expense of which may be estimated—with the double and shifting bottom to each, so that the urine may be removed daily, and the bottoms well cleaned—at from 25 francs (1*l.* sterling) to 30 francs each, making a total of 3750 francs (150*l.* sterling); but of course it is not necessary to arrive at this full complement all at once; the breeder will increase his hutches with the success of the speculation. The young are to be divided from month to month; that is to say, there must be six hutches; the first for the young of one to two months, the second for two to three months, the third for three to four months, for the males only; the fourth for three to four months, for females only; the fifth for four to five months, for males only; the sixth for four to five months, for females only.

"At the fifth month, the rabbits for the market are to be sold, keeping back for breeding the strongest females, and those which have the least of the appearance of fancy rabbits; and taking care to select those which are not pot-bellied, and whose dung is hard, as that is an indication of good health. The food in summer should be green, such as lucerne, trefoil, parsley, and cabbages, and also carrots, parsnips, and potatoes. The rabbits should be accustomed to potatoes as much as possible, as they are to be had at all seasons. Bran should be given to the young only—that is to say to breeding does, and males from two to four months old; oats should be given to those of four or five months; and to the does whose young are not yet able to find themselves, and on no account to the others, as this description of food is apt to affect the liver. The bed of the rabbit should be broken straw, to be turned every four days, and renewed every eight days, in order that the urine may not soil them. When the females have young, the straw is not to be changed until they can see well; for if the straw were to be changed at an earlier period, the down of the mother, which keeps the young warm, would also be removed, and then the cold might injure them.

"The young are not to be disturbed, unless it is perceived that any of them have died; and if any doe should eat or destroy her young, her hutch must be marked, so that at her second litter, if she should again destroy her young, she may be set aside for the market.

"The breeding does should be from five months to two years old, so that they may produce a litter every forty-five days. The number of a litter varies from five to fourteen; but an average of seven may be fairly reckoned upon, and we may calculate the annual living produce at forty-two, which may be sold, when five months old, at one franc and a half (fifteen pence English) each—making a total of sixty-three francs; and thus for four hundred breeding does would give an annual return of 25,200 francs, (rather more than a thousand pounds sterling.)" [Fifteen pence is not, perhaps, too much for a good-sized rabbit in large towns, where the markets are not plentifully supplied with wild rabbits; but in country places it would, we think, be difficult to command a regular sale at this price.—Translator.]

The author estimates the outlay for the first year at 24,200 francs, for food, attendance, expense of carrying to market, casualties, &c., consequently the profits would be only 1000 francs, or forty pounds sterling; but as the outfit is reckoned in this estimate at 3500 francs, and as this expense being once incurred would cover many years, the profits of a second year with the same amount of live stock would, according to his estimate, be more than 4000 francs, (instead of 3000 francs,) and that, too, after allowing a good sum for wear and tear. He calculates the cost of food daily at forty-two francs, or about 1*l.* 13*s.* 6*d.* English, daily.

In this estimate, it is supposed, of course, that the whole 400 does are in breeding activity from the commencement of the year; but M. Mallan gives a table, shewing the expenditure and receipts for a year, beginning only with four females. It is as follows:—

No. of Does.	Litters	No. of Young.	Expense for a period of 50 days.	Receipts.
			f. c.	f.
4	1	24	14 50	0
4	2	24	25 44	0
16	3	96	63 2	18
28	4	168	130 92	18
76	5	456	259 20	72
124	6	744	424 98	126
208	7	1,248	635 4	342
240	8	2,400	1,113 84	558
400	9	2,400	1,113 84	936
400	10	2,400	1,113 84	3,600
400	11	2,400	1,113 84	3,600

Total Expense .. 6,008f. 46c.
Ditto Receipt .. 9,270 —
Profit 3,261 54,

Or nearly one hundred and forty-three pounds sterling.

It does not appear that in the above M. Mallan has allowed anything as interest of money in the outfit, nor does he shew us the items of expenditure. Assuming the totals, however, to be correct, the only diminution to be made from the profit would be about 10 or 12 pounds a year, as the interest on the outlay.

RADISHES. This root, although refreshing, is very indigestible, and should be eaten only in small quantities, and never without salt. Large radishes are very good boiled tender, and eaten with melted butter, in the same manner as asparagus. The room of the kitchen garden may be economized by sowing radish seed with the onions and carrots; for as the former are of quicker growth than those vegetables, the crop will be all cleared off before they can be in the way. Radishes are of two kinds, the long, and the turnip-rooted. When required for very early use, the former kind should be sown the beginning of November, and the bed kept sheltered, continuing the sowings every fortnight to ensure a succession: they should not be allowed to remain too thick in the bed. The turnip-rooted are not, however, sown for an early crop; March is the best time of sowing for that kind.

RASPBERRY. A delicious fruit, of fragrant smell, and full of sweet vinous juice. Raspberries eaten fasting, correct bile powerfully in young persons. In their natural state they are taken for dessert, in the same way as strawberries, and are dressed in a variety of ways. Raspberry wine amongst the ancients was a very favourite beverage, but it is seldom made now. The earth round the roots of the plant should be laid open at least three or four times in the year, to refresh it; and the branches should be well cut down in March, and all the dead wood be carefully removed. In order to prevent the ravages of insects, the branches should be well coated in the spring with a solution of lime.

To Preserve Raspberries Whole. Make some very strong syrup, and when it is quite thick, put the raspberries into it, and boil them for five minutes, taking off any scum that may arise; take them off the fire, and add a little sifted sugar; then boil again, skimming as before; this process, and the powdering with sugar, is to be repeated three or four times.

Raspberry Cream. Pass the juice of some ripe and dry raspberries through a jelly bag; then add to every pint of juice a pound of sugar, and when dissolved, bottle, filling only to the neck. When used, it is mixed with rich cream, and more sugar, and whisked till it is thick. It should not be made more than a day or two before it is required. When the juice cannot be had, raspberry jelly may be mixed with cream, a little lemon juice, and grated lemon peel, beaten well together, and then milled with a syllabub mill until sufficiently thick to put into the jelly glasses.

Raspberry Flummery. Boil a pound of raspberries for three or four minutes, stirring constantly, with half a pint of white wine vinegar; having strained this through a hair sieve, dissolve an ounce of isinglass in half a pint of water, and boil it with a pound of powdered white sugar, and the raspberry liquid; when thoroughly boiled, pour into a shape, and turn out when cold.

Raspberry Jam. Put into a preserving pan two pounds of raspberries, and boil for about five or six minutes, bruising it well; then add two pounds of powdered loaf sugar, and boil and skim, mixing carefully.

Raspberry Jelly. Put into a jar two pounds of raspberries, and two pounds of white currants; set the jar in a saucepan containing some water, and in this way heat the fruit thoroughly; then press the fruit, and pass the juice through a jelly bag; now boil the juice with a pound of powdered white sugar to every pint; when it has boiled once, take it off, and skim it, and repeat the same operation three or four times, until it is quite clear.

RASPBERRY MARMALADE. See STRAWBERRY MARMALADE.

RASPBERRY RATAFIA. Mix a pound of raspberry juice with some strong syrup made with two pounds of sugar, add a quart of brandy, a few cloves, and a little cinnamon; let these stand in a stone bottle, well corked, for a fortnight, then strain through a jelly bag, and put into another bottle.

RASPBERRY SPONGE. Dissolve an ounce of isinglass in a sufficient quantity of water, and add it to a quart of cream, a pint of new milk, a quarter of a pint of raspberry juice, and half a pound of powdered sugar, or half a pint of raspberry jelly without sugar, and the juice of a lemon; whisk this well until it becomes thick and sponge-like, then put into an earthenware mould, and when it is thoroughly set, turn it out.

RASPBERRIES IN TARTS, &c. See PASTRY.

RASPBERRY VINEGAR. Bruise two quarts of fresh raspberries, and pour over them a quart of good white wine vinegar, cover closely, and let it stand for four days, stirring it occasionally; strain through a flannel bag without pressing, and boil the liquor for a quarter of an hour, with powdered sugar in the proportion of a pound to a pint, skimming carefully; when cold, bottle and cork. If it is intended that the vinegar shall be very acid, less sugar must be used. Some persons add a little brandy when it is bottled; this is good for keeping, but it injures the flavour.

RASPBERRY WATER. See STRAWBERRY WATER.

RATAFIA. This name is given to a liqueur made by the distillers, but it is also used to describe infusions of the juice of fruits with brandy, although these are more commonly known by the compound name of the fruit and the brandy, as cherry-brandy, &c. The mode of making ratafia is exceedingly simple; two quarts of the juice of the fruit, which is previously allowed to stand in a cold place for twenty-four hours, and then skimmed, are added to two quarts of good brandy, two pounds of sugar, and a little cinnamon and cloves. The mixture must stand in a stone bottle well corked for a month, when it must be poured off clean, and bottled in the regular way. The best fruits for making ratafia are the red and black currant, raspberry, mulberry, and cherry.

RATS. The kitchens, sculleries, and out-offices of many houses are infested with these animals in such numbers, as not only to make it difficult to preserve food from their ravages, but also to occasion considerable damage to the wood-work and walls, for they are rapid in their mode of operation. Traps are frequently of no avail; for their sagacity is great, and they are not easily induced to enter them; besides, where they are in large numbers, the taking of one or two occasionally is of little importance. Poisoning appears to be the best mode of destroying them; but even here they are sometimes too cunning for their persecutors. Arsenic is the poison most used for their destruction; but if the quantity mixed with the food which is placed to attract them be too large, they will not touch it. The common practice is to mix two or three grains of arsenic in a ball of dripping and flour, and to strew several of these balls in the places most infested by the rats. Another mode is to mix about a drachm of the poison in a dish with boiled potatoes, slices of bacon, &c.; or to melt some cheese, and mix the arsenic with it. All these, however, have frequently been known to fail, when arsenic, mixed with plain boiled potatoes, without any highly-flavoured food, has been effectual. When it is found that the rats, for a considerable length of time, avoid one kind of bait, another should be tried; and persons should not despair of their taking the poison eventually, because they avoid it for several days together, as they will sometimes do this and then in a single night devour all the bait. Some attempt to poison rats by boiling barley, or wheat, in a saucepan, with nux vomica, and a sufficient quantity of water to swell the grain, which is then strewed in their haunts, and water placed near for them to drink, as it is supposed that when they have eaten the poison great thirst ensues, and they drink to such excess that their recovery is rendered impossible. This plan, however, is but rarely successful. A much better mode is to mix a few grains of strychnine, which is a very powerful preparation of nux vomica, with food: the presence of the strychnine is not easily detected by the rats, and its effects, when taken, are instantaneously fatal. This poison being of extraordinary strength, it must be carefully used; for if a very small portion were to find its way into the food of the inhabitants of a house, medical aid would hardly be of avail. Although poisoning is the most effectual mode of destroying rats, it should never be resorted to until cats have been tried; for rats,

when poisoned, die frequently so near the outlet of their holes, as to occasion a highly disagreeable smell in a house whilst they are in a state of decomposition; and the situation of the holes may be such, under floors or otherwise, as to make it impossible to remove the nuisance. It has been recently stated that rats have such an aversion to the smell of garlic, that if a few cloves of this vegetable be placed at the mouths of their holes, they will abandon the spot, and seek some other haunt. The thing is worth trying, although the statement does not appear to rest upon any good authority.

RENNET. A liquor prepared from the stomach of the calf. The stomach in its solid state is also called rennet. To prepare the liquid, the stomach is rolled up with the chyle and a handful of salt inside, and put into a jar for a week or longer, with salt strewed over it; it is then taken out and dried by the fire like bacon; when wanted for use, the bag is cut into pieces, and put into a jar with a handful or two of salt, and new whey, or water which has been boiled and cooled to about 65°, is poured upon it. The stomach of a calf of four or five weeks old will bear a gallon of liquid, but if younger, a much smaller quantity must be applied, as the quantity of rennet is smaller. The stomach is to be infused in the liquid for three days, when the liquid is to be drawn off, strained, and bottled for use: in this state it is called rennet. If it be intended to keep this liquid long before it is used, half an ounce of spirits of wine may be added to each quart: the rennet is stronger if the curdled milk found in the stomach of the calf be rolled up with it. The rennet is applied to the milk when it is at about 85 or 90°, if the temperature of the air be about 70°; but the heat of the milk is increased as the season grows colder: the rennet, however, is applied cold. A table-spoonful of good rennet will turn, in about a quarter of an hour, about thirty gallons of milk.

RESTAURANT. The name given to eating-houses in France. It is derived from *restaurer*, to recruit or fortify. The French restaurant is very different from the English eating-house, both as to the establishment itself, and the mode of dressing and serving the food. Whatever a Frenchman pays for his dinner, there must be variety, although the quality of each dish be very inferior to what would suit an Englishman. He must have his soup, two or three dishes of meat and vegetables, his wine and his dessert; and all these may be had in Paris for much less than the price of a single plate of meat in a London eating-house, with the accessories of bread, vegetables, and a pint of porter. At some of the small eating-houses in Paris, the dishes are priced as low as four sous (twopence) each; thus a dinner composed of soup and two dishes will be twelve sous; half a pint of common wine, three sous; bread, two sous; and dessert, two sous—making nineteen sous; which, with one sou for the waiter, amounts altogether to tenpence English. As provisions are very dear in Paris, the portions of such a dinner as this are not of course very abundant, nor are they of the first quality; but they are wholesome, and more so, perhaps, than those of the expensive restaurants, where everything is disguised with rich sauces. Very respectable society is sometimes to be met with even at these small restaurants; but if the stranger wishes to meet with the élite of the people who dine in public, he will go to the expensive restaurants—there he will see officers of rank, judges, the head employés in the government offices, and a brilliant display of ladies; for in France it is the fashion for females to dine at a restaurant with their friends and acquaintances; nor would a female, if alone, be exposed to any annoyance. Some of the restaurateurs (the person who keeps a restaurant is thus called) in Paris have expended enormous sums in fitting up their establishments. That of Very, in the Palais Royal, is splendid; but the rooms of the *Trois Freres Provençaux*, which is within two doors of Very's, are magnificent beyond description. Many persons even of the highest rank invite friends to dine with them at a restaurant, in preference to having them at home, as it is almost impossible to serve a dinner at home in an equally good style. On such occasions, the charge is rarely less than thirty francs a head; for it is the custom, in eating and drinking in France, to do things liberally.

We find the following useful and very correct information on the restaurants of Paris, in a very useful little work, called "The Companion to the Hand-book to Paris:—"

"There are restaurants at Paris, at which the visiter may dine, from eighteen sous per head up to as many francs. Up to fifty sous per head, there are several houses, at which the prices are fixed; beyond that price, dinner is only served by

the *carte*. The best houses for dining, at a fixed price, are those of Follet, Richard, and Luzine in the Palais Royal—the latter is, perhaps, the best of the three. At either of these houses the charge per head is two francs, or two francs and a half, according to the quality of the wine. For two francs the visiter has soup, four dishes, to be selected from a well-varied *carte*, dessert, bread, and half a bottle of ordinary wine. For two francs and a half, he has a bottle of wine of a rather better quality. A very fair dinner is given at these houses; but the Englishman who prefers really good living will dine at a table d'hôte. It is customary to give two or three sous to the waiter. Of the cheaper houses little can be said by way of recommendation. Some of them, indeed, at thirty-two sous, for which three dishes instead of four are served, may be tried; but restaurants by the *carte*—that is to say, where the prices are fixed by the dish—are Vefour's, Very's, Freres Provençaux, in the Palais Royal, the Poissonnerie Anglaise, in the Rue de Rivoli, the Rocher de Cancale, near the Rue Montmartre, &c. &c. At these houses the prices of the dishes are from fifteen sous upwards; and, as the portions are large, it is impossible for a person to dine there alone, if he has any variety of dishes, and wine of a good quality, under twelve or fifteen francs; but if three persons dine together, and order for one of each dish, they may have variety, and a bottle of ordinary wine, and one of superior quality, for six or seven francs each. We subjoin the copy of a *carte*, such as is usually laid upon the table of the first-rate houses, observing that the greater part of the dishes therein named are also on the *carte* of the restaurants, at fixed prices. Persons who wish to dine well, at so much per head, should go between the hours of four and five; earlier than that the best dishes are scarcely ready, and, at a later hour, they are frequently told, in answer to their demands, 'Il n'y en a plus'—It is all gone.

POTTAGES.

(One hundred centimes make a franc.)

	fr.	c.	
A la Julienne		40	A favourite soup with chopped herbs.
Aux choux		40	Cabbage soup.
Riz à la purée		40	Rice and pea soup.
Au vermicelle		40	Vermicelli soup.
Purée aux croûtons		50	Pea soup with toasted bread.
Purée de Crécy		60	Another description of pea soup.
Rix à la Turque		60	Rice soup, in the Turkish manner
Consommé		50	Gravy soup.
Consommé aux œufs pochés		90	Ditto, with poached eggs.
Potage au macaroni		60	Macaroni soup.
au lait		50	Milk pottage.
au lait d'amandes		60	Ditto, with almonds.
a l'oseille		50	Sorrel soup.
en tortue	1	25	A sort of mock turtle.
a la Reine	1	0	Made of fowl and rice.
a la jardiniere		90	A vegetable soup, with meat.
au maigre		60	A soup, made in various ways, eaten by Catholics on the maigre days, when meat is forbidden.

HORS-D'ŒUVRES FROIDS.

Petit pain		25	Roll.
Huîtres, lo douzaine		30	Oysters, per dozen.
Huîtres d'Ostende, la douzaine	1	0	
Citron		30	Lemon.
Beurre		20	Butter.
Radis		30	Radishes.
Thon mariné		90	Thunny.
Salade d'anchois		90	Anchovy salad.
Trois sardines		60	Sardinias.

	fr.	c.	
Pâté de foie gras aux truffes	1	0	A pie of goose liver, with truffles.
Tranche de melon cantaloux		40	Slice of melon.
Trois figues		40	Three figs.
Artichauts à la poivrade		40	Cold artichokes, to be eaten with vinegar and pepper.
Olives		60	
Cornichons		30	Cucumbers.
Jambon de Bayonne à la gelée		75	Ham.
Saucisson de Lyon ou d'Arles		75	
Langue à l'écarlate		75	Tongue.

HORS D'ŒUVRES CHAUDS.

Deux œufs frais		50	Two fresh eggs.
Huîtres frites, la douzaine	1	0	Fried oysters in batter.
Coquille aux huîtres	1	25	Scolloped oysters.
Deux saucisses au naturel		40	Two sausages, broiled.
Deux saucisses au choux		90	Ditto, with cabbage.
Deux saucisses à la choucroûte		90	Ditto, with sourcrout.
Une saucisse truffée		75	Sausage, with truffles.
Pied de cochon à la Sainte-Menehould		60	Pig's foot broiled. A favourite dish.
Pied de cochon farci aux truffés		60	Ditto, dressed with truffles.
Boudin noir		60	Black pudding.
Jambon aux épinards	1	25	Ham and spinach.
Côtelette de porc frais au naturel		90	Pork chop.
Côtelette sauce Robert	1	25	Ditto, with a peculiar sauce.
Côtelette sauce tomate	1	25	Ditto, with tomata sauce.
Côtelette sauce piquante	1	0	Ditto, with an acid sauce.
Andouillette de Troyes		60	A preparation of the intestines of the pig.
Deux petits pâtés au naturel		40	Two little patties.

BŒUF.

Bœuf au naturel		50	Plain boiled beef out of the soup.
Bœuf à l'étouffade		90	Ditto, with peculiar sauce.
Bœuf à la flamande		75	
Bœuf sauce tomate		75	Ditto, with tomata.
Bœuf aux choux		75	Ditto, with cabbage.
Bœuf sauce piquante		60	Ditto, with an acid sauce.
Beefsteak au naturel		90	Broiled beefsteak from the under part of the fillet.
Beefsteak au beurre d'anchois	1	0	Ditto, with anchovies.
Beefsteak á l'Anglaise		90	In the English style.
Beefsteak aux pommes de terre		90	With fried potatoes (the favourite dish).
Beefsteak au cresson		90	With water cresses.
Filet sauté dans sa glace	1	0	Fillet, fried.
Filet aux champignons	1	25	Ditto, with mushrooms.
Filet aux olives	1	25	Ditto, with olives.
Filet au Madère	1	25	Ditto, with Madeira sauce.
Filet aux truffes	2	0	Ditto, with truffles.
Filet piqué sauce cornichons	1	25	Ditto, larded, and with cucumbers.
Rosbif aux pommes de terre	1	25	Roast beef and potatoes.
Palais de bœuf à la poulette		90	Ox palate, with white sauce.
Palais au gratin	1	0	Ditto, another mode.
Entrecôte à la maître-d'hôtel		90	A lean part of the beef, broiled, with sauce.
Entrecôte sauce piquante		90	Ditto, with acid sauce.
Choucroûte		60	Sourcrout.

MOUTON.

	fr.	c.	
Deux Côtelettes au naturel		80	Two plain mutton chops.
Deux Côtelettes panées		90	With crumbs of bread.
Deux Côtelettes sautées aux champignons	1	25	Fried with mushrooms.
Deux Côtelettes sautees dans leur glace	1	0	Fried in their gravy.
Deux Côtelettes a la jardiniere	1	25	With vegetables, a favourite dish.
Deux Côtelettes à la Soubise	1	50	
Deux Côtelettes à la financière	1	75	
Deux Côtelettes a la purée de pommes de terre	1	25	With a kind of mashed potatoes.
Deux Côtelettes a la chicorée ou aux épinards	1	25	With chiccory or spinach.
Deux Côtelettes aux laitues	1	25	With lettuce.
Deux Côtelettes aux pois	1	25	With pease.
Deux Côtelettes aux navets	1	25	With turnips.
Id. a la sauce tomate	1	25	With tomata sauce.
Deux Côtelettes sauce poivrade	1	20	With hot sauce.
Deux Côtelettes a la provençale	1	20	In the provençale manner.
Deux Cotelettes d'agneau au naturel	1	20	Lamb chops plain.
eux Côtelettes d'agneau aux pointes d'asperges	1	20	With the tops of asparagus.
Deux Côtelettes d'agneau aux pois	1	20	With pease.
Deux Côtelettes d'agneau aux laitues	1	20	With lettuce.
Epigramme d'agneau	1	20	
Poitrine d'agneau aux haricots	1	20	Breast of lamb with haricot beans.
Blanquette d'agneau aux champignons	1	20	
Blanquette d'agneau aux truffes	1	20	With truffles.
Filet de mouton mariné en chevreuil	1	25	Salted, and with vinegar.
Deux Rognons a la brochette		75	Broiled kidneys.
Deux Rognons au vin de Champagne		90	Stewed with wine.
Deux Rognons au vin de Champagne et aux truffes		90	Ditto, and truffles.
Poitrine aux haricots ou à la chicorée		97	With haricot beans or chiccory.
Poitrine panée grillée		75	
Poitrine sauce piquante		90	
Pieds de mouton à la poulette		90	Sheep's trotters with white sauce.

VEAU.

Riz de veau au jus ou sauce tomate	2	50	Veal sweetbread with gravy or tomata sauce.
Riz de veau à la chicorée ou aux épinards	2	50	Ditto, with chiccory or spinach.
Riz de veau aux haricots ou à l'oseille	2	50	Ditto, with chiccory or sorrel.
Riz de veau à la financière	3	0	A peculiar rich dish of veal, with champignons, &c.
Riz de veau à la financière aux truffes	3	0	Ditto, with truffles.
Blanquette de veau aux champignons	1	0	A sort of white fricasee.
Fricandeau à la chicorée ou à l'oseille		90	This is veal partly roasted, and then served with a peculiar gravy.—A favourite dish with the English. Chiccory or sorrel is added.
Fricandeau au jus ou sauce tomate		90	The same with tomata sauce.
Fricandeau aux haricots ou aux épinards		90	Ditto, with haricots or spinach.
Fricandeau aux pois		90	Ditto, with pease.
Côtelette au naturel		90	A plain veal chop.
Côtelette en papillotte	1	25	Ditto, cooked in paper.
Côtelettə aux légumes ou sauce tomate	1	25	Ditto, with vegetables or tomata sauce.
Côtelette aux pois	1	25	Ditto, with pease.

	fr.	c.	
Côtelette aux laitues	1	25	Ditto, with lettuce.
Côtelette à la provençale	1	20	Ditto, in the provençale fashion.
Côtelette à la financière	2	0	A peculiar rich mode of cooking.
Côtelette à la financière aux truffes. . .	2	50	Ditto, with truffles.
Tête de veau en tortue	2	0	Calf's head richly cooked with mushrooms, &c.
Tête de veau en tortue aux truffes . . .	2	50	Ditto, with truffles.
Tête de veau au naturel		90	Ditto, plain, and eaten with oil, vinegar, and small herbs.
Tête de veau à la poulette et aux champignons	1	25	Ditto, with white sauce.
Oreille de veau au naturel		90	The ear plain boiled.
Oreille de veau farcie frite sauce tomate .	1	50	Ditto, fried.
Oreille de veau à la poulette	1	25	Ditto, with white sauce.
Oreille de veau à l'Italienne	1	0	Ditto, in the Italian style.
Langue de veau à l'Italienne	1	20	Calf's tongue in the Italian style.
Langue de veau en papillotte	1	25	Ditto, cooked in paper.
Cervelle frite	1	25	Fried calf's brains.
Cervelle à la poulette	1	25	Ditto, with white sauce.
Cervelle au beurre noir	1	25	Ditto, with burnt butter.

ENTREES DE VOLAILLE.

	fr.	c.		fr.	c.	
Chapon au gros sel . . .	9	0	le quart.	2	25	Boiled capons with gravy.
Chapon au riz ou aux huîtres	10	0	a qtr.	2	50	Ditto, with rice or oysters.
Chapon aux olives . . .	10	0	ditto	2	50	Ditto, with olives.
Poulet au gros sel . . .	5	0	ditto	1	25	Fowl, boiled, and covered with gravy.
Poulet au riz ou aux huîtres	8	0	ditto	2	0	
Poulet aux olives . . .	8	0	ditto	2	0	
Poulet à la marengo . .	6	0	ditto	1	50	
Id. aux truffes	7	0	ditto	2	0	Another mode of cooking.
Poulet en carrick à l'indienne	8	0	ditto	2	0	Curried fowl.
Poulet en fricassée . . .	6	0	ditto	1	50	Fricaseed fowl.
Id. aux truffes	7	0	ditto	2	0	Ditto, with truffles.
Poulet en friteau garni . .	6	0	ditto	1	50	Ditto, fried and garnished.
Poulet en marinade . . .	6	0	ditto	1	50	
Poulet en capilotade . .	6	0	ditto	1	50	
Poulet en salade garnie .	7	0	ditto	1	75	
Poulet en mayonnaise . .	8	0	ditto	2	0	With salad and egg sauce.
Poulet à la tartare . . .	6	0	ditto	1	50	
Cuisse de poulet en papillotte				1	50	
Suprême de volaille . . .	2	50	aux truf.			
Filet de vol. à la meréchale	2	50	ditto			
Croquettes de volaille . .	1	50	ditto			A sort of fowl fritter
Coquille de volaille . . .	1	50	ditto			
Ragoût mêlé à la financière	3	0	ditto			A very rich dish.
Coquille à la financière .	2	0	ditto			
Caneton aux olives				5	0	A duckling with olives.
Caneton aux navets						Ditto, with turnips.
Pigeon de voliere à la crapaudine . . .				2	0	Broiled pigeon.
Pigeon en compote				2	0	A sort of potted pigeon.
Pigeon aux pois				2	0	A stewed pigeon with peas.
Ailerons aux navets						The wing of fowl with turnips.
Id. aux olives						Ditto, with olives.
Id. à la financière (aux truffes) . . .						With truffles.

Grenouilles (à la Poulette)	Frogs.—This is a very rich dish; only the hind legs and loins are used: the taste is like that of very delicate fricasseed chicken. It is always necessary to order them the day before. A dish for two persons will cost 8, and 10, to 15 francs.

ENTREES DE GIBIER.

(The prices vary according to the season.)

Perdrix aux choux	A Partridge stewed with cabbage.
Perdr. sauce périgueux	With a sauce.
Perdr. en salmi	A peculiar mode of cooking.
Perdr. aux truffes	
Perdr. rouge en salmi	Red legged partridge.
Perdr. en salmi aux trf.	
Bécasse en salmi.	Woodcock.
Mauviettes en salmi.	A sort of lark.
Mauviettes au gratin	Ditto, with crumbs of bread.
Mauviettes à la financière.	
Caille à la financière	Quail à la financière.
Caille aux laitues	Quail with lettuce.
Caille aux pois	Quail with pease.
Caille au gratin . . . . . aux truffes	Quail with crumbs of bread and truffles.
Canard sauvage en salmi	Wild duck.
Filets de chevreuil sauce poivrade . . .	A portion of the fillet of venison with truffles.
Filets de chevreuil aux champignons . .	Ditto, with champignons.

ENTREES DE PATISSERIE.

	fr.	c.	
Dex petits pâtés au jus		80	Two little pasties with gravy.
Deux petits pâtés à la béchamelle . . .	1	25	Another mode.
Vol-au-vent à la financière	1	75	This is poultry with a light crust a sort of fowl pie.
Id. aux truffes.			
Vol-au-vent de saumon	1	76	Salmon pie with very light crust.
Id. aux truffes.			
Vol-au-vent de turbot.	1	75	
Vol-au-vent d'anguille.	2	0	Eel pie.
Id. aux truffes.			
Vol-au-vent de morue.	1	50	Cod pie in the same way.
Vol-au-vent de cervelle	1	25	Brains in a light crust.
Vol-au-vent de ris de veau	1	50	Sweetbread in the same way.
Vol-au-vent de légumes	1	25	Vegetables in the above manner.
Pâté de foie gras aux truffes			Goose liver pie with truffles—a very rich dish, but considered highly indigestible.

ENTREES DE POISSON.

(No prices are affixed, as they vary according to the season—they are always marked, however, upon the carte of the day.)

Turbott sauce aux câpres	Boiled turbot with caper sauce.
Turbott à la Hollandaise	Turbot in the Dutch style.
Turbott sauce homard ou aux huîtres . .	Ditto, with lobster or oyster sauce.
Saumon sauce aux câpres	Salmon boiled or fried, with caper sauce.
Saumon à la provençale ou sauce genevoise	
Saumon sauce homard ou aux huîtres . .	
Petite truite sauce aux câpres ou genevoise	A small trout.

Mayonnaise de saumon	A peculiar and good dish.
Mayonnaise de turbot	
Sole au naturel	Fried sole served without any sauce.
Sole en matelotte normande	A sort of stewed sole broiled, and with a peculiar sauce.
Sole au gratin	
Sole aux fines herbes	
Sole à la hollandaise	
Merlan frit	Fried whiting.
Merlan aux fines herbes	Ditto, with herbs.
Merlan au gratin	With crusts of bread.
Maquereau à la maître-d'hôtel la moitié	Broiled mackerel (the half,) and fresh butter.
Goujons frits	Fried gudgeons.
Brochet	Pike.
Eperlans	Broiled or fried smelts.
Un hareng sauce moutarde	Broiled herrings with mustard sauce.
Carrelet au gratin	Flounder.
Morue à la maître-d'hôtel ou béchamelle,	Salt cod.
Morue fraiche	Fresh boiled cod.
Raie sauce aux câpres ou au beurre noir	Skate boiled and served with caper sauce, or cooked in burnt butter.
Ecrevisses	River crayfish.
Crevettes	Prawns or shrimps.
Un homard	A lobster.
Salade de homarde	A lobster salad.
Anguille à la tartare	Eel fried, and served with mustard sauce.
Matelotte de carpe et anguille	A rich dish of stewed carp and eel.
Moules à la poulette	Muscles with white sauce, a very good dish.

ROTS DE VOLAILLE ET GIBIER.

	fr.	c.	
Poulet gras, 6 fr. le quart	1	50	Roast fowl.
Poulet truffé 8	2	0	Ditto with truffles.
Caneton du Rouen	4	0	Roast duckling.
Pigeon de volière	2	0	Roast pigeon.
Veau rôti	1	25	Roast veal.
Agneau rôti	1	25	Roast lamb.
Filet de bœuf piqué	1	0	Fillet of beef roasted and larded.

GIBIER.

(The prices vary.)

Faisan	Roast pheasant, generally very dear in Paris.
Perdreau gris, la moitié	(The half,) ditto, grey partridge.
Perdreau truffé	Ditto, stuffed with truffles.
Perdreau rouge	Red partridge.
Id. truffé	Ditto, with truffles.
Caille grasse	A fat roast quail.
Canard sauvage	Roast wild duck.
Bécasse	Roasted woodcock.
Décassine	Snipe.
Deux grives	Two thrushes.
Trois mauviettes	Three larks.
Pluvier doré	Golden plover.
Vanneau	Lapwing.
Salade de saison	The salads in season.
Salade aux œufs	Ditto, with eggs.

ENTREMETS.

	fr.	c.	
Asperges à la sauce ou à l'huile			Asparagus with melted butter, or cold with oil and vinegar.
Asperges aux petits pois			The points of asparagus.
Petits pois au sucre ou à l'Anglaise . .			Peas stewed with sugar, or plain boiled.
Petits pois au beurre			Ditto, with butter.
Fêves de marais à la crême			Beans with cream.
Artichaut à la sauce ou à l'huile . . .			Artichoke with melted butter, or cold with oil and vinegar.
Artichaut frit			Ditto, fried.
Artichaut à l'Italienne ou à la Lyonnaise.			
Laitues au jus			Lettuce in gravy.
Choux-fleurs à la sauce ou à l'huile . .			Cauliflower.
Choux-fleurs au gratin ou au Parmesan .			
Concombres à la béchamelle			Cucumbers.
Macédoine de légumes		90	A mixed dish of vegetables.
Haricots verts à l'Anglaise			Green French beans plain boiled.
Haricots blancs à la maître d'hôtel . . .		75	The white haricot bean, a good dish.
Pommes de terre à la maître-d'hôtel . .		75	
Pommes de terre á la Lyonnaise . . .		90	
Pommes de terre frites		75	Fried potatoes.
Pommes de terre au naturel			Plain boiled.
Purée de pommes de terre aux croûtons .		90	A sort of mashed potatoes.
Epinards au jus ou au sucre		75	Spinach with gravy or sugar.
Chicorée au jus ou à la crême		75	Chicoree, ditto.
Coquille aux champignons	1	25	Mushrooms scolloped.
Champignons à la provençale	1	25	
Macaroni au gratin	1	50	Macaroni with cheese, and with the top baked.
Macaroni à l'Italienne	1	25	Ditto with gravy.
Trois œufs aux truffes			Eggs with truffles.
Id. aux pointes d'asperges			Ditto, with the tops of asparagus.
Id. au jus		90	Ditto, with gravy.
Deux œufs pochés au jus		75	Poached eggs.
Id. à la chicorée		90	Ditto, with chiccory.
Deux œufs sur le plat ou au beurre noir .		75	Fried eggs.
Deux œufs frits sauce tomate	1	0	Ditto, with tomata sauce.
Omelette aux fines herbes		75	Omelette with herbs.
Omelette au jambon ou aux rognons .	1	0	Ditto, with ham or kidneys.
Truffes au vin de Champagne . . .			Truffles in champagne wine.
Truffes à l'Italienne			
Salsifis frits			Fried salsifis.
Céleri au jus ou frit			Celery with gravy, or fried.
Choux de Bruxelles		75	Brussels sprouts.
Carottes au jus			Carrots in gravy.
Navets au jus ou à la crême		75	Turnips in gravy or cream.

ENTREMETS AU SUCRE.

	fr.	c.	
Gelée au rhum		75	Jelly with rum.
Gelée d'orange		75	Orange jelly.
Un pot de crême		50	A pot of baked custard.
Omelette aux confitures	1	25	Omelette with preserved fruit.
Omelette au sucre	1	0	Sweet omelette.
Omelette aux pommes	1	25	Apple omelette.
Omelette soufflée à la vanille	1	75	A light puffed omelette, very good.

	fr.	c.	
Riz soufflée à la vanillée	1	75	A light dish of caked rice.
Beignets de pêches, ditto	1	0	Peach fritters.
Beignets d'abricots	1	0	Apricot fritter.
Beignets de pommes	1	0	Apple fritters.
Charlotte de pommes	1	0	A sort of apple marmalade.
Charlotte russe	1	50	Another, and favourite marmalade.
Croquettes de riz	1	0	Fried rice with sugar.
Gâteau au riz	1	25	A kind of baked rice pudding.
Tourte aux cerises			Cherry tart.
Tourte aux pommes			Apple tart.
Plum-pudding au Madére ou au rhum	1	75	
Plum-pudding à la Chipolata	2	50	

DESSERT.

Fraises au sucre		Strawberries with sugar.
Groseilles au sucre		Currants, ditto.
Framboises		Raspberries, ditto.
Cerises		Cherries.
Abricot		Apricot.
Pêche au sucre		Peach with sugar.
Prunes		Plums.
Amandes vertes		Green almonds.
Noisettes		Nuts.
Noix		Walnuts.
Cerneaux		Very young walnuts.
Raisin		Grapes.
Poire		Pear.
Pomme		Apple.
Orange		Orange.
Salade d'oranges à l'eau-de-vie		Oranges with sugar and brandy.
Mendians		Chesnuts.
Marrons		Small cakes.
Compote d'abricot		Apricot jam.
Compote de pruneau		Stewed prunes.
Compote de pomme		Apple jam.
Meringue à la crême	50	A rich, light cake.
Pêche à l'eau-de-vie	90	Preserved peach and brandy.
Abricot à l'eau-de-vie	60	
Deux prunes à l'eau-de-vie	30	
Cerises à l'eau-de-vie	50	
Biscuit de Reims	30	Sponge cakes.
Quatre macarons	50	
Marmelade d'abricots	90	
Confitures de cerises	90	
Gelée de groseilles	60	
Gelée de pommes de Rouen	1 0	
Gelée de coing	1 0	Quince jelly.
Fromage à la creme	1 0	Cream cheese.
Fromage de Neufchâtel la moitié (the half)	20	
Fromage de Gruyere	25	
Fromage de Chester	40	
Fromage de Roquefort	40	
Fromage de Parmesan	40	
Fromage de Brie	25	

VINS ROUGES. (RED WINES.)	la bout. fr. c.	la ½ bout. fr. c.
Bourgogne (Burgundy) ordinaire	1 0	...
Macon	1 50	...

	la bout. fr. c.	la ½ bout fr. c.
Beaune	2 0	
Beaune Ire	3 0	1 50
Thorins	2 0	
Moulin à vent	2 50	
Côte Saint-Jacques	2 50	
Pomard	3 50	1 75
Volnay	3 50	1 75
Vosne	4 0	2 0
Nuits.	4 0	2 0
Richebourg	6 0	3 0
Chambertin	6 0	3 0
Romanée-Conti	7 0	3 0
Clos-Vougeot	8 0	4 50
Bordeaux ordinaire	2 0	2 0
Bordeaux St.-Julien	4 0	2 0
Bordeaux Médoc	4 0	2 0
Bordeaux St.-Emelion	3 0	1 50
Bordeaux Château Margot	5 0	2 50
Bordeaux-Latour	5 0	2 50
Bordeaux-Laffitte	6 0	3 0
Bordeaux-Laffitte Ire	8 0	4 0
Bordeaux Château-Laffitte	10 0	5 0
Porto Vieux	7 0	3 50
Hermitage	6 0	3 0
Côte-Rôtie	6 0	3 0
Tavel	2 50	
Saint-Georges	3 0	1 50
Les vins frappés de glace (iced) augmentent de	0 50	

VINS BLANCS. (WHITE WINES.)

Ordinaire	1 0	
Chablis	1 50	
Chablis Ire	2 0	
Pouilly	2 50	
Alsace Ribauvillé	2 50	
Mursault	4 0	2 0
Mont-Rachet	6 0	3 0
Clos-Vougeot	8 0	4 0
Bordeaux Blanc	2 50	
Grave	5 0	2 50
Saterne	6 0	3 0
Tisane Champagne	4 0	2 25
Champagne mousseaux	6 0	3 25
Champagne rosé	6 0	3 25
Champagne d'Aï	7 0	
Champagne Sillery	7 50	
Hermitage mousseux	6 50	
Saint-Peray.	6 0	
Saint-Peray mousseux	6 50	
Vin du Rhin	8 0	4 0

Eau de Seltz	0 75
Soda water	0 75
Porter	2 0
Bière	0 50

VINS DE LIQUEURS.

	la bout. fr. c.	la ½ bout. fr. c.	le verre. fr. c.
Madère sec	6 0	3 0	75
Malaga	6 0	3 0	75
Frontignan	6 0	3 0	60
Muscat de Lunel	6 0	3 0	60
Alicante	6 0	3 0	75
Xères	8 0	4 0	75
Grenache	5 0	2 54	60

CAFE ET LIQUEURS.

Café, la tasse	60
Café, la demi-tasse	40
Chocolat, la tasse	75
Orgeat	75
Limonade	75
Groseille	75
Glace (an ice)	1 0
Un thé complet (tea)	1 50

PUNCH.

A la romaine	(le bol)	6 0
Au rhum		5 0
Au vin de Champagne		6 0
A l'eau-de-vie		5 0

LIQUEURS FINES.

		c.
Eau-de-vie de Cognac	the glass	25
Eau-de-vie d'Andaye		50
Eau de-vie de Dantzick		75
Genievre de Hollande		50
Extrait d'absinthe		50
Kirschenwasser		50
Rhum vieux de la Jamaïque		50
Fleur d'orange		50
Anisette de Bordeaux		50
Anisette de Hollande		60
Huile de kirschenwasser		60
Crême de vanille		50
Scubac		50
Huile de rose		50
Marasquin de Zara		75
Elixir de Garus		60
Crême de Malte		60
Curaçoa de Hollande		60
Curaçoa		50
Crême de menthe		60
Crême de thé		60
Crême de moka		60
Noyau de Phalsbourg		50

The prices given in the above *carte* are about an average of the charges of the best restaurants in Paris. As to the dishes, the mode of preparing such as are not peculiar to restaurant customers will be found in the DICTIONARY under their proper heads. Many of them would not

be suitable for domestic cookery; others bear names which change according to the restaurant.

RHUBARB. In England the stalks of this plant are used as a very agreeable substitute in pies and puddings for the green gooseberry; and recently a wine has been made from them by boiling them with sufficient sugar to give a sweetness, and fermenting in the usual way for other home-made wines. This wine is said to resemble champagne in flavour. In order, however, that it may effervesce, it should be bottled before the fermentation has completely subsided. This alone would not be sufficient to give all the character of champagne, even if it be true that it resembles it in flavour; for champagne wine undergoes many processes after it is in bottle, (see WINES.) Rhubarb does not appear to have any particular medicinal effect; but if it have, it cannot be other than beneficial. The root of a particular kind of the English rhubarb is medicinal, like that of the Turkey rhubarb, although, as regards its purgative property, in a much smaller degree; it is said, however, that the English rhubarb, as a drug, is much more tonic than the Turkey rhubarb, in proportion with the purgative quality, and it has even been strongly recommended, when the tonic rather than the purgative principle is required, that the root of the English rhubarb should be used. It is stated as a curious fact, the rationale of which, however, is not given, that an equal quantity of rhubarb in powder and the infused root sliced do not produce the same effect on the system: the power of the drug is said to be at least ten per cent. greater by infusion than in powder. The rhubarb cultivated for the table in England is called Monk's rhubard, and is propagated by offsets, which are to be planted in a good soil, between the months of November and February, at a distance of two or three feet from each other. It is a good plan, at the beginning of winter, to cover the plants with litter, as the stalks improve by this mode of blanching. The leaves will appear early in spring. For the mode of cooking, see PASTRY.

RICE. A farinaceous production, common to most hot countries; some of the best comes from Carolina. It grows abundantly in the East Indies and in Egypt, and there forms the chief food of the poor. Rice is cooked in a variety of ways for the table, (see PASTRY,) both in the grain cleared from the husks, and in the ground state, and is not unfrequently mixed with wheat in the manufacture of bread. It is very mucilaginous, but contains much less gluten than wheat, and is therefore, bulk for bulk, less nutritious; but in those countries where it forms the staple article of food, the inhabitants are a hardy and healthy race. There is a deep-rooted belief in England that the frequent and abundant use of rice will bring on blindness; but this opinion is not borne out by experience. The use of water in which rice has been boiled, being then strained and cleaned, is found very beneficial in diarrhœa and dysentery, particularly in chronic diarrhœa, when the administration of powerful astringents would be injurious: to make this water, the rice should boil slowly, until the water has become well thickened; after straining, it may be sweetened, and a flavour be given to it with a small quantity of sherry or brandy, if there be no fever to render either of them improper. Rice water, when taken medicinally, should, during the process of treatment, be taken to the exclusion of all other liquids; and two or three tumblers of it should be taken on going to bed. The best rice is of a fine pearl white colour, and swells readily in water. It is now so cheap an article compared with what it was formerly, that it forms a considerable article of diet in many of the establishments for the support of the poor. When made into bread, it should be previously boiled quite tender, in a bag, so as to come out nearly dry, and then, being thoroughly dried and rubbed into flour, should be made up with a portion of wheaten flour. This bread, and indeed any other, may be kept moist for a long time by the following simple process:—Put about two inches in depth of cold water in a bread pan which has a cover, and fit into the pan, just above the water, a board pierced with holes, on which the bread is to be placed so as to prevent its touching the water; then put on the lid of the pan.

RIZ AU LAIT. A favourite French dish, taken at night by persons who do not usually eat suppers. It consists merely of boiled rice and milk with sugar, and flavoured with orange flower water. The rice should be first boiled in a bag in water, until it becomes quite tender; it is then taken out, care being used that there be no more water in it than was necessary to swell it, and afterwards it is boiled slowly in milk.

RIZ AU GROS. Rice boiled in the

same way as for *Riz au Lait*, but subsequently allowed to simmer in consommé, (see CONSOMME.) It is usually eaten in the middle of the day, but is sometimes taken for supper.

ROOK. This bird is never used for the table but when very young, and just able to hop from the nest. Young rooks may be cooked in any of the ways given for pigeons, which they much resemble in flavour; but the most usual way of cooking them is in a pie.

ROOK PIE. Draw and skin as many young rooks as will fill the dish; when they have lain in cold water for two hours, remove the back bones, season with pepper, salt, two or three cloves pounded fine, and a little Cayenne, and lay them closely in a pie dish, adding a little good gravy, and laying on the top some slices of butter; cover the dish with a coarse flour and water paste, and bake for an hour and a half. Next day, remove the coarse crust, and cover the dish with puff paste, and bake it again until it is thoroughly dressed; before serving, pour into the dish a little good gravy highly seasoned.

ROSEMARY. This plant is beautifully aromatic, and pleasantly pungent. It is used as a tea, and very much in compound perfumes in the form of the essential oil. Distilled rosemary water (see DISTILLATION) is also agreeable; and is said to be a good cosmetic wash, particularly if mixed with elder flower water. Rosemary is also occasionally used in the kitchen. Rosemary is propagated by slips and cuttings.

ROSES. The rose is one of the most common, and yet most agreeable flowers of the garden. The perfume of the eastern rose is exceedingly rich; and it is from that that we derive the beautiful scent called attar of roses. The perfume of the rose of colder climates, although less powerful, is highly agreeable. The flowers of the red rose are astringent, and, made into powder, are sold for a variety of purposes, where a mild astringent for external use is required; they are also used in the preparation of medicine as an infusion; but this is rather for the colour than for any medicinal quality that they possess. The chief value of the rose is as a perfume.

ESSENCE OF ROSES. The true essence, or essential oil of rose, is that product which is sold under the name of Attar, or Otto of Roses. This is made in eastern countries, and is generally imported into Europe in small bottles. All attempts to obtain this product from the roses of colder climates have failed; the quantity produced being so limited as not to cover the expense of preparation, and the quality also being very inferior. What is usually called essence of rose in England is merely a small quantity of attar, or otto, dissolved in spirits of wine; and in this form it is generally used either as a perfume by itself, or for perfuming any composition. A drachm of the attar, dissolved in a half pint of spirits, will, if good, make a very strong essence; but most of the attar sold in England, particularly by perfumers, is much adulterated with spermaceti or some common oil. Persons who use much of this article should, therefore, be careful to purchase it of some highly respectable druggist, whose experience prevents his being imposed upon, and whose probity prevents his imposing upon others.

OIL OF ROSES. This is a very agreeable liqueur. To three quarts of white brandy add three pounds of rose leaves, taking care to choose the simple rose, which has the most perfume; let them infuse for a week in a jar, adding a pint of water, and then distil; adding, after the distillation, two pounds of sugar dissolved in three pints of water; colour the whole with a little filtered cochineal. This liqueur, however, is seldom made by distillation. What is usually sold is prepared in a much more rapid manner. A few drops of the attar of rose are put into a quart of good spirits of wine, which is added to the same quantity of strong syrup, the whole being coloured by a little tincture of cochineal. The quantity of attar of rose to be used depends entirely upon taste.

RATAFIA OF ROSES. Infuse a quarter of a pound of rose leaves in a pint of lukewarm water; let them lie for two days, and then press them through a cloth; add as much brandy as there may be infusion, and a thick syrup, made in the proportion of half a pound of sugar to a quart of the above liquid, and a little coriander seed, mace, and cinnamon; let them infuse for a fortnight, and then filter.

TO MAKE ROSE WATER. Gather the roses very dry; and having stripped off the leaves, put to every four pounds of flowers a quart of water, and place them in some vessel which can be closely stopped, with a handful of salt; let them lie in this way for three days, stirring them well at least once a day; at the end of that time put the mixture into the

still, taking care to line the bottom of it with a sufficient quantity of clean straw, to prevent the flowers from burning, and leaving a space of at least one-third in the still; for every twelve pounds of flowers put into the still, six quarts of water are to be added, and when three quarts for every twelve pounds have been drawn off, the distillation must be stopped. If the perfume of this water be not sufficiently strong, it may be strengthened by adding a little essence of roses. A very strong rose water is made in the following way: Take thirty pounds of rose leaves, gathered before sun-rise; crush them in a large mortar, and put them into a jar, with four pounds of common salt, arranging the roses in layers, and sprinkling the salt between each. Press them down well, and then cover the jar in such a way that none of the perfume can escape; let them macerate for twelve days; at the end of which time, distil them with a sharp fire, protecting them carefully in the way previously stated. The result of this distillation will be small in quantity, but rich in quality. A dozen drops will give as much perfume to half a pint of water, as half a pint of rose water distilled in the ordinary way would contain.

ROUX. Although the elements of this are merely butter and flour, it is a very important article in culinary matters, and requires skill and care in the preparation.

White Roux. Melt a quarter of a pound of butter over a slow fire; when melted, dredge into it sufficient flour to make it of the consistence of a thin paste; keep it on the fire after this till it is lightly fried, when it may be set by in a jar till required for thickening white sauces.

Brown Roux is made in the same way as the above, but is kept over the fire, and fried until it becomes of a dark brown colour. You must be careful not to attempt to obtain this colour at once, by putting it on too quick a fire, or it will be bitter. This is used for thickening brown sauces.

RUM. A liquor distilled from sugar. The best comes from Jamaica. Rum, to be less unwholesome than it usually is, should have great age, and should be racked off three or four times into barrels, the insides of which have been burnt. A small quantity of rum thus prepared finds its way to England as presents. Persons who are choice of their rum may adopt a good substitute. Put into each cask, fresh burnt and powdered charcoal, in the proportion of an ounce to a gallon of rum; stir up well, and let this remain for six months, then repeat it. The colour will be rendered pale, but the rum will improve wonderfully in flavour and quality.

RUST. The preservation of iron and steel from rust is a very important consideration in domestic economy. The following plan of doing this is very little known, and is far superior to any other:—add to a quart of cold water half a pound of quick lime; let this stand until the top is perfectly clear; pour off the clear liquid, and stir up with it a quantity of olive oil, until the mixture becomes a thick cream, or rather assumes the consistence of butter which has been melted for the table, and has become cold. Rub the iron or steel which is to be put by with this mixture, and then wrap it up in paper. Knives and other steel articles treated in this way will not acquire the slightest rust. If the nature of the articles will not admit of their being wrapped up in paper, they will remain free from rust by covering them more thickly with the mixture.

SAFFRON. A bulbous plant, cultivated in England as an ornament, the flower forming an agreeable variety for a border. In the East, the flower is gathered for medicinal purposes, and is highly esteemed. It used to be at one time largely imported into England, as it was said to have many fine sedative properties, but it is little used now. A few years ago it was pretended that by placing a quantity of saffron next to the skin, previously to embarking on a sea voyage, sea-sickness might be avoided; large quantities of saffron were sold for this purpose, but it was soon found that it had none of the virtue which had been ascribed to it. In the South of France, saffron is not merely used to give a rich colour to many dishes, but it is also made into preserves, and is taken medicinally in colds and nervous attacks. The dye given out by saffron is a very fine one. Saffron is frequently added to liqueurs in France, in the belief that it has a tranquillizing effect on the nerves of the stomach.

SAGE. This herb is used in the kitchen for seasoning, and is very wholesome. Culpepper is very diffuse in his eulogy of it as a medicine, and ascribes to it sovereign powers. It has certainly been used with advantage in cases of pulmonary disease, when not too far advanced, and is refresh-

ing when made into tea mixed with balm, when the stomach will not bear the infusion of Chinese tea. The mode of using it for pulmonary complaints is to express the juice of the young green leaves, and to take two or three table-spoonfuls morning and evening, mixed with honey. An extract may also be made from it in the same way as from the lettuce. (See LETTUCE.) The sage preferred for the kitchen is the red kind, and it should be grown in a light poor soil. The propagation is very easy, by slips or cuttings in the spring; all that is necessary is to put them deeply in the ground, and to water frequently.

SAGO. A farinaceous and gummy production from a species of palm tree. It is similar as an article of diet to tapioca, and is used in the same way for invalids and children. It is made into a pudding, (see PASTRY,) or is boiled in milk or wine, in which case, being first washed, it is dissolved by boiling in water, the milk or white wine being then added, and the whole boiled for a short time. Wine sago is found to be a very strengthening and wholesome article for old and feeble persons. If French white wine be used, it will not be necessary to add water; but if sherry or Madeira be used, the quantity of water should be at least equal to that of the wine. It may be sweetened according to taste, and either cinnamon, lemon peel, orange water, or nutmeg may be added.

SALAD. Raw vegetables, dressed with oil, vinegar, and other seasoning. It is a general opinion with medical men in England that salads of every kind, from the circumstance of the vegetables being uncooked, are unwholesome; but the medical men on the Continent do not appear to be of the same opinion, and salads there are not merely eaten as in England, as an agreeable variety, but form an essential article of diet. In fact, there is not one table in a hundred at which salad is not served, the only difference being that, in some parts of the south of France, salad is the first dish, whilst in other parts it is the last. With many of the lower, and even middle orders in France, a salad and an omelet frequently compose the whole of the dinner. The mode of dressing salad on the Continent differs essentially from that adopted in England; a larger quantity of salt and oil is used, and very little vinegar. Whether it is owing to the excess of oil that salad is considered more wholesome in France than in England may be a question. The English dressing for salad, composed of egg, mustard, &c., mixed with the oil and vinegar, is never adopted in France, except for a dish called Mayonnaise, which is cold fowl cut into pieces, and served with lettuce, and a dressing which is entirely similar to the English salad sauce, even to its acidity. In France, a great number of vegetables are used for salad which are little known in England. The common dandelion is very much used by the lower orders, and is perhaps one of the most wholesome vegetables so used. Boiled beet root, cut in slices, is served with almost every salad, and is a great improvement. The best dressing for salad, according to the English taste, is the yolk of hard eggs rubbed up with oil, vinegar, mustard, pepper, and salt; some add a little sugar. As few persons agree as to which of these ingredients should predominate, it would be useless to give instructions for the mixing. Watercresses are, perhaps, after the dandelion, the most wholesome vegetable for salads; and next to watercresses, the lettuce, from its sedative properties. Celery is generally mixed with salad in England, but seldom forms a salad of itself; whereas in France it is a distinct dish; but, unlike all other salad, it is prepared with a large quantity of mustard, probably as a stimulating condiment, to counteract its natural indigestible character. Where onions do not disagree with the stomach, and the flavour is not disliked, they should always be mixed with salad, as they give a warmth which is wanting in the other vegetables. To those who like the flavour of garlic, it is recommended to rub the bottom of the salad bowl with a clove of this vegetable, without putting any portion of the garlic itself into the salad.

SALSIFY — Is a root, the leaves of which bear a strong resemblance to the leek. It contains a large portion of saccharine matter, and is nutritious. This root is not much used in England; but on the Continent it is cooked in different ways, and by many is much liked. It is sown in March; and when the plants are at a proper growth, they are thinned to about six inches apart. The salsify requires a mellow deep soil; the roots may remain in the ground, and be taken up as wanted through the winter.

To BOIL SALSIFY. Wash it well in vinegar and water, and scrape off all the skin, removing every black spot; then boil it as asparagus, and serve with melted butter.

Another way: Scrape and clean as above; then put them in a stewpan with a little water, salt, lemon juice, and a small quantity of flour; serve with hot cream, or Espagnole sauce.

To Fry Salsify. Prepare them as above, cut them into pieces of three inches in length, dip them in batter, and fry to a good colour. A little brandy may be added to the batter.

SALT. This is the most useful of all the condiments, and otherwise the most valuable of all natural productions; without the use of salt, our food would be insipid, and health would be impossible; for the culinary preparations of civilized life would be little less than poisonous without it. Salt is also a valuable addition to the food of the lower animals, by which it is usually much relished. The quality and quantity of milk from the cow is improved by giving to it in some malt, grains, or other food, about an ounce and a half of salt, an hour before milking. Horses are kept in health by giving about half an ounce of salt twice a-day; it should also be given to sheep to the extent of from a quarter of an ounce to half an ounce in the course of twenty-four hours; and poultry is much improved when fattening, if a quarter of an ounce of salt be added to every pound weight of their food. Salt is invaluable for the preservation of meat and other articles of food, for although it is by no means one of the strongest anti-putrescents, it is almost the only one fit for domestic use, as it communicates no unpleasant flavour to the articles for which it is employed. Salted articles, however, are not generally wholesome, not on account of the quantity of salt which they contain, but on account of the change which they undergo, and which renders them indigestible; thus it happens that the long and exclusive use of salted food, where fresh vegetables cannot be obtained at the same time, brings on scurvy. Salt is used extensively in the arts and in chemistry; soda is made from it, by its decomposition with sulphuric acid; it is also a valuable article for manuring land. There are, in many countries, natural salt springs, which yield abundantly by evaporation of the water, after which the salt undergoes a preparation to render it white for the table. What is called sea-salt, which is also very good, is obtained by evaporation of the sea water by heat. The water flies off in vapour, and leaves the salt at the bottom of the evaporating pans. Some time ago considerable sensation was produced by a pretended discovery of the importance of salt mixed with brandy as a remedy for both internal and external diseases. We have no faith in the remedy internally, and as an external remedy for rheumatism, sprains, &c., it is no novelty; it was used nearly a century ago in many parts of England. The old mode was to put a handful of coarse salt into a large cup, to fill up the cup with brandy, to make it hot before the fire, and rub sharply with the salt and brandy together. It is a very useful external remedy, but spirits of wine to the salt would be much better than brandy.

Salting and Curing Animal Substances. A patent has been taken out in England for a new process of salting and curing. The meat to be cured is placed in an iron vessel of considerable strength, connected by a pipe and stop-cock with the brine tube, also with an exhausting pump; the cover having been screwed down on the vessel, the air is extracted and a vacuum established; whereupon, the stop-cock being properly turned, the brine rushes in and takes the place of the air, filling the pores of the meat, and penetrating thoroughly the animal substance; lest, however, some parts of the meat might not have been impregnated with the pickle by this re-action and the common atmospheric pressure, more of the liquid from the tub, prepared to taste with salt alone, or with saltpetre, or sugar, or spice, or alum, in the case of hides, is pumped in by a small condensing engine, (connected, of course, with the iron vessel,) until a pressure of from 150 lbs. to 200 lbs. on the square inch is attained. The animal substance is allowed to remain under pressure for about ten minutes, and the process is complete. The meat when taken out is thoroughly saturated with the brine, the full flavour of which is imparted to it, and it is well cured.

SAMPHIRE. This is a difficult herb to cultivate; it requires a rich light soil mixed with sand, and the plants from the seed must be well watered and sheltered until they take deep root. Samphire should be sown, if possible, in the interstices of old walls, and having once taken root there, it is likely to stand. It is chiefly used for pickling.

SAUCES. Although the use of exciting sauces may, in some cases, be injurious to the stomach, it is a fact, that, when carefully made, and taken with moderation, the excitement which they

produce is of a healthy character; without them many persons would be unable to derive that gratification from their food which is essential to the digestive process; and many meats which, without sauces, would fatigue the stomach, are rendered by the use of them much more agreeable and nutritious. As, notwithstanding the vast variety of sauces which are made, the bases of them are comparatively few in number, the ingenuity of the cook finds an abundant field for exercise, as they can be modified and varied to an almost interminable extent. One thing in the manufacture of sauces is essentially requisite: the butter should in all cases be of the best quality; and when unsalted butter is not perfectly sweet, it will be always better to employ salted butter of good quality.

Apple Sauce. Having pared, cored, and sliced some apples, boil them in water with a slice of lemon peel, until tender, when they must be strained and mashed; add to them a small piece of butter and a little sugar; good moist sugar is preferable; heat and serve.

Bechamel Sauce. Chop some shalots, parsley, and chives, very fine; put them into a saucepan with a bit of butter, a little flour, cream, salt, and pepper; let the whole boil till it becomes thick; a little nutmeg may sometimes be added, to vary the flavour.

Sauce for Boiled Beef. Take the water in which a large onion has been boiled, and mix with it a little chopped parsley and chives, some rich gravy, and a piece of butter covered with flour; boil them for a few minutes, and then add some capers, chopped fine.

Black Butter. Put any quantity of butter required into a saucepan, and heat it over the fire until the colour has turned; just before it is taken off, add a little vinegar, salt, and pepper. This is the common mode of making black butter. But where a fine flavour is required, a table-spoonful or more, according to the quantity of butter, of the following vinegar must be used:—Take a pint of white wine vinegar; put into it a small quantity of the usual sweet herbs, a few cloves, salt, pepper, and a sliced shalot; let these stand in the sun for a fortnight, or infuse near the fire; then strain, clear off, and put into another bottle. This vinegar may be used with a variety of sauces.

Sauce Bourgeoise. To a pint of good velonté, or other good stock, add a glass of French white wine, a little pepper and salt, a few shreds of lemon peel, a bay leaf, and a little white wine vinegar; let the whole stand over hot ashes for six or eight hours; then strain it for use; in a cool place it will keep some days, and is excellent with any meat, fish, or game.

Bread Sauce. Boil the crumb of bread with a minced onion and some whole white pepper; when the onion is cooked, take it out, as also the peppercorns, and put the bread, carefully crushed through a sieve, into a saucepan with cream, a little butter and salt, stirring it carefully till it boils.

Brown Sauce. Put into a saucepan two pounds of beef, the same quantity of veal, an old fowl, some onions and carrots, and throw over the whole a pint of water; place this on a strong fire until it begins to glaze; then put the vessel on a slower fire; and when your glaze begins to brown, put to it a little stock, adding to it some mushrooms, chiboles, a bunch of parsley, a few cloves and bay leaves; skim it, put a little salt, and let it simmer for three hours; then strain the liquor off, and add to it a roux which you have made in a separate vessel, and let it boil again another hour; you have only then to take the fat off and pass it through a sieve, when it is ready for use.

Caper Sauce. Have ready some melted butter, and when you have chopped your capers, put them in it with a little lemon pickle; the butter should be again heated, after the capers are added; but great care must be taken not to let it boil.

Sharp Sauce for Cold Meats. Into a quart of white wine vinegar, put eight cloves of garlic, twelve shalots, a small clove of ginger, a little salt, and the peel of a lemon; boil them together for a short time; then strain and bottle for use.

Cullis. Brown some sliced onions, carrots, celery, and parsley, in a saucepan, with a sufficient quantity of butter; add a pint, or a pint and a half of consommé; boil together and strain, then set by for use.

Sauce a la Diable. Chop six shalots very fine, put them into a saucepan with a large glass of vinegar, a clove of garlic, a bay leaf, and some veal jelly; reduce the whole together to the consistence of thin jelly by adding a little good stock and a table-spoonful of olive oil.

Dutch Sauce. Mix well together half a pound of butter, two table-spoonfuls of flour, and the yolks of five or six eggs; then put this paste into a saucepan with some salt, whole pepper, the juice of three

lemons, and half a tumbler of water; put it on a charcoal fire, and keep stirring until it has become sufficiently thick to lay on the vegetables or fish, over which you may throw it.

Egg Sauce. Boil the eggs very hard; when taken up, throw them into cold water; take off the shells, and chop the eggs rather fine; have ready your melted butter, into which throw them; heat it well and serve.

Sauce Espagnole. Take half a pint of cullis, the same quantity of beef stock, some parsley, shalots, a little garlic, a sliced parsnip, a sliced carrot, a head of celery, a bay leaf, a sliced onion, and a little coriander seed; boil for two hours over a slow fire, skimming occasionally; season with salt and pepper; strain and set by for use.

Fish Sauce. To about four ounces of melted butter, add three table-spoonfuls of mushroom catsup, a table-spoonful of essence of anchovies, a table-spoonful of white wine vinegar, some Cayenne, and a tea-spoonful of soy.

Lobster Sauce. Take the body of a boiled lobster cut or torn into small pieces, and mix it with melted butter and a little rich beef gravy, seasoning according to taste; boil them up, turning one way; the spawn of the lobster pounded may be added to the sauce.

Oyster Sauce. The oysters are to be bearded and scalded; then strain the liquor, and thicken it with a little flour and butter, adding lemon juice in small quantity, and a few table-spoonfuls of cream; heat the oysters well in this mixture, but do not let them boil; some persons add spices in making oyster sauce, in which case it must be left longer on the fire, simmering gently, but never being allowed to boil. An imitation oyster sauce may be made by boiling two or three chopped anchovies with spices, in about a tumbler of water until the anchovies are dissolved; this is then strained and thickened with flour and butter, the whole being simmered together afterwards for a few minutes. Another substitute for oyster sauce may be made with flour, butter, new milk, rich gravy, essence of anchovy, nutmeg, and pepper.

Shrimp Sauce. Take some shrimps, and when you have picked them from the shell as much as you can without breaking them, put them into some good melted butter which you have previously prepared; add a table-spoonful of lemon pickle; heat well and serve.

Sauce for Game or Poultry. Put into a stewpan, and set over a very slow fire, a quarter of a pint of French white wine, a table-spoonful of vinegar, three of oil, a bunch of sweet herbs, and some spice; moisten the whole with some good gravy.

German Sauce. Put some cullis or velonté into a stewpan with an equal quantity of good stock; add a little parsley chopped fine, the livers of two fowls braided, an anchovy washed and chopped, a piece of butter, some salt and whole pepper; thicken the whole over a slow fire, and use it as required; it is good with any dish.

Gherkin Sauce. Chop some gherkins, and put them into a stewpan with a little butter and spices to your taste; dust in a little flour, and moisten with a little gravy or stock.

Italian Sauce. Cut up some mushrooms very small, and put them into a stewpan with a little parsley, a bay leaf, and a few shalots; turn the whole a few times over the fire, and dredge in a little flour; add a little good stock, and a wine glass of French white wine; let it boil half an hour; then skim, strain, and serve.

Liver Sauce. Boil the liver of a fowl for a few minutes in water, and rub it through a sieve with a part of the water in which it has been boiled; then make some melted butter, adding a little cream; and when it is hot, put the grated liver into it, seasoning with pepper, salt, grated lemon peel, and nutmeg; this sauce is used for roasted fowl, and is usually poured over it.

Melted Butter. Flour the butter, and put it into a saucepan with a little milk, stirring carefully one way till it boils.

Sauce a la Menagere. Boil very gently for about twenty minutes a quarter of a pint of French white wine, some good gravy, a little melted butter, a handful of crumbs of bread, some shalots, chibols, parsley, and spices; when about to serve, add a little dash of vinegar.

Mint Sauce. This sauce is seldom used but with roast lamb; to prepare it, pick, wash, and chop fine some green spearmint; to two table-spoonfuls of the minced leaves, put eight of vinegar, adding a little brown sugar; serve cold in a sauce tureen.

Mushroom and Walnut Sauce. Take a pint of mushrooms, and the same quantity of walnut pickle; add five or six cloves of garlic, and a table-spoonful of

essence of anchovies; put them into a bottle, and set it without the cork in boiling water for about half an hour; then cork up, and put by for use.

Onion Sauce. Take as many onions as you may consider necessary; boil them until tender, taking care to change the water two or three times to render them more mild; then strain, and mash them in a bowl, adding a piece of butter, and a little salt; place it on the fire again before serving.

Parsley and Butter. When you have melted your butter, have ready some parsley chopped very fine, which has been previously scalded, and put into it, giving it a boil up before serving. Fennel sauce is made in the same way.

Pepper Sauce. Put into a saucepan a small handful of parsley, some chiboles, two or three bay leaves, a little thyme, some fine pepper, a wine-glassful of vinegar, and a little butter; let this stand over a charcoal fire until it has very considerably wasted; then add a little roux or espagnole, and a small quantity of good stock; after it has been over the fire sufficiently long, pass it through a sieve without stirring it up; this sauce should be rather pungent, and is good with all dishes that require to be highly-flavoured.

Sauce Piquant, or Sharp Sauce. After having made a roux, (see article Roux,) and moistened it with some good stock, add half a tumbler of vinegar, a little allspice, a small bunch of thyme, and a bay leaf; place the whole over a slow fire to thicken, when it must be passed through a sieve; season to your taste; the flavour may be occasionally varied, by adding sliced carrots, shalots, and a little parsley, and seasoning with Cayenne.

Sauce Ravigotte. Put into a saucepan some good gravy, a little vinegar, some spices, watercress, cerfeuil, and stragon, chopped fine; boil them altogether for a quarter of an hour; then take it off the fire, melt into it a little butter into which some flour has been rubbed, and set it over the fire again for a few minutes, shaking it well.

Sauce Robert. Slice eight or ten large onions, and put them into a saucepan with a quarter of a pound of butter; put them on a strong fire, and when your onions are of a light brown colour, add three large table-spoonfuls of roux, two of stock; and, when it begins to thicken a little, withdraw it from the fire, skim off the fat, and when about to serve it, add a spoonful of mustard. Do not let it boil.

Tomata Sauce. Put ten or a dozen of these vegetables in a stewpan, with an onion, and a little minced ham, a clove or two, or a little thyme; when the love apples are melted, rub them through a sieve, adding a little flour, and season to your taste. Before served, it must be boiled for some minutes.

Another way: Cut some tomatas into small pieces, put them into a stewpan with a little butter, two or three onions sliced, a little parsley, thyme, pepper, salt, and a clove or two; when done, strain through a hair sieve.

Sauce Tournee. Dilute some white roux with a little good veal stock, adding chopped mushrooms, parsley, and chives, or green onions. Boil them gently, skimming carefully; then strain and set by for use. This sauce, mixed with an equal part of consommé, and thickened over a brisk fire, adding some boiling cream, and boiling together with seasoning, according to taste, makes another velonté sauce. (See Velonte Sauce.)

Truffle Sauce. Take some truffles, mushrooms, half a clove of garlic, some parsley and young onions; chop the whole together very fine; then put them on the fire with a little stock, a glass of French white wine, a little salad oil, pepper and salt; let the whole stew together; skim off the grease before serving.

Sauce Velonte. Put half a pound of knuckle of veal, two fowls, four carrots, four onions, two cloves, some parsley and chibols, into a saucepan; cover them with consommé, and put them over a sharp fire; skim carefully; and when the liquid has diminished, fill up the saucepan with consommé, skimming from time to time; when it boils, stand it by the side of the fire, and make a white roux, with which put twenty champignons, and the juice of a lemon; pour upon this some of the liquor of your velonté, and let them boil; when this has been done, pour the whole into the saucepan with the meat, and let them boil together; then strain, taking care that the velonté be as white as possible. Set it by for use.

White Sauce. Put into a saucepan a quarter of a pound of butter, half a table-spoonful of flour, some salt, and whole pepper; add a little water; mix the whole well together with a wooden spoon; set it on the fire, stirring it until it is well mixed. Do not let it boil, as it makes it strong.

White Sauce without Butter. Take the yolk of an egg, adding to it a

little salt; beat it up with a wooden spoon, and pour into it, while beating, four or five ounces of salad oil. This sauce must not be put over the fire, the heat of the dish on which it is put being sufficient. It may be put over fish or vegetables, adding at the time a little vinegar, nutmeg, or pepper, according to your taste.

SAVORY. A herb formerly much used in cookery, but less so at present. It was also once a favourite in herbal medicine; but has lost its reputation. Summer savory is sown in the spring, in shallow drills, rather less than a foot apart; winter savory may be propagated from cuttings and slips.

SCOURING. This term is applied indiscriminately to all operations of cleansing in which a brush is used, and also as regards culinary and other utensils which are cleaned without its aid. By scouring, however, we shall here refer only to the operation of cleaning woollens, cottons, silks, and other fabrics of a similar nature. (See Silks.) In scouring of this description the article to be cleaned is stretched upon a board, and the stains having been removed (see Stains) it is well brushed with soap and water, or ox-gall, (see Ox Gall), and then the soap or gall is subsequently washed out with clean water. As many articles become unfit for use less by the wear which they have undergone, than by the stains of grease, &c., and the dirt which they have received, the operation of scouring, when carefully performed, is a very useful one, and frequently renders unnecessary the purchase of a new article. Unfortunately, however, most of the professional scourers, in order to get rapidly through their work, use brushes of such hardness that the texture of the article under their hands is partially destroyed, and the owner, far from finding economy in having had it cleaned, is a serious loser. It is always desirable therefore to perform the operation at home. Hot water should never be used in scouring of this nature; the brushes should be only moderately hard, and sufficient time should be employed to effect the thorough cleansing, without injury to the texture of the object to be cleaned.

SHALOTS. This root is used in most seasoned dishes; its flavour is milder than the garlic, and more pungent than the onion, and it must therefore be used in moderate quantities. The soil for shalots should be light and well broken, and be well manured with old, rotten dung. The sets are planted about the beginning of October, at about four inches apart, and three inches deep. The crop is taken up in the early part of the autumn, when the leaves begin to change colour, and is hung in a cool, dry place for use.

SHRUB. A compound liquor of rum and sugar. It is generally considered to be unwholesome. Mixed with cold water, however, it forms an agreeable beverage in warm weather.

SIEVE. An utensil perforated with holes, or made partly with wire, muslin, or other substance, to allow the finer parts of any article to pass through, and the grosser parts to remain. In perfumery sieves are made of gauze, muslin, silk, &c., according to the powders to be sifted; they should always have covers over them, to enable the operator to agitate the sieve powerfully, without losing any portion of the contents.

SILKS, to wash or clean. (See Washing.) Silks are never washed so well as in a running stream, using the clay called puddle, instead of soap, during the greater part of the operation, and only employing soap once or twice. Indeed, if the application of the clay be found sufficient, soap should be entirely dispensed with. Fuller's earth reduced to powder, and made with water into a kind of cake, will answer the purpose of the particular clay alluded to. When the silk has been thoroughly cleaned, and the stains, if there were any, removed (see Stains), it must be drawn backwards and forwards in the stream, until all the earth or soap disappears; and then be put to dry without being wrung. If a running stream be not at hand, rinse in frequent waters, and press with the hand. Silks thus cleaned have a beautiful brightness, when dry. The following receipt for cleaning silks has been communicated by a celebrated *dégraisseur* (scourer) of Paris.

Simple Method for Cleaning Silk, Cotton, and Woollen Stuffs, without Injuring the Colours. Take half a pound of black soap, half a pound of honey, and the same quantity of brandy, (quarter of a litre,) and mix them well together over a slow fire; then take the silk, cotton, or woollen stuff which is to be cleaned, spread it on a table, and with a soft brush rub the stuff with the soapy composition all over, on both sides; have ready at hand three pails of water, two of soft, (rain or river water,) and one of

hard, (pump water;) plunge the stuff, well soaped and scrubbed, first in the soft water, until the soap is discharged; next rinse it well in the hard water, and afterwards hang it up to dry; when dry, (if the stuff is of silk or cotton,) pass it through a little gum water, and, finally, iron it all over with a hot iron. The same method will answer equally well for cotton and woollen stuffs.

SNAILS. These animals were much used for the kitchen by many of the ancients, and they still form a dish in Italy and the South of France; but notwithstanding all the care that can be taken in cleaning them, they can scarcely ever be made agreeable eating. They have, however, still a high medicinal reputation, and are used not unfrequently on the Continent boiled in milk, as a remedy for affections of the lungs. They do not appear to have any other quality to recommend them than their highly viscous character, and some snails are even decidedly unwholesome; particularly those which are found in vineyards, and on hedges. Various preparations are sold in Paris as remedies for consumption, which are said to be made from snails, but there is probably no truth in the statement. They are occasionally brought into the French markets in cages like bird cages, for sale.

SOAP. The soap of commerce is made by a combination of oil and alkali, which is soluble in water, and dissolves stains of oil and grease, without injury to the object which has been stained. The best soap is made of pure olive oil and soda; for the ordinary soap a more common oil and potass are used. For general domestic use in cleaning, the common soap is preferable to the finer sort. Soap may be hardened in the making by the admixture of iron; it is in this way that the Marseilles marbled soap is made. Great varieties of fancy soaps are sold by the perfumers; the *Manuel de Parfumeurs* gives no less than fifty modes of preparation, but it would be a waste of space to repeat them, for no private person could prepare them in small quantities at so cheap a rate as they can be sold at by perfumers, and the making of them is attended with considerable trouble. It will be sufficient therefore to give the preparation of only two or three domestic soaps, which do not fall exactly in the class of perfumery.

Essence of Soap. This is very much used on the Continent for shaving. It is made by dissolving as much fine dry white soap in spirits of wine as the spirit will dissolve, and perfuming it with any essence. The mixture should be placed near the fire, or in a sand bath; and if the whole does not dissolve, pour off the clear liquid and keep it for use. In using it for shaving, the brush should be dipped in, and then a few drops of water be thrown upon the brush: it makes a fine lather. This is also a good article to have in the house, as it may be used as a soap liniment, by adding to it a little camphor, or camphorated spirits of wine.

Soap Powder — Is made by taking white soap which has been made very dry, by evaporation of the unctuous parts in the sun or in a drying stove, and pounding it in a mortar, and passing it through a sieve. The chief use of this article is assisting in putting on tight or damp boots; a little of the powder strewed over the inside of the boot will obviate any difficulty in drawing it on.

Soap for Stains. Cut up into very fine shreds a pound of white soap, and dissolve it near the fire in strong spirits of wine; work it well in a mortar with eight yolks of eggs, adding by degrees two ounces of essence of turpentine, and as much finely powdered Fuller's earth as will make it solid; then divide it into cakes, and lay it by for use. When it is used, wet, if possible, with hot water, the object which is stained, then rub it with the soap; having done this, take a sponge, or a fine brush, with some warm water, and rub until the stain has completely disappeared. This soap will take out all stains of a greasy nature.

SOAP WORT, (*Saponaria.*) The root of this plant is aperient and sudorific, and is said by some to be preferable, as a detergent of the juices, to sassafras. The leaves agitated in water raise a saponaceous froth, which is nearly as powerful as soap itself in washing, and is frequently used for that purpose.

SODA WATER. On the first invention of soda water, it was chiefly used by invalids, under the belief that its alkaline properties facilitated digestion, whilst the effervescence created a wholesome excitement. It soon, however, became a very favourite beverage for persons in health; and is now used to an enormous extent, not only in England, but also on the Continent. It is quite a mistake, however, to suppose that the soda water usually sold can have any great effect as an alkaline draught. In many cases not a grain of soda in its pure form enters into the composition of even a thousand bottles; the carbonic

gas which it contains being artificially prepared, and forced in by powerful machinery. We must not conclude, however, from this circumstance, that the soda water of commerce is a decidedly unwholesome beverage; it is only so when too highly charged with carbonic gas; for then a weak stomach finds difficulty in getting rid of the burden, and the peculiar sensation experienced shews that the first impulse of that organ is a desire to reject what it receives. Some medical writers, indeed, are of opinion that the soda water of commerce can never do any good, but frequently produces harm. Under this impression, an attempt has been made to introduce a new aerated mixture, in which the water, instead of being saturated with carbonic gas, is charged with the oxygen gas, commonly called laughing gas, which is made from manganese. It is asserted by the partisans of this new doctrine, that the oxygen thus taken into the stomach is immediately absorbed and carried into the blood; and many cases have been brought forward of extraordinary cures effected by this water, in cases of asthma, and other diseases. It is even pretended that it would be a remedy for cholera, some cases of that frightful malady having been cured by the administration of the laughing gas. Without pronouncing on the degree of credit due to this statement, it may be certainly laid down as a principle, that as this gas possesses exhilarating properties, whilst those of carbonic gas are, on the contrary, depressing, the use of the new aerated water would seem to be more reasonable than that of the soda water of commerce. Persons, however, who are fond of soda water, may make it themselves at a very slight expense: all that is necessary is to fill a pint bottle to the extent of three-fourths with water, then to put in half a drachm of finely powdered tartaric acid, and, next, a drachm of carbonate of soda, bottling with an excellent cork, and tying over immediately; in order, however, to prevent the escape of gas, the neck of the bottle, when tied, should be dipped in melted resin. Of course, the bottling is altogether unnecessary if the water is to be taken immediately; for if a rummer be filled half full with water, and half the quantity of tartaric acid above prescribed be put into it, the soda being placed in the same proportion in another glass with a similar quantity of water, the two being then mixed suddenly together, the whole will effervesce, and form a very agreeable beverage. Invalids and persons liable to indigestion should, however, reduce the quantity of acid to such an extent that the soda may be in excess. The draught may be made more stomachic by mixing a little powdered ginger and sugar with it.

SOUPS. If in England the use of soups is not so general as it might be, so far at least as regards those which are in their nature wholesome and economical, it must be admitted that our continental neighbours, the French, have carried this department of cookery to an absurd extent. M. Carême, in his large work called *l'Art de la Cuisine Française*, gives us nearly three hundred and fifty different soups, many of them exceedingly complicated in the mode of preparation, and many merely fanciful; for the imagination of a French cook has no limits, and he is as proud of a slight change in the manner of preparing a soup which enables him to coin a new name, as a general is of a victory. The selection given in the *Kitchen Dictionary*, from all that is known to be good of the soups used in different countries, whether as connected with health, economy, or pure gourmandize, will be sufficient for all practical purposes in the cottages of the poor, or in the palaces of the rich. Where modifications or changes are desired, the inventive faculties of the cook may be called into action; but the necessity for them is not very apparent. It is, perhaps, as well to remark that the richer soups should be taken sparingly; for it is a very bad custom to give to the stomach, at the commencement of a repast, the fatigue of digesting rich soup, and enfeebling its tone, so as to disable it from performing its work with what is to succeed. It may also be observed, that with the plainer soups it is equally imprudent to take a large quantity; for the juices of the stomach should not be too much diluted at the commencement of a repast.

Plain Beef Soup—Called in French, *Pot au Feu.* This is by far the most wholesome of all soups, and is regularly used by the middle classes on the Continent, and also by many of the most wealthy. Take three pounds of good rump of beef, or any other part not too fat, and free from bone; put it into an earthen fire-proof pot, with three quarts of water, one large carrot, two or three turnips, two leeks, a head of celery, and one burnt onion, add a proper quantity of pepper and salt, and let the soup boil

slowly, skimming it from time to time, for at least five hours; when the soup is ready, strain it through a fine sieve, then pour it over thin slices of bread, and serve it up. The meat and vegetables make a dish, which is served up after the soup. Thus cooked, the meat becomes tender and juicy, and eaten with French or English mustard has a fine flavour; it is also excellent eaten cold at breakfast or at luncheon. In Paris there are large establishments which supply this soup to families by the quart; so that the cook has nothing to do but to warm it for use. The soup thus made on a large scale is strengthened and rendered economical by the addition of gelatine made from bones, which is sold by the grocers in cakes. By way of economy, beef, which has been roasted on the preceding day, may form part of the meat employed.

Beef Tea. Put a pound of lean beef into a stewpan, with about a pint and a half of water; be careful to skim it well, and let it simmer very gently for two hours; a clove or two may be put in, but no vegetables; strain before used.

Cottage Soup—the *Pot au Feu* of the poor. An earthen pot is filled with carrots, turnips, cabbages, leeks and onions, and water, to which is added a quantity of bacon, in the proportion of one pound to six quarts of water; pepper and salt are used in the usual way; and the soup is allowed to boil very gently for five or six hours; the addition of a pint of the white haricot beans improves the flavour and nutritive properties. Where vegetables are cheap, soup for ten persons may be obtained for about twopence per head; and the vegetables thus cooked are wholesome and nourishing. When poor persons can afford to purchase butcher's meat, they make a *pot au feu* with it, and thus obtain all its virtues at the same time that they have the solid food, instead of sending it to the bakehouse, as is done in England, and losing half the bulk, and half the juices, by evaporation.

Currie Soup. Put three or four onions, cut fine, into a saucepan with a little butter, and some flour, and let them fry of a light brown colour, but without burning; then rub in by degrees about two small table-spoonfuls of currie powder, till it becomes of the consistence of paste; mix this well in about four quarts of good gravy soup, and boil it gently until it has become sufficiently flavoured with the currie; strain it off, and put into it a fowl cut into pieces, and let it stew slowly for about an hour. A large table-spoonful of tamarinds is sometimes added, previously stewed in a little of the soup, and strained. It should be boiled about ten minutes before serving.

Giblet Soup. Scald the giblets of as many geese as may be necessary; divide the neck into small pieces, and cut the gizzard and liver into several pieces; wash them well afterwards in cold water; then put them into a saucepan with about two quarts of good stock, and boil gently until quite tender, then strain them off; put a quarter of a pound of butter into a stewpan with a bunch of parsley, some young onions, and half a pint of stock; put these over a slow fire for an hour, then add as much flour as will absorb all the butter, afterwards throwing in all the liquor in which the giblets were boiled, and half a pint of wine, (sherry preferred;) when this has boiled for a few minutes, strain it over the giblets, squeezing in a lemon, and seasoning to your taste.

Hare Soup. After having cut the hare into joints, put it into a stewpan, with some allspice, a little salt, whole pepper, a bunch of parsley, a little lemon thyme, four quarts of water, about three pounds of lean beef, a small slice of ham. and three or four onions; let it boil till it is reduced one-fourth; then separate the hare, strain the soup over it, and add a pint of red French or port wine; boil it up before serving, that it may be thoroughly hot.

Julienne Soup. This is one of the best soups made in France and is generally preferred by the English to all the other soups of the restaurateur s carte. The *Manuel de la Cuisiniere*, a little work written for the use of the middle classes, recommends it to be made in the following way:—Slice very fine, in any quantity, according to the number of persons who are to dine, equal parts of leeks, carrots, parsnips, onions, turnips, celery, and potatoes; add an equal proportion of finely chopped lettuce, and a little sorrel and cerfeuil, (parsley, if cerfeuil cannot be had;) let these be about half cooked in a saucepan with fresh butter, and then add sufficient beef stock (Bouillon gras) to make the quantity of soup required; boil gently for an hour, then season with pepper and salt, as may be necessary, and serve up without straining. If there be no beef stock on hand, make some for the purpose in a separate saucepan. The vegetables cannot be sliced too fine; they should not be more bulky when

cooked than a large straw, and about an inch long.

Another Julienne soup, called *Faubonne*, is made by allowing the vegetables, when first cooked in the butter, to remain long enough to acquire a deep colour. In the preparation above mentioned, there should be sufficient butter to prevent their burning brown, and having a burnt taste.

Mullagatawny Soup. Stew half a pound of butter, about twenty sliced turnips, nearly the same quantity of carrots, and six or eight onions, in some strong stock; when they are quite tender, strain off the vegetables, and add about two or three quarts of stock, about a handful of the crumb of bread, and two table-spoonfuls of currie powder; then take a fowl which has been cut into pieces, and fried in a pan with butter, and put it into the saucepan, which should now be put to simmer for some time, the fat being taken off from time to time; just before it is taken from the fire, mix two table-spoonfuls of arrow-root, or potato fecula, in a little water, and put it into the saucepan, stirring it well, until the soup becomes nicely thickened. A mullagatawny soup may be made in the same way, with breast of veal cut into slices, and previously fried in butter. When there is no stock ready prepared, it may be made by boiling the bruised bones of beef and poultry for a long time with the vegetables, then, straining off the liquor, add the fowl or veal; the vegetables may be served or not with the soup, according to taste: salt must be added in sufficient quantity.

Another mullagatawny soup is made in the following way:—Stew over a slow fire, until lightly brown, half a pound of fresh butter, four or five large onions sliced, some chopped sweet herbs, and a little shalot; then put in four pounds of lean beef and two pounds of veal, cut into slices, and stew gently for half an hour, after which add half a pound of pearl barley, and two ounces of rice, and three or four table-spoonfuls of currie powder; these must simmer for three or four hours; cut up a fowl previously skinned, and stew it gently until perfectly done; add this to the soup about half an hour before it is taken up, and a quarter of an hour before taking up, add a pint of boiling milk, thickened with arrow-root, and the juice of a large lemon, or two table-spoonfuls of good vinegar. The quantity of currie powder may be increased for persons who are partial to that flavour. Rice carefully boiled, and served up very dry, always accompanies this soup. A rabbit may be substituted for a fowl, and is preferred by many persons.

Ox Cheek Soup. Cut the meat off the bones in small oblong pieces, and break the bones well; put the whole into a vessel with water in the proportion of a quart to a pound of meat; set it on a gentle fire; when it has stewed gently for two hours, add vegetables to your taste, a little vermicelli, pepper and salt, and let it stew for about two hours longer; then take out the bones; take care that while boiling it is well skimmed.

Ox Tail Soup. Cut two ox tails into pieces of about an inch and a half long, and after steeping them for two hours in cold water, put them into a stewpan, with a bunch of sweet herbs, a little whole pepper, two onions, a carrot, and a turnip; pour over these ingredients four quarts of cold water, and cover closely; when it boils, skim it carefully, and let it boil for three hours; then take off all the fat, add a small quantity of vinegar, half a pint of red French or port wine; before serving, the vegetables and herbs should be taken out.

Oyster Soup. Put the liquor of ten dozens of large oysters into a stewpan with a quart of new milk, and the same quantity of water; season with pepper and salt, and thicken with half a pound of fresh butter and flour; let this boil for a few minutes, after which set it to cool; then beard the oysters, add them to the liquid, and let them boil for two minutes at the utmost; a little nutmeg may be added to those who like the flavour of that spice. This is a rich, strengthening, and agreeable soup. In some parts of Normandy, soup is made from muscles in a similar way.

Pectoral Chicken Soup for Colds. Take a chicken and prepare it in the same way as for fowl broth, (see at the end of soups,) but adding two ounces of pearl barley, two ounces of rice, and two ounces of honey, leaving out pepper and salt.

Rabbit Soup. Cut a rabbit that is too old to dress in any other way into joints, and lay in water for an hour; then dry, and fry brown in butter, with three or four onions cut in slices; when done, put into a stewpan, with three quarts of cold water, a pint of split peas, some pepper and salt, and let it stew very gently for five hours; then strain and serve hot.

Stock, or Bouillon Gras, as it is made in France. Take any quantity of the choice and most juicy parts of beef,

and put it into an earthen pot, or sauce-pan, with as many quarts of water as there are pounds of meat; boil gently, and take off the scum that rises, until none is left; then add sufficient salt to give a flavour; when the quantity of water has been considerably reduced, add carrots, turnips, parsnips, leeks, celery, and burnt onions, in the same proportion as that mentioned under the head PLAIN BEEF SOUP, according to the quantity of meat that is employed; the stock should boil gently until the quantity of clear soup strained from the vegetables has been reduced to less than one-half of the quantity of water first employed; when strained, put the stock by for use. In cold weather this stock will remain good for three or four days, and form the basis of several soups; in hot weather it will sometimes turn in a day; when, therefore, it is intended to keep the stock beyond this time, no vegetables are to be used, except the burnt onion, without which it would be merely beef tea. The *Almanack de France* states that the decomposition of soup may be checked for some time by adding to a tureen full, three or four table-spoonfuls of vinegar.

TURTLE SOUP. The following excellent method of making this article is from Mrs. Dalgairn's "Practice of Cookery," and is meant for a turtle of one hundred and twenty pounds weight:—

"Having cut off the head close to the shell, hang up the turtle till next day; then open it, bearing the knife heavily on the back of the animal in cutting it off all round; turn it on its end, that all the water and blood may run out; then cut the flesh off along the spine, sloping the knife towards the bones so as to avoid touching the gall; and having also cut the flesh from the legs and other members, wash the whole well, and drain it; a large vessel of boiling water being ready on the fire, put in the breast shell; and when the plates will separate easily, take them out of the water; boil the back and belly in water till the softer parts can be taken off easily; but before they are sufficiently done, as they are to be again boiled in the sauce, lay them to cool singly, in earthen vessels, that they may not stick together; let the bones continue to stew for some time, as the liquor must be used for moistening the sauces. All the flesh being cut from the body, the four legs and head must be stewed in the following manner:—Lay a few slices of ham on the bottom of a large stewpan, and over the ham two or three knuckles of veal; then above the veal, the inside flesh of the turtle, and that of the members of the whole, adding a large bunch of sweet herbs, such as sweet basil, sweet marjoram, lemon thyme, a handful of parsley, and green onions, and a large onion stuck with cloves. Then partly moisten it with the water in which the shell is boiling, and when it has stood some time, moisten it again with the liquor in which the back and belly have been boiled; when the legs are tender, take them out, drain, and put them aside, to be afterwards added to the sauce; and when the flesh is completely done, drain it through a silk sieve, and mix with the sauce some very fine white roux; then cut all the softer parts, now sufficiently cold, into pieces about an inch square; add them to the sauce, and let them simmer gently till they can be easily pierced; skim it well.

"Next chop a small quantity of herbs, and boil them with a little sugar, in four bottles of Madeira, till reduced to two; then rub it through a tammy; mix it with the turtle sauce, and let it boil for a short time. Make some forcemeat balls as follows:—Cut off about a pound of meat from the fleshy part of a leg of veal, free from sinews or fat; soak in milk about the same quantity of crumbs of bread; when quite soft, squeeze, and put it into a mortar, together with the veal, a small quantity of calf's udder, a little butter, the yolks of four hard-boiled eggs, a little cayenne, salt, and spices; pound the whole very finely; then thicken the mixture with two whole eggs, and the yolk of a third; throw a bit into boiling water, and if not sufficiently firm, add the yolk of another egg; and for variety, some chopped parsley may be mixed with half of the forcemeat; let the whole cool, so that it may be formed into balls, about the size of the yolk of an egg; poach them in boiling water, and add them to the turtle. Before serving, mix a little cayenne with the juice of two or three lemons, and add it to the soup. It is generally preferable to prepare the soup the day before it is required for use; and it will be best heated in a water bath, or flat vessel containing water, which is always kept very hot, but not allowed to boil. By the same method, sauces, stews, and other made dishes, may be kept hot.

"When the fins of the turtle are to be served as a side dish, they must be first parboiled, then skinned, and stewed in a little turtle sauce, with some port

wine, and seasoned with cayenne, salt, and a little lemon juice, and thickened with butter and flour. Fricandeaux and blanquettes may also be made of the flesh of the turtle, in the same way as those of veal."

Mrs. Rundell, in her "Domestic Cookery," gives the following :—

"The night before dressing a turtle hang it up by the hinder legs, and, without giving time for it to draw in its neck, cut off its head; early next morning have ready a boiler of hot water; with a sharp knife take off the fins next the head at the joint, which if properly hit, will allow them to separate from the body without cutting; the hinder fins, when cut at the joint, will, by a little twist, come off immediately.

"Next divide the callapash, or back shell, from the callapee, the belly shell, at about two inches round the latter, which is some of the prime of the turtle; take out the entrails with particular care, lest the gall should be broken, and throw them into a tub of cold water; when well washed, open the guts from end to end with a small penknife, and draw them through a woollen cloth often, to cleanse them; then put them into fresh cold water. The belly shell must be cut in pieces, the size of the palm of the hand, and the lungs, kidneys, &c., be cleared from the back shell; put the shells and fins into scalding water, until the scales can be scraped off with a knife, and all the meat can be taken clear off. Be sure to keep the different parts of the turtle separate, that they may be proportioned out afterwards.

"The green fat cut in pieces the size of an inch and a half square; simmer the fins only, in as much water as will cover them, till tender; then add the water, strained, to a quantity of very rich broth of veal, to which put a pound of butter rubbed down with as much fine flour as shall give due thickness; stir it over the fire ten minutes; having put in the entrails, cut in small pieces, six hours to stew before dinner; add to the soup green onions, and all sorts of seasoning herbs, chopped small, pepper, salt, and cayenne, to your taste, not extremely hot, and the juice of one or two lemons, according to the size of the turtle, which, if fifty pounds weight, will require two bottles of Madeira; let all the seasoning be simmered six hours, some of the coarse and white parts two hours, and a proportion of the green fat one hour.

"Put round the back shell a paste of flour and water about two inches high, to keep in the meat; then fill it three parts with the remainder of the coarse, the part that resembles veal, the green fat, &c., and some of the thin soup, and additional seasoning. Bake it." (For Forcemeat, see Stuffing.)

Mock Turtle Soup. After having parboiled a calf's head, take off the skin, and cut it into small square bits; cut the meat also into small pieces, and skin and cut up the tongue into slices; put this into a large stewpan with about three quarts of water, and a pint of Madeira wine, and let it boil gently over a slow fire for two hours; season with cayenne, two blades of mace, salt, and a little lemon peel; put in also a dozen of forcemeat balls; mix two table-spoonfuls of flour in a little of the soup, and stir it into the stewpan, adding at the same time a little lemon juice, and the yolks of six hard eggs; let the whole simmer for about a quarter of an hour, and serve in a tureen; the forcemeat balls should be made by mixing the brains with a little grated bread, a small quantity of finely minced suet, salt, pepper, nutmeg, and parsley, scalded and chopped; make into balls with the yolks and whites of two eggs beaten, and fry to a good colour in boiling dripping.

Mock Turtle. (French method.) The following method, amongst several others, is given by M. A. Carême :—"Choose a calf's head which is fat, and has a thick skin, let all the blood be well drained from it, in order that it may be perfectly white; take out the bones, cut it into four parts, taking off the ears and the kernelly parts; boil it until tender, and then take it off, and place it under a heavy weight to press; when cold, cut it into pieces of an inch square, removing from each piece any fat or hair that may be attached to it; put all these pieces into a stewpan with a dozen fine cocks' combs, twenty-four cocks' kidneys, and the same number of small white mushrooms; let it stew over a very slow fire for about ten minutes, adding a glass of dry Madeira wine; then turn out the head thus stewed into some espagnole well clarified, in which you have previously mixed a sauce made as follows: Put into a stewpan two carrots and two onions cut fine, a few sprigs of parsley, half a bay leaf, a little thyme, basil, sweet marjoram, a slice or two of lean ham cut into small pieces, three anchovies washed and bruised, a little cayenne, two cloves, and a very small bit of mace; add a wine glass of

Madeira wine, and about twice the quantity of good *consommé;* let these ingredients stew on a slow fire for an hour, and then pass it through a fine sieve; when you have added this sauce to the soup, boil the whole again together for a quarter of an hour, and skim off the light froth which the wine has caused to rise. Care should be taken not to let the flavour of any one spice predominate."

Vegetable Soup. Cut up into small pieces, some celery, onions, carrots, or turnips, according as you wish the flavour to predominate; when you have blanched them in boiling water for a short time, put them into a vessel to stew, with a small piece of butter, and some salt; in the meantime put into another stewpan a piece of butter, some onions, carrots, parsnips, and a head of celery, all cut up very small; two or three cloves, a little parsley, or a clove of garlic, may be added, according to your taste.

Vegetable Stock, or Bouillon Maigre. Put into a saucepan ten carrots cut in slices, the same number of turnips and onions, two heads of celery, two lettuces, a little cerfeuil, if it can be procured, half a cabbage sliced, two parsnips, also sliced, and half a pound of butter; pour over them a pint of water, and boil until all the water has evaporated, and the vegetables begin to fry a little in the butter; now fill the saucepan with water to the height at which the vegetables stood before it was first put upon the fire, and about two quarts more, adding a quart of peas, green or dried, according to the season, two or three cloves, and pepper and salt for seasoning; boil gently for three or four hours, then strain off. This is an agreeable soup in this state, and, as stock, is the basis of most of the soupes maigres which are made.

Carrot Soup. Wash, scrape, and cut into slices twenty-four carrots, and put them into a stewpan with about a quarter of a pound of butter; let them stew till sufficiently soft to press through a hair sieve; then add the pulp to as much good well seasoned stock as will make it of the consistence of rich cream, and boil it for about three-quarters of an hour.

Green Pea-Soup. Put into a saucepan with six quarts of water, a quart of old green peas, two onions, a little mint, some salt and pepper, and boil till the peas are perfectly tender, when they must be pressed through a sieve; stew four young lettuces in butter until they are tender and three pints of young green peas; put these into the soup, and boil until the peas just added are tender.

Green Pea-Soup Maigre. In Catholic countries excellent pea-soup for the maigre days is made as follows:—Take a quart of green peas, large, but not too old; boil them in water with salt until they are thoroughly tender, then pass the pulp through a sieve; now take a quart of milk, and beat up in it the yolks of two eggs and the white of one; put the pulp to this, and boil for a quarter of an hour: just before serving, sweeten with white sugar, and add a little grated nutmeg and lemon peel. This is a very agreeable and nourishing preparation for young persons.

Onion Soup. Peel and slice eighteen onions, three or four turnips, a parsnip, two carrots, and put, with the heart of a head of celery, a bunch of sweet herbs, and a little pepper and salt, into a stewpan, with four quarts of beef or veal stock; boil till the vegetables are tender, then press all through a sieve, and let stand till cold; then bruise up the yolks of three hard-boiled eggs with a pint of cream, and stir it into the soup, and heat it, but be careful that it does not boil; put a piece of toasted bread into the soup before serving.

Onion and Milk Soup. Brown some slices of onion in a frying-pan, with a piece of fresh butter, and a few pinches of flour; when the onion is well coloured, put into the pan a quart of boiling milk; season to your taste; let the milk boil up once or twice; strain and serve.

Pea-Soup in the English Way. Put a pint of split peas into four quarts of water, with two ounces of butter, three pounds of beef, one pound of crushed bones, and a knuckle of ham, or half a pound of good bacon; add two or three carrots, as many turnips, a head of celery, four onions, and the proper quantity of salt and pepper; boil for about three hours; then crush the pulp from the peas through a sieve, and add it again to the soup; boil for another hour; then pass the soup through a sieve, and serve it up, making of the meat, where economy is looked to, a separate dish. Some persons who do not like the flavour of bacon or ham, leave it out. Many good housewives, when they boil salt beef, or a leg of mutton, keep the liquor for the following day for pea-soup, adding a much smaller quantity of meat than they would otherwise use. When green peas are in season, a pint may be added at the second boiling; these are to be served up with

the soup; serve with the soup a plate of dry toast, cut in small squares, and a little powdered mint, that each person may flavour the soup according to taste.

The French way of making pea-soup is as follows:—Take the required quantity of bouillon gras (beef stock), and put into it as much purée (see Puree) as will make a thick soup; boil for an hour; cut bread into small squares, which are to be fried in butter, and served up with the soup. The purée is sometimes made simply, without any other process than boiling the peas, and converting them into a pulp. In this case it is put into the beef stock, and gently boiled for a longer time, with the addition of a bit of bacon or ham. M. Carème makes a very rich pea-soup in the following manner:—Take three pints of crushed peas, of the green kind, put them into a saucepan, with a little salt, a piece of fresh butter, and a sufficient quantity of water to boil the peas, adding a little lean ham; let them simmer for two hours; then take away the ham, and press the peas in pulp through a sieve or cullender, assisting the process by a little hot consommé, (see Consomme;) now mix consommé in the proper quantity to make thick soup, and simmer for an hour; just before the soup is taken from the fire, add a little sugar sufficient to give the soup a slight flavour of sweetness, and a little butter; serve with it small squares of bread fried in butter, but on a plate separate from the soup. To improve the colour of the soup, add a little boiled and mashed spinach, rubbed through a sieve with consommé.

Potato Soup. Peel some potatoes, and boil them in water until they become a purée; then press them through a sieve, and fricasee them with some butter, chopped parsley, and a little pepper and salt; moisten these ingredients with the water in which the potatoes were boiled. Steep some slices of bread in the soup.

Pumpkin Soup. Pare the rind from a large piece of pumpkin, taking out all the pulp; then cut it into small pieces, and boil it in water until all the water is consumed, and it becomes of the consistence of marmalade; then add a small piece of butter, and a very little salt, and afterwards about a pint and a half of milk which has been boiled and sweetened; cut slices of bread in the dish before serving.

Rice Soup. Let the rice be well washed in three or four waters, a little lukewarm, rubbing it at the same time between your hands; then drain it dry; it must then be put over a slow fire, with some good stock and veal gravy, and allowed to boil for from two to three hours; when done, skim, season it to your taste, and serve thick; the rice should not be allowed to boil so long as to break, as it spoils the appearance of the soup, although the flavour is not injured.

Vermicelli Soup. Put whatever quantity of stock you may think necessary into a saucepan, and let it boil quickly; when it boils, put in your vermicelli, taking care that you do not allow it to settle in lumps; boil it a quarter of an hour; if it is allowed to boil too long, the vermicelli bursts, and the soup becomes too thick; the vermicelli should be blanched in boiling water, and be well drained on a sieve, before it is put into the soup.

Venison Soup. Put into a stewpan two ounces of butter, and about four pounds of the breast of venison, cut into small pieces, and let it stew, closely covered, for half an hour; put two quarts of cold water, with about three quarters of a pint of the blood, into another saucepan, and boil it, stirring it constantly; then add the meat to it, with an onion sliced, a carrot, some salt, and pepper; let it boil about two hours; thicken, if necessary, with a little flour and butter; before serving, take out the carrot and the bones.

Whiting Soup. Take two whitings, two soles, and a mullet, cut them, when carefully cleaned, into pieces, and put them into a saucepan, with a clove of garlic and some parsley; having put the saucepan on the fire, add a quart of boiling water, salt, and pepper, and let the whole boil over a slow fire for an hour and a half; fry some slices of bread in butter, and place them in a deep dish, on which the fish and soup, when done, are to be poured.

Calf's Lights Broth. A favourite French preparation. Take half a lobe of a calf's lights, cut it into small pieces, and place it in an earthen pot with three quarts of water, six or eight turnips, cut up, a little parsley, or cerfeuil, and half an ounce of jujubes, or a quarter of an ounce of isinglass; skim the broth carefully as it boils, and when reduced to two quarts, strain through a fine gauze sieve.

Fowl Broth (for four persons). Take a good-sized fowl, cut it into pieces, and put it, with the bones, into a saucepan, with two quarts of water, add one onion, and season with pepper and salt; when the quantity is reduced to a third, strain through a fine sieve, and serve it up

with a little chopped parsley. If rice be used, let it be boiled separately, and mix it with the broth when cooked.

Mutton Broth. To four pounds of the middle part of neck of mutton, put two quarts of water, boil and skim it well; then add some turnips, and two or three onions, and about half a pint of pearl barley; let it simmer very gently for an hour and a half; serve the meat separately, with some melted butter, in a tureen. If the turnips are preferred to be eaten mashed with the mutton, take them out when tender, and mash with a little piece of butter, salt, and pepper.

Sheep's Head Broth. Mrs. Dalgairn's *Practice of Cookery* gives the following method for making this preparation:—"After having the sheep's head and trotters singed, which is done with a red-hot iron, (they are usually sent for this purpose to a blacksmith's forge,) split the head and take out the brain, which is not used, cut out the white of the eye, and rub the head and feet well over with it; let them lie for two hours, then wash them very well in lukewarm water, and rinse them thoroughly; cut out the tough membrane from between the toes, and lay them in cold water for two hours; put on two gallons of water, and three quarters of a pound of Scotch barley; when it boils, put in the head, trotters, and neck of the sheep, and a quart of carrots and turnips cut into dice; add a little salt, cover the pot closely, and let it boil four hours; take off the scum as it rises; put in some chopped onions about an hour before serving; boil some whole carrots and turnips, or cut them in half, to put round the head, trotters, and neck, in the dish. In summer, green peas are a great improvement to this broth."

Veal Broth. This is to be made in the same way as chicken broth, in the proportion of one quart of water to one pound of knuckle of veal without the bone; an onion may be added. The French make what they call cooling veal broth, which is taken by invalids, in the proportion of only half a pound of veal to two quarts of water, and add two lettuces.

SOURKROUT. Cabbage which has undergone fermentation. It is a favourite dish in Germany; but very few English persons are fond of it. The mode of preparing it in Germany is either peculiar, or the cabbage which is used for the purpose is of a different kind from that which is used in England and in France; for the Germans pretend that no sourkrout is good but that which is made in their own country. It is made in France as follows:—Some vinegar and flour are laid in the bottom of an upright cask, from which the head has been removed; on the vinegar and flour is placed a layer of the drum cabbage, cut into shreds; salt is plentifully sprinkled over the layer of cabbage, which is rammed down tight, and successive layers, salted, are placed in the same way until the cask is full, each layer being well pressed; the head is now put on in such a way as to clear the sides and press upon the cabbage, and a light weight is placed upon it; when the cabbage has fermented for nearly a month, the scum and a great part of the water at the top are removed, and a heaver weight is laid on. The cask should be placed in a dry and rather warm cellar. Sourkrout is usually stewed with gravy, and should be brought to the table rather crisp. It is sometimes cooked in plain water, and requires a long time, as it should merely simmer. The Germans eat sourkrout with almost every dish. In France, it is generally served with sausages, which are broiled and laid upon it. Partridges, either roasted or stewed, are also frequently served upon sourkrout. There are different opinions as to the wholesomeness of this preparation. Some Germans say it is very wholesome and light of digestion; others merely assert that it is not unwholesome. There is really, however, no reason for supposing it to be, when eaten in moderation, either wholesome or unwholesome.

SOY. A very rich sauce, exported from India, and used in small quantities with melted butter for fish. It has a very peculiar flavour, and is by no means generally liked. It is unwholesome if more than a few drops be used. Soy is imitated in various ways; but it is not sufficiently expensive to render it necessary to attempt any substitute.

SPINACH. This is considered a cooling vegetable; but it does not appear to have any particular medicinal qualities, at least not in the quantity in which it is used for food. The kinds of spinach most generally cultivated are, the smooth-seeded for summer, and the prickly-seeded for winter use. For the former, the sowing for the first crop is made in a sheltered situation in the beginning of February, or in January, if the weather be open. It may be sown either thinly in a row, or broad cast: if the latter, the plants should be twice thinned—first, to about

three inches, and afterwards to about eight inches, asunder. Other sowings should take place at intervals of about three weeks. The winter crop is sown about the middle of August, choosing the time before rain is expected. The soil for this vegetable should be light, dry, and rich, and the situation sheltered. When the plants are a little advanced, the ground around them should be carefully hoed clear from weeds, the plants at the same time being thinned to moderate distances. With care and attention, the winter crop will afford successive gatherings, until about April; but this must in a great measure depend on the mildness or severity of the weather. In England, spinach is seldom cooked but in one way—plainly boiled; but on the Continent it is an article of more considerable consumption. There is, therefore, a slight variety in the mode of cooking.

To Boil Spinach. When it has been carefully picked and well washed, put it on the fire in boiling water with a little salt; let the saucepan be uncovered, and allow it to boil for about twenty minutes, then strain it well in a cullender, and put it again in a saucepan, and beat it well with a wooden spoon until it is perfectly smooth; add a small piece of butter, and a little cream; mix well together, and serve hot; when placed on the dish, score it in squares with the back of a knife; poached eggs or fried sausages are very frequently served on spinach, or it is served with roast meat.

Another way: When the spinach has been well picked and boiled as above, put it into cold water for a minute or two; then drain and squeeze it well; chop or rub it very fine and smooth, and put it into a stewpan with a small piece of butter, and let it cook for ten minutes; then add a little salt, sugar, and some grated nutmeg; moisten with good gravy, and garnish with sippets of toasted bread.

SPIRITS OF WINE. (See Alcohol.) Dr. Guérin, in his *Chymiste Populaire*, gives the following directions for the preparation of spirits of wine, which is to be used for dissolving essential oils: to a quart of spirits of wine of forty degrees, add ten drachms of potass and one drachm of alum, reduced to a fine powder; cork the bottle carefully, and shake it twice a-day for two or three days, then filter, and use the spirit as it may be wanted; the use of the potass is to absorb the aqueous parts of the spirit, and consequently give it additional strength; the alum corrects the empyreumatic smell of some essential oils, and, combined with the spirits of wine and the potass, assists dissolution considerably.

SPRUCE BEER. Formerly a very favourite beverage, but little used since the introduction of ginger beer. A very good spruce beer may be made as follows: Twelve gallons of water, four quarts of treacle, a quarter of a pound of bruised ginger, two ounces of allspice, three ounces of hops, four ounces of the essence of spruce, and half a pint of good yeast; boil the hops, ginger, and allspice together for about half an hour, then take the mixture off the fire, and stir in the treacle and spruce; strain into a cask, and stir in the yeast; when the fermentation has ceased, the cask must be bunged up; it will be fit for bottling in three or four days, putting it in stone bottles, and tying down. It may be made without the hops, ginger, or allspice, and by merely mixing the other ingredients first in a small quantity of lukewarm water, and then adding as much cold water as is necessary to fill the cask.

STAINS. The art of removing stains is one of great utility in domestic economy. The following modes of operating on different substances are chosen as the most certain and practical, from the mass of receipts published on this subject.

Acid Stains. The stains of lemon, orange, vinegar, mineral acids, &c., may be removed from silks, cottons, or other articles of dress, by the application of volatile alkali. If round the stain the volatile alkali should for a moment affect the colour, it will re-appear as soon as the evaporation is gone off; silk and woollen substances, stained by the juice of fruits or red wine, may be restored by holding them over the vapour of burning sulphur, washing them carefully immediately afterwards.

Stains by Alkalis. Stains caused by quick lime, potass, soda, &c., may be removed by moistening them with vinegar, or where they are very obstinate, by well diluted sulphuric or muriatic acid, but nitric acid is never to be used, as it destroys the primitive colour, and leaves of itself a yellow stain.

To Remove Stains from Bronze. Make the article very hot by dipping it in boiling water, then rub it with a piece of flannel dipped in suds made from yellow soap, rubbing clean with soft linen cloths. If the article to be cleaned be a tea urn, it should be filled with boiling water before the outside is touched.

Stains of Grease. To remove these, a mixture of fuller's earth, soda, and soap, will be found effectual; turpentine is also sometimes added. (See Soaps.)

Stains of Ink and Ironmould. These are most effectually moved by placing a little salt of lemon upon the stain, and pouring on a small quantity of boiling water, and then washing in cold water, without which precaution the stain would shew itself again after the first washing.

To Remove Stains by Manganese. Put an ounce of manganese into a stone jar, and pour upon it some sulphuric acid; expose the stain to the vapour which arises, for a few minutes, and then rinse the article in cold water. Ink, fruit, or other stains not from grease, are readily removed in this manner.

Stains of Metals. When metals are rusty, or covered with verdigris, which has entered the substance, they are to be rubbed with sand or emery, or even filed, if the oxydation be deep; the polish is then to be restored by an impalpable powder of emery, moistened with oil, and cleaned off with a leather covered with whiting. Silver, gold, or tin, which is stained by any sulphurous emanation, should first be washed with water slightly acidulated with vinegar, and then rubbed with fine tripoli or whiting. Almost all the powder which is sold for cleaning plate is mixed with mercury, and is therefore in some degree objectionable. The fine colcothar of vitriol used by painters, is, however, a good plate powder. Another and very excellent mode of cleaning plate, is to rub it, after having washed it clean, with a piece of cloth prepared in the following manner:—Cut a yard of coarse calico into four, and boil it in a quart of water with two ounces of calcined powdered, and sifted hartshorn, till all the liquid is absorbed.

For Cleaning Wainscots, and other Painted Woods. Four ounces of potass and four ounces of powdered quick lime are to be mixed together, and boiled for half an hour in three quarts of water; this mixture is to stand until it is cold and quite clear; the clear liquid is then poured off, and a painter's brush dipped into it is to be passed over the surface of the wood in the same way as for painting, immediately afterwards washing with cold water. This mode of cleaning will frequently render a new coat of paint unnecessary, and it has the advantage of being destructive to the eggs of insects which may be deposited in the interstices of the wood; where there is reason to suspect that bugs are in the wood, it may be well, as an additional precaution, to add to the mixture two drachms of corrosive sublimate.

Stains of Wood. The most effectual way of removing stains of most descriptions from wood, is to mix a quarter of an ounce of oil of vitriol with two ounces of water and rub the stained surface with a cork dipped in this liquid, until the stains disappear; then wash with cold water. The colour of the wood is rendered pale for a time by this method, but it is brought up again by rubbing with furniture paste. (See Furniture Paste.)

STARCH. The starch usually sold is the fecula or sediment of good wheat, steeped in water; after separating the bran from it, it is passed through sieves, and being dried in the sun, or in an oven, is afterwards cut into pieces. A substitute for wheat starch, for domestic purposes, may be made as follows:—Wash and peel a gallon of good potatoes; grate them into a pail of water, and stir frequently; then let them settle. On the following day the starch will be found adhering to the bottom of the vessel; the water must be poured off, and fresh water added, stirring again as before, and let it subside a second time; then pour off the water, and dry the sediment, either in the sun, or in a very slack oven. It may then be cut into any form for use; but as the gluten is much less than that from wheat, the same appearance cannot be given to it as to wheat starch. This sediment, when crushed into powder, is called potato fecula, and is used for cooking; on the Continent, several articles of pastry are made from it. It is also a substitute for arrow-root, as a food for children and invalids, and is prepared in the same manner. All the fibrous parts of the potato being removed, and the nutritive portion only retained, the fecula is a light digestible food.

An excellent starch may also be made by setting by, in a cool place, the water in which rice has been boiled in the ordinary way (not in a cloth), which will, in twenty-four hours, become a very strong starch.

STERNUTATORY POWDER.—The use of sternutatory powder in some affections of the head and eyes is found to be of great benefit; but many of the preparations sold under this name are dangerously exciting. The following preparation is one of the most harmless, and at

the same time, one of the most efficacious. Take of the dried flowers of roses and marjoram, each two drachms, flowers of lavender one drachm, and iris powder one drachm; rub the flowers in the hand, and then pound them in a mortar; mix the powder with the iris powder, and sift through a fine sieve; then rub up with the whole seven drops of oil of cloves.

STRAWBERRY. A very agreeable and wholesome fruit. It is said to contain a considerable portion of iron, and therefore to be tonic; when eaten to excess, it brings on flatulency, but it is of short duration. The leaf is diuretic. The variety of strawberries is very great, and some, by a peculiar mode of cultivation, are brought to an enormous size, but without being improved in flavour. Strawberries may be obtained at an early period by forcing them in hothouses, but they have not the fine aroma of those which grow in the open air; they may also be cultivated in pots in rooms, and be thus obtained earlier than in the natural state. The most aromatic strawberries are those called the wood strawberry. In France these are transplanted into gardens, and a succession is kept up in ordinary seasons until near Christmas. The best time for planting strawberries is in May, or in the beginning of June, before the great heats come on, and transplanting them in September. They must be watered in dry weather; and at their first bearing, only a few of the buds should be allowed to remain. Particular care must be taken from time to time to examine the plants, and remove from them the large white worm, which is their chief enemy. This worm generally attacks them in May and June. Strawberries are chiefly eaten in an uncooked state, with wine and sugar, or cream and sugar; but they also make a good syrup, marmalade, &c., and a beverage is obtained from them, called strawberry water, which is very agreeable in warm weather.

Italian mode of Eating Strawberries at Dessert. Take off the stalks from as many berries as will form one layer at the bottom of a dish, sift some fine loaf sugar over them; then place another layer, and sift again; each layer will be found smaller than the preceding. When there are five or six layers, cut a fresh lemon and squeeze the juice all over them. Before they are helped, let them be gently disturbed, that they may have the benefit of the lemon-juice and sugar. They may be eaten of heartily without danger, which is more than can be said of strawberries and cream; and, generally speaking, those who have eaten them with the Italian dressing will never eat them any other way if they can help it.

Strawberry Cream. Boil some good cream with sufficient quantity of sugar to sweeten it, and reduce it to one half its bulk; then add a little rennet, and the juice of strawberries, sufficient to give a good flavour; and bake in a slow oven.

Strawberry Marmalade. Crush two pounds of fine strawberries, and pass them through a sieve; then mix them with a strong syrup of two pounds of sugar, and cook till the marmalade is done.

Syrup of Strawberries. Proceed in the same way as with mulberries.

Strawberry Water. Put some very ripe strawberries into a linen cloth, and press out the juice. Put this into a wide-mouthed bottle, leaving the mouth open, and hang it up in the sun until the juice has become clear; then pour it off gently into another vessel, taking care not to disturb the sediment, and beat it up in the proportion of half a pint of juice with a quart of water, and a quarter of a pound of sugar. Then strain through a jelly bag.

[It is necessary to observe that from the flat taste of strawberries when dressed, it is usual to add a few raspberries to heighten the flavour.]

STUFFING. Stuffing or forcemeat, called in French *Farce*. Other recipes will be found under different heads.

A French Stuffing. Cut in small pieces some undressed fowl, put them into a stewpan, with a piece of butter, a little salt, pepper, and nutmeg; shake them over the fire for ten minutes, drain, and let them cool; put an equal portion of crumbs of bread in the same stewpan, with some broth, and a little parsley, chopped fine; stir it with a wooden spoon till it becomes quite soft; let it get cold, then pound the fowl until it will pass through a tammy; pound the bread also, and put it through the sieve; then put equal parts of the meat, butter, and bread together, and pound them with yolks of eggs sufficient to make into a proper consistence, and keep in a jar for use.

Stuffing of Ham and Veal. Mince equal quantities of ham and veal, a bunch of parsley, and some pepper; put it on the fire with a little broth; let it stew very gently, then pound it in a mortar; add to it an equal portion of bread, soaked

in milk and pounded; pound the whole together with some butter, and mix it with the yolks of eggs. Bacon and veal which have been used in braising, or anything being highly impregnated with the flavour of herbs and onions, and very rich, may be employed afterwards as a stuffing, pounded and mixed with panada.

Common Veal Stuffing. Take equal quantities of beef suet and crumbs of bread, chop the suet very finely; chop together a bundle of sweet herbs; add to them a tea or salt spoonful of grated lemon-peel, and pepper and salt. Ude, who is good authority, observes, that "it would not be amiss to add a piece of butter, and pound the whole in a mortar;" mix it up with eggs. Grated ham or tongue may be added to this stuffing.

By mixing with any potted meat or game an equal proportion of soaked bread, which will always be lighter than bread-crumbs, the cook will have at once a very fine species of stuffing, to be employed in stuffing olives, fillets of fowl, &c. Bacon or butter must always be substituted for suet, when the forcemeat is to be eaten cold.

A Stuffing for Fowls or Meat. Shred a little ham or gammon, some cold veal or fowl, some beef suet, a small quantity of onion, some parsley, very little lemon-peel, salt, nutmeg, or pounded mace, and either white pepper or cayenne, and bread crumbs; pound it in a mortar, and bind it with one or two eggs, beaten or strained. For forcemeat patties, the mixture as above.

For a Hare. The scalded liver, an anchovy, some fat bacon, a little suet, some parsley, thyme, knotted marjoram, a little shalot, and either onion or chives, all chopped fine; crumbs of bread, pepper, and nutmeg, beat in a mortar with an egg.

Passover Balls for Soup. Chop an onion and half a pound of suet very finely, stew them together until the suet is melted, then pour it hot upon eight spoonfuls of biscuit flour; mix it well together; add a little salt, a little grated nutmeg, lemon-peel, and ginger; add six eggs; put the balls into the soup when it boils, and boil them for a quarter of an hour. The quantity of eggs and flour may appear disproportioned, but the flour employed is of a peculiar kind, used for the purpose in Jewish families. Nothing can exceed the excellence of the balls made after this receipt: they are applicable to any kind of soups.

Forcemeat for Fish Soups, or Stewed Fish. Beat the flesh and soft parts of a lobster, half an anchovy, a large piece of boiled celery, the yolk of a hard egg, a little cayenne, mace, salt, and white pepper, with two table-spoonfuls of bread crumbs, one ditto of oyster liquor, two ounces of butter warmed, and two eggs long beaten; make into balls, and fry of a fine brown in butter.

Another, for Fish. Chop, and afterwards pound in a mortar, any kind of fish, adding an anchovy or two, or a tea-spoonful of the essence of anchovies, but do not allow the taste to prevail, and the yolk of a hard-boiled egg. If for maigre, pound butter with it; but otherwise, the fat of bacon pounded separately, and then mixed; add a third portion of bread, prepared by soaking and pounding previously, and mix the whole up with raw eggs.

For Cutlets. Get some stale bread, add to it an equal portion of chopped sweet herbs, parsley being the principal ingredient; season it, and mix it on a plate with clarified butter; have another plate of dry bread crumbs. Brush the cutlets with yolk of egg, and put the mixture on thickly with a knife, then roll them in the bread crumbs. Upon some occasions this process should be twice performed, in order that the coating may be sufficiently thick.

Forcemeat for Turtle. A pound of fine fresh suet, one ounce of ready dressed veal or chicken, chopped fine, crumbs of bread, a little shalot or onion, salt, white pepper, nutmeg, mace, penny-royal, parsley, and lemon-thyme, finely shred; beat as many fresh eggs, yolks and whites separately, as will make the above ingredients into a moist paste; roll into small balls, and boil them in a fresh lard, putting them in just as it boils up; when of a light brown, take them out, and drain them before the fire. If the suet be moist or stale, a great many more eggs will be necessary.

Mrs. Rundell, in her *Domestic Cookery*, gives the following list of forcemeat ingredients, which may be used according to the taste and discretion of the cook:—

Cold fowl, veal, or mutton.
Scraped ham or gammon.
Fat bacon, or the fat of ham.
Beef suet.
Veal suet.
Butter.
Marrow.
Crumbs of bread.
Parsley.

Yolk and white of eggs well beaten, to bind the mixture.
Cold sole.
Oysters.
Anchovy.
Lobsters.
Tarragon.
Savory.
Pennyroyal.
Knotted marjoram.
Thyme and lemon-thyme.
Basil.
Sage.
Lemon peel.
Yolks of hard eggs.
Mace and cloves.
Cayenne.
Garlic.
Shalot.
Onion.
Chives.
Chervil.
Pepper.
Salt.
Nutmeg.
Jamaica pepper in fine powder, or two or three cloves.

SUGAR. The nutritive properties of sugar are very great; and this article appears to form the basis, more or less, of all those vegetable and farinaceous substances which give the greatest support to human life. As it is almost a general rule, however, that the most nutritious substances, in an unmodified form, are the most difficult of digestion, persons whose digestive powers are feeble should not indulge extensively in the use of sugar. The practice of giving sweet things to children is highly injurious; for even those of the strongest digestive powers may have them enfeebled by this habit. Taken in moderation, with those articles which do not of themselves abound in saccharine matter, sugar, however, rarely produces any serious inconvenience. In France, grown persons as well as children take much more sugar than is conducive to health. In their coffee they use four times as much as an Englishman would take; and they also consume a great deal mixed with cold water as a beverage. Against the latter practice, however, much cannot be said; for it is in most cases a substitute for the stronger and exciting drinks preferred by the English. Indeed, a glass of sugar and water, taken occasionally, is a very refreshing beverage; and, with the addition of a few drops of orange flower water, it is very wisely taken in French evening parties, instead of punch, grog, or negus. The sugar in general use is of two kinds: that which is made from the boiled and crystallized juice of the sugar cane, and that which is produced from the sweet juice of the beet root. In England, however, there is very little of the latter, the moderate price of colonial sugar rendering unnecessary and unprofitable a manufacture of this description. The adulteration of sugar, which was said to be carried on to a great extent in England, when the article was dearer than it is now, is little practised; and it requires but very slight experience to detect it, either in the state of moist or refined sugar. It is a mistake to purchase the coarser kinds of white sugar as an economy; for just in proportion with the fineness of the lump, is its saccharine quality. In brown sugars, however, the same rule does not hold good, the coarser containing frequently more saccharine strength than those which are fine; consequently, where the high flavour of strong moist sugar is not an objection, it may be used in preference to the finer sorts.

To Make Syrup. The solution of sugar and water by means of boiling is very necessary for many preserves and other articles. It is made, if required to be strong, by merely adding as much water as will cover the sugar, and boiling it for a long time gently, removing the scum as long as any continues to rise. The stronger the syrup is required, the longer it must simmer. When done, put it by in bottles for use.

Barley Sugar. Melt some sugar over the fire with a decoction of barley, mixed with whites of eggs, well beaten into a light froth; this is then passed through a jelly bag, and again boiled until it forms large bubbles; then throw it out on a marble slab or table, which has been lightly rubbed over with oil of sweet almonds; when the bubbles disappear, it is rolled into round sticks, and left to cool and harden.

Sugar Candy. Clarify four pounds of lump sugar, which must be allowed to simmer with a little water, over the fire, until by taking up a little on a spoon, and blowing to it, you find it fly off in small flakes; then having scummed it well, take it off the fire, throw into it a quarter of a glass of good spirits of wine, and pour the whole out into an earthen dish; cover it over, and put it into an oven for eight days, taking care to keep it of an equal temperature; at the end of that time,

drain off the syrup, and the candy will remain attached to the dish, which must be warmed, in order more readily to allow the candy to be detached.

Sugar Plums. Under this general head are included the whole variety of articles of this kind sold by the confectioners, from the common sugar-plum to the almond, and other kernels, &c., covered with sugar, and also the compound paste of fruit and sugar. They are made in the following way:—Take a copper pan or basin, in the form of a stewpan, having two holes by which it may be suspended by cords from a ceiling, and a kind of handle from the middle, to facilitate the frequent agitation by the hand; let this pan be suspended at about four inches from a brasier of charcoal, and having put the articles which are to be covered with sugar into the pan with some strong syrup, shake the pan, so that every part of the articles may be covered, and keep agitating them until the sugar is dry; then add more syrup, and agitate till dry; and continue to do the same until the desired thickness is obtained. If blanched almonds or nuts, for instance, be put into the pan in this way, they will acquire any thickness of sugar required, and their original shape will be preserved. It will be the same with any paste of fruit and sugar, but this must be dry before it is put into the pan.

SWEETBREADS, (Veal.) A delicate portion of the calf, light of digestion, but not very nutritive. It is much recommended to invalids when the stomach is unable to digest more solid food. Sweetbreads are cooked in various ways, (see Veal,) and are also made into a pie, either with or without the addition of other meat, but alone they are rather tasteless. The following sweetbread pie is very palatable:—Stew the sweetbreads, sliced thickly, for about a quarter of an hour in white stock, with a few fine herbs and chopped shalot, and mushrooms, salt, pepper, and a good-sized piece of butter; then put them into a pie dish with some ox palates, previously boiled very tender, or the remains of a roasted fowl, and a little ham, some peas, or asparagus tops, and the yolks of some hard-boiled eggs, and forcemeat balls; over the whole put thin slices of fat bacon; put on a crust, and bake as a pie, or bake without a crust, and when done put it into a vol au vent. (See Vol au Vent.) Water may be used intead of stock, if a little rich gravy be added.

SWEET HERBS. A bunch of sweet herbs is composed of parsley, sweet marjoram, winter savory, and orange and lemon thyme. The parsley should predominate.

SYLLABUB, mixed with sugar, juice of fruits, &c. They are either solid or whipped.

Syllabub with Cakes. Steep spunge biscuits, or any other cakes, in equal quantities of port, claret, and brandy; mash them up with a spoon, and add grated nutmeg, and lemon peel, lemon juice, sweet almonds, blanched and pounded to paste, and sufficient sugar to make the whole sweet; the quantity of the above will depend upon the size of the syllabub required; put all these ingredients into a bowl, and let the milk of a cow be milked upon them, adding a little good cream and sifted loaf sugar. A very good syllabub may be made by mixing half a pint of sherry, half a pint of mountain, a wine-glass of any ratafia, (see Ratafias,) half a pound of pounded white sugar, some grated nutmeg, the grated peel of a lemon, and the juice of a lemon; when these have been well stirred together, and the sugar is dissolved, add a quart of rich cream, and whisk it up until it froths well; put some macaroons, or spunge biscuit, into a dish, and pile the froth upon them; or the syllabub may be served in glasses. If the whites of six eggs be whipped up with the syllabub, it may be served up differently, but the whipping must be continued for a long time; as the froth rises, put it upon a sieve to dry, and having half filled wine-glasses with wine, fill them up with the froth. The common syllabub is generally served without cream or whipping; wine, nutmeg, sugar, grated lemon-peel, with or without a little brandy or liqueur, are mixed in a basin, and the milk of the cow is milked upon them; the quantity of milk is generally in the proportion of three pints to one pint of wine, but this may be reduced or increased, according to taste.

SYRUP. A preparation of sugar and water. (See Liqueurs.) Dr. Guerin, in his *Chymiste Populaire*, recommends the following method of making syrup as attended with less trouble than the ordinary mode of boiling:—For ten bottles of any syrup dissolve seven pounds of sugar, broken into small bits, in six pints of cold water; then filter carefully. On the other hand, mix in five pints of spirits of wine, the essences and colours, and add the water by small quantities at a time,

stirring constantly; then filter the whole. This method of Dr. Guerin is not so good as boiling the syrup, and scumming it repeatedly, for it has not the fine oily appearance, which is so important to syrups and liqueurs. When very great clearness is required, it is customary to add the whites of eggs, beaten up, to the syrup whilst it is hot; and after beating it well in, to strain through a jelly bag. This, however, is seldom necessary, and even the straining, if the sugar be very clear, and the syrup be well skimmed when boiling, may be dispensed with. On the Continent the juices of various fruits are mixed with sugar, and sold under the name of sirop: such as Sirop de Groseilles, Sirop de Framboises, &c., which, mixed with water, form a very refreshing beverage in hot weather. One general direction will do for compound syrups of this kind: let the fruit be put into a stewpan, and boiled for five minutes; then squeeze out the juice; and having strained it through a jelly bag, add it to the syrup of sugar, in the proportion of half a pound of juice to a pound of sugar. The syrup must be good for this purpose, the water being evaporated by boiling, until the syrup is very thick; when the juice and the syrup are mixed, pass again through a jelly bag.

TAMARIND. The fruit of a tree which grows abundantly in the West Indies, and is imported from thence in a preserved state, with sugar. Tamarinds mixed with water make a refreshing drink in fevers; and they are slightly laxative.

TANSY. Some of the old herbalists assign sovereign virtues to this herb. They do not appear to have been merited, and it is now rarely used in medicine. Tansy tea, however, is occasionally used for what is called sweetening the blood. It is of little value in cookery. Tansy will grow in any soil, and may be propagated by separating the roots.

TAPIOCA. A preparation from the flower of the maniocks, or cassada tree; it is nourishing, and light of digestion. It is used as a diet for invalids, and for soups and puddings. (See Pastry.) When used in soups it should not be cooked too long, as it would, after absorbing the liquid in which it is boiled, become thick and glutinous.

TARRAGON. This is a highly aromatic plant, and is frequently used to flavour salad; but it should be in small quantity, as the flavour is strong. A small quantity of tarragon infused in water in the same way as tea, gives tone to the stomach in cases of indigestion. A dry, loamy soil is best suited for this plant, but that which grows in a moist soil is considered the most wholesome. It is propagated by parting the roots in the spring, and planting the young shoots.

TEA. Although the black and the green tea are from the same plants, the action upon the nervous system is by no means the same. Many persons who drink black tea regularly, without inconvenience, would be very much affected by even a small quantity of green tea. It is a popular notion that the ill effects of the latter arise from its being prepared by the Chinese with the aid of copperas, but this appears to be an error, as the leaves of the tea plant, previous to being dried and rolled up for the market, are dipped in boiling water; and as the tea which is intended to be black is exposed to its action for a much longer period than that which is to be green, it is probable that some of its exciting properties are thus removed. Whatever may be the causes of the difference, however, it is beyond dispute that the difference does exist. Hence it is that in many families only black tea is used, in others the proportion of tea is as one-third or one-fourth green; the latter may be considered to be the most usual practice in England, although it is by no means uncommon to mix the black and green in equal quantities. The quality of the tea depends much, of course, upon the price at which it is sold; but some of the higher priced, as well as the low priced teas are frequently adulterated by the Chinese, by mixing with them the leaves of other plants. Teas are very much improved by the length of time required for transporting them to Europe, and it is generally allowed that the teas which come overland, when carefully packed, are superior to those which are brought by sea. In Russia fine teas are sold for as much as three and four guineas a pound; and even in China the superior qualities, which are reserved exclusively for the use of the rich, are sold for as much as two and three guineas per pound; of these teas very few find their way to England. Those chiefly used by persons who do not look at price, vary from eight to fifteen shillings per pound, but very fair tea may be had at a much lower rate. In making

tea it is important that the water should have boiled, but it is the opinion of some chemists that the water should not be poured on whilst boiling, but allowed to stand for two or three moments, in order that the ebullition may pass off. It is supposed that if the water be poured on at the boiling point, the tannin of the tea is extracted, which is not the case when the contrary practice is observed. Some prudent housewives, who look to economy, put into the tea-pot a piece of carbonate of soda, which, by softening the water, assists in extracting the virtue of the tea. This, if not a successful mode, is at least a very harmless one. The tea-pot should always be of metal, because metals are in general bad conductors of caloric. The saving by this alone is equal at least to fifteen per cent. For persons whose incomes are so limited that tne expense of tea becomes a consideration, it may be recommended to preserve the leaves after the first infusion, and boil them up : the tea has not, indeed, the same fine flavour, but it is quite as strong on the second occasion as the first ; and by the addition of a small portion of fresh tea, it may be used a third time by boiling again. This fact is not to be neglected by persons who cannot afford the expense of drinking strong tea by having a fresh infusion every time. The action of tea on the human frame is a question of dispute with many learned physicians ; by some it is called a slow poison, whilst others, who speak of it as " the cup that cheers, but not inebriates," can find no language sufficiently eulogistic for their favourite beverage. The general opinion is, that moderately used it is a gentle tonic, and produces its salutary effects by being naturally combined with a peculiar aroma, which is exclusively contained in the plant. When the stomach is much enfeebled, experience shews that it is necessary to abstain occasionally from the use of this beverage, and there are many instances where the use of an infusion of half a drachm of the common hop, which is also a bitter combined with aroma, in a pint of water, has given all the good effects of the infusion of tea, where tea has disagreed. Whenever, after drinking tea, an unpleasant or metallic sensation is felt in the mouth, it is a decided proof that the exciting properties of the plant have been more than the stomach could bear. In this case it is recommended to take in each cup of tea either a small portion of powdered ginger, or a teaspoonful of brandy, which is commonly called the Doctor. If after this the sensation should still remain, tea should be cautiously abstained from, until, by some other beverage, such, for instance, as good wholesome beer, the tone of the stomach has been restored. Where Chinese tea is found to disagree with the stomach, an infusion of English herbs is sometimes used with good effect. Some infuse an ounce of the common green broom of the fields in a pint of water over night, and drink it in the morning, quite cold, but this is rather as medicine where there is a dropsical tendency, than as tea. As substitutes for tea, taken in the usual way, with milk and sugar, there are, sage, peppermint, horehound, the black currant leaves, in the proportion of a drachm by weight to the pint of water, more or less, as it agrees. In France, for the purpose of either health or economy, some of the inhabitants of the provinces infuse the leaves of a little plant, called the *Gaultiera procumbens*, which is of the family of the heaths, and is a native of Canada, but grows freely in all moderately cold climates, in a sandy soil. Sels, one of the most distinguished botanists of the last century, informs us that the leaf of this plant has a closer resemblance in flavour to that of the tea plant than any other that is known. Hallè, another botanist, who repeated the experiment of Sels, assures us also that it not only resembles Chinese tea in flavour, but that it has all its agreeable qualities, without any of the injuriously stimulating properties which are attributed to the Chinese beverage. He recommends, however, that even where Chinese tea does not agree with the stomach, a quantity of it should be mixed with the other, by way of economy. In Switzerland, the leaves of several plants are used as substitutes for tea, and the manufacturers of the herbs have so closely imitated the appearance of the exotic plant, that it would be difficult to detect the appearance, except by the taste : this, however, is very different. In England, a composition, called Dr. Solander's herb tea, enjoyed for many years a high degree of celebrity. Whatever its medicinal properties may be, it certainly bears no resemblance whatever in taste to the article for which it is recommended as a substitute. The Swiss *vulneraire*, which is a collection of various herbs sold in packets, is also used as a substitute for tea. The flavour of this composition is more agreeable than that of Solander's

herb tea, but it is still by no means pleasant, nor so grateful to the stomach, although, medicinally, it is said to produce very good effects. Extensive adulterations of Chinese tea by the common sloe leaf, so prepared as to resemble the genuine article, have been from time to time detected. At one time it was said that at least 100 families were engaged in this illicit process in the metropolis alone; but the heavy penalties inflicted upon those who were detected, have, it is presumed, materially, if not entirely, checked this atrocious fraud.

"Seven or eight kinds of green tea are brought to Europe; the two kinds most used are pearl and hyson. The name of pearl tea is given on account of the nearly round form of the prepared leaf; the colour of this tea when in its prime state is of a fine silvery green; the colour of hyson is of a deep green, approaching to black; the smell is agreeable, and improves with age, if the tea be kept thoroughly free from contact with the air. This, and all other teas, should be kept in leaden or china canisters, and not in bottles, for it is almost as important to exclude light as air. Green tea, when taken to excess, has a severe and injurious action upon the nerves. There are several kinds of black tea, of which that most used is bohea, but it is by no means the best, unless it be choice—viz., the finer leaves of this kind separated and sold by themselves. Black tea acquires that colour, from being, in its first preparation, left for a longer time in boiling water; it is consequently less acrid, and, at the same time, less aromatic, than green tea. The use of tea began to spread in Europe in 1666. At present it is become so general, that there are consumed annually in Europe more than twenty millions of pounds. The use of tea is most general in low and damp climates, such as Holland and England; in France it is taken rather from fashion than necessity." [The editor of the *Dictionnaire des Menages*, should have corrected this statement, which was made in the first edition of the work. A few years ago, tea was only used as a real or supposed remedy, taken very weak, for indigestion, and here and there it was served as a beverage in fashionable society. So little was known of tea and tea-making in France twenty years ago, that at the *Café Anglais* in Paris, the fashionable café of the French, as it is of English visitors, the mode of making tea for a customer was the following:—about a quart of boiling water was poured upon a single tea-spoonful of green tea, and when it had stood for about ten minutes, to extract the strength and flavour of the tea, the water was thrown away, under the belief that the first infusion was unwholesome; another quart of boiling water was then poured upon it, and this was the liquid called tea, which was served to customers. A few years have effected a great change. Tea, which was formerly sold by apothecaries only, is now kept by every grocer, and although the consumption is very small indeed, as compared with England, it has increased at least tenfold in the same number of years. Tea is served at every respectable party, and it is by no means an uncommon breakfast. The French, however, still drink weak tea, and it is generally green. It is one of the favourite tisanes, or drinks, for persons who have disordered their stomachs by eating too copiously. Tea punch is a favourite beverage at the better kind of coffee houses.] — TRANSLATOR.

"If the tea which has been used be dried and put away, it may be used with great advantage for the washing of nankeens, if boiled in the water in which the nankeens are to be washed, as it preserves the colour. Tea leaves, whilst moist, should also be thrown over carpets before sweeping them."

THYME. A fine aromatic herb, used green for seasonings. When distilled it yields a very strong essential oil, little used in medicine, except as a remedy for tooth-ache, in which case, however, its chief property appears to be the promotion of the secretion of saliva by its pungency; this oil is also used, but in very small quantities, as a component part of some perfumes. It grows well in a light, dry, and not very rich soil, and is propagated in the same way as mint, or is obtained from seed sown in the spring.

TOBACCO. The abuse of this narcotic plant is productive of the most serious consequences to health, as it impairs materially the digestive functions. Persons who wish to enjoy their food will do well to refrain from smoking, or taking snuff, except with great moderation. If the habit be not in all cases alike injurious to the stomach, or rather, if in some there is no immediate indication of derangement from this cause, let it not be imagined that there is no baneful action going on in the system. Excessive indulgence in smoking, or snuff-taking, must be more

or less injurious in every case, and in too many it lays the foundation of incurable malady. The effects, however, are very different, according to the temperament of the individual. Some excessive smokers bring on obesity and general fulness of habit, which not unfrequently ends in apoplexy; others become excessively lean, and, as the French say, *desseche*, and with them pulmonary consumption is to be dreaded. When the functions of the stomach are impaired by smoking, high stimulating food is craved for, yet, the digestion being weak, such food should be carefully avoided. Generally speaking, the smoker who indulges in the habit to excess requires no other monitor to remind him of his folly than his own sensations; his nights are restless and feverish, he rises with a parched mouth and a foul taste, and during the day has not that relish for plain wholesome food which he would have if his stomach were not disordered. The snuff-taker does not experience the same degree of injury as the smoker, and there are thousands of snuff-takers who, having at all times been free from absolute indications of injury to which no other cause could be assigned than snuff-taking, are not to be convinced that even excess of snuff-taking is baneful; yet these persons, if told that the habitual and very frequent use of opium, or any other narcotic taken into the stomach, is dangerous, would not hesitate to admit the truth of the assertion; they do not even deny that tobacco taken internally would be poisonous, and they can understand that the smoke of tobacco inhaled by the lungs may lead to serious injury. "Snuffing, however," say they, "is not smoking; snuff stimulates the brain, but does not enter the stomach." This is a great error; snuff does at times enter the stomach in large quantities, as must be evident from the expectoration, and the sensation occasionally experienced in the throat. An authentic case is on record of the autopsy of a gentleman who was a great snuff-taker, and in whose stomach was found an accumulated mass of snuff, equal in size to that of a small pear; no doubt was entertained that the reception of snuff from time to time into the stomach had produced the illness which put an end to his existence.

If a man must either be a smoker or a snuff-taker, we would recommend the latter, as far as health is concerned, although it is the more filthy habit of the two, for the injurious effects of it are certainly less positive than those which arise from smoking, and its offensiveness is confined to the offender; and as we do not entertain the hope that anything here said will induce smokers to lay aside the habit altogether, a few remarks by way of caution in the indulgence of it may be useful. When the stomach is evidently, from the sensations of the individual, out of order, it is advisable to lay aside the pipe or cigar if the slightest inconvenience is found to arise from it, and to refrain from smoking until the tone of the stomach has been restored by diet, or by the use of a tonic medicine. As a proof of what injury may be done by smoking, where the stomach is debilitated, we give the following statement from a gentleman, whose veracity may be relied upon:— "Being at Lisbon," says our informant, "and suffering at the time from chronic gastritis, my spirits were low, and as I lay in bed, I thought I would smoke a cigar to cheer me. I smoked one cigar without any serious inconvenience, but before I had got half through the other, I felt a chilliness gradually creeping over me, and was, in a few minutes, cold as marble. I was unable to move my hand to reach the bell, in order to ring for assistance, and when I attempted to call out, my tongue refused the office; in this state I lay four hours, dead in every respect, except as to the slight pulsation of the heart, and the mental consciousness of my wretched position. Nature at length resumed her power, and I gradually acquired speech and motion, but for two days afterwards I felt as on the brink of the grave."

The mildest tobacco, whether for the pipe or cigar, should be used, and the mouth should be occasionally rinsed with rose water; but nothing will remove the offensiveness of the breath of the confirmed smoker, except the entire, or nearly entire, abandonment of the habit of smoking. In snuff-taking, the best snuff is probably what is called the high-dried Irish or Welsh, for in the roasting of it some of the narcotic principle is destroyed, and a few pinches of this snuff daily cannot do much harm. The confirmed snuff-taker should never attempt to abandon the habit all at once, particularly if he be a person at all advanced in life; the system, after being so long accustomed to this stimulant, might flag under the abandonment of it. There are many cases on record of serious illness resulting from the sudden abandonment of the practice. The best plan is to limit the quantity, until, from

taking half an ounce or more daily, the allowance is reduced to a few pinches. It is a pretty general opinion, that perfumed snuff is more injurious than that in which there is no perfume; but there is no reason why this should be the case, if the perfume itself be a wholesome one, and be not carried to excess; indeed, there are hopes of curing a man of excessive snuff-taking, if he uses perfumed snuff, for he seeks to gratify the olfactory nerves, as much as he does to stimulate the brain, and he might by degrees be weaned from the habit, by the exchange of the snuff-box for the smelling bottle; but there is not much hope of this kind where the snuff-taker prefers the strongest and most unmixed tobacco.

Having spoken of the abuse of tobacco, both in the cut or rolled leaf, and in the powder, it may be as well to say something of its usefulness. It cannot be doubted that the smoke of tobacco has a powerful influence in preventing the influence of miasma, and the propagation of certain infectious diseases. Persons who live in low marshy lands find the use of the pipe beneficial, and as the evil to be guarded against by smoking, is greater than that of smoking itself, in such cases the habit should not be discouraged. In travelling, the pipe is an agreeable companion, and such society is not to be despised; but, as with living companions, the intimacy, to be useful and pleasant, must not become too familiar. When a single cigar, or a pipe, in the evening, does not disagree with the stomach, it may be indulged in, and asthmatic persons frequently find great benefit from smoking a pipe before breakfast; this is the natural result of the narcotic principle of the tobacco, and when a narcotic is required, one of the best, perhaps, in certain cases, is the slight inhalation of the fumes of tobacco which arise from smoking. As a medicine, there is scarcely any more potent than tobacco. A tobacco poultice, laid over the stomach and bowels, destroys worms in the intestines; the smoke of tobacco injected by the rectum, produces motion in the bowels when everything else has failed, and a tobacco lavement is frequently effectual in procuring the retrocession of strangulated hernia. In the earache, a little moistened tobacco, laid in the cavity of the ear, sometimes allays the pain instantaneously; and long-standing cases of deafness, unattended with organic change of structure, have been permanently cured by injecting into the ear two or three times daily, by means of a small syringe, a strong infusion of tobacco.

In England, the growth of tobacco is prohibited, except as to a few plants for the purpose of fumigating other plants attacked by insects; but the tobacco trade is open to all persons on payment of the high duty laid upon it. In France, and most other countries of the continent of Europe, the tobacco trade is a monopoly in the hands of the Government. Smoking has been general in Europe since the days of Sir Walter Raleigh, but cigars are of comparatively modern introduction; thirty years ago they were almost unknown both in France and in England.

TOMATA, or LOVE APPLE. A vegetable used for sauces, and some other culinary preparation. To preserve tomatas, they are to be gathered ripe, washed, and dried, and then cut into pieces; they are next put upon the fire, without water, in a well-tinned saucepan, and when reduced to two-thirds of their bulk, are to be crushed through a sieve, to get rid of the seeds. The decoction is now to be put upon the fire again, and boiled until reduced to one-third of its quantity; after this it is to be cooled in an earthen vessel, and put into bottles, which are to be boiled in a water bath, (see WATER BATH;) when thoroughly boiled, to drive out all the air, cork tightly; with these precautions, it will be unnecessary to add any spices to keep the tomata. By boiling up this decoction with spices, as for mushroom catsup, we have tomata catsup.

TONIC LOTION, FOR INDIGESTION. An excellent substitute for the shower bath, which cannot always be had conveniently, and the shock of which is sometimes too severe for debilitated persons, has been used lately in Paris, where it was prescribed by Dr. Louden, one of the most eminent physicians of that capital. It is prepared as follows:—Take half an ounce of sulphuric acid, half an ounce of muriatic acid, and one drachm of the sulphate of quinine; mix them with about three pints of water, and bottle the mixture for use. Every morning on rising, and every evening before going to bed, the whole person, except the face and hands, is to be sponged over with a sponge dipped in this mixture, and the moisture should be left to dry on the skin, or, rather, to be absorbed by the pores—not wiped off with a cloth, as in the case of a shower bath. Very great benefit has

been derived from the use of this wash, which is to be persevered in so long as the patient requires it. One of the greatest benefits arising from its use is the removal, by degrees, of the susceptibility of cold, which is one of the characteristics of dyspepsia, and which greatly aggravates the disease. It is common for dyspeptic persons to say, "I should be very well, indeed, if I were not constantly taking cold." The removal of this susceptibility is the first principle of the curative means employed; and it does not appear that any more successful method for attaining that end has been adopted than this. In travelling, the use of this wash should never be omitted. All that is necessary is to have two small phials, with the acids, and a small quantity of the quinine; put as many drops of the two acids into a glass of water as will make it as sour as strong vinegar, and as much of the quinine as will make it very bitter, and then use it with the sponge. A French physician also recommends the use of this wash, but adds to it camphorated spirits of wine, in the proportion of one-tenth to the whole bulk. This, however, is not at all essential, although it can do no harm.

TOOTH POWDER. Although there are fifty ways of making powder for cleaning the teeth, the safest and best preparation is charcoal powdered very fine; and animal charcoal—that made from bones, is much better than the charcoal made from wood. (See CHARCOAL.) This production, which should not only be rubbed in a mortar to as fine a state as possible, but afterwards be pressed through a fine sieve, is antiseptic, and will not only prevent decay of the teeth, but also check it when it has commenced. Acids and strong alkalies, which form the basis of most of the tooth powders sold by druggists and perfumers, should never be used; for although they clean the teeth very effectually, they frequently injure the enamel. When wood charcoal is used, it should be very fresh; and as this is seldom the case with what is bought for the use of the kitchen, the charcoal should be again burnt in a close vessel, in the way recommended for animal charcoal, but should be left only a few minutes exposed to a red heat. Whether wood or bone charcoal be used, it is advisable to mix about a fourth in quantity of powdered myrrh with the powder. Some of the old herbalists have asserted that the charcoal made from the roots or branches of the vine is superior to any other; but this does not appear to be the case. If the colour of the preparation be objected to, the levigated chalk sold by the druggists, with the addition of myrrh as above stated, and perfumed by the addition of a little essence of cloves, is a safe and agreeable tooth powder.

The following recipes for tooth powder are given in a French work:—

POUDRE DENTIFRICE. Three ounces of coral, two ounces of hard biscuit pulverized, an ounce and a half of finely powdered pumice stone, two drachms of cinnamon powder, an ounce and a half of dragons' blood, half an ounce of myrrh, two ounces of rose lac, seven grains of amber, seven grains of musk. This may be either used as a powder, or be made into an opiate, with four ounces of the syrup of mulberries, and three ounces of clarified honey.

OPIAT POUR LES DENTS. One ounce of finely-powdered chalk, two ounces of cream of tartar, two ounces of pumice stone, half an ounce of burnt alum, half an ounce of cochineal, all well powdered, and half a drachm of essence of bergamot; to be made into an opiate with honey. A little of the opiate is to be put upon a brush, and used in the same way as tooth powder.

TEINTURE DE GRENOUGH, (Greenough's Tincture.) Two drachms of benzoin, two drachms of myrrh, nine ounces of cochlearia, one drachm of cinnamon, one drachm of cloves, a quart of spirits of wine, a quart of white wine; infuse for a week in the spirits of wine, then strain, and add the white wine. This mixture has had great vogue in France, but we see nothing in it superior to the ordinary tooth tinctures. It is hardly necessary to observe that water will do just as well as wine to dilute the spirit.

PREPARATION DU DOCTEUR CHAUSSIER. Infuse half a drachm of sal ammoniac in a pint of water, and half a pint of spirits of wine; rinse the mouth with this mixture after having cleaned the teeth, with a few drops of a mixture made by dissolving a drachm of sal ammoniac in half a pint of spirits of wine.

EAU DE BOTOT. Bruise two drachms of cinnamon, two drachms of cochineal, fifteen grains of aniseed, and two drachms of cloves; infuse for a week, in the sun, in two quarts of good brandy, then filter, and add half a drachm of the essential oil of peppermint; the bottles in which this is put must be well corked.

Eau de Vie de Gayac. Infuse for a week in a quart of brandy, two ounces of gum guaiacum, two drachms of coriander seed, two drachms of cloves, two drachms of cinnamon, all bruised, and the rind of a lemon; filter through blotting paper, and bottle.

The following mixtures for the toothache, are given by the same authority:—

Essence pour les maux de Dents. One drachm of camphorated spirits of wine, fifteen drops of laudanum, five drops of oil of mint, or five grains of acetate of lead, five grains of sulphur of zinc reduced to paste in a mortar, with nine grains of laudanum; this paste is to be put upon cotton, and placed in the hollow of the affected tooth.

The above paste has been sold in Paris as a specific, as have indeed half a hundred other pretended remedies for the toothache. The best, but most unpleasant remedy is, perhaps, the creozote; but it is not hazarding too much to say that where teeth are decayed, there is really no cure but extraction.

TRIPE—Is a part of the inside of the bullock, and when properly cleaned and prepared makes a very agreeable dish; but cannot be recommended to persons whose digestive organs are not strong, as it is not nutritious, and is sometimes very indigestible, especially the brown parts. It is generally purchased cleaned and ready for cooking.

To Boil Tripe. Boil it gently in milk and water in equal quantities, with some small onions; serve in a tureen with the liquor, and melted butter in a sauce boat.

To Fry Tripe. Having cut the tripe into pieces of about four inches square, dip them in batter made with milk, flour, two or three eggs, a little salt, pepper, and grated nutmeg, all beaten well together; fry in good dripping to a good colour, and serve with melted butter, the dish garnished with crisped parsley and slices of lemon.

To Roast Tripe. Cut the tripe into oblong pieces, and having made a forcemeat of bread crumbs, chopped parsley, pepper, and salt, with the yolk of two eggs to bind it; lay it on the tripe, put two pieces together, roll tightly, and tie up; roast it for an hour and a half, basting well with butter; serve it with melted butter, or a little sharp sauce.

TRUFFLES. A tubercle, very much used in foreign cookery, to give a high flavour to dishes, and sometimes, but not frequently, used as a dish of itself. Truffles are found in the ground in many parts of France, and in a few parts of England, generally in moist land, and in the middle of woods. As there is no external indication of their locality, there would be no means of discovering them without other aid. A peculiar species of dog is used in France; and as the animal scents them rapidly, the persons who hunt for them dig on the spot, and sometimes succeed in obtaining a large quantity. Pigs are also used for the same purpose. Truffles are of an oval form, much resembling that of a kidney. When young they are nearly white; but when they have reached maturity their colour is of a deep brown, nearly approaching to black. The price of this tubercle varies according to seasons, as they are sometimes in abundance, and at other times excessively scarce. The average price in France is about eight or nine sous per pound; but they have even sometimes sold as high as fifty sous per pound. When eaten as a separate dish, they are at all times highly indigestible; and when they are used to flavour ragouts, or any other preparation, the truffles themselves should not be eaten. On the Continent, the breast of the turkey, pheasant, partridge, capon, &c., is frequently stuffed with truffles for roasting or stewing. They give a very rich and peculiar flavour. All that is necessary in preparing them is to brush off the dirt with which they are always brought to market, for the sake of increasing the weight, and washing them repeatedly. When used as a separate dish, they are either stewed in champagne wine or rich gravy; they are, indeed, sometimes fried in batter, or served with salad; but this is rather as a display of luxury, on account of their high cost, than for their excellence.

The *Dictionnaire des Menages* says, "In purchasing truffles, it is very important to see that they are all sound, for a single bad one would spoil all the others. Truffles should be kept in a cellar, or other cool place, in a basket suspended from the roof. In their natural state, they will not keep good more than fifteen or twenty days, and great care should be taken not to expose them to the action of frost. As they spoil, they become soft and rotten, and lose their natural colour and smell, giving out a fœtid smell, like decaying animal matter; as soon as they begin to feel soft under pressure of the finger, they should be used. Truffles are preserved in France in various ways;

they may have a single boil in lard, and then be put into well-covered jars with the lard, or they may be dipped thrice in hot bees-wax. Appert's mode of preserving them is to wash and peel them lightly, then put them into jars, expose them to the action of the water bath for an hour or so, and pack them in light tin cases. In some countries truffles are kept in brine, and steeped, when wanted for use, in tepid water, to remove the salt; but preserved in this way they lose their fine flavour."

TURKEY. This is perhaps the most difficult of all domestic poultry to rear. The chief thing is to keep them, when young, very warm, and on no account to allow them to be in the open air when it rains. As soon as they leave the shell, they should be fed with the white of egg boiled hard, and chopped very small, without any of the yolk; this food should be continued for three days, without any other; at the end of that time, the white of egg must be continued for about a fortnight, with groats, and now and then small pieces of new cheese; now very ripe fruit which has fallen from the trees may be given to them. When a hen turkey is rearing a brood, the young ones should be confined under a basket, unless they can all be enclosed within a small yard, for if allowed full liberty, the mother will lead her brood so far from home, as to kill them with fatigue.

The flesh of the turkey, if young, is not more indigestible than that of the fowl; but the flesh of full-grown turkeys disagrees with many stomachs; that of the hen turkey is considered more delicate than the flesh of the cock. All turkeys, before killing, will require to be shut up for at least ten days or a fortnight, and crammed three or four times a-day with balls made of barley-meal mixed with milk.

There are at least fifty different ways of dressing turkeys in French cookery books, but they are mere varieties of the receipts given for fowl and chicken. In ordinary domestic cookery there are but four ways of cooking a turkey—viz., roasted, boiled, hashed, and minced. In England, turkeys are roasted with veal stuffing and sausage meat; but in France, when any stuffing is used, the breast is filled with boiled chesnuts, or truffles sliced, which have either been fried in butter, or stewed in wine.

To Roast Turkey. The turkey should be kept as long as possible before it is dressed, in order to become tender and light of digestion. It is then to be roasted in the same way as any other poultry, allowing a longer time, according to its size. Oyster or chesnut sauce, or a mock oyster sauce, made by adding some anchovy essence to melted butter, may be served with it, and if the turkey has not been stuffed with sausage meat, sausages should be fried, and laid round the dish. The chesnut sauce is made as follows:—Boil some chesnuts in hot water for a few minutes, then skin them, and stew them slowly for two hours in white stock, seasoned, and thickened with flour and butter. If sausages are used with this sauce, they are to be cut each into three pieces, and fried, and placed in the dish. the chesnuts and the sauce being poured over them.

To Boil Turkey. Follow the directions given for boiling a fowl; oyster sauce, and plain melted butter to be served with it. On the Continent, fried sausages are always served in a separate dish; but in England, a boiled ham or a tongue generally accompanies it.

To Hash Turkey. (See Hashed Fowl.)

To Mince Turkey. (See Minced Veal.)

The leg of a turkey, which is considered rather coarse eating in any other way, makes a nice relish for breakfast or luncheon, scored with a knife, and well rubbed with pepper, salt, and a little cayenne, and broiled, putting a bit of fresh butter on it, when taken off the fire; squeeze a dash of lemon juice when served.

TURNIPS. This vegetable is very useful in cookery, and is, equally with the carrot, a component part in most soups, broths, and stews. It possesses a large portion of saccharine matter, and is considered, when cooked, a very wholesome and nutritious vegetable. When dressed plain, to be served with meat, it is generally, after boiling, mashed with a bit of butter, and a little pepper and salt. There is a great variety of turnips, but the sorts most cultivated for the table are, for the spring crop, the early Dutch, which are sown in April, and for winter, the yellow Dutch, which is sown in July. The Swedish and yellow are also in estimation as winter turnips. In sowing turnip seed, the same plan should be adopted as that recommended for carrots—viz., that of mixing the seed before sowing with some earth or sand, as from the lightness of the seed, they cannot otherwise be sown evenly over the bed. After sowing, if the weather be dry, the beds should have frequent

watering. A sandy soil suits best for the turnip, and it is desirable to choose ground that has not been recently manured. As soon as the leaves of the plant are about an inch long, the bed should be thinned, leaving the strongest at about six inches asunder. While the plants are in their seed leaf, quicklime should be strewed lightly over the bed to protect them from the fly. The turnip is also a very useful root for feeding cattle, particularly sheep, for which purpose, large quantities are grown. It is very useful for milch cows, where the milk is for immediate use, or for sale; but where it is to be kept for butter, too much of this food is apt sometimes to impart an unpleasant taste.

To Boil Turnips. After they have been pared, and washed in cold water, put them into a saucepan in boiling water, with a little salt, and let them boil till tender, which will take from one hour to two, according to the size; when done, drain them in a cullender, and serve either plain, or with melted butter poured over them.

To Fry Turnips. After having peeled and washed some large sized turnips, parboil them in water; then cut them into slices, and fry them to a good colour in a little butter or dripping.

To Mash Turnips. Prepare them as above, and when tender, drain them in a cullender, and put them into a saucepan, with a bit of butter, pepper and salt, and mash them well with a wooden spoon, adding a cupful of good milk; mix well, and serve them quite hot.

Turnips with White Sauce. (See Carrots.)

Ragout of Turnips. (See Carrots.)

TURTLE. See Soups.

VARNISHES—(For domestic use.)

Varnish for Boots and Shoes—called in French *Cirage Vernis*.—Take of bruised nutgalls, two ounces; logwood, three ounces; boil them gently in two pints of white French wine for half an hour; (the wine used for this purpose in France is of the commonest sort, and the cost of it is trifling; but as in England the cost would be considerable, water may be used as a substitute, adding two ounces of spirits of wine, and one ounce of vinegar, and deducting from the two pints of water three ounces, to allow for the above addition;) on removing the mixture from the fire, add, whilst hot, a quarter of an ounce of sulphate of iron, four ounces of gum arabic, and half an ounce of isinglass; when the gum and isinglass are thoroughly dissolved, add half a pint of spirits of wine, and a wine-glassful of the best japan ink. This varnish is to be laid on with a soft varnish brush, when the boot or shoe is perfectly free from dirt. It is not absolutely necessary that the boot or shoe should be previously blacked with the ordinary blacking, and polished; but if this be done, the coat of varnish laid over will have additional lustre. Boots and shoes for which this varnish is used, should once in ten days have the accumulated varnish sponged of with warm water, otherwise there will be a slight crust upon them, which, although perfectly harmless, will detract from the lustre.

Furniture Varnish. (French polish.) Melt over a slow fire two drachms of salt of tartar, or ten ounces of potass, dissolved in water; five drachms of wax, cut into small pieces, and ten ounces of river water: lay this mixture on with a brush, and when dry polish with a piece of cloth.

For Garden Fences, Sheds, &c. A cheap and incomparable varnish may be made with gas tar. Take two gallons of the tar, and add two pounds of resin, one pound of tallow, and one quart of turpentine; put these into an iron vessel, and let them boil gently over a fire, taking care that the mixture neither boils over, nor the fire reaches the vapour which escapes in ebullition, and which is very inflammable, being chiefly naphtha, until the quantity is reduced one fourth. This varnish, which may be used at the same time as paint and varnish, is fully equal to the best vegetable tar; but if the gas tar be used in its natural state, it wants body, and being of a dry, harsh nature, does not preserve the wood upon which it is placed.

VEAL. This is a very delicate meat, and although not so digestible as some other meats, it is to be preferred where the stomach will not bear much excitement; it should however be eaten with moderation. Some parts of the calf are highly nutritive, from their gelatinous properties. Veal should not be killed before it is six weeks or two months old, at which age it is at its highest perfection; the contrary practice is a fault that is frequently committed in England, where many modes are resorted to to give the meat an artificially fine appearance. The veal in France is considered superior to English veal, and it is dressed in a variety of ways, that gives it a piquancy unknown to the English cookery of this meat. This

peculiarity may, however, apply to other kinds of meat, and may be accounted for from the general plan of larding almost every kind of meat with bacon, either the fat or lean part, according to the dry or juicy nature of the meat to which the operation is applied. In English cookery, the prime joints for roasting are the loin, the best part of the neck, and the fillet. Before roasting the fillet, it should be well washed, the bone taken out, and the space filled with good stuffing, as well as under the flap; the whole to be tied or skewered up into a round form. Observe the same directions in placing it at the fire as given for beef and other roasting joints. A fillet of fourteen pounds, stuffed, will take four hours to roast, taking care to have a clear fire; when it is about half done, the fat part should be covered with a sheet of buttered white paper. Pickled pork or ham should be always dressed to serve with veal; the necessity of this, on the Continent, is obviated by the practice of larding, alluded to above. There are some joints of the veal which are better boiled or stewed, as the knuckle, breast, &c.

To Choose Veal. Choose the meat of which the kidney is well covered with white thick fat. If the bloody vein in the shoulder looks blue, or of a bright red, it is newly killed; but any other colour shews it to be stale. The other parts should be dry and white; if clammy or spotted, the meat is stale and bad. The kidney turns first, and the suet will not then be firm.

To Keep Veal. Mrs. Rundell, in her "Domestic Cookery," says:—"The first part that turns bad of a leg of veal is where the udder is skewered back. The skewer should be taken out, and both that and the whole of the meat wiped every day, by which means it will keep good three or four days in hot weather, if the larder be a good one. Take care to cut out the pipe that runs along the chine of a loin of veal, as you do of beef, to hinder it from tainting. The skirt of the breast of veal is likewise to be taken off; and the inside of the breast wiped and scraped, and sprinkled with a little salt. If veal is in danger of not keeping, wash it thoroughly, and boil the joint ten minutes, putting it into the pot when the water is boiling hot; then put it into a very cool larder. Or it may be plunged into cold water till cool, and then wiped and put by. The fillet is a favourite joint in England; but when merely roasted, the meat is close, heavy, and not very digestible. Take out the bone, and fill the orifice with fat, or stuffing; stuff it also well under the skin, much depending upon the quantity and flavour of the stuffing; serve it up with melted butter in the dish, and send a lemon to table."

To Prepare Veal Fat for Keeping. After having cut it into pieces, and removed all the fibrous parts, knead it well in cold water, so as to get out the blood and gelatine; this must be repeated in several waters, until the water is no longer discoloured; then put the fat into a pan, with a little water, over a slow fire, and boil until all the water has evaporated, which is ascertained by the cessation of the bubbling, occasioned by the mixture of water with the fat. It is now to be taken off the fire, and put into jars, which are to be well covered over. This fat, carefully prepared, may be very useful for many culinary purposes; and if perfumed, which may be done by mixing a few drops of essence of rose, or any of the finer essential oils, just before it has become cold enough to fix, it is an excellent pomatum, and is said to be good for chapped hands or lips.

Breast of Veal, a la Braise. Put a breast of veal into a braising pan, with some slices of bacon, a bunch of parsley, three shalots, a bay leaf, a few cloves, two carrots, cut in small slices, pepper, and salt; add a glass of white wine, and stock sufficient to cover it; stew for three hours over a slow fire, keeping the vessel closely covered.

To Broil a Breast of Veal. When it has been half roasted, season it with parsley, some fine herbs, chopped fine, pepper, and salt, and broil it over a clear fire; when done, garnish the dish with fried parsley, and pour over the meat some Espagnole, or other piquant sauce, made hot.

To Collar a Breast of Veal. Have ready some good forcemeat, and having boned the veal, lay the forcemeat over it, and roll it up, and tie it round with tape; envelope it in a cloth, and boil it very gently for three hours, putting it on in boiling water. Fry some forcemeat balls, and serve with it some good brown savoury sauce.

Another way: Having prepared and rolled the breast as above, put it into a dish with some good stock, and bake it in the oven; when served, pour over it some rich, well-seasoned gravy, and garnish the dish with forcemeat balls, fried to a good colour. This joint

may be kept for some time by making a pickle of bran and water, a little salt, and vinegar, and pouring it cold over it.

To Fricassee a Breast of Veal. Cut a handsome piece, put it into a stewpan with a piece of butter, a pint of water, an onion, a stick of celery, and some white pepper and salt; let it draw gently for some time, then cover it with hot water, and allow it to stew until perfectly tender; remove any skin that may be about it, and thicken a part of the stock with roux, cream, or flour and butter; cover it with the sauce, and serve it up. Mushrooms pickled white may be added to the sauce, or stewed celery.

To Ragout a Breast of Veal. Cut it into pieces, and half fry them; then put the veal into a stewpan, cover it with water, and add an onion and a bunch of sweet herbs. Stew until perfectly tender, strain the gravy, thicken it, if necessary, with brown roux, and serve it up with forcemeat balls and slices of lemon.

To Stew a Breast of Veal. When the veal has been half roasted or fried to a good brown colour, put it in a stewpan with some rich gravy, a shalot, two or three cloves, a little walnut catsup and a few champignons, salt, and whole pepper, and let it stew gently for two hours. Before serving, add a squeeze of a lemon. Rice boiled, and served with this dish forms a very pleasant addition.

Breast of Veal Stewed with Green Peas. Cut the breast into small square pieces, and put them into a stewpan, with some good stock, pepper, salt, a little butter, and a quart of green peas; let it stew gently, closely covered, for two hours. Before serving, add a little brown roux, to colour and thicken the gravy.

Breast of Veal Stuffed. Take a breast of veal with the skin on, and having lifted the skin from the flesh, but without entirely separating it, put into the opening a meat stuffing, sewing it up, that the forcemeat may not fall out; then put it into a stewpan, with some slices of bacon or ham, some stock, salt, whole pepper, two shalots, a bunch of sweet herbs, and two or three bay leaves; stew it very gently for about two hours. Pass the remaining sauce through a sieve, take off the fat, and serve with the veal, quite hot.

Veal Cutlets, should be cut from the leg, and should not be cut too thin, but be beaten before cooked; beat up two or three eggs with a little grated nutmeg, some fine herbs, and parsley chopped very fine, and dip the cutlets in this mixture before frying, covering them with grated bread crumbs; serve forcemeat balls and small mushrooms with the cutlets, pouring into the dish some good white sauce.

Veal Cutlets, French way. Cut some cutlets thin, and put them in a stewpan, with some slices of streaked bacon, a piece of butter, and a shalot, two or three onions, a little parsley, and a bunch of fine herbs, all chopped fine; let them cook over a slow fire, turning them occasionally. Put into another stewpan a little good stock, and a wineglass of French white wine; let it boil a few minutes; when the cutlets are done, take them up, and put them into this mixture, adding the yolks of four eggs, well beaten up, with a little broth; let the whole thicken on the fire. Before serving, add a squeeze of lemon juice.

Veal Cutlets en Papillottes. Cut some cutlets thin, and having covered them with a mixture of parsley, mushrooms, shalots, and bread crumbs. all chopped very fine, and mixed with a little butter; wrap each in square pieces of white paper, letting the end of the bone remain uncovered; rub the outside of the paper with butter, and place them upon the gridiron. Serve them in the papers.

Fillet of Veal Stewed. Prepare the joint as for roasting, and when it has been roasted to a good brown colour, put it in a stewpan, with some good stock, lemon pickle, or Espagnole sauce, and a little mushroom catsup. The gravy must be poured hot over the meat, having first seasoned it with a little Cayenne, salt, and a few champignons; some forcemeat balls should be served with the veal, and the dish be garnished with slices of lemon or fried parsley.

Forcemeat and Stuffing for Veal. Season with pepper, salt, cloves, grated nutmeg, and lemon peel, a pound of lean veal, and a quarter of a pound of sausage meat; then add some mushrooms, mincing the whole very fine together. When wished to make into forcemeat balls, add yolks of eggs, and roll them in flour.

Fricandeau of Veal. Lard some slices of veal, cut from the leg, and put them into a stewpan, with some good stock, white roux, a small slice of ham, two or three small onions, a little salt, and whole pepper; let them stew very gently for an hour and a half; when done, take off all the fat, and strain the gravy; then boil it up quickly, put in the meat again,

and let them stew gently till the gravy assumes the appearance of a brown jelly. Serve it upon sorrel, or spinach boiled.

Fricandels. Take three pounds of the best end of a loin of veal, chop fat and lean together very fine; then soak a French roll in some milk, beat three eggs, add pepper, salt, nutmeg, and mace; make the mixture up into the size and somewhat the shape of a chicken, rub it over with egg and bread crumbs, fry till brown, pour off the fat, boil water in the pan, and stew the fricandels in this gravy. Two will make a handsome dish; thicken the gravy before it is sent to table.

A Gelatine. Divide the ribs from the brisket of a breast of veal, and take out the long bones, beat the veal for four minutes with the flat part of a hand chopper, in order that it may roll easily; spread it on a table, and brush it over thickly with the yolk of egg, and then sprinkle it with chopped herbs; then make two omelettes, one of the yolk, and one of the white of egg, well seasoned, and cut them in strips; lay them upon the veal, with layers of pounded ham between; cut some pickled cucumbers and mushrooms into small pieces, with some sweet herbs, well seasoned; strew them over the surface, then roll up the veal very tightly, tie it in a cloth, and let it stew gently for six hours; then put a heavy weight upon it, and let it stand two days before it is cut; serve it in slices with savoury jelly; any kind of boned game or fowl may be added.

Knuckle of Veal, Boiled. This is almost the only joint of the veal that is boiled, but it is a dish which is generally liked. It must be boiled rather longer than most other meats, until it feels very soft under a fork, and the tender parts become quite tender. Great care must be taken that it does not boil too fast, and that it be well scummed. It should be cooked in milk and water, which increases its whiteness. Pickled pork or ham should be boiled and served with it. The sauces for this joint are parsley and butter, or onion sauce.

Minced Veal. Mince very finely some cold roasted veal, and put it into a stewpan, with some good stock, a few mushrooms, chopped fine, pepper, salt, and a shalot; let it simmer very gently for half an hour; lay some thin slices of toasted bread at the bottom and round the sides of the dish.

Miroton of Veal. Chop very finely cold dressed veal and ham or bacon, mix it with a slice of bread-crumb, soaked in milk, two onions, chopped and browned, a little salt, pepper, and an egg beaten; put all these ingredients into a stewpan, until they are hot, and are well mixed, then oil or butter a mould, put in the whole, and bake it in an oven until it is brown; then take it out, and send it to table with fresh gravy.

Veal Olives. Having cut some thin slices from a fillet of veal, season them highly, and roll them up, putting a bit of fat within each, and securing them with a thread; then fry them of a good colour, and afterwards stew them gently for an hour, in some stock, to which add a glass of white French wine, a few champignons, and a little lemon pickle.

Veal Patties. Mince some cold roasted veal, not overcooked, with parsley, a little sage, and a very small quantity of onion; then season with grated lean ham, lemon-peel, nutmeg, pepper, and salt; moisten with rich gravy, warm up, and put it into the patties.

Veal Pie. A neck of veal is to be cut up, and well seasoned with pepper and salt, and a little nutmeg, if the flavour of that spice be agreeable; the meat is then to be pressed close in a dish, and about two teacupfuls of stock to be added; the yolks of five hard-boiled eggs may be added; the meat and the sides of the dish are to be covered with a puff-paste. If there be no stock on hand, water may be used by adding to it a little of the gravy from some roasted veal, or stock may be made by bruising the bones, and boiling them for two or three hours; a little veal kidney to this pie is a great improvement.

Another mode of making veal pie is to add sweetbreads, sliced, oysters, forcemeat balls, a little white wine, and a table spoonful of lemon pickle. Cold roast veal may be cut up, and made into a pie, in the same way as fresh meat; but in this case oysters should be added to increase the flavour.

Mrs. Dalgairn gives the following directions for making what she calls a solid veal pie: "Stew in veal stock, till it be perfectly tender and like a jelly, a piece of a knuckle of veal, with the gristles adhering to it; let it cool, and then pull the meat and gristles into small bits; butter a pie-dish or shape, and lay at regular distances the yolks of some hard-boiled eggs, and some of the white parts cut into rings or strips; then put over them some bits of the meat and gristle, and strew over some white

pepper, salt, and grated nutmeg, mixed; add a little of the gravy, and then more eggs, and small bits of beet-root, green pickles, and the red part of a carrot, cut to fancy; add more meat seasoning and all the gravy. When the shape is full, put it into an oven for twenty minutes, and when quite cold turn it out. If rightly done it will have a glazed appearance."

Another way: In Kent the following plan is adopted: Have ready some slices of veal, cut from the fillet, some slices of bacon, forcemeat balls, and the yolks of eggs, boiled hard; season the veal well with pepper and salt, and place layers, composed of some of each of the above, in a pie dish, with a piece of butter on each layer; cover with a good crust, and bake. Put only about a wine-glass of water in the dish, but by the time it is done have ready some rich and highly-seasoned gravy, which pour into it by lifting the crust.

Veal Pies. The following instructions for making veal pies of various kinds are given by Mrs. Rundell in her "Domestic Cookery:"—

Veal Pie. The best part of veal for this purpose is the breast; cut it into pieces, and put it into a stewpan, with an onion, a stick of celery, a bundle of sweet herbs, and a small quantity of water; when warmed through, add more water, and stew it gently until it is enough. By this means two pounds of veal will yield a quart of fine white stock, which will jelly; let it remain until cold, and then take off all the fat; take out the long bones, and all the skin, season it well, and pile it lightly in the pie dish, having lined the sides with paste; boil four or six eggs hard, and put them in; pound some ham or gammon of bacon in a mortar, make them up into small balls, with a little butter, and add them, (bacon or ham in slices always being hard;) add also some forcemeat balls; fill up the pie with the stock, which should be flavoured with a small quantity of catsup, Chetney, or other sauce; reserve a portion of the stock thus prepared, and pour it hot into the pie, when it comes from the oven, to supply the waste. This will be most excellent cold, as it will be perfectly free from all greasy particles, and the meat tender, which will not be the case unless previously stewed.

A Cold Veal Pie. Take some of the fleshy part of a knuckle of veal, with an equal quantity of minced ham; season it with salt, pepper, spices, and aromatic herbs, chopped, and a small clove of garlic or shalot; pound them in a mortar, adding eggs, and an equal quantity of gravy; cover the bottom of a pan with thin slices of bacon, lay a little of the forcemeat upon it, lay some cutlets of veal over the forcemeat, seasoning them with pepper and minced mushrooms; in this manner fill to the top, covering the whole with forcemeat; after baking for an hour, let it cool; have paste prepared about an inch in thickness, make it round upon buttered paper, sprinkling a little flour on the paste; then take the meat from the pan, which should be plunged in hot water to detach it easily; place it in the paste, covering it at the top with a crust half an inch thick, and leaving a hole in the middle; glaze, and put it into a very hot oven; let it bake three or four hours; when sufficiently done, a wooden skewer will enter easily; put in a glass of brandy and some clear gravy; fasten the hole at the top, and turn it upside down. This pie may be made of fowl, rabbit, or game, boned, or put in whole, the birds being filled with forcemeat, mushrooms, &c.—*Ibid.*

Veal and Sweetbread Pie. Cut the veal from the chump end of the loin; season it well; clean and blanch a sweetbread, cut it into pieces and season it; lay both in the dish with the yolks of six hard-boiled eggs, and a pint of oysters; strain the oyster liquor, add to it a pint of good gravy; line the sides of the dish with a puff paste half an inch thick, and cover it with a lid of the same; bake it in a quick oven for an hour and a quarter; and when it is sent to table cut the lid into eight or ten pieces, and stick them round the sides, covering the meat with slices of lemon.—*Ibid.*

Veal and Sausage Pie. Cover a shallow dish with paste, lay a well-beaten veal cutlet at the bottom, slightly-seasoned; cover it with a Bologna sausage, freed from the skin, and cut into slices; then add another cutlet and a layer of the Bologna sausage; cover the whole with paste, and put no water to it. The veal will give out sufficient gravy, while it will be rendered very savoury by the sausage. It is excellent eaten cold.—*Ibid.*

Veal and Pork Pie. Take equal quantities of veal and pork, boil one or two onions, and scald some leaves of sage; beat the meat well, and cover it with the sage and onions, chopped together, with

pepper and salt; fill up the pie, pour in a little water, and bake it. In Devonshire this pie is made with layers of apples and onions between the meat, pork alone being used. Veal and pork pie may be made by covering small veal cutlets with sausage-meat of pork, and rolling them into fillets, filling up the dish with gravy that will jelly.—*Ibid.*

Potted Veal. Cut some slices off a leg of veal, and having seasoned them with pepper, salt, and two or three cloves, place each slice of meat in a potting pan, placing between each layer a slice of fresh butter; cover it close, and bake in a quick oven for an hour; when it is cold, pound the meat in a mortar, then pack it closely in a jar, and pour clarified butter over it.

Rolled Veal. The breast is the best for this purpose; put the ribs into a stew-pan with just water enough to cover them, an onion, a stick of celery, and a bundle of sweet herbs; let it stew very gently, adding more water as it stews, until it is tender; then take out the bones, and remove the skin; return the bones into the liquor, which will be a fine jelly, and serve as the sauce for several dishes; cover the veal with a fine forcemeat, season it well, add egg-balls, and roll it up, securing it with tape. Put it into a stew-pan with the fat procured from mutton or pork chops, a slice or two of fat bacon, or a lump of butter, and a tea-cupful of the liquor it was stewed in; shake the stew-pan about until the fat has melted, and turn the veal into it, that it may be all equally done, adding an onion, and another bunch of herbs; let it braise for an hour and a half or two hours, then strain the gravy, thicken it, add forcemeat-balls, egg-balls, and fried paste, cut in shapes; remove the tape, and send it up. Peeled mushrooms may be given by way of variety; when well done, this is an excellent dish; but bad cooks will render it hard and uneatable.

Veal Stewed with Oysters. Cut the veal into handsome pieces, put them into a jar with one or two dozen oysters, and their liquor strained, and a piece of butter rolled in flour; put the jar into a kettle of water, and stew until tender; if the veal has been cooked, merely warm it up with the oysters in white sauce.

Calf's Brains. Strip off the skin in which they are inclosed, and having well cleansed them, let them soak for two hours in cold water; then blanch them for ten minutes in boiling water, in which has been put a handful of salt and a little vinegar; take them out, and put them again in cold water; then stew them for an hour with a slice or two of streaked bacon, a bunch of sweet herbs, a shalot, a little parsley, two bay leaves, two or three cloves, and a little French white wine; when done, drain the brains, and pour over them a sauce made of some roux, white wine, chopped mushrooms, and a bunch of fine herbs; or, if preferred, some Espagnole sauce.

Another way: Clean the brains as directed above, then stew them in a little good stock, adding some French white wine, salt, pepper, two shalots, a bunch of fine herbs, and a little parsley.

Calf's Brains Fried. Make a paste of some flour and lukewarm water, a small piece of butter, two eggs well whipped, and a little salt; cut the brains into four parts, dip each piece into the above paste, and fry of a good colour; garnish the dish with fried parsley.

Calf's Brains with Marrow. Cover the bottom of a silver or earthen dish that will stand fire, with thin slices of bacon; over these, slices of brains half an inch thick, and strew over them a little salt, pepper, and nutmeg; then lay over the brains a covering of beef marrow, and some chopped mushrooms; over this place another layer of brains, salted and spiced in the same way; then a layer of marrow and mushrooms, and lastly, a layer of brains, which is to be covered with a mixture of yolks of eggs, over which, chopped fine, herbs and crumbs of bread are to be strewed; bake in an oven, or cook in a braising pan, until the brains are of a fine colour. This is a very rich dish.

Calf's Ears. Take seven or eight ears, previously well scalded and cleaned, and put them into a saucepan with some slices of bacon; then add a little ragout, made as for calf's head en tortue, and simmer for three hours; when done, take out the ears, put them on a dish, and serve with Italian sauce.

Calf's Ears Broiled. Dip them in butter, melted, while in a liquid state, and broil them over a slow fire, to prevent their burning; when of a fine colour, serve with a sauce composed of a little stock, lemon juice, chopped shalot, and salt and pepper.

Fried Calf's Feet. Chop the feet in two, and boil them in flour and water until half-dressed; then let them lie in a mixture made of vinegar, salt, pepper,

shalots, parsley, thyme, and two or three bay leaves; when they have sufficiently imbibed the flavour of this seasoning, flour and fry them to a good colour, and serve with fried parsley.

Stewed Calf's Feet. Take four feet, cut in two, and put them into a saucepan, with the juice of a large lemon, a good-sized piece of butter covered with flour, some salt, and whole pepper, a little chopped shalots, and half a pint of water; let them simmer for half an hour over a slow fire, then add a little chopped parsley, and a chopped anchovy; simmer for ten minutes or a quarter of an hour longer, and serve.

Calf's Head Boiled. Split the head, and carefully take out the brains and tongue; wash it well, and let it lie two hours in cold water; boil it with the tongue and brains gently in plenty of water, until it is quite tender; pour over the head parsley and butter made very thick; rub the brains through a sieve, add to them some chopped parsley, pepper, salt, and a bit of butter; mix the whole well together, and put it round the tongue.

Calf's Head Fried. The head having been boiled, cut the meat into slices, and let them lie for two or three hours in a mixture composed of a ladleful of vinegar, the same quantity of oil, some chopped fine herbs, a chopped onion, salt, and pepper; then let the pieces drain, dip them in batter, and fry.

Calf's Head a la Poulette. Put some fine herbs into a saucepan with butter, a little flour, some stock, salt, and a little whole pepper; boil for a quarter of an hour, then put in the flesh of the head previously boiled and cut into pieces; simmer just long enough to make the head thoroughly hot; just before serving, thicken with two or three eggs, taking care not to let the ragout boil, in order that it may not turn; a minute or two before taking up, squeeze in the juice of a lemon.

Calf's Head Stewed. When the head has been boiled, cut it into square bits, and stew it in some brown gravy, with a little essence of anchovy, two table-spoonfuls of lemon juice, some Cayenne, and about an ounce of butter mixed with flour; before serving, add a glass of French white wine.

Calf's Head en tortue. The head having been boiled, cut it into pieces, and garnish with slices of bacon; then wrap them up in a linen cloth, and put them with a ragout made in the following manner: Cut into small pieces two pounds of veal, two pounds of bacon, two large carrots, and three onions; put these in a large saucepan over a good fire, then add a pound of butter, the juice of three lemons, three or four cloves, two bay leaves, a little thyme, salt, and pepper; when the quantity of butter has been a little reduced, add a large ladleful of stock; cook these till the quantity of fluid is reduced about one half, then put by in a dish for use. Having mixed this ragout with the calf's head, add a bottle of Madeira wine, and put the whole in a braising pan for three hours; on the other hand, take a quart of Espagnole sauce, a bottle of Madeira, a little consommé, and a little pimento in powder, and reduce these over the fire one half; then add the calf's tongue cut into pieces, some cocks' combs and kidneys, and some calf's brains cut in pieces, the whole having been previously cooked; to these add some small pickled cucumbers cut in slices, some chopped mushrooms, salt, and pepper, and some river crayfish, if you have them previously boiled; this sauce is to be very hot, but must not boil. When ready, pour it over the calf's head, and serve.

Calf's Liver Fried. Cut the liver into slices about a quarter of an inch in thickness, and fry them in butter well on both sides; when done, take them out of the frying pan, and put into it some chopped parsley, chibols, and shalots, and cook them until they are brown; now add a little flour, and about a quarter of a pint of French white wine, with a dash of vinegar; let all these boil together for a minute or two, then pour them over the liver and serve; slices of bacon may be fried with the liver.

Calf's Liver, Italian Method. Cut a calf's liver into very thin slices, put a layer in the bottom of a moderate-sized saucepan, and strew over it a seasoning consisting of salt, pepper, parsley, chibols, mushrooms, and shalots, all chopped very fine, and mixed with a dry bay leaf, and a little dried thyme, rubbed into powder; put a second layer seasoned in the same way, and go on until all the liver is placed in the saucepan, then add half a pint of water, and a little rich gravy, a good-sized piece of floured butter, and the juice of a small lemon; cook over a slow fire for about an hour.

Calf's Liver Larded and Roasted. Lard a calf's liver in the same manner as a fricandeau, and let it lie for twelve

hours in vinegar, with an onion sliced, a bunch of fine herbs, some salt and pepper, and a little parsley; baste it well while roasting, and serve it with Espagnole, or pepper sauce.

Calf's Pluck. This part of the calf forms one or two very nice dishes; the heart may be stuffed with a rich forcemeat, and roasted; the liver and lights may be parboiled, and minced, and then be stewed with some rich gravy, and a little mushroom or walnut catsup, or a part of them may be dressed as above, and the remainder be fried with some slices of bacon; when served, the heart should be laid on the mince, and the dish be garnished with the fry.

Sweetbread Broiled. When you have well washed the sweetbread, parboil it, and then rub it over with butter, and broil it over hot ashes; baste it from time to time with butter, and turn it frequently.

Sweetbread Fricasseed. Clean and parboil as above, and cut them in slices; beat up the yolk of an egg, into which mix a little flour, salt, pepper, and grated nutmeg; dip the slices of sweetbread in this mixture, and fry of a good colour; prepare a sauce of some good gravy, a little lemon juice, and half a glass of French white wine, pepper, and salt; when it has well boiled put in the sweetbreads, and let them stew for ten minutes, and serve.

Larded Sweetbreads. When the sweetbreads have been soaked and blanched, lard them on the top, and bake them in an oven for about half an hour; serve on boiled spinach or endive.

Sweetbreads (en Caise.) Having cleaned and blanched the sweetbreads, as before directed, cut them into small slices, and put them to season in a mixture of oil, parsley, chibols, mushrooms, and shalot chopped fine, a little salt, and whole pepper; let them lie in this seasoning for some time, and then having folded some writing paper, put the slices of sweetbread each in one, with some of the seasoning; oil or butter the paper, and broil over hot ashes for half an hour; before serving, squeeze a little lemon juice over them.

Sweetbreads Roasted. Having cleaned and blanched as above, parboil them in milk and water; then dry, and cover them with grated bread crumbs, having first dipped them in yolk of egg well beaten; roast them of a good colour, basting them from time to time with butter, or veal dripping; serve with slices of broiled ham or streaked bacon, and good brown gravy, or Espagnole sauce.

Calves' Tongues with Sauce Piquante. Soak the tongues in cold water for some time, then blanch them in boiling water for a quarter of an hour, and put them again into cold water, lard them with bacon, and put them into a stewpan, with two or three shalots, carrots, a bay leaf, a small bunch of sweet herbs, pepper, salt, and a little good stock; let them stew over a slow fire for two hours, then skin them, and serve with sauce piquante. (See Sauces.)

VEGETABLES. See each sort under its proper head.

VERJUICE. The expressed juice of unripe grapes. It is occasionally used in cooking, and is said to be very serviceable, used externally, for bruises, where there is no abrasion of the skin. It is made as follows:—Having gathered the grapes when they are fully large, but still quite sour, remove the seeds, and pound the fruit in a mortar, with a little salt; having squeezed out the juice, by wringing the bruised grapes in a cloth or putting them into a press, filter it through a jelly-bag several times, until it is perfectly bright; the juice is to be put into very dry and clean bottles, which are previously to be exposed to the fumes of brimstone, in the following manner:—Suspend by a wire a small piece of lighted brimstone in the bottle, and when it is burnt out, and there is still a small portion of the vapour left, withdraw the wire, and put in the juice; cork immediately. A dash of verjuice made in this way gives an agreeable flavour to many dishes. On the Continent, jellies, marmalades, syrups, &c., are made with the green grapes, as with ripe fruit, merely adding a larger quantity of sugar.

VERMICELLI. A dry paste, made of very fine flour. That which is made in Italy is considered the best. It is chiefly used in the making of soups, (see Soups,) but is also a light and agreeable dish, either cooked with gravy or milk.

Vermicelli with Gravy. Put a quarter of a pound of vermicelli into boiling water, and after it has stood for a short time, put it in cold water; then having drained it, boil it for an hour in good stock; just before taking it off the fire, add a little veal or other gravy, and serve in a dish, covering the surface of the vermicelli with grated parmesan.

Vermicelli with Milk. Boil the milk, and when it boils, throw in the ver-

micelli, stirring it well to prevent its becoming lumpy; add sugar to sweeten it, and let it boil gently for half an hour.

VINEGAR. The best vinegar is made from wine which has been allowed to turn sour; but all fermented liquors become vinegar, in the second stage of fermentation. In France none but wine vinegar is used, except for very ordinary purposes, when economy is an object, for although weak wine may be converted into vinegar with almost as great ease as strong wine, the vinegar made from the inferior sorts has not so fine a flavour, and is weak in proportion with the weakness of the wine from which it is made. When cheapness of cost is aimed at, vinegar may be made from bran, by boiling it as for making beer, and fermenting it with yeast, and from many other cheap substances. In all purposes, however, requiring an article of a superior description, vinegar made from good white wine is preferred. In England, where the price of wine made from the grape is so high, owing to the duty and freight, as to render the manufacture of vinegar from it impossible in the operations of trade, vinegar is made from sugar, and from beer; the first, however, is the best, and it may be used in most cases, instead of white wine vinegar. Vinegar of every kind may be rendered more acid by exposing it to a high degree of heat; but in doing this, much of its alcoholic property is removed, and it will not keep. The best way of obtaining strongly concentrated vinegar, is to expose it to frost, and when frozen, to take away those parts which are converted to ice. The aqueous part of the vinegar being thus separated, what remains liquid will be finely acid, and will have sufficient alcohol for keeping. The vinegar obtained by distillation from wood, is sometimes used, mixed with a little brandy and tartar, and it has the advantage of resisting long voyages, and the action of different climates; but it has a taste which makes it unpleasant for general use.

To Preserve and Clarify Vinegar. (*Dictionnaire des Menages.*) When vinegar is weak it will not keep. In this case, boil it gently, and add a little brandy; or distil it, collecting what comes over only at the moment when the product is very acid; but the best method to be adopted, and the most simple, is to filter the vinegar through a bed of charcoal. For this purpose, take some light charcoal, pulverize it, and wash it until it no longer discolours the water; take a pail with holes bored through the bottom, and fill it half full with this powdered charcoal, then fill up the pail with the vinegar; the pail should be set over the mouth of a larger vessel, to catch the liquid as it filters through. A single filtration will improve the quality and appearance of the vinegar in a high degree, but if a very superior article be wanted, the operation should be repeated. Although the above is recommended for vinegar that is beginning to spoil, there can be no doubt that it would be an excellent precaution with every vinegar before bottling.

To Clarify Vinegar with Milk. To each quart of thick vinegar, add four table-spoonfuls of milk; shake the mixture well, and after it has stood for some time, filter: repeat the operation if necessary.

To Detect the presence of Sulphuric Acid in adulterated Vinegar. Put twenty drops of the aqueous solution of the muriate of barytes into four ounces of the suspected vinegar; if no agitation be produced, the vinegar is pure; if sulphuric acid has been put in by the vinegar maker to increase the strength, the liquid will be troubled, and a precipitate will be formed.

American Vinegar. Boil nine gallons of water, and while it is yet hot, add six quarts of treacle; mix it well, and when it is cooled to about the temperature of new milk, put it into a cask, and place it before the fire for twenty-four hours; then put it in the sun, with the bunghole slightly covered; it will be fit for bottling in three months, till which time it must remain exposed to the weather.

Beer Vinegar. If the beer be strong, and not too much hopped, very good vinegar may be obtained from it by proceeding as for cider. Many persons make beer vinegar by exposing the cask to the sun, but in this way it is never good; the temperature should only be just high enough for the beer to turn, and the temperature should be kept as equable as possible.

Bran Vinegar. Make a thick mixture of wheat bran and river water; boil and strain; then put the liquor into a cask, and set it to work with some yeast a week old. It will ferment in twenty-four hours; when the scum from the bunghole begins to diminish, bung up the cask, and keep it in a state of quiet until fit for use.

Camp Vinegar. To three quarts of strong vinegar add four table-spoonfuls of soy and the same of mushroom catsup,

eight anchovies pounded, two heads of garlic, half an ounce of cayenne pepper, and as much cochineal as will give it a good colour; shake it well two or three times a day for three weeks, then strain and bottle; it is an agreeable addition to fish sauces, and to most made dishes.

Chili Vinegar is made by steeping capsicums in strong wine or sugar vinegar, not boiled; a little garlic may be added, and a few cloves.

Cider Vinegar. Take a quart of rye flour, and moisten it with cider, sufficiently to make it up into dough; bake it in an oven after the bread has been drawn, and let it be dried thoroughly afterwards; when dry, pound it in a mortar, and make it up again in the same way with cider; bake and dry as before, and perform the process also a third time; it is then to be broken into powder, and placed in a hogshead of cider, stirring it about with a stick; the cider is to be bunged very lightly, and put into a dry, but not too hot place. In the course of a fortnight it is to be bottled, for if left in the cask it acquires a vapid taste. The same plan may be adopted with perry, which makes better vinegar than cider.

Currant Vinegar. Follow the directions given for gooseberry vinegar.

Garlic Vinegar. Steep a small clove of garlic, a nutmeg bruised, and two or three cloves, in a quart of vinegar for a week, shaking it well every day; strain and bottle it for use.

Gooseberry Vinegar. Take any quantity of ripe fruit, (the yellow sort is best,) and having bruised them to a mash, mix thoroughly with water which has been boiled and suffered to cool, in the proportion of three gallons of water to one of the mash; let it stand twenty-four hours, then strain through a cloth, and add brown sugar, in the proportion of one pound to each gallon of the strained liquor; mix well, and put it into the cask. It will not be fit to bottle in less than nine months.

Honey Vinegar. Mix any quantity of honey with water, in the proportion of a pound of the former to a pint of the latter; put it into a cask, and expose it to the hottest sun, without closing the bunghole, but covering it only with a bit of linen, to exclude the insects; in about two months it will be fit for use.

Lavender Vinegar, Rose Vinegar, &c., for the toilet, are made in the same way as tarragon vinegar, omitting the cloves.

Milk Vinegar. Take a quart of milk, to which add six table-spoonfuls of good brandy; put this mixture into a bottle, which is to be closely stopped, and placed in a warm situation, giving air from time to time, on account of the fermentation; at the end of a month this will have become good vinegar; it is then to be strained, and kept in a bottle closely corked for use.

Raspberry Vinegar. Having procured a sufficient quantity of fresh gathered raspberries, bruise them in a large bowl, and having poured over them some good vinegar, (in the proportion of a pint to a quart of the fruit,) cover closely; let it stand for four days, stirring at least once every day; then strain it through a jelly bag, until all the liquid has drained through, but without pressing it; to a pint of this strained liquor, add a pound of pounded lump sugar, which must be boiled for about a quarter of an hour, taking off the scum as it rises; when cold, bottle and cork; a glass of brandy may be added to a quart of raspberry vinegar. This article is very useful in sore throats, or in fevers, mixed with water, as a refreshing beverage.

Rivigotte Vinegar, much used in French sauces. Take of tarragon, shalots, garlic, and elder flowers, each two ounces, and proceed as for tarragon vinegar.

Rose Vinegar. Dry any quantity of rose-leaves in the sun, and put them in a closely-stopped jar, or bottle, in the sun, and let it stand for a fortnight or three weeks. The proportion of leaves is an ounce to a quart of vinegar. Elder flower, carnation, and orange flower vinegar is made in the same way, except that for the latter the leaves must not be dried.

French Salad Vinegar. At the bottom of an earthen jar, put two handfuls of tarragon, half a handful of cerfeuil, the same quantity of pimpernel, two cloves of garlic, a green capsicum, and two heads of celery; upon this pour two quarts of white wine vinegar, previously boiled with a little salt; cover up the jar, and leave the mixture to infuse for a week; then decant, and put into bottles.

Shalot Vinegar. Same as garlic vinegar.

Spring Vinegar. So called from its being made from the salad herbs which are only to be had in perfection at that season. It is made in the following manner:—The herbs, consisting of cresses, tarragon, pimpernel, chervil, &c., are first dried in the sun, and then put into a

pitcher with six cloves of garlic, as many shalots, and onions, a handful of mustard-seed, some cloves, coarse pepper, and a lemon cut in slices with the peel on; the pitcher, which should be large enough to contain five or six gallons, is then to be filled with cold vinegar, and stopped close; expose it for about a fortnight to the heat of the sun, then filter it, and bottle and cork for use.

Sugar Vinegar. Take coarse brown sugar, in the proportion of eight pounds to five gallons of water, and when it has boiled as long as any scum rises, pour it into a cask, and let it cool to about sixty degrees of Fahrenheit; then cover a piece of toasted bread with fresh yeast, and put it into the cask, which must be left open for four or five days, at the expiration of which time paste a piece of paper over the bunghole, piercing it in two or three places with a pin. If made in April, it must remain in a warm dry place, without being moved, until September, when it should be drawn off, and boiled for a minute, and when cold, bottled. It will keep good for years. When the cask has been emptied, it should be refilled for a fresh supply.

The *Polytechnic Journal* gives the following receipt for making sugar vinegar:—Dissolve ten pounds of sugar in 160 quarts of boiling water, after which add six pounds of crude argol; place the whole in a fermenting cask, and when the temperature is reduced to 80° Fahrenheit, add four quarts of beer yeast to it, stirring it well together, and keep up a temperature of about 75° Fahrenheit, to promote the vinous fermentation, for about a week. The cask should be kept loosely covered. When it has become clear and bright, the liquor may be drawn off, and acetified by the common vinegar process; before the acetification is finished, three gallons of strong spirits should be added, and if the common process is followed, the addition of fifteen quarts of good vinegar will be found necessary to complete the acetous fermentation.

Tarragon Vinegar. Put into a stone bottle three quarts of good white wine or sugar vinegar, and three-quarters of a pound of tarragon leaves, very slightly dried in the shade; add a few cloves, and the rinds of two lemons; expose the bottle to the action of the sun for a fortnight, or, if the weather be not favourable, put the bottle two or three times in the oven after the bread has been drawn; cover a sieve with two linings of filtering paper, and pour the vinegar very gently through it, then bottle. All vinegars for culinary purposes may be made in the same way, the herbs and plants, such as garlic, capsicums, &c., being previously laid in the shade for a few hours; bottle and seal the corks.

For Four Thieves' Vinegar, see that head.

To Make Wine Vinegar. Fine a cask of wine in the usual way, and when it is clear, draw off a third and bottle it; then fill up the cask to the bung with wine of the same kind, and bung it down lightly; keep the cask in a moderate temperature, and leave it until the wine has become good vinegar. Another more simple way is to put into a hogshead of wine a large double-handful of the shavings of the wood of the yew tree; in a short time the wine will be converted into good vinegar. If a very strong vinegar be wanted, put into a hogshead of wine about thirty or forty very ripe capsicums, and a quarter of a pound of ginger; leave them in for a fortnight, then take them out and dry them. In order that this operation may be easy, the capsicums and ginger should be enclosed in a muslin bag when put into the wine.

VIOLETS. This beautiful flower is employed on the Continent for confectionary as well as for perfume.

Pate de Violettes. Take two pounds of the flowers, and reduce them to pulp in a mortar, adding the juice of two lemons; boil two pounds of sugar to the state of thick syrup, and then add the mixture from the mortar, and a pound of apple jelly; let them simmer until they are sufficiently thickened to form a paste, which is to be rolled out and dried on plates in the sun, or in a slow oven.

The leaves of violets are sometimes used medicinally by infusing them—they are cordial, emulcient, and slightly laxative.

WALNUTS. An agreeable fruit, but generally very difficult of digestion, although they do not disagree with all persons. When at maturity, the walnut contains a large quantity of oil, which, in the south of France, is expressed, and used as a substitute for salad oil, or for burning in lamps. In Paris, very young walnuts, in which state they are called cerneaux, are served for dessert; for this purpose they are taken out of the shell, and put into cold water with salt for some hours before they are used; they are,

however, almost tasteless. Walnuts are much less unwholesome when eaten soon after they are gathered, than if they be allowed to lose their aqueous moisture, for then the oil which they contain has no corrective. When at full maturity, walnuts carefully peeled may be preserved in sugar, and are more digestible; to do this, let them simmer for two or three hours in thick syrup, then put them into pots or glasses with the syrup, or take them out and dry them in a slow oven, or in the sun, first powdering fine sugar over them. If walnuts be gathered when ripe, and buried in their skins, deep in the earth, they will remain almost as good for some months as when they were first gathered; they may be preserved for some time in this way also in sand. The thick outer covering of the walnut makes an agreeable catsup for sauces, and the young walnuts are used as a pickle.

To Make Walnut Catsup. Crush the green shells in a mortar, and express the juice; to a quart of this add a pint of strong vinegar, and three table-spoonfuls of salt; when it has stood for three or four days, boil it until it is reduced one half, with some lemon peel, a quarter of an ounce of mace, and the same quantity of nutmeg and cloves; let these stand in a close jar for a month, then strain and bottle. If the flavour of garlic be not disagreeable, add a clove of it. The quantity of vinegar should be increased, if the catsup is to be kept a very long time before using, or some port wine should be added in the boiling, in the same proportion as the vinegar; the quantity of salt must also be increased; but if the catsup is not to be kept for more than one year, the first receipt is the best, as the flavour is more agreeable.

Walnut Pickle. (See Pickle.)

WARMING-PAN. Two kinds of pans are used for warming beds; one in which hot cinders are placed, and the other hot water. The latter is preferable, for although the heat which is given out is not quite so great as with the pan most commonly in use, it is unattended with danger, and the sulphureous vapour caused by the portion of live coal which may be mixed with the cinders. A third plan, however, is adopted by some persons, and is very useful:—into a copper or a brass pan made air-tight, with an opening in the centre, to which a screw cap is fitted, two or three moderate-sized pieces of quick lime, previously dipped in water, is put; the cap being then screwed on; in a short time the lime gives out an intense heat, which lasts for several minutes. As the lime in its decomposition falls into powder, it may be necessary, in order to get it out of the pan when used, to pour in some water, and shake the pan well, when the powdered lime may be poured off with the water. It is a general opinion, that the practice of warming beds is an unhealthy one, but this depends entirely on the system. Getting into a cold bed is invigorating, where the system is sufficiently active for the cold to act as a general tonic, for if the blood circulates quickly, a genial glow follows; but with weak and sickly persons, bed warming is to be recommended, for the shock of a cold bed, after leaving a warm apartment, is sometimes more than the system can bear without injury; with such persons equanimity of temperature is highly advisable. It is not to be inferred, that because weak nervous persons are frequently benefited by the application of a shower bath, they will experience a similar result from a cold bed. In one case the body is in a state of activity, and the friction of rubbing dry with coarse napkins promotes the circulation of the blood; but in the other, where the vital warmth is languid, there is nothing of this kind to promote the healthy revulsion which sometimes ensues from the application of cold. It is a popular, but unfounded notion, that putting brown sugar into a warming pan is beneficial, where the party is much fatigued. The practice neither does good nor harm, and is an expense without utility.

WASHING. In domestic matters, the term given to the process of removing dirt and stains from linen, cotton, woollen, silk, and other articles. It is customary, in localities where good wood ashes can be obtained, to prepare a lye by pouring water on them, and allowing it to remain for several hours, then drawing off the water, and boiling the articles in it before they are washed with soap. This process effects a great economy in the use of soap, as most of the stains and dirt are removed by the boiling in the lye; but from the caustic nature of the ash, much injury is done to the article so washed, and it also has a tendency to discharge colours. In places where wood ashes are not easily obtained, pearlash is frequently substituted, in order to save labour and soap, but neither the one nor the other should be used by the good housewife. Soap and water only should be employed, and

the articles may be boiled previously, with a sufficient quantity of soft soap to act upon them in the boiling. The best mode of washing is by steam, but as this can be done only on a very large scale, it is useless to say more of the process than that the articles, after having been previously boiled, are exposed to the action of the steam, introduced through a variety of pipes properly arranged for the purpose, The chief advantage of the system is, that it prevents the necessity of rubbing, and thus preserves the texture; but, on the other hand, there is a drawback, as, in order to get the articles very clean by steam washing, they must be previously boiled in rather a strong lye. The use of potatoes in washing has been introduced rather extensively in the hospitals of Paris. M. Hericurt de Thury gives the following account of an experiment made in the presence of the Directors of the Hospitals, and of the Prefect of the Seine: "The linen was put into a tub of cold water, and soaked for half an hour; the water was then changed, and the operation repeated; the linen was then thrown into a copper of boiling water, and taken out bit by bit to be successively rubbed on both sides, in the same way as with soap, with pieces of potatoes which had been three-quarters boiled. When every article had been treated in this way, the whole of the linen was again thrown into the copper, and boiled for half an hour; at the expiration of this time each article was taken out, and again rubbed as before; this being done, the linen was again put into the copper and boiled for a quarter of an hour; it was then rinsed in a large quantity of cold water, and also a second time; it was then wrung and hung out to dry. The results of the experiment were exceedingly satisfactory. The linen was beautifully white, and free from any smell, and from that green tint which is frequently seen after the ordinary mode of washing."

To Clean Cottons, Woollens, and Silks, with Potatoes. Wash and brush some potatoes until they are thoroughly clean, then rasp them through a sieve into a pan containing a small quantity of water, let the mixture settle, and pour off the water; with the fecula which remains, and the water poured off, rub the articles, stretched on a clean board or table, frequently with a sponge on both sides, and rinse in clean water.

To Wash Coloured Woollen, Linen, and Cotton Articles. Wash them in cold water in which boiled soap has been mixed, rinse them frequently, and in the last rinsing water put some salt; dry in the shade.

To Clean Feathers. Wash the feathers by passing them through a strong and hot solution of white soap; rinse in tepid, and then in cold water; then bleach them with sulphur vapour, and placing them near the fire, pick out every part with a bodkin.

To Wash Lace. Put the lace in folds in cold water for twelve hours, then wash several times in cold water with white soap; rinse well in clean water; then put the lace into thin starch, and spread it on a blanket to dry; when nearly dry, pull it out, and when quite dry, lay it in the folds of a fine towel, and beat it hard with a rolling pin until it looks quite smooth.

To Wash Nankeens. Put a large handful of salt into a vessel, with a gallon of cold water; put the article in, and let it remain twenty-four hours; then wash in hot lye without soap, and without wringing; nankeens washed in this way will keep their colour.

To Clean Ribands. Proceed as for silks, according to the colours, and, after washing, pass over a slight solution of isinglass; then iron between writing paper.

To Clean Black Silk. Mix some ox gall with boiling water; whilst the mixture is pretty warm, dip a sponge into it, and sponge repeatedly both sides of the silk, squeezing the silk from time to time to get rid of the water already imbibed; then rinse in soft water until all the ox gall mixture has entirely disappeared; strain the silk on an open frame, and dry; when dry, take a slight solution of isinglass, and pass it over with a clean sponge, and as soon as dry, brush as for white silk. If the colour of the silk be slightly faded after having cleaned it as above, dip it in some soft water, into which there has been put enough sulphuric acid to make it slightly sour; squeeze the silk several times for about five minutes, and then rinse in several waters; after which dry, &c., as above. If the colour be so far gone as to render dying necessary, put into a saucepan, large enough to contain the article, some campeachy wood in shavings or thin cuttings, and boil them with water for half an hour; now put the saucepan by the side of the fire, and put in the silk for half an hour; after this, add to the water some sulphate of iron, in such proportion that

there may be about three drachms for a silk gown, and add enough water to make up for the quantity absorbed by the silk, after it has been held over the saucepan for the excess to drain off; now put in the silk again, and boil very gently for half an hour; rinse in several waters; dry, and give the polish as above.

To Clean Coloured Silks. Proceed as with white silk, and rinse in tepid water, but very briskly, to prevent the discharge of the colours. If the colours should be injured, the following mode of restoring them may be adopted: For yellows, crimsons, and chesnut coloured, make some water slightly acid, as above, dip in the silk, and wash in clear water; then lay it on a coarse cloth, and roll silk and cloth up together, and press hard. For rose and flesh colours, substitute lemon juice for sulphuric acid; and for scarlet, employ the composition called Dyer's scarlet. For olive green, use sulphate of copper; and restore blues by dissolving the ball blue in water. Some blues are rather brought out by soap than injured.

To Wash White Silk. Dissolve some white soap in boiling water, and when the water is sufficiently cooled not to burn the hand, put the silk into it, and press it repeatedly, opening it again from time to time, and taking care not to wring it. If there be any obstinate stain, dip it into a strong solution of soap, and rub it gently between the fingers until it disappears, adding, if necessary, a little spirits of wine. When the washing is finished, rinse the silk in several tepid waters; and having made some water blue to the required shade, with the blue sold by the colour dealers for that purpose, dip the silk in it, and hang it out to dry; when dry, brush it with a soft brush to give a lustre.

To Wash Silk Stockings. Boil some thin pieces of white soap in soft water, (it is hardly necessary here to observe that no washing can be carried on well unless the water be soft,) add this to some cold water, and wash the stockings in it thoroughly. If they are to be pinked, mix the pink with a little clean suds, and dip in the stockings; then smoothe them out, and put them on a sheet or table cloth to dry; when they are nearly dry, rub them with flannel on both sides until they are glossy. They may then be either mangled or ironed, but the former is preferable.

To Clean Straw Bonnets. Put the bonnet on a form, and wash with a slight solution of white potass and a sponge, to remove dirt and stains; then put it into a box, exposed to the vapour of burning brimstone; after this, moisten the bonnet with a sponge dipped in thin rice and starch water, and iron; taking care to place between the bonnet and the iron some grey blotting paper. The form should fit the bonnet thoroughly.

To Wash Woollens. Boil some water, with a pound of soap and a pound of soda to every gallon; set this by to become cold; wet the woollens in cold water, and then wash them in other water, to which some of this boiled mixture has been added; repeat this process until the articles are quite clean, when they are to be rinsed in cold water, and hung out to dry, without being wrung; the advantage of this plan is, that the articles by being washed in cold water do not shrink when drying.

WATER. Water, although a solid body, is found to be composed of gases, which may be separated by heat into the gaseous state, whilst the gases are, by chemical action, brought to the state of water. As we have to consider it here, however, more as regards its application to domestic economy, we shall merely observe on the propriety of having it as pure as possible, for upon that will frequently depend the health of an entire family. The purest kind of water, except distilled water, is rain water; for it has been taken up from the earth by evaporation, and undergoing in the air a mysterious decomposition, is returned to us free from the foreign particles which previously belonged to it; but rain-water, like that which is artificially distilled, has a flatness which renders it less agreeable as a beverage than the water from springs, although it is much better for domestic use generally. Almost all spring or river water contains more or less of earthy matter, which can only be effectually got rid of by distillation; although filtration alone is frequently all that is necessary. What is called hard water, and which is generally the most agreeable to the taste, has its properties of hardness from the particles which it holds in solution, and is very unfit for brewing from, or for the making of wines, and, as it takes soap with difficulty, is not good for washing, although there may be nothing in it injurious to health. The hardness may, in a great degree, be removed by boiling, or by the addition of soda. Where parties

are so situated as not to be able to obtain soft well water for domestic uses, they should have large reservoirs for the reception of rain, and keep them well covered, so as to prevent earthy or other foreign matter from getting into them. Even the purest water is liable to decomposition, but in this case it appears to arise rather from what it takes up from the atmosphere than from its natural properties. The clearest and best water loses nothing of its goodness by filtration, but rather improves: no house, therefore, should be without a filtering fountain. A very economical one may be made by taking out the head of a cask, setting it upright, and at a distance of about one third from the bottom putting in a shelf or partition, pierced with small holes; the shelf is then to be covered with a layer of clean, small pebbles, over which a quantity of fresh charcoal, made from wood or bones,—the latter is preferable,—(See CHARCOAL,) and fine sand should be laid to the depth of an inch, and then covered with another layer of pebbles; over this should be placed another shelf, pierced with holes, to prevent the water which runs or is poured in from disturbing the prepared bed of charcoal and sand and pebbles. At the bottom of the cask a cock is to be placed, to draw off the water as it is wanted. If it is intended to use rain water, a pipe should communicate from the reservoir to the top of the cask, and in that case the top is to be fitted in, leaving only an opening for the pipe, and sufficient vent. Water may be rendered beautifully clear also by the following simple process: Take a cask holding about eighteen gallons, stand it upright, taking out the head, and putting the cock at a distance of about one-third from the bottom; fill it with water, and stir in about half an ounce of powdered alum. In about twelve hours the impurities of the water will sink in flakes near the bottom, and the water drawn off above them will be bright, and highly agreeable to the taste. The small quantity of alum that is used does not render the water hard, or give it any perceptible acidity; but this water should only be used for drinking. In sea voyages, where putrefaction has commenced in water, it sometimes recovers its sweetness by pouring it backwards and forwards in the air; but the use of alum in the way above recommended is much more certain. Water which is impregnated with any mineral should be used only medicinally, for even those which are impregnated with iron, and which are exceedingly tonic, would be rather injurious than otherwise, if taken as a constant beverage. The external use of cold water is, in many cases of illness, of great value. Fevers of the most violent kind are sometimes subdued by the frequent and plentiful application of cold water; and burns and scalds, if the part be for a long time deluged with cold water, heal much more rapidly than by any other treatment; but the remedy to be effectual should be continued for a long time on each application. The inflammatory symptoms are almost sure to yield at length, where a cure by any mode of treatment is practicable.

The use of water (that which is used as our ordinary beverage), medicinally, is still recommended by some physicians. A German has lately published a treatise, in which he attempts to shew that all curable diseases are to be cured by water alone, used externally and internally. His external treatment is to throw the patient into a deep perspiration, by loading him with bed clothes, and raising the temperature of the room, and then to plunge him suddenly into a cold bath; after which he is rubbed with coarse towels, until another but gentle perspiration ensues, when he is put into bed, and the temperature of the room is reduced to an ordinary state. The internal treatment consists in drinking in the morning, fasting, from a pint to a quart of cold water, and the same at night. This gentleman gives an account of several remarkable cures, (the failures are not mentioned,) and it is not improbable that he may have had considerable success; for his external treatment differs but little from that of the Russians, who find great benefit from the use of baths of this kind, which experience has shewn to be far less dangerous in many cases than most persons would be inclined to suppose; and, as regards the internal treatment, we have to consider not only that this copious use of cold water may of itself have some effect, but that patients who are under this regime are strictly kept from the use of exciting liquids and stimulating food, which abstinence alone tends to the eradication of disease. Many patients have been cured under homœopathic treatment in the same way. The diet prescribed having been severely moderate, nature has had time to resume her sovereignty, for nature is always struggling to maintain the normal state of the system; the imagination of the patient has been found

a powerful auxiliary, and the cure has been ascribed to the magical wonders of the homœopathic pill.

The difficulty of obtaining good water in abundant quantities by the means of ordinary wells, has led to the introduction of a new system of well making, called "Artesian," from the circumstance of their having been extensively adopted at Artois, in France. It was ascertained that there is almost everywhere a subterraneous basin of water, derived from filtration through the soil, and which, meeting with a resisting stratum, is confined between the upper and the lower beds. By boring with an instrument until this water is reached, the liberated element rushes to the surface, and continues to afford an abundant supply, so much so, indeed, that an Artesian well, of six feet diameter, would furnish sufficient water for the supply of the whole of London, and render it unnecessary to use the water of the Thames, which, although excellent in its nature, is much corrupted by the filth which flows into it, and the consequent production of unwholesome gases, which no filtration will remove. Many Artesian wells have already been made by private establishments in the English metropolis; and the municipality of Paris have been for some time engaged in boring one at Grenelle, a faubourg of the capital, which, if the theory of M. Arago, as to the internal heat of the earth, be correct, will probably, from the enormous depth already attained, yield a hot spring. In an article on water in the *Monthly Chronicle*, we find the following observations as to the impurities with which much of the water used in England is mixed:—

"The contamination of water arises partly from extraneous and noxious substances, mechanically diffused through the fluid, and partly from the water holding in solution certain deleterious principles, which have been derived from the decomposition of the substances exposed to its action. The former may, by subsidence and filtration, perhaps, be thoroughly got rid of, but not the latter; for no process of clarification or filtration will remove the deleterious qualities which are chemically combined with, and enter, as it were, into the very constitution of the water itself. The particles of matter, too, which are mechanically diffused through water, are for the most part less injurious to the animal economy than the substances held in solution. Thus, particles of earth, whether argillaceous or calcareous, exuviæ, larvæ, even living insects, will not, however they may irritate, produce any specific disease; but being, for the most part, inert substances in themselves, will pass through the alimentary canal without seriously disturbing the system; but the gases disengaged during the decomposition of animal, vegetable, and more especially mineral substances, produce recombinations when held in solution, which may be productive of serious effects.

"It is well known that from the disengagement of certain gases by volcanic action, whole continents have been found covered with dead fish, and accordingly we infer that the most mischievous effects of impure water arise, not so much from extraneous substances mechanically dispersed through it, as from the deleterious substances which it holds in solution. Hence Dr. Paris observed, 'The impurity of the water, which so greatly injures the health of the inhabitants, arises, not from particles of matter floating in the fluid, but from the quantities of matter which are held in chemical solution, which cannot be separated from it by any mechanical means whatever.' Accordingly, the filters introduced into private families are no prophylactic instruments of protection: and it ought to be constantly recollected that the clearness and sparkling brightness of water are no positive *criteria* of its salubrity."

Of Artesian wells, the same authority says, "The water so obtained is exceedingly pure. 'The water afforded by these wells,' says Connybeare, referring to London, 'and which arises from the sands of the plastic clay formation underlying it, is very limpid, and remarkably free from salts; it is, therefore, what is called soft in a remarkable degree, is adapted to every domestic purpose, and never fails.' The testimony of all the scientific men who have analysed this water is to the same effect; and from the analysis of the springs in different parts of the metropolis yielding the same results, it is presumed that they communicate with each other, or arise from the same natural reservoir. Hence, whenever the bed of clay which overlays the chalk formation has been properly pierced or bored, a bed of fine sand has been discovered, which separates the clay from the chalk, and from this an abundance of pure water has been immediately obtained.

"In the neighbourhood of London these

Artesian springs are already very numerous: there are at Hammersmith, 6; Brentford, 3; Uxbridge, 8; Rickmansworth, 4; Watford, 9, one of which produces 22,500,000 gallons weekly, partly supplying the river Colne; St. Albans, 2. In London itself there are 174, of which 30 produce 30,000,000 gallons weekly; indeed, it is clearly ascertained that the quantity of water which any one of these wells will yield depends on, and is proportioned to, the diameter of the bore. It has been calculated that the quantity of water supplied to the metropolis by all the water companies on both sides the river, may be estimated at 38,000,000 gallons daily; and *one* orifice from a single Artesian well, with a diameter of six feet, would yield more than sufficient to meet this demand."

It is a popular notion in some parts of the Continent of Europe, that if the hardest water be thrown from a great height, say the third or fourth story of a house, and caught below, it becomes softened. We are assured that at Avignon and Nismes, in France, three or four houses have forcing pumps, for the purpose of throwing up the hard water from the wells into reservoirs, from which it is again thrown through the air into tanks in the yards. The belief is, that in passing through the air, the water undergoes a chemical change. We have strong doubts, however, of the correctness of this notion. We can just conceive the possibility of a separation, whilst passing through the air, of the sulphate of lime, and other substances of metallic bases, by their superior specific gravity; and if this is correct, then, if a column of water were to be thrown from a great height, the upper part of the column, having lost the greater portion of the metallic principles held in solution, might be comparatively soft, whilst the part of the column near the earth would be hard; but even if this theory, which is merely fanciful, were true, how would the same column of water, collected together in a tank after its passage through the air, assume an entirely new chemical character? Supposing, even, the separation, which we have considered just possible, to have taken place in the air; must not the same component parts of the fluid be again held in solution, when the whole is again mixed together? That the passage of water through the air may purify it, by abstracting foreign substances, there can be no doubt; but we doubt very much whether its original chemical character can be entirely changed; although the theory of an illustrious chemist, that the hardness of water is caused by the carbonic acid gas which it contains, and by common air in a peculiar state of combination, would seem to imply that there is something in the idea of the people of the south of France on this subject.

The possibility of converting salt water into fresh, has within the last few years been brought successfully to the test, and it is done now by simple distillation, without the action of neutral agents. Several patents have been taken out for the various modes of operation, amongst which is one of such great simplicity, that the cooking apparatus of a vessel at sea, at the same time, and without any additional fuel, converts a sufficient quantity of sea water into palatable water for the use of the crew. The different analyses ordered by the Board of Admiralty in England have been favourable; but whether from apathy or otherwise, very little has been done towards the practical adoption of the discovery, on a large scale. The water distilled from sea water has not, indeed, the briskness and the agreeable flavour of river or spring water; but that is no reason for rejecting the discovery. Nobody would think of supplying a ship, in the first instance, with water so obtained, for that would be going to an expense without the slightest utility; but what a precious resource it would be for persons at sea, when the supply of water should by any accidental cause be exhausted, to be able to obtain a palatable liquid from the ocean.

The agency of water as a portion of the sustenance of man, has been recently shewn in a remarkable manner, by some experiments by a commission of the French Academy of Medicine. It is mentioned under the head Jelly, that in order to ascertain whether the gelatine made from bones, which had for some years been regarded as a very nutritious substance, was really so or not, the commission in question fed a large number of dogs upon this article exclusively, and that they all died of starvation. In the course of their experiments—which appear to us to have been unnecessarily cruel, for if it may be permitted to science to inflict pain upon animals, for the advancement of useful knowledge as regards the human race, it is not permitted to it to be barbarous without utility; a few experiments, and those of short duration, being in such cases as good as a thousand—some of the

dogs had water given to them during the trial of the gelatine, whilst others were wholly kept from it. The dogs without water survived from twenty-one to twenty-three days; those with water twenty-eight to thirty. The conclusion of the commission is, not that the water preserved life by its nutritious properties as food, but that in the animal economy the lungs and other vital organs give out a certain degree of moisture, which acts upon the whole machine as oil does upon a steam-engine, or other piece of machinery made by the hands of man, and that if the means of renewing this moisture be withheld, life ceases in a comparatively short period. We may conceive, therefore, that a human being kept without solid food of any kind, (and we should here state that several of the dogs on which experiments were made, were kept without food of any kind, even the useless gelatine; whilst others had water only given to them, and the results were just the same as those with the dogs with gelatine with or without water,) would live much longer than one from whom water as well as solid food should be withheld. There are some extraordinary instances of persons who have lived for weeks with water alone; but these are rare and mysterious exceptions to the general laws of nature.

Mineral Waters. Nature in her bounty has provided for us, not only in our normal state, but also in a state of derangement, by supplying us with mineral springs, which have a sovereign effect in the various diseases to which the human frame is subject. There are indeed some persons, even some physicians, who deny that mineral waters do of themselves effect the wondrous changes which are attributed to them. They pretend that the patients who drink mineral waters, and take mineral baths at the places where they exist, are frequently indebted for their cure entirely to the change of air and of scene, and to the new system of diet which is ordered for them; and they imagine that their argument finds abundant support in the fact, that if these waters be drunk or used as baths, when obtained from the source of them, without the removal of the patient, they have no effect. It is not invariably true that they are without efficacy when so used; but it certainly is true that change of air and scene, the alteration of the mode of living, &c. contribute very powerfully towards recovery. All this may readily be allowed, without adopting the opinion that mineral waters are not in themselves sometimes of the greatest benefit, and that without the use of them there would be no chance of recovery.

Mineral waters are of two kinds, thermal and non-thermal; and there is probably no country in the world which has not one or both. In England, the thermal waters in repute are those of Bristol, Bath, and Buxton; the Cheltenham and Leamington springs are non-thermal. In France there are several places celebrated for their mineral waters, such as Vichy, for dyspepsia, Bourbon-les-Bains for dyspepsia and paralysis, and Dax for rheumatism. At the latter place, the thermal spring is of so high a temperature, that an egg immersed in it for five or six minutes, is sufficiently cooked for eating. Not only is the spring at this place strongly impregnated with sulphur, but the soil of the town and environs is sulphureous to such a degree, that soldiers who are incapable of service from rheumatic affections are sent thither to take mud baths, which bring about extraordinary cures. The mode of taking the bath is as follows:— The patient is stripped naked, and laid on the ground, which has been previously saturated with water. The wet earth or mud is then laid over him, to the thickness of two or three inches, or more, and he is left to bake, as it were, in his crust, under a hot sun. When he is no longer able to bear this exposure to the sun, the mud covering is removed, and he is taken to a bath of the hot sulphur spring, for the purpose of completing the process, and cleansing him. Germany is also famous for its mineral waters. Who has not heard of Ems, Carlsbad, Baden, and Wiesbaden? The author of that beautifully written work called *Bubbles from the Brunnens*, supplies us with some very valuable information respecting the waters of the duchy of Nassau, in which it appears there are waters for all complaints, and all equally efficacious; but the most powerful appear to be those which are taken as tonics, and in which, according to the author, the iron is so abundant, that it oozes from the pores of the patient, and soils his linen, long after he has taken a bath, and drunk the waters. We strongly recommend the dyspeptic patient to read this book, and to take a trip to the Brunnens, in preference to some of the more noisy and frequented spots which are resorted to by health seekers, and in which, as at Baden, it is difficult to have any society without falling into habits of dissipation.

Mineral waters, thermal and non-thermal, are divided into three classes—viz., saline, or purgative, sulphureous, and chalybeate. The two former are both used in cases of dyspepsia, according to the symptoms exhibited by the patient; but sulphureous waters are chiefly good in diseases of the skin, and in rheumatic affections. The chalybeate waters are strictly tonic, and are therefore good in dyspepsia, where the administration of iron in a state of natural combination with other substances is desirable. We find, generally, in mineral waters—varying, of course, according to their nature, as to the substances themselves, and as to the quantity of each present—sulphuric and sulphureous acid, hydrosulphate of soda, sulphate of lime, carbonic acid, carbonates of lime and iron, potass, and ammonia, sulphate of soda, magnesia, alumine, potass, iron, and copper; oxygen, and azotic gas; nitrates of potass, lime, and magnesia, and various animal or vegetable substances. Saline waters contain various salts, and are neither ferruginous, nor gaseous, nor sulphureous; they are used principally to rouse and excite the nervous system. The principal sources on the Continent are Seidlitz and Bourbon les Bains. In England, the most pure saline waters are to be found at Leamington. Sulphureous waters hold in solution hydrosulphuric acid, and other substances: the best are at Harrowgate, in England, Moffat, in Scotland, and on the Continent, Barèges, Baguères, Cauterets, &c. As to tonic or ferruginated waters, they abound in all parts of the world, and are all more or less good in cases of dyspepsia and general debility; they should never be taken, however, without medical advice, for it is a nice point in indigestion to say when tonics should be administered, and to what extent they should be carried.

Mineral waters are imitated artificially, but it is a question whether, although we are acquainted by analysis with the component parts of most waters, we are sufficiently so with all, for the imitation to be efficacious; or whether there is not some unknown action in the natural waters, which we cannot imitate. A recent discovery has shewn us that there exist in some mineral waters two substances, iodine and bromine, of whose presence we were until lately ignorant. May there not be other substances which chemistry has not yet been able to detect? And if so, may it not be inferred that all imitations of mineral waters must necessarily be defective?

Artificial Seltzer Water. Take one drachm of carbonate of lime, not quite two of carbonate of magnesia, rather more than one of crystallized carbonate of soda, six drachms of chlorate of sodium, five quarts of carbonic acid, and ten quarts of water; the salts are first to be dissolved, and then the acid is to be added to the bottles in which the other mixture is placed, the proper proportion of acid being added to each bottle, which is to be immediately corked, and tied down with string or wire. The above is the seltzer water as it ought to be made artificially in Paris, where seltzer water is used in the same way as soda water is in England; but there are few of the manufacturers who take the trouble of following the prescription.

The ordinary mode of making artificial water is to make a mixture of chalk and tartaric acid, with a little common salt and soda, and to bottle it immediately.

The celebrated *Eau de Vichy*, in its artificial state, is merely composed of soda and tartaric acid, and water.

Toilet Waters. We subjoin the recipes for preparing various highly esteemed toilet and other perfumed waters.

Angel's Water, (for the skin.) Infuse the flowers of the myrtle in water, and distil. This water, which in Paris is called *Eau d'Ange*, is one of the best cosmetics.

Another, and more complicated water, under the same name, is made as follows:—With two quarts of spirits of wine, distil four ounces of benzoin, two ounces of storax, half a pint of rose water, and half an ounce of calamus aromaticus; to the product of the distillation, add half an ounce of orange water, and the same quantity of rose water.

Eau de Bouquet. A very celebrated perfume and cosmetic. Two ounces each of storax, lemon-peel, and nutmegs; six ounces each of coriander, and calamus aromaticus; one ounce and a half of cloves; four ounces of iris of Florence; half an ounce of essence of bergamot; a drachm of essence of lemon, the same of rosemary; fifteen drops of otto of roses; a quarter of a drachm of ambergris; half a drachm of vanilla; fourteen quarts of spirits of wine, and one quart of orange-flower water, or fifteen drops of neroli: all the solid substances, except the amber, the iris, and the vanilla, are to be bruised, and put to infuse in the spirits of wine for several days; then distil, and add to the product the amber, vanilla, and iris; these are to infuse for several days, when the mixture

is to be filtered, and the orange water to be added. When used as a cosmetic, this mixture must be greatly diluted with water.

The celebrated *Eau de Mille-fleurs* is made by adding roseda, lavender, and bergamot, to the *Eau de Bouquet.*

Eau de Jouvence. For the complexion. Mix with a quart of spirits of wine, one quart of orange-flower water, and two drachms of essence of lemon.

Eau des Odalisques. For perfuming baths, or sweetening the breath. Infuse for a week in two quarts of spirits of wine, and one pint of rose water, half a drachm of oil of mint, two drachms of soluble cream of tartar, six drachms of storax, three drachms of balsam of Tolu, the same of balsam of Peru, a quarter of a drachm of cochineal in powder, half a drachm of vanilla, the same of cinnamon, angelica, and two drachms of dried orange-peel; when this has infused for a week, filter it, and put it in bottles for use.

Detergent Waters. Under this head we give the mode of preparing some of the best mixtures for the removal of stains. The first is the celebrated

Eau de Javelle. It is made as follows:—Dissolve a pound of sub-carbonate of potass in a gallon of water; when it has stood for some time, filter it; pound together ten ounces of sea salt, and four ounces and a half of oxide of manganese; place these two powders in a retort with two tubes; through one of the tubes pour into the retort ten ounces of sulphuric acid, and connect the other tube with the solution of potass, in such a way that the gas arising from the mixture in the retort may enter; then add three pounds of sulphate of soda, and let the whole rest for three hours, after which time it is to be decanted, and put into bottles for use, and corked closely. Or place in a copper half filled with water, two stone bottles; in one of the bottles must be four ounces of oxide of manganese, and a pound of muriatic acid; in the other, a pound of potass, dissolved in two gallons of water; in the neck of the first bottle is to be a glass or leaden tube, plunging into the neck, and reaching to the bottom of the other bottle, well luted; but in the second bottle there must be a small hole, through which the air may escape, and which is to be closed as soon as it is driven out; when the water in the copper boils, the contents of the first bottle will be converted into vapour, which will pass through the tube into the second bottle, and saturate the solution of potass; as soon as the bubbling ceases, the fire may be raked out, and the solution in the second bottle be left to cool; the tube is afterwards to be taken out, and the bottle must be well corked. The mixture so obtained is the *Eau de Javelle*, which is one of the most powerful preparations known, for the removal of stains of various descriptions. The scourers in France use this water in preference to all other preparations. It is called *Eau de Javelle*, from having been first manufactured at a place called Javelle.

Water for the Removal of Grease Spots. Mix in a bottle, which is to be well corked immediately afterwards, four ounces of very pure spirits of turpentine, one ounce of sulphuric ether, and one ounce of spirits of wine. In using this water, place the object which is greased on a folded table-cloth or napkin, and dipping a bit of rag in the mixture, rub the grease spot with it until it disappears. If the spot is of very old date, the application of heat may be necessary; if so, place a bit of rag, wet with the mixture, over the spot, and over that a hot iron, after which rub as above recommended.

Eau Seconde. The water used by the painters in France to clean old paint before laying on new colour, or to render a new coat of paint unnecessary when the paint is still good, but dirty. This water is made by dissolving three quarts of potass, and infusing two pounds of wood ashes (in France the burnt lees of wine are used when they can be had) in six quarts of water; when it is to be used, mix half a pint of the mixture (filtered) with a quart of water, and having dipped a sponge in it, rub the wood, or other work which is to be cleaned, with it, until all stain and dirt disappears; but as this mixture, if left too long upon the paint, would remove it altogether, use immediately afterwards another sponge dipped in pure water. Varnished paint is not to be cleaned with this water; soap and water will suffice where there is varnish.

WATER-GRUEL. Crushed oats, or oatmeal, boiled with water, a nutritive and digestible preparation, very much recommended in dyspepsia. (See Indigestion.) It is made by mixing a little oatmeal in a small quantity of cold water, then adding the rest of the water, and boiling very gently, until it becomes sufficiently thick to be agreeable; it is seasoned either with salt or sugar, according to taste. Made very thick, it is an important article in the diet of prisons, workhouses, and even

some schools where economy is aimed at. As an article of diet, used with moderation by persons in good health, it is never attended with very ill effects; but carried to excess, as it frequently is in some of the establishments above alluded to, it has a tendency to impoverish the blood, and bring on scrofula. When Dr. Voisin, one of the government physicians in France, visited the Penitentiary at Milbank, he found this disease raging to a great extent, and ascertained that as soon as the patients were put upon more generous diet, they recovered rapidly. He made similar observations in other prisons, and came to a conclusion that a gruel diet, for persons who have not free exercise, and abundance of other more stimulating food, is much calculated to bring on cutaneous disease, if taken to excess. As an article of diet, however, in illness, it is found highly useful, as an occasional substitute for other food. The best water-gruel is made from what are called the Embden groats, which are the crushed oats deprived of their outer skin. These are very gently boiled for a long time, and being passed through a sieve, to separate the groats, the gruel has the appearance, when it has stood for a few minutes, of a fine jelly, it is then eaten with sugar, and if there be no inflammatory symptom, with the addition of a little sherry wine, or brandy. In this state it is a very wholesome supper, as it satisfies the appetite of persons who are accustomed to that meal, without fatiguing the stomach. In Normandy, gruel is made with the water in which crushed oats have been previously steeped, the oats being stirred up from time to time, to allow the water to take up the starch. When a milk diet is not objectionable, milk may be used for making gruel, instead of water; some persons, in this case, use half oatmeal and half wheaten flour, others use only the latter.

WAX, or BEES' WAX. A solid substance, of a yellow colour, obtained from the honeycomb. When washed and bleached it becomes white, and is called white, or virgin wax. The process of bleaching wax, in order to give to it the [illegible] which it has in commerce, is rather tedious, and the aid of chemistry is not unfrequently called in. For domestic use, however, wax may be made sufficiently white by melting it in hot water, passing it through fine linen, and then, having poured it into round and very shallow moulds, and taken it out when cold, exposing the cakes to the action of the sun and air, sprinkling it now and then with water; in this way it soon becomes white. Wax was formerly much used internally as medicine, particularly in cases of dysentery, but its chief use now, medicinally, is in ointments and plaisters, to give them consistence. Formerly, also, an oil and a butter of wax, obtained by distillation, were much used as an external remedy for rheumatism, and also for chapped hands, &c.; but as it was ascertained that these, although very troublesome in making, had no property which was not possessed by the wax itself, reduced to nearly a liquid state by the addition of heat and olive or almond oil, the use of the butter and wax have been almost, if not wholly abandoned. The melting of the honeycomb to obtain the wax, is a very simple process. It should be put into a moderately fine hair bag, well tied up, and be boiled briskly in a kettle, with sufficient water for the bag to lie in, and about half an ounce of aquafortis to each quart of water; a weight should be placed upon the bag, to keep it down. As the wax rises to the top of the water, it is to be taken off with a spoon, and be put into a pan, and when no more rises, the bag must be pressed with a flat board having a handle, to squeeze out the wax which remains in it. The wax so obtained should be re-boiled in fresh water, and treated in the same way as before, and even a third boiling may be necessary, in order to have it quite pure; after the last boiling, it is to be poured into a vessel of the form in which it is desired to have the cakes. The quantity of aquafortis at the second boiling may be reduced one half; and if a third boiling be made, that quantity may be still further reduced to the same extent.

An artificial wax for candles, is made as follows:—Take a given quantity of tallow, and mix with it oil of turpentine; put this into a round box lined with felt, and having small holes bored through the bottom; let this box be so made that there may be a cover to fit over the mixture, and press it down; when force is employed for that purpose, the fluid part of the tallow, which must be warm when used, will, with the turpentine, pass through the small holes; this should be boiled with some animal charcoal, to carry off the smell of the turpentine, and be filtered whilst very hot. The turpentine should be in no larger quantity than to give a certain degree of force to the tallow. When cold, the mixture will resemble wax, but will

be much more fragile, and if mixed subsequently with one-fifth of pure bees' wax, very good candles may be made from it. The candles sold in Paris as *Bougies du Phœnix*, *Bougies d'Etoile*, &c. are made, but upon a larger scale, in this way. The finer part of the tallow is pressed out with great force, and is thus converted into what is called stearine, which, by the use of acids, is rendered beautifully white, and the admixture of the turpentine gives the appearance of wax. Most of these imitation bougies, however, have arsenic in the wick, for the purpose of doing away with the necessity of snuffing; the arsenic in combustion causing the wick to disappear as the tallow burns away.

Sealing wax is made by mixing an equal quantity of gum lac, vermillion, (or printers' black,) and pure turpentine; and having melted these over a slow fire, rolling the mixture into sticks upon a heated plate; if the wax is to be scented, the essential oil is to be added just before the wax begins to set. Sealing wax is now sold at so cheap a rate, that it can never answer the purpose to make it on a small scale for private use. An excellent varnish is made by merely dissolving red or black wax in spirits of wine, in a bottle placed near the fire.

WELCH RABBIT. Melted cheese served upon toasted bread. The real name of this dish is rare-bit, which has been corrupted down to rabbit. A foreigner, who, on arriving in England, should see Welch rabbit on the card of a house of public entertainment, and, referring to his dictionary, should find that the French of Welch rabbit is *lapin du pays des Galles*, would be astonished, if he ordered it by the English name, to see some toasted cheese, instead of a rabbit of rich flavour peculiar to Wales. As there is an art in the roasting of eggs, so there are three arts in making Welch rabbits. The first is to choose good cheese; the single Gloster, when not too old, is one of the best for this purpose; the next is to toast the bread carefully, that it may be crisp; and, lastly, to watch the turn of the cooking, and take care that the toast be hot when the cheese is spread upon it; the crust is usually pared off the bread for toasting, but this is not an improvement. The cheese should be melted in a cheese toaster before the fire, cutting it first into thin slices or shavings, that it may heat quickly and equally; a little butter may be added; some persons add a little ale, and this is not a bad plan. When the cheese is thoroughly melted, and very hot, spread it over the bread rather thickly, and cover well with salt, pepper, and mustard. This seasoning must be laid on boldly, for Welch rabbit is usually eaten as a relish, and to give a zest for the ale or porter which is taken with it. The seasoning is sometimes mixed with the cheese when melting, but this is not an improvement. Welch rabbit is an indigestible article if eaten in excess, but in small quantity it rarely disagrees with the stomach, as the cheese is corrected by the condiments.

WHEAT-EAR. This bird is smaller than the lark, and is remarkably fat, and of a very delicate flavour. It is rather a scarce bird, and consequently dear. Wheat-ears are generally found on downs and high grounds; they very closely resemble, both in flavour and appearance, the ortolan of the south of France. All the directions for the cooking of that bird, and of larks, may be followed for the wheat-ear. (See Ortolan and Larks.)

WHEY. (See Milk and Fever Drinks.)

WINES. There are some persons who pretend that none are so healthy as water drinkers; others, that wine is, next to bread, the staff of human existence. "Wine, generous wine," is the favourite cry, however, of the majority. To man, in a state of nature, wine would, perhaps, be little better than poison; but the nature of man is changed by civilization, and God has not placed the grape within his reach, and given to him the degree of intelligence which enables him to convert it into an agreeable and cheering beverage, without intending that he should use it. In diet, wine sometimes effects wonders with invalids; in medicine, it was formerly considered a sovereign remedy, and, generally speaking, the moderate use of it is rarely injurious. The alcohol which it contains, when blended with the vegetable qualities of the entire bulk, has a very different effect from that of alcohol in its pure state; and even when taken to excess, the results are far less dangerous than the excess of pure spirit; although, as the stomach is in fact a distilling apparatus, the alcohol of wine is soon separated from the other parts of the fluid, and its fumes are carried to the brain. Frequent and long indulgence in wine to excess, destroys the body as surely, although not so rapidly, as purely spirituous liquors. The diseases produced

by an excessive indulgence in wine, are different from those produced by spirits, but they are equally fatal if the excess be continued. There is, however, this great advantage in favour of the wine drinker to excess: a recourse to habits of temperance will frequently restore him to health, whilst he is apparently on the brink of the grave; whereas, when the seeds of destruction are sown by ardent spirits, it is almost impossible to eradicate them.

It is said by some physicians, that wine is fit for youth and old age, but useless in middle life—for youth, to assist in replenishing the waste of the fluids in growing; for old age, in giving tone and vigour to decaying nature. There may be some truth in this. We have rarely known a glass of wine daily do harm to a youth, or two or three glasses to injure an old man; and it is fairly to be assumed, that where there is no direct evidence of injury from the use of a tonic, there is benefit, although it may not be immediately apparent. This is the case with almost all tonic medicines. If bark or steel be administered, it has no negative effect; it either disagrees with the person who takes it, and the derangement is shewn by nausea, an increased temperature of the skin, or some other positive indication; when there is no indication of derangement from its use, we may be quite sure that it assists the functions of nature. All medical opinions as to the moderate use of wine amount to very little, for no one can be so good a judge as to whether it is proper or improper, as the party who takes it. Mr. Abernethy, when asked by a patient as to whether wine would agree with him or not, replied, "How can you ask me such a d——d foolish question? I did not make your stomach, and cannot tell what will, or will not, agree with it. Drink wine if you like, and if you find no inconvenience from it, it will agree with you; if you find that you are worse for taking it, leave it off." Many medical writers have said that red wine is preferable to white wine, as regards health; but it would be difficult to shew why this should be the case, unless it be that, as the skins of the red grape contain a larger portion of tannin than those of the white grape, and as tannin is at once astringent and tonic, red wine is to be preferred; for in order to give colour, the colouring matter of the skin of the grape is expressed, and the tannin is mixed with the fluid. Some persons, however, cannot drink red wine without feeling unwell, and yet they take white wine with benefit to health; it would be absurd, then, to lay down any fixed rule on this point. All persons who drink either red or white wine in moderation—and out of moderation red and white are both injurious—will soon discern which of the two best agrees with them, and which, consequently, should be the ordinary beverage. It is pretended, however, that white wine stimulates to excess the functions of the kidneys, and brings on nervous tremulousness; but so will red wine if taken to excess; but if these effects be found to result more from the use of white than red wine, then let red wine be preferred.

Much has been said about the acidity of certain wines, and invalids have been made to believe that in this respect some are highly injurious, whilst others are highly beneficial. A few years ago, Madeira wine was recommended; suddenly the medical faculty pretended to have discovered that there was much more acid in Madeira than in Sherry, and the former was proscribed as so much poison. That there is more acidity in Madeira than in Sherry may be true; but it is by no means proved that the greater quantity of acidity in Madeira is injurious to health, for in the state of combination with the other properties and qualities of wines, acidity may not be prejudicial to health. We have, however, seen, in the analysis of these wines, many instances in which the quantity of acid was greater in Sherry than in Madeira. How much of the Sherry that finds its way to England is of an inferior quality, and, from the greater extent of consumption, how likely it is that the Sherry being bad, may have more acidity than good Madeira. But even supposing one description of wine to be more acid than another, it is not to follow that it is, therefore, necessarily unwholesome. It is the fashion to proscribe in diet, those elements in which the presence of the acid principle is predominant; but fashion does not constitute truth, nor is truth always apparent from analysis. Divest a wine of all its acidity, and it is not, therefore, rendered more wholesome, for in such a process the natural combination is destroyed, and the tonic and astringent principles may suffer. One wine in which acid prevails may also contain tonic properties which more than counterbalance the evils of acidity. The most acid wine, if it be the natural acidity of the grape, and not the acidity acquired

by secondary fermentation, or any chemical change from causes foreign to the nature of the compound, may be the most tonic, and, therefore, the less calculated to create acidity in the stomach. Take, for instance, a bottle of Rhenish wine, and add to it a sufficient quantity of carbonate of soda to neutralize the acid. Is the wine rendered more wholesome? No! It becomes less grateful to the stomach, the tone of which, instead of being improved, is diminished; and, consequently, the acidity, which is the result of a want of healthy action, is necessarily created. These observations are not made with a view of shewing that the more wine is acid in its natural, unadulterated, and undeteriorated state, the better it is; but for the purpose of surmounting the fallacy of the popular prejudice, that, because one wine is less acid than another, it is therefore better. The great point with the wine drinker, whether he be an invalid or not, is to have his wine genuine; for admixtures, although not always unwholesome in their separated elements, become so frequently in combination. Cheap wine is therefore to be avoided, not because we are sure of having good wine because we pay a high price for it, for there are many wine dealers who price their wines according to their customers, and who find it easy to dispose of bad wine to one class of customers at a low price, and at a high price to another class of customers. All wine drinkers imagine that they are, more or less, judges of the quality of the article. The cheap wine drinker supposes that the wine merchant has but one description of a certain kind of wine, and that he makes a difference in the price merely in order that he may be prepared for all purchasers; the dear wine drinker, on the other hand, runs into the opposite extreme, and imagines that he has only to pay a good price to obtain a good article. The one invariably sets down the wine merchant as a rogue, the other frequently accords to him a too great degree of confidence. There are dealers in wine who are truly conscientious men; and if there are not so many conscientious men in this branch of trade, it is because the temptations to cheat are great, and the difficulty of detection much greater than with the general body of tradesmen. He who can afford to import his own wine, will do well to do so, and even then to take care that he is not deceived, for the wine grower is sometimes as great a fabricator as the wine dealer. We advise the purchaser not to place too much reliance upon his judgment, for there is nothing more fallible, as we shall illustrate by the following authentic anecdote:—About twenty years ago, a private individual purchased in Paris a cellar of wines which had belonged to a wine grower who resided in the French capital during the winter, and which was sold after his death by his executors. As the stock was much beyond the consumption of the family of the purchaser, he sold a portion of it to his friends, a proceeding in which he experienced but little difficulty, for the wines had a high reputation, and were really excellent. One of the persons to whom he sold a part of the stock was considered a first-rate judge, and his recommendation of any wine was sufficient to ensure its sale. Now, amongst the stock was a cask of currant wine, which had been made, by way of experiment, from the pure juice, unmixed with water, and with a very small addition of sugar, for the year in which it was made was a very favourable one for the development of the saccharine properties of all fruits. The possessor of this wine drew a bottle from the cask, and presented it to the judge in question, telling him what it was, and asking him his opinion of it. "Currant wine! currant wine!" said this highly-reputed taster, and having drank half a glass, he added, "It is only fit for servants!" The wine was then offered to a dealer in Paris as currant wine, at half a franc a bottle, and refused with a sneer. The owner now gave up all hope of being able to sell it. A few days afterwards he was amusing himself with the preparation of some perfume, in which two of the ingredients were otto of roses and tincture of bitter almonds. The weather was warm, and as his currant wine was agreeable, he was drinking it mixed with water. It occurred to him that he might make a pleasant drink of it by adding to it a little perfume; he put two or three drops of the tincture into his glass, and dipping the feather of a pen into the otto of roses, touched the liquid with it. The result exceeded his anticipations. He did the same with a little of the undiluted wine, and was still more satisfied. He now prepared a bottle of it, and taking a decorated label, stuck it on the bottle, and wrote in the words "*Vin d' Elba.*" On the following day he called upon an English gentleman, to whom he had disposed of about twenty dozens of the wines of the original stock

which he had purchased, and requested him to taste the wine which he had brought with him. The gentleman offered to take it without tasting, although he was told that the price would be seven francs the bottle. This the conscientious vendor refused, and it was agreed that the bottle should be left to the judgment of the person who has been alluded to as so excellent a taster, and who was to dine at the house on the next day. Three days afterwards the gentleman with whom the wine had been left called upon the owner of it, and told him that Sir J. —— had tasted the wine, as had also three or four other good judges, who had dined, and who all found it excellent, and he was therefore desirous of purchasing the whole of it, which he was told amounted to about eighteen dozens. The fabricator went to work, doctored all the cask, put it into bottles, pasted on the fine labels with the words "*Vin d' Elba*," delivered it, and received seven francs per bottle, for what he had offered at ten sous, without having been able to find a purchaser. A few days afterwards, the great wine judge, upon whose fiat the *Vin d' Elba* had been purchased, called upon the party who had sold it, and after having reproached him with having concealed from him the fact that he had so choice a wine in his stock, ordered six dozens of it. "I have not," said the party, "six bottles, or six glasses. I have sold it all to Mr. ——." Now followed fresh reproaches, and very angry ones, for having given to Mr. —— the right of saying that he had better wine in his cellar than any other man in Paris. The story does not end here. Mr. —— was very sparing of the use of his wine, and treated his friends with it only at rare intervals, observing, what even the fabricator had not said, that it was made by Napoleon, from his own vineyards, when he was in exile at Elba. When Mr. —— left Paris, his furniture and wines were sold, and a few bottles of this wine that remained brought twenty francs per bottle.

This is not an invented anecdote; it was related to the writer by the fabricator of the wine himself, who mentioned the names of all the parties. There is another anecdote, equally authentic, of the delusion which is kept up by the variation in the prices of wine. A gentleman in London was in the habit of receiving from France, annually, for his own consumption, two casks of a wine made in the south of France, called Picardan. It is a white wine, resembling Madeira in colour and equally strong. When good, it is an excellent substitute for Madeira or sherry, and much cheaper, for it may be had in France of the finest quality at about 300 francs (12*l.*) the cask of 23 or 24 dozens. When the duty and expenses of carriage and bottling were paid, this wine cost the importer about twenty-two shillings per dozen. A wealthy acquaintance who dined with the importer requested him to procure for him a cask of the wine, and asking the price, was told off-hand three guineas a dozen. The importer promised to execute the commission. The next day an intimate friend, who had been of the dinner party, and who had the reputation of being one of the best judges of wine in London, called upon the importer. It was luncheon time, and the Picardan was brought out with the sandwiches and biscuits. "I wish," said the friend, "you would procure me also a cask of this wine, for it is excellent." "Certainly," replied the importer; "but I must let you into a secret. I did not tell old ——— what the real cost of the wine was; for he once took me in at cards, and I was glad of the opportunity of making him pay for having cheated me; but with you the case is different: the wine does not cost three guineas a dozen, but twenty-two shillings!" The friend looked astonished, tasted the wine again; said nothing; tasted it a third and a fourth time, and then said, "I now find that it has what the French call a *gout de terroir*, (and this to a certain extent was really the case.) I have altered my mind, and will not trouble you." Here is an instance of the difficulty of making some persons believe that cheap wine can be good wine, and that to make a moderately good wine appear excellent, all that is necessary is to ask a high price for it. A few years ago, the person who imported this Picardan, received from Aï, in Champagne, fifty dozens of champagne wine, for some of which he paid as much as five francs per bottle to the grower. For a portion of it, called Tisanne de Champagne, he paid just half the price. A person of rank with whom he was acquainted hearing that he had received this wine direct from the grower, requested as a favour that he would let him have two dozens. He did so, charging him five guineas per dozen. The money was paid, and a month or so afterwards the seller asked the purchaser how he liked it. "Why," replied he, "I cannot say that it is good.

A few days ago I had some very distinguished persons dining with me, and I could see that they thought it bad, although they would not say so." The seller requested him to send back all that remained, and said that he would return the money. The offer was not accepted; but he was asked if he had another sort, to which he replied affirmatively; and two dozens of the Tisanne were sent in to replace the other. This was found excellent, and the importer was asked to oblige the party with six or seven dozens more of the same kind, for which he paid the original price of five guineas per dozen. Had a lower price been mentioned, he would probably have thought the wine execrable. Now the wine in each case was good, but there was really all the difference of cost in the difference of quality. The best wine, however, was slightly effervescent, the other greatly so; and with some English persons no champagne wine is bad if it will, when the string is cut, send the cork to the ceiling. There is in France a really excellent red wine, called *Vin du Pape*, but it is little drank there, for it is full-bodied, or, as the French say *capiteux*, and strong bodied wines are not liked by Frenchmen. This wine costs about 8*l.* per cask in France. Some samples of it were sent to London a few years ago by a gentleman who resides in Paris, 20*l.* per cask, first cost, being set upon it. The name being changed, he disposes of about thirty casks annually in London, in a private connexion; thus deriving from this source alone sufficient income to live as a gentleman.

The substitution of one name for another, the laying on of an additional price according to circumstances, and the alteration of the flavour of a wine in order to enable the seller to dispose of it as something curious, are acts which, although fraudulent, are not the most deserving of reprobation in the wine trade. It is not unusual with wine merchants, when wine has become sour from secondary fermentation, and lost all its generous qualities, to correct the acidity with alkalies, and mix it with other fresh wine, so as to prevent the detection of that flatness which is always the result of a chemical neutralization of acid. This fraud is unpardonable, and it becomes still more so when practised upon some of the sweet French wines, in which sugar of lead is mixed in sufficient quantities to injure health. The admixture of brandy with wine is in all cases also to be regretted; for the alcohol so added has a very different effect from that of the same quantity of alcohol blended in its natural state with a generous wine. Thus it happens that many of the wines of Burgundy which are sold in England, although in their natural state much more alcoholic than those of Bordeaux, are less so than claret, which, in order to its keeping, receives a large quantity of brandy before it leaves the cellars of the grower. The best clarets are indeed sufficiently alcoholic to bear the voyage and to keep; but as these are so expensive that in the hands of the grower they are frequently priced higher than clarets are generally sold for in England, after payment of duty and expenses, an inferior wine of the same flavour is prepared, by mixing with it a certain quantity of strong ordinary Bordeaux wine and brandy. The best clarets in France are sold wholesale at from five to six francs per bottle, and in London they could not be sold at less than five guineas per dozen to cover duty, expense, and breakage, and allow a profit of twenty per cent. to the dealer. So powerful, however, is the force of habit, that most consumers of claret in England prefer the article which is sold in the London market, prepared as it has been, by the admixture of inferior wine and brandy, to the genuine article as it would be served at the table of the grower. This is also the case with Oporto wine. During the last occupation of Portugal by English troops, the officers could not believe that the wine which was served to them as port wine was really port, and they thought it very inferior to what they had been in the habit of drinking in London. Most of the port wine consumed in England is prepared before it leaves Portugal for the London market, by mixing with it about one-fourth of its bulk of the deep-coloured and fruity flavoured wine of Catalonia, and a certain quantity of brandy. The wine thus prepared is of a richer colour than the port wine in its natural state, and is more full bodied, but the excess of alcohol which it contains is not detected, as the Catalonian wine mixed with it, although of itself much more alcoholic than port, is what the wine dealers call *fruity*, and this conceals the presence of the alcohol. There is in Portugal a wine country called Collaris, which yields a wine resembling claret, and which is sold at a cheap rate in Portugal, because it will not bear

a sea voyage without brandy, and will not bear the admixture of brandy without a deterioration of flavour. In what are called light ports, much of this wine is used in mixing, and as it is by no means an unwholesome wine, the only complaint that can be made of the practice is that the purchaser is made to pay a high price for a cheap article. When Bucellas wine was a favourite wine in England, it was mixed with Lisbon wine, and sometimes the proportion of real Bucellas was not one-third. Some years ago, Bucellas was preferred during meals to sherry; and justly so, for whether genuine or mixed with Lisbon wine, it was less alcoholic than sherry or Madeira. At that time the consumption in England alone of wine called Bucellas was nearly double the entire production of the Bucellas vineyards. The fashion having altered, there is now more chance of having it genuine, for the production of this wine is equal to the consumption. The white wines of Portugal and Spain, however, as dinner wines, are never to be recommended, for they are all more alcoholic than befits digestion. There is nothing so destructive to health as the practice of drinking strong white wines at table. The weak stomach is still more debilitated by it, and the strong stomach is soon debilitated. Equally injurious is the English practice of drinking champagne wine between the courses. The French understand these things better; they take half a glass of Madeira, or other generous white wine after their soup, and until near the dessert they drink only weak Bordeaux wine, diluted with water, and very light French wines, such as *Vin de Grave*, *Vin de Pouilly*, or *Vin de Chablis*, the latter in small quantity, as it is the strongest of the three. Towards the dessert they indulge in two or three glasses of *Chambertin*, *Côte Rôtie*, *Volnay*, or other generous red wines, and in one or two glasses of champagne. They do not, like the English, go on inflaming the stomach with strong wines, or exciting it by champagne, beyond its natural powers, and when the dessert is over they rise from the table, and take their coffee in the drawing-room. Well would it be for the English if this were also generally the case with them. It is true, indeed, that the intercourse which has been kept up during a long peace, has materially modified the English practice of sitting at table after the dessert, or rather of prolonging the dessert throughout the whole of the evening; but the practice of drinking strong wines at table is still kept up in most parties, and on public occasions; gentlemen are still in the habit of remaining a long time at table, although it is no longer the custom to judge of a man's means of living, and of his position in society, by the quantity of wine which he is able to drink at a sitting. There was a time when it was considered a mark of hospitality for the entertainer to cover his tables with wines of every description, and then take the key out of the door, to prevent his guests from making their escape whilst a single bottle remained. There was a time when a man who would not drink himself drunk was called a milksop, and the thorough good fellow was the thorough drunkard; or rather he who could drink most without appearing to be the most intoxicated of the party. The one-bottle man was the good fellow in the positive degree; the two-bottle man reached the comparative degree; but the three bottle man was the good fellow in the superlative. Those times, which were the remnant of feudal days, in which the superiority of physical force was the only test of excellence, have disappeared, and temperance is no longer a shame; but temperance has not yet become the true sign of superiority. It is a singular fact, that in almost all wine countries the better class of persons are moderate in the use of it. This is particularly the case in Spain, where strong and very good wine is sold at from one penny to three pence, English, per bottle. A single bottle of wine frequently serves for a family of six or eight persons; they drink water during the dinner, and at the dessert each person takes only one glass of wine. In France, except where guests are invited, it is unusual to drink any wine at meals, except in the state called *eau rougie*, which is about one-third *vin ordinaire*, and two-thirds water; and when there are guests, although the best wines are freely offered, they are sparingly partaken of. In England, on the contrary, and particularly amongst persons whose pecuniary means do not really admit of their drinking much wine without injury to their income, it appears that people have at heart to shew that they can afford to drink wine, and therefore indulge to excess in it. Even at evening parties, where sandwiches are offered to the guests, Sherry, Madeira, and Champagne, are taken in abundance; and if the parties be in high life, still more

expensive wines are offered. In France, weak tea, or *eau sucrée*, (sugar and water,) are offered; and if wine be presented, the persons who accept it are not those the most remarkable for good breeding.

We have already observed, as regards the drinking of wine, and the quantity which may be taken with due regard to health, that the general rule must be found in the sensations of the persons who drink it. There are, however, cases in which the use of even the smallest quantity of wine would be highly injurious. If there be any inflammatory disease, such as fever, any derangement of the body in which excitement is to be avoided, wine must not be taken; nor must it always be assumed that a small quantity may be taken because there are no direct symptoms of inflammatory action. In many cases of indigestion there is a slow morbid fever going on, with a suspension of the healthy functions of the skin, and in this case wine is to be avoided, whilst in others, slight stimulants may be necessary to excite action. In colds it is by no means an unusual practice to take hot wine, or wine posset, going to bed, or white wine whey, in which at least a glass of sherry is put, to separate the curd. Sometimes this is found beneficial; the system being excited, perspiration being induced, and the pores of the skin being set free, a return to the normal state is effected. But these are exceptions to the general result: in nine cases out of ten, a slight derangement is, by this foolish practice of taking stimulants, converted into an active malady, and by the injudicious use of a glass or two of wine, where a mustard footbath and a basin of whey without wine would have relieved the cold, the patient is brought into the hands of the doctor, and is happy if he comes out of them with nothing worse than a long bill and two or three weeks' confinement.

Having made these general observations as to the hygienic properties of wine, we shall now proceed to say something of the defects of wines, and of the mode of correcting them. It is hardly necessary to observe, that the same wine is not produced, under different circumstances, from the same description of vine. The nature of the soil, the exposure, the mode of cultivation, the climate, the temperature of the year, and the manner of preparing the wine from the grape, have all a material effect upon the quality of the product. The same vine will yield perfect and delicious wine in one case, and a disagreeable and unwholesome beverage in another. The natural defects of wine are—1st, the absence, or want of development, of the necessary qualities; 2nd, the excess of any of these qualities; 3rd, the disagreeable taste, arising from the character of the soil or from the excess or bad quality of the manure; 4th, the non-maturity of the grape; 5th, the taste of the wood, or of the grape, arising from excessive fermentation. A fine colour, body, and a certain quantity of alcohol, are essential to all wines; without these they are not pleasant to the taste, and will not keep. The absence of alcohol necessarily causes imperfection of colour; for if the colouring matter be imperfectly dissolved, it remains suspended in the wine for a certain length of time, and then is precipitated with the lees. To prevent this, brandy or spirits of wine are added to many wines whilst they are in the course of fermentation. The means of judging of the wine by its colour is therefore prevented, and wine, which would be otherwise unmarketable, is sent to market where the defect can only be ascertained by a perfect connoisseur. The defect here mentioned is very frequent with the wine called *Roussillon;* and here we may remark, that of all the French wines, this, when taken to excess, is the most hurtful. Roussillon is a favourite wine with the English, for it has a resemblance to port wine, and, like that wine, deposits a crust. Cases of apoplexy are by no means of rare occurrence after drinking freely of this wine. Most of the French abhor it as if it were poison; they know that in the very preparation of it brandy or spirits of wine are used, by which it undergoes a prejudicial chemical change, and, as regards the English market, it is hardly ever exported until it has undergone a second admixture of brandy.

Wines which are of too deep a colour are generally heavy and disagreeable to the taste; to correct this, lighter wines, and particularly white wines, are mixed with them. Spanish, Portuguese, and Italian wines, and those of the south of France, are, for the most part, thick and mucous; they want brightness, and, in their natural state, keep badly; whilst many of the wines of Alsace and Germany are dry and sharp. The thick and heavy wines are easily corrected by mixing with them light dry wines; but it is much more difficult to correct the wines of Alsace and Germany. They are modified, however, by the addition of brandy.

A common defect of wine is the deterioration of its flavour, and the acquirement of a disagreeable taste. It is almost impossible to do away entirely with the latter, and to restore to the wine its original flavour; but the defect may be so far corrected, that by mixing the wine so corrected with a larger quantity of wine which has undergone no deterioration, it will answer for common purposes, and even for sale will pass as good with all but the thorough connoisseur. When the wine has become flat and insipid by being badly bunged up in the cask, and the taste which it has acquired is not decidedly offensive, it may be much improved by drawing it from the cask, and burning a few brimstone matches in the empty cask. The wine having been drawn into another cask, is to be fined with isinglass, and about a quart of good French brandy is to be added for every thirty gallons; when fine, it is to be racked off into the cask in which the brimstone has been burnt, and well bunged, the cask being completely full. If it should so happen that there is no other wine of the same character with which the cask can be made full, it should be filled with some other wine nearly resembling it in flavour and colour; but if this be not practicable, let as many clean pebbles be dropped into the cask as will serve to bring the liquid up to the bung. The last-mentioned plan is indeed preferable to mixing other wine with that which has undergone slight deterioration, unless the wine so added be of the same nature and of good quality; and in every cellar there should be a quantity of clean pebbles at hand for casks which lose by leakage or evaporation; one of the best precautions for keeping wine good in casks being to exclude the admission of air by the continued fulness of the cask. If wine be very much deteriorated in flavour, and the acquired taste be very disagreeable, the above precautions will not alone suffice. It must in this case be converted into vinegar, or made fit for use by mixing with it other and generous wine in the proportion of two thirds. In this way the taste may be overpowered; but the cellarman should never run the risk of spoiling good wine in attempting to improve what is bad. Before he operates upon a large scale, he should try the experiment upon a small one. Let him, for instance, take one gallon of the deteriorated wine, and mix it with two gallons of wine which has undergone no deterioration, and putting this into a three-gallon cask, wait for a few days to see what effect has been produced. It is to be understood, however, that the deteriorated wine shall have been previously fined again, and racked off into a cask, heated, as above recommended, by brimstone.

In the south of France it is not unusual to add to the deteriorated wine, before it is mixed with other wine, a handful or two of violets, or an ounce of orris root, to about twenty gallons of wine, and to let either the one or the other steep for a fortnight. Sometimes also a handful of raisins to ten gallons of wine is added, for the liquor to feed upon. When the wine has acquired a decided musty taste, or the taste of bad eggs, it is very difficult to remove it, even by repeated fining, racking off, and the addition of brandy; and a small quantity of wine in this still would spoil ten times its bulk of good wine if mixed with it. We are assured, however, by a celebrated French winegrower, that wine which is perfectly undrinkable from either of the above causes, may be brought round by adding to a hogshead of wine eighteen pounds of white sugar, dissolved over the fire in as many quarts of the injured wine, and pouring it boiling hot into the cask, the bung of which is to be left out. The wine thus heated will soon undergo a new fermentation, if the weather be not too cold, and when this has subsided, it is to be fined with isinglass or white of egg, in the usual way. Isinglass is always preferable, for it is more certain in its operation, and never gives an unpleasant taste, which the white of eggs will do sometimes, even though fresh, as they undergo a slight decomposition. Of the process of fining we shall speak presently, but we may observe here that it is always advisable to be liberal in the use of the isinglass; for if it be good, it can never impart an unpleasant flavour, and can never injure by being in excess. When the fermentation produced by the addition of saccharine matter has subsided, and the wine has received the finings, the cask must be carefully bunged up, taking care that it be first quite full. In some wine countries the taste of musty wine, or that peculiar taste which resembles rotten eggs, is corrected by the addition of lime-water, in the proportion of an ounce to a quart, or less, if the taste be not very predominant; but in order to compensate for the addition of aqueous fluid, it is necessary to add to the wine good French

brandy, in the proportion of a pint to six gallons. The lime-water does not produce any unpleasant flavour. It is made by pouring a gallon of water upon a pound of unslacked lime, and when clear, pouring off the water. Another, and very simple process, is to burn about two pounds of wheat to the same degree of torrefaction as roasted coffee. This is to be tied up in a cloth, with a pound of good raisins, and suspended in the cask from the bung. A large carrot, baked in woodashes, is sometimes suspended in this way, and with good effect. In many cases, however, nothing of the kind will avail, and we cannot repeat too strongly the recommendation not to proceed to any admixture of sound with unsound wines, except by way of experiment, until a few days shall have elapsed, at the end of which a judgment may be formed as to the degree of success to be anticipated. It is certainly very desirable in England, where wine is so expensive an article, that none of it should be lost; but attempts to restore it to its original state frequently end in disappointment. When wine is becoming acid, the acidity may be checked, if it has not made too great a progress, by placing a quantity of chalk in the cask, to neutralize the excess of acid, or by adding lime-water, and a sufficient quantity of brandy to compensate for the water; but all alkalies have a tendency to render wine vapid, and to prevent this, an effort should be made to revive vinous fermentation. If this be done by the addition of saccharine matter, and the wine be fined and mixed with generous, sound wine, and then bottled, taking care, of course, that all the fermentation has ceased, it will frequently recover the tone and brightness in bottle of which it had been deprived by alkalies. There is a period of the year, the autumn, at which many wines undergo a secondary fermentation, which is called *flowering*. At this time there is great danger of the vinous fermentation becoming acid, and it is well to watch it, so that any of the precautions recommended in this article may be adopted in time to prevent extensive deterioration. On the other hand, it sometimes happens that this secondary and natural fermentation produces beneficial results. Wine which had acquired an unpleasant flavour, and even a considerable degree of acidity, frequently recovers, and becomes better than it was before it underwent the change; but these cases are rare compared with the results of an opposite nature. The preservation of wine depends much upon the cellar in which it is placed. Directions for the mode of constructing and managing cellars will be found under the proper head. (See CELLAR.)

The age of wine generally governs the price at which it is sold in the market, as does the year of the vintage; for there are some years in which, from the temperature of the season, and the facilities of getting up the vintage, the wine is very superior to that of other years. Unfortunately, however, there is no certain test as to the year in which the wine was made, and we have to depend upon the conscience of the growers or merchants, many of whom do not hesitate to assign a false origin to the wines which they bring to market, well knowing that the alteration of date may make a difference in their favour of from 10 to 30 per cent. It would be very desirable, for the protection of the public, that commissioners should be appointed in all the wine countries, to put their brand of the true date upon the casks, but this is not likely to be realized. The purchaser must therefore depend upon his judgment, or upon the probity of the seller. Various tricks are resorted to by growers and sellers, to give to the wines of one year the peculiar bouquet and appearance of those of another year. They do this by mixing the vintages, or they make wine appear old by regulating the temperature of their cellars, or by chemical action upon the wines. As some persons prefer very old port wine, they are deceived easily as to the age, by mixing with the port, before it is put into bottle, a certain quantity of fresh animal charcoal. This discharges a portion of the colour, and gives to the wine the peculiar flavour of old port. The reader may ascertain this fact, by taking a bottle of port wine three or four years old, and mixing with it an ounce of this charcoal. The bottle thus prepared is to stand by for about a fortnight, and the wine is then to be passed through a filter, and rebottled. In less than two months this wine will have the flavour and appearance of old port; and if the experiment be made in the cask, the crust will be deposited, as with other wine, but not quite to the same extent. No wine is really good until it has been a certain length of time in bottle; but it is an error to suppose that beyond a certain number of years, varying from five to fifteen, according to the nature of the wine, the article improves by keep-

ing. Burgundy wines of the more full-bodied sort, are in fine perfection when they have been in bottle six or seven years, and clarets are best when they have been three or four years in bottle, unless they have brandy, or some full-bodied wine mixed with them before they are bottled, in which case they are in high perfection at the end of eight or nine years. For bottled wines, nothing contributes so much to their preservation as good corking: economy in corks, therefore, should never be attempted; and it is always desirable that the necks should be dipped in melted resin, or enveloped in thin lead, as is done in Paris, by means of a machine for that purpose. This is a very effective and desirable mode, for although by this machine the lead is so closely pressed round the neck of the bottle that no air or dampness can penetrate it, it is removed without difficulty when the wine is wanted for use. No wine will keep well in bottle, if it has remained in cask a longer time than is sufficient to bring it to maturity. For this there is no precise period. Generally speaking, three years are sufficient, but many wines should remain only one year in cask. The lighter wines of France are usually bottled at the end of a year; the more generous wines in two or three years. In Spain and Portugal, this is about the time allowed for wines to remain in cask. When wine has acquired a full body, without having lost its fruity flavour, is the proper time for bottling. If wine has been kept too long, either in cask or in bottle, it loses its quality; in which case it should be mixed with newer wines, and bottled, after having been again fined.

We now subjoin a list of the wines most used in Europe, with the countries in which they are grown.

Aï, Champagne.
Alicante, Spain.
Anjou.
Arbois, Franche-Comté.
Auxerre.
Avallon, Burgundy.
Barsac, Bordeaux.
Beaugency, Orleans.
Beaune, Burgundy.
Bellay.
Béni-Carlos, Spain.
Bordeaux, (Claret.)
Bougy, Champagne
Brue.
Bucella, Portugal.
Cavello, Portugal.
Cahors, Bordeaux.
Calabre, Italy.
Calon-Ségur.
Canary, Africa.
Cape Wine, white and red, Cape of Good Hope.
Carbonnieux, Bordeaux.
Chablis, Champagne.
Chambertin, Burgundy.
Chambolle.
Champagne, red.
—— White-Tisane.
Chassagne, Burgundy.
Château-Grillé.
Château-Margaux, Bordeaux.
Château-Neuf du Pape, Avignon.
Chio, Greece.
Cyprus, ditto.
Clos-Vougeot, Burgundy.
Constantia, Cape of Good Hope.
Cortone.
Coteaux de Saumur.
Côte-Rôtie, white and red, Dauphiné.
Côte Saint-Jacques.
Coulange, Auxerre.
Falerne, Italy.
Fley, Burgundy.
Florence, Italy.
Frontignan, Languedoc.
Grave du Lomon, Bordeaux.
Grenache, Roussillon.
Guigne, Burgundy.
Hautbrion, Bordeaux.
Hautvillers, Champagne.
Hermitage (l'), Dauphiné.
Hock, Germany.
Iranci, Burgundy.
Joigny, Auxerre.
Johannisberg, Germany.
Julna.
Jurançon, white and red, Béarn.
Lachaînette, Auxerre.
Lachryma-Christi, Italy.
La Ciotat, near Toulon.
Laffitte-Mouton, Bordeaux.
Laffitte-Ségur, ditto.
Lagaude.
Lamalgue, Toulon.
La Neithe.
Langon, Bordeaux.
Lunel, Languedoc.
Mâcon, Burgundy.
Madère, Madeira.
Malaga, Spain.
Malmsey, Madeira.
Malmsey de Ténériffe, Teneriffe.
Médoc, Bordeaux.
Mercurey, Burgundy.
Meursalt, ditto.
Miès, Provence.
Monte-Fiascone, Italy.
Monte-Pulciano, ditto.

Montilla, Spain.
Montrachet, Burgundy.
Moulin-à-Vent.
Nuits, Burgundy.
Œil de perdrix, Champagne.
Œras, Portugal.
Orléans.
Pacaret.
Paille, Colmar.
Paphos, Greece.
Pedro Ximénès, Spain.
Pedro Penas, ditto.
Picoli, Italy.
Pierry, Champagne.
Pomard, Burgundy.
Porto, Portugal.
Pouilly-Fuissé, Burgundy.
— Sancerre, ditto.
Rancio, Spain.
Reuilly, Champagne.
Rhenish wine, Rhine.
Richebourg, Burgundy.
Rivesaltes, Roussillon.
Romanée-Conti, Burgundy.
Rosées.
Rota, Spain.
Roussillon.
Samos, Greece.
Saint-Amour.
Saint-Emilion, Bordeaux.
Saint-Estèphe, ditto
Saint-Georges, Burgundy.
Saint-Georges, Spain.
Saint-Julien, Bordeaux.
Saint-Julien-du-Sault, Champagne.
Saint Martin.
Saint Perray.
Sauterne.
Savigny.
Schiras, Persia.
Sercial.
Setuval.
Sherry, Spain.
Sillery, côte de Reims.
Syracuse, Sicily.
Stancho, Greece.
Tavel, Languedoc.
Thorins, Burgundy.
Tokai, Hungary.
Tonnerre, Champagne.
Tormilla, Spain.
Vanvert, Languedoc.
Vermouth.
Verzi-Verzenay, Champagne.
Volnay, Burgundy.
Vosne, ditto.
Vougeot, ditto.
Vouvray, Touraine.

To this list of wines we add the order in which they are served at the tables of the great, and on great occasions, on the Continent, observing, however, that they are partaken of sparingly.

FOR A DINNER OF THREE COURSES.

Before the Soup.

Vermonth.
Absinthe

Absinthe is white wine of any kind, but generally Pouilly, Grave, or Cheblis, in which the leaves of green wormwood have been steeped. It is supposed to be stomachic, and to provoke appetite.

After the Soup.

Madeira.
Sherry.

For the Oysters.

Arbois.
Chablis.
Pouilly.
Memsault.
Montrachet.
Chateau Grillé
White Bordeaux—Barsac.
Sauterne.
Carbonieux.
Grave.
Langon.
Tisane de Champagne.

First Course.

Red Wines—Côte Saint-Jacques.
Coulanges.
La Chaivette.
Auxerre.
Tounerre.
Macon.
Thorins.
Moulin-a-Vent.
Beaune.
Mercurey.
Chassagne.
Saint-Estèphe.
Saint-Emilion.
Petit-Médoc.
White Wines—Chablis.
Meursault.
Pouilly.

Between the First and Second Course.

Madeira.
Rum.

Second Course.

Pomard.
Volnay.
Nuits.
Vosne.
Vougeot

Second Course—continued.

Richebourg.
Chambolle.
Saint-Georges.
Corton.
Chambertin.
Romanée-Conti.
Clos-Vougeot.
Pouilly.
Meursault.
Montarchet.
Château-Grillé.
Côte-Rôtie.
Ermitage.
Saint-Perray.
Jurançon.
Rhin.
Saint-Julien.
Médoc.
Ségur, Léoville et Laroze.
Haut-Brion.
Margaux.
Château-Margaux.
Mouton-Lafitte.
Lafitte.
Latour.
Tavel.
Roussillon.
Château-Neuf du Pape.
Laneithe.
Côte-Rôtie.
Hermitage.
Jurançon.

Pink Champagne { Bouzy. Versi. Versenai.

Port.
Grave.
Langon.
Barsac.
Sauterne.
Carbonieux.

Third Course.

Volnay mousseux.
Nuits, ditto.
Romanée, ditto.
Champ. mousseux, Aï
Ditto, non-mousseux, Aï
Ditto, rosé
Sillery.

VINS DE LIQUEUR.

Muscat Frontignan.
Ditto, Lunel.
Ditto, Rivesaltes.
Grenache.
Vin de paille.
Malaga.
Rota.

Alicante.
Pacaret.
Sherry.
Madeira.
Cyprus.
Canary.
Sétuval.
Calabrian wine.
Syracuse.
Lacryma-Christi.
Constantia.
Cape, red and white.
Schiras.
Carcavella.
Paphos.
Picole.
Rancio.
Samos.
Sercial.
Tokay.

The following table of the alcoholic strength of certain wines and liquors, is given on the authority of Mr. Brande :—

	Pure Alcohol per cent.
Burgundy, average of four samples	14·57
Ditto, lowest of the four	11·95
Ditto, highest of ditto	16·60
Champagne, four samples; average	12·61
Ditto, still	13·80
Ditto, mousseux	12·80
Côte Rôtie	12·32
Frontignan	12·79
Red Hermitage	12·32
Sauturne	14·22
Lunel	15·52
White Hermitage	17·43
Vin de Grave	13·94
Ditto, second sample	12·80
Barsac	13·86
Rousillon	19·00
Ditto, second sample	17·26
Claret	17·11
Ditto	16·32
Ditto	14·08
Ditto	12·91
Average	15·10
Malaga, 1666	18·94
Ditto	17·26
Sherry; average of four kinds	19·17
Teneriffe	19·79
Vidonia	19·25
Alba Flora	17·26
Tent	13·20
Hockheimer	14·37
Ditto	13·00
Ditto, old	8·88
Colares Port	19·75
Port; average of seven specimens	22·96
Lisbon	18·94

	Pure Alcohol per cent.
Carcavellos	19·20
Ditto	18·10
Bucellas	18·49
Madeira Malmsey	16·40
Ditto, red	22·30
Ditto	18·40
Ditto	24·42
Ditto	23·93
Sercial	21·40
Ditto	19·41
Average	22·27
Marsala; average of two specimens	25·09
Lacryma Christi	19·70
Lissa	26·47
Ditto	24·35
Syracuse	15·28
Etna	30·00
Aleatico	16·20
Constantia, white	19·75
Ditto, red	18·92
Cape Muscat	18·25
Ditto Madeira	22·94
Average of three samples	20·51
Shiraz, white	19·80
Ditto, red	15·52
Tokay	9·88
Nice	14·63
Raisin wine	26·40
Average of three specimens	25·12
Currant wine	20·55
Gooseberry	11·84
Orange; average of six samples	11·26
Elder wine	9·87
SPIRITS.	
Scotch Whiskey	54·32
Irish ditto	53·90
Rum	53·68
Brandy	53·39
Gin	51·60
Cider, 9·87 and 5·21; average	7·84
Perry, four samples	7·26
Mead	7·32

	Pure Alcohol per cent.
Burton Ale	8·88
Edinburgh	6·20
Dorchester	5·56
London Porter	4·20
Brown Stout	6·80
London Small Beer	1·28

Another statement of the result of the same experiments on the same subject, is as follows:—

A bottle of Port, of 26 oz., seven years in glass, gave 2 oz. 7 dchms. of pure alcohol.

Ditto, 25½ oz., one year in bottle, and two in wood, 2 oz. 6 dchms. ditto.

Ditto pale Sherry, 25 oz., and three years old, produced 3 oz.

Ditto Madeira, 25½ oz., two years old, produced 2 oz. 5 dchms.

Ditto Cape, 25 oz., one year old, produced 2½ oz.

Ditto old Hock, 21 oz., produced nearly 1 oz.

Ditto Brandy, 24 oz., produced 10 oz.

Ditto Rum, 24½ oz., produced 9½ oz.

Four bottles of Port, Sherry, or Madeira, contain somewhat more spirit than a bottle of Brandy.

Three bottles of Sherry are about equal to a bottle of Rum.

Ten bottles of Hock are about equal to one of Brandy.

Port wine contains in the residuum an astringent extract, and more tartaric acid than Madeira, and Sherry less than either. The preference given to Port, on account of its astringency, is objectionable on account of its tartaric acid, causing indigestion and irritability of the viscera. Sherry appears better fermented, and freer from the acid and saccharine matter on that account, and therefore preferable where such irritability is observable.

As a complement to the above tables, we add the following list of various liquors in use among modern nations, but to which the name of wine is not given. We are indebted for it to the work of Mr. Redding:—

Name.	*Country.*	*From what extracted or distilled.*
Brandy, *eau de vie*	France	Grapes, potatoes, corn, cider, and perry, plums, cherries, residue of the brew-houses, &c.
Aguardiente	Spain	Generally from the grape, and of tolerable quality.

[Our own experience compels us to differ from Mr. Redding. We seldom found even tolerable brandy in Spain, unless it was imported from France. Most of the Spanish brandy is bad, and it is almost all flavoured with aniseed.—*Ed. of Domestic Dictionary.*]

Name.	*Country.*	*From what extracted or distilled.*
Geneva	Holland	From corn, flavoured with juniper in rectification.
Troster	Germany	Distilled from the murk, fermented with ground rye or barley.
Mum	Brunswick	Fermented wheaten malt, and oatmeal, with fir rind; lops of fir and beech, and variety of herbs.
Mariskino	Zara	Distilled from the cherry.
Rakia	Dalmatia	Grape murk, and aromatic herbs, distilled.
Goldwasser	Dantzic	Distilled from corn and other substances; sometimes called *eau de vie de Dantzick*, named from having gold leaf floating in it.
Rosolio		Brandy, sugar, cinnamon, and cloves distilled.
Snaps	Denmark	A brandy, distilled from rye and barley, sold in shops.
Birch wine	Norway	Made of the juice of the birch tree, boiled and fermented.
Brandy	Sweden	Distilled from corn and the black ant; a powerful spirit.
Ditto	Russia	Ditto, from corn.
Braga		Ditto, from oatmeal and hops; a white liquor.
Mead		Honey, beer-lees, and kalatsch fermented.
Quass		Barley-malt, rye-malt, oatmeal, fermented and made acidulous.
Kisslyschtxhy		Differently prepared with the preceding, being rye-meal and water alone.
Schara	The Calmucks	A beer resembling Braga, but different in colour.
Arraki	Hill Tartars	Prepared from sloes and numerous wild berries.
Busa		A beer brewed from ground millet.
Raka	Kamtschatka	Distilled from a sweet grass, called Slatkaia-trava, with certain berries to flavour.
Muchumor		Made from a red mushroom of the country.
Zythum	Syria	Beer fermented from the grain of the country.
Araki	Egypt	Distilled from dates.
Carmi		A species of beer.
Sherbet	Turkey	Sugar, lemon-juice, apricots or plums, and flavoured with some sweet flower.
Bouza	Nubia	Beer prepared from barley previously roasted.
Palm wine		Prepared as in other places, from the tree of that name.
Mead	Ethiopia	Prepared from honey, barley, and a root callo taddo.
Pitto	Dahomey	Prepared from grain on the coast.
Milaffo	Congo	Prepared from the palm tree.
Guallo		Prepared from Indian wheat.
Pombie	The Caffres	Fermented from millet, or Guinea corn.
Mahayah	Morocco	Distilled from figs.
Lotus wine	Tripoli, interior	Made from the *Rhamnus Lotus*, or tree of the food of the ancient Lotophagi.

Name.	*Country.*	*From what extracted or distilled.*
Usuph, or Usaph	Barbary	Raisins and water prepared.
Boza	Constantinople	Superior to that of Nubia, of similar materials.
Brandy	Persia	Distilled of very good quality, from the grape, at Shiraz; sold by weight.
Airen	Tartary	Cow's milk made into a drink like koumiss.
Koumiss		Mares' milk fermented; a strong drink called arika is frequently distilled from it.
Mandrin	China	A superior rice wine. The lees distilled yield a brandy called *show-choo*, or *sam-su*.
Tar-a-sun		A beer from barley or wheat.
Lamb wine		Lamb's flesh, mashed with milk, or with rice, and fermented.
Cha		Palm wine.
Rum	India	From jaggory, a kind of molasses from the sugar cane.
Tári	Ditto	Palm wine, when distilled, affords arrack, hence the English word toddy. The wine of the wild date is called *Sindag* in the Carnatic Hindu, in the Teling and Zamul, *Callu*.
Mahwah Arrack		Made of Maduca flowers (*bassia butryacea.*)
Toddy	Ceylon	Distilled from the cocoa tree.
Phaur	Nepaul	Distilled from wheat or rice.
Sihee		Prepared from the grape, in two modes.
Sihee	Afganistan	A drink from sheep's milk, fermented.
Lau	Siam and the Birmans	Generally prepared from rice.
Soura, or Taury	Nicobar Islands	Fermented palm juice.
Ki-ji, Tan-po, Si-chew,	Java	Three different strengths of distilled rice, or of arrack.
Bâdek and Brom	Ditto Natives	Rice boiled, and stewed with *razi* or onions, black pepper, and capsicum, made into cakes, and sold as a ferment. Brom is a different preparation of the same substances.
Brum	Sumatra	Nearly the same as the Java brom.
Kokemar	Persia	Poppy seeds in decoction, drank hot.
Paniz	Corea	From a grain, supposed to be a coarse kind of rice.
Sacki	Japan	A beer from fermented rice.
Awamuri	Japanese Islands	A drink from corn and different fruits fermented.
Sagwire	Celebes	A strong species of palm wine.
Tuba	Manilla Isles	From a species of palm.
Kava	Friendly Isles	A species of pepper plant chewed by the women, and their saliva collected and diluted with water.
Ava	Otaheite	A root which is bruised or baked before infusion: the liquor very intoxicating.
Y-wer'a	Sandwich Islands	A spirit like whiskey, but less strong; from the tea root.
Peach Brandy	United States of America.	The peaches are treated as similar fruits in Europe.
Brandewyn	Cape of Good Hope.	A bad brandy, distilled from the husks and stalks of the grapes, and wine lees.

Name.	*Country*	*From what extracted or distilled.*
Rum	The West Indies	Distilled from molasses.
Tafia	Ditto.	A poor kind of rum.
Piworree, or Ouycon,	Guyana . . .	Prepared from the cassava, resembling beer. Cakes of cassava, made about three-quarters of an inch thick, are baked until they are brown throughout. Women then moisten their mouths with a little water, and chew a piece of bread until it is perfectly saturated with saliva. They then strain it in their mouths, and spit out the saliva into a vessel in the centre. When a sufficient quantity of this extract is made, they add water, to the extent of 200 gallons or more, leave it to ferment until sour, and then drink it.
Pulque	Mexico	The juice of the agave fermented; a strong spirit is also made from it, called Aguardiente de Magney.
Chica		Beer made from maize by the Indians.
Masato		A drink from the roots of the manioc, or yucca.
Grape	Brazil	Black sugar, water, and the leaves of the akaja tree to make it intoxicating.
Aipy		Prepared from the aipimakakara, a species of manioc.
Kaviaraku		The preceding before fermentation.
Kooi		Prepared of the akajèe apple.
Vintro da Batatas		Prepared from the batata root.
Brandy	Portugal . . .	Distilled pure and good; also often from damaged figs and raisins; some kinds are bad in quality.
Gin, or British Brandy,	England . . .	A pure spirit, distilled from corn, but too fierce to be sold alone, and therefore reduced and rectified, or rather adulterated, with turpentine, juniper berries, nitre, or prunes.
Porter, Beer, Ale, &c.		Fermented from malt and hops.
Whiskey	Ireland and Scotland.	Distilled from corn, a pure spirit.

Remarks on the Wines of different Countries.

We begin with French wines, as they stand deservedly high in reputation. The wines most used by the French are those of Bordeaux and its environs, and they are justly considered the most wholesome, for they are sufficiently alcoholic to cheer, and not so much so as to intoxicate, unless taken in excess. The Burgundy wines, however, have the finest bouquet, and are preferred to those of Bordeaux for occasional drinking, but they must be drunk with moderation. In what is called Upper Burgundy, each vineyard nas its particular type, and some of the wine, from its fine bouquet, brings a very high price in the market. There is one, nowever, called Beaune which is not very dear, and yet it is, when in perfection, so good, that it is hardly necessary to try any other variety of Burgundy as a regular beverage; it has the bouquet of the finer Burgundies, and if kept in bottle for three or four years, it is sometimes difficult to detect the difference between Beaune and some of the wines which are sold at double and treble its price. The other wines of Burgundy in high esteem are Volnay, Nuits, Chassagne, Saint Georges, Vosné, Chambertin, (the favourite wine of Napoleon,) Clos-Vougeot, Romanée, and Romanée-Conty The best white wines of Burgundy are Chablis, Meursault, and Morachet; but, generally speaking, the soil of Burgundy

is not favourable to white wines. Champagne wine continues to hold a high place in the estimation of wine-drinkers in France, as well as throughout the civilized world, but we would advise its moderate use, for it does not agree with all persons, and, divested of its effervescence, it would not rank very high in the wine calendar. The grape from which it is made, even in the best vineyards of Champagne, is not of so rich a quality as that of many other parts of France; and it is not, therefore, surprising, that since the adoption of the same process for rendering Burgundy and Bordeaux white wines effervescent as that which is used for Champagne, a preference is given to them by many wine-drinkers. It is scarcely necessary, perhaps, to state that the effervescing property of Champagne does not arise entirely from the peculiarity of the grape; the wine is rendered effervescent chiefly by checking the fermentation at a particular stage; but the subsequent process is tedious and expensive, for, after bottling, the bottles are inclined so that the vegetable matter which the wine holds in solution may fall upon the cork, which is suddenly drawn out, and replaced by a fresh cork, and this is repeated two or three times, with a waste of wine on each occasion, before it is sent to market. Champagne wines differ in quality according to the vineyard from which they are made, and the care which observed in the process. The best are those of Ay, Sillery, and Epernay, and these are much better since they have been made with the black grape; for whilst the white grape was used, they seldom lasted good more than three years, whereas they will now, if well made, and carefully deprived of the vegetable matter held in solution whilst in the process of making, remain good seven, eight, and even ten years. There is no wine so much counterfeited as that of Champagne, but it is proper to state that many of the counterfeit Champagnes are quite as good as the real article. There are two modes of imitating Champagne practised in Paris; one is, to take good white Bordeaux or Burgundy wines, the nearest possible in flavour to Champagne, and to add to them sugar candy; a large quantity of carbonic acid gas is then forced in with an apparatus as for soda water. If this wine be drunk rapidly, as is generally the case with Champagne, the wine being poured out to the guests by a person in attendance, the difference between it and real Champagne wine is not detected; but if any of it be left in the bottle, the fixed air escapes, and the wine becomes vapid. Another process, which is kept a secret, is to prepare white wines by sugar candy, and the addition of some aromatic, which gives the peculiar flavour of Champagne, and to put into each bottle some preparation which brings on secondary fermentation; the bottles are now corked, and laid upon shelves with the necks downwards. In the course of two or three months the wine purges itself, and deposits a sediment upon the cork, which is drawn rapidly, with a slight waste of the liquid. The bottle is now filled up with fresh wine, and re-corked, and in two or three months more the process is repeated, as it is also a third time; the wine is then fit for use. When this wine is served at table, the fixed air is not liberated in the same manner as by the first-mentioned process, but, on the contrary, is even more durable than that of the real Champagne. Nay, if half the contents of the bottle be consumed, and the remaining half be left without a cork for two or three hours, and then re-corked and set by for a day, the effervescence will be nearly as strong, and the wine as lively, as when the bottle was first opened.

We believe the secret of this process is known but to two or three persons in France, but it is not improbable that, having mentioned its existence, some clever chemist in England will think it worth his while to discover the means of promoting secondary fermentation, and, at the same time, of purging the wine of those impurities which would prevent it from having a wholesome effervescence. One of the persons in Paris who is in possession of this secret, is engaged occasionally by wine-growers in Champagne to renew the vigour and effervescing quality of Champagne wines which have become unsaleable. This is a proof of the excellence of the system. Before this discovery, enormous quantities of Champagne wine which had become slightly ropy were thrown away; they are now, with a loss of about fifteen per cent., restored to their original state, and find ready purchasers.

Mr. Cyrus Redding, in his "History and Description of Modern Wines," by far the best work on the subject that has ever been published, gives the following account of the mode of bottling and preparing Champagne wines:—

"About Christmas, after the vintage,

the fermentation being complete, the wine is racked. This is always done in dry weather, and if possible, during frost. A month after, it is racked a second time, and fined with isinglass. Before it is bottled, it undergoes a third racking and a second fining. There are some makers of wine who only fine it once after the second racking, and immediately bottle it, taking care that it has been well fined in the cask; others rack it twice, but fine it at each racking. The best wines are always able to bear three rackings and two finings; and the benefit of such repetitions is found of the utmost importance afterwards, in managing the wine when bottled.

" The wine which is designed to effervesce, and the *ptisannes* and wines of the third pressing, are racked and fined in March and April in the cellar, out of which they are only taken in bottles. That which is designed to be still wine, is not bottled at Epernay until autumn and is taken to the underground cellar in April or May. This is not the practice at Rheims with the Sillery. It has been found there the most advantageous plan to bottle the wine in the month of January, though at the risk of its imbibing the sparkling quality. In this case, forthwith after the first racking, which is called *debourbage*, it is fined, and drawn off in ten or twelve days. Still wines are found by this means to be much improved in character.

" The strength of the bottles, and their uniform thickness, for the sparkling wines, are most carefully ascertained. Every bottle with an air-bubble in the glass, or with too long or too narrow a neck, or with the least malformation, in short, with anything which may be supposed to affect the production or retention of the effervescence, is put by for the red wine. The bottles, too, are jingled together in pairs, one against the other, and those which crack, or break, are carried in account against the maker.

" Some idea of the quantity of effervescing wine made in the department of the Marne, in the arrondissement of Epernay alone, is obtained from the fact that no less than thirty-three thousand hectolitres, or eight hundred and sixty-six thousand gallons, have been manufactured in one year. A third was purchased by the merchants of Rheims, and at least as much more has been made in one year in this last arrondissement.

" In the month of March or April, after the wine designed for effervescence is made, it is put into bottle. Some begin as early as February, at the risk of exposing the wine to failure, or the bottles to more extended breakage in case they succeed. Fifteen per cent. is a common loss, sometimes it reaches much higher.

" The effervescence is owing to the carbonic acid gas produced in the process of fermentation. This gas being resisted in the fermentation of the white wine, scarcely begins to develop itself in the cask, but is very quickly reproduced in bottle. In this process the saccharine and tartarous principles are decomposed. If the latter principle predominate, the wine effervesces strongly, but is weak; if the saccharine principle be considerable, and the alcohol found in sufficient quantity to limit its decomposition, the quality is good. The wines do not effervesce in uniform times, some will do it after being in bottle fifteen days, others will demand as many months. One wine will require a change of temperature, and must be brought from the underground cellar to another on the surface; a third will not exhibit the desired quality until August. One kind, when patience is exhausted, and the effervescence so long expected is given up, will give it all of a sudden. Another wine, standing until the following year without this action, must then be mingled with the product of a new vineyard, which is known to abound in the effervescing principle, such as that of the white grapes of Avize. The effervescence of the Champagne wine, considered in all its bearings, is most uncertain and changeable, even in the hands of those best acquainted, through experience, with its management. The difference of the spot of growth; the mixture; the process, more or less careful, in the making; the casking and preservation in the wood; the glass of the bottles; the aspect of the cellars; the number and direction of the airholes; the greater or less depth, and the soil in which the cellars are situated; all have a varied and often an inexplicable influence on the phenomena of effervescence.

" It will not be amiss to follow up the present subject in its details, in order that the reader may judge of the attention necessary in an operation, to a stranger apparently the least important, relative to the manufacture of this delicious wine.

" The bottles must be new, having been some days preceding rinsed twice in a large quantity of water, and shotted. Five workmen are required to manage

them in what is called the workshop, or *atelier*.

"The barrel heads are bored, and a little brass pipe inserted in them, with a fine gauze strainer, to prevent the smallest substance from passing. The bottles are filled so as to allow about two inches' space between the wine and the cork. This space diminishes during the time the gas is forming; and in those bottles which burst, it appears that the void is filled up entirely by the expansion of the liquid.

"The workman whose duty it is to fill the bottles, passes them by his right side to the principal operator, who sits on a stool, having before him a little table, covered with sheet lead, and not higher than his knees. He takes the bottle, inspects the allowance left between the wine and the place the cork will occupy, regulates it very nicely, chooses a cork, moistens it, introduces it into the bottle, and strikes it forcibly two or three times with a wooden mallet, so smartly that it would almost be thought the bottle must be broken by the violence of the blows; but fracture is rare in the hands of an experienced workman, who has paid attention to placing his bottle solidly, and resting it with a perfectly even pressure upon its bottom.

"The bottle thus corked is passed again by the right hand to another workman, seated in the same manner as the foregoing, who crosses it with packthread, very strongly tied, and then hands it over to the fourth, who has a pincers and wire by him; he wires it, twists and cuts the wire, and gives it to a youth, who places the bottles on their bottoms in the form of a regular parallelogram, so that they can be counted in a moment. The daily labour for a workshop is calculated at eight casks, of one hundred and eighty litres each, or a drawing of sixteen or seventeen hundred bottles. M. Moët, of Epernay, who deals in the bottled wine, has constantly from five to six hundred thousand bottles in store, and sometimes no less than ten of his workshops are in full employ.

"The cellars of M. Moët at Epernay, are in the limestone rock, and of immense extent. The piles of bottles render it a labyrinth. They rise to the height of six feet.

"The bottles are arranged in heaps (*en tas*) in the lower cellars. They are carried down by means of baskets, which enclose each twenty-five osier cases for the bottles. Two workmen, by means of leather belts drawn through the handles, transport them. The heap or pile runs along the wall of the cellar, most commonly for its entire length. Among the wholesale merchants, slopes are prepared in cement for the piles, having gutters to carry off the wine from the broken bottles, and also reservoirs to collect it.

"The bottles are arranged horizontally, one against the other. The lowest row has the necks turned to the wall; and the bottles placed upon laths. The bottles thus situated indicate the vacant space left between the wine and the cork, just at the spot where the bend of the bottle takes place to form the neck, by which the diminution in the void space is easily seen. Small wedges secure the first range of bottles, and upon them a second range is placed the other way, or with the bottom of the bottles towards the wall. All the rows are placed on laths, the corks of one row one way, and the other the reverse. The piles of bottles are thus arranged nearly in the same manner as in English bins, but are carried to the height of five or six feet. This they call in France to heap them, (*mettre en tas, ou entreiller.*)

"The pile is very solid, and any of the bottles with the necks to the wall can be withdrawn at pleasure, by which means they can be examined, to observe if they are "up," as it is termed in England; if not, they must be got into that state, let the expense amount to what it may. A bottle drawn from the heap, to examine if it be in a proper state, is held horizontally, when a deposition is observed, which the workmen call the *griffe*, or claw, from its branching appearance. The indication of a bottle's breaking is the disappearance of the vacancy below the cork before spoken of, by the expansion of the carbonic acid gas. It is generally in July and August that this breakage happens, and that considerable loss ensues. In ordinary cases, indeed, from four to ten per cent. is the amount. Sometimes, however, it amounts to thirty and forty per cent. It is very remarkable, too, such is the uncertainty of the process, that of two piles in the same part of the cellar, of the very same wine, not a bottle shall be left of one, while the other remains without effervescence at all. A current of fresh air will frequently make the wine develop its effervescence furiously. The proprietor of the wines is every year placed in the alternative of suffering great loss by breakage, or is put to great expense in making wine effer-

vesce that will not naturally develop itself. Of the two evils he prefers submitting to breakage from too great effervescence, rather than being put to the trouble and expense of correcting the inertness of the liquid. If the breakage be not more than eight or ten per cent., the owner does not trouble himself further about it. If it become more serious, he has the pile taken down, and the bottles placed upright on their bottoms for a time, which is longer or shorter, as he judges most advisable. This makes the quality of one bottle of wine somewhat different from another. Sometimes he removes it into a deeper cellar, or finally uncorks it, to disengage the overabundant gas, and to re-establish the void under the cork. This last operation is naturally expensive. It happens that when the gas developes itself with furious rapidity, the wine is wasted in large quantities, and it is difficult to save any portion of it. Even that which is least deteriorated is of bad quality. The piles, as before observed, are longitudinal, and are parallel to each other, with a very small space between each pile. The daily breakage, before it reaches its fullest extent, will be in one day perhaps five bottles, another ten, the next fifteen. Those piles which may have the smallest number broken, still fly day by day among the mass, and scatter their contents upon the sound bottles. Sometimes a fragment of a bottle is left, which contains a good proportion of its contents; in a short time this becomes acid from fermentation, and finally putrid. During the continuance of the breakage, the broken bottles which lie higher in the pile mingle their contents with what is spoiled, resting in the fragments beneath. The overflow runs together into gutters in the floor. When there are many of these accidents, the air of the cellar becomes foul, and charged with new principles of fermentation, which tend to increase the loss. Some merchants throw water over the piles of bottles two or three times a week during the period of breakage, to correct the evil. The workmen are obliged to enter the cellars with wire masks, to guard against the fragments of glass when the breakage is frequent, as in the month of August, when the fragments are often projected with considerable force.

"The breakage ceases in the month of September, and in October they 'lift the pile,' as they style it, which is done simply by taking the bottles down, one and one, putting aside the broken ones, and setting on their bottoms those which appear (in spite of the cork and sealing, which are entire) to have stirred a little, upon examining the vacant space in the neck. Bottles are sometimes found in this state to have diminished in quantity to the amount of one-half, by evaporation. This loss must be replaced. In the other bottles there is observed a deposition which it is necessary to remove. For this latter purpose the bottles are first placed in an inclined position of about twenty-five degrees, and without removing them, a shake is given to each twice or thrice a day, to detach the sediment. Planks, having holes in them for the necks of the bottles, are placed in the cellar to receive them thus slopingly, three or four thousand together. For ten or fifteen days they are submitted to the before-mentioned agitation, which is managed by the workmen with some dexterity, so as to place all the deposition in the neck next to the cork, and leave the wine perfectly limpid. Each bottle is then taken by the bottom, kept carefully in its reversed position, and the wire and twine being broken, the bottle resting between the workman's knees, the cork is dexterously withdrawn, so as to admit an explosion of the gas, which carries the deposition with it. An index is then introduced into the bottle, to measure the height to which the wine should ascend, and the deficiency is immediately made good with wine that has before undergone a similar operation. As it was by no means an easy task to do this, from the evaporation of the gas, while the bottle was open, an instrument has been invented, and is everywhere used for the purpose, which it is not necessary to describe here. The bottle is then a second time corked, and wired.

"The wine is now ready to be sent away by the maker. The bottles are arranged in a pile as before; but if they remain any time longer in the cellar, they are uncorked, and submitted to a second disengagement (*dégagement*, a French word, signifying to disengage or free,) of the deposition, and sometimes to a third; for it is a strict rule never to send Champagne out of the maker's hand without such an operation, about fifteen days preceding its removal. If this were not done, the deposit would affect the clearness of the wine in the act of transporting it. Thus the process, to the last moment the wine remains in the maker's hands, is troublesome and expensive. Sometimes, too, in the second year of its age, the wine will break

the bottles, though such breakage will be very limited, it generally remaining tolerably quiet.

"The non-effervescing wines, if they are of the white species, are all submitted to the operation of uncorking and clearing at least once before being sent out of the maker's hand."

The Bordeaux wines are, as we have already said, the most esteemed in France for general drinking; indeed, there are many French physicians who pretend that no other wines are wholesome. The Bordeaux wines of the first class are, Lafitte-du-Château, Latour, Château Margaux, Aubrion-du-Château, Prémier, Gravé, and Segur Medoc: those of the second class are, Mouton-Canon, Medoc-Canon, Saint-Emilion, Rosans, Margaux, Rose Medoc, Pichort-Longueville, Medoc-Potelet, Saint-Julien-les-Ville, and Saint-Julien, Vin du Pape (red Grave), Vin de la Missim (red Grave), and all the wines of the Upper Pesac: the wines of the third class are the inferior growths of Medoc, and are called *vins ordinaires*. The wine called Bordeaux ordinaire, in the trade, is rather full bodied, and when new has an unpleasant roughness, with almost a metallic taste. This wine is generally mixed, if intended for immediate consumption, with lighter red wines; but if kept in the cask two years before bottling, and in bottle two or three years, it is a good inferior claret.

All the wines of Rouillac are of good quality. The most esteemed is the St. Estèvé-Castenac, but these wines are very liable to become what is technically called sick, after having been in bottle about two months; at the end of six months, however, they recover their former quality. Amongst white wines, those of the Haut-Barsac and Haut-Brignac are of the finest quality; after them comes Sauterne. This wine has of late years had a very high reputation in England, and in France, also, it stands well; but the connoisseur of wines ranks it only after those which we have just mentioned. Next to Sauterne we have Barsac Largon, Carbonieux, and Podesilac. The Bordeaux white wines are generally preferred in France, but the white wines of Languedoc are considered equally good in foreign countries. In red wines, Hermitage, Côte Rôtie, and the wines of Dauphiny and Provence, have high rank, particularly Hermitage, when it is good, as it bears with it an excellent *bouquet;* but this wine requires to be kept a much longer time than some other red wines, as when only a few years old, it has a sharp, rough taste, which disappears when it has arrived at maturity. Many years ago Hermitage bore a very high price in England, but it has latterly become less in fashion. This has arisen, perhaps, from the importation of a large quantity with false dates as to age, and of inferior vineyards. There is, however, no wine, when in perfection, better suited to an English taste. Those who import it should not only take care to buy it of good growth, but it is always advisable to leave it for a few months in the Customs' cellars. This is an economy; for if, on tasting it at the end of six or eight months, it is found to be good, one does not feel at all reluctant to pay the duty and expenses of carriage; whereas, if it should not have borne the voyage and cellarage without deterioriation, it would be much wiser to have it sold in bond, and submit to any loss upon the sale; and, indeed, we should advise this course with almost all French wines, which are liable to deterioration by the sea-voyage. Care, however, must be taken to see that the vacuum caused by leakage or evaporation whilst the wines are in the Customs' cellars be filled up; and this is easily done, by an understanding with the warehouseman, who will put in pebbles as the vacuum occurs.

The white wines of Languedoc, and other parts of the south of France, are of a deeper shade than those of Bordeaux. They are also more alcoholic, and of a thicker nature. They should never be put into bottles until they have thoroughly purged themselves; but having done this, they will go on improving for years, and will keep good for twenty, thirty, and even forty years, if they have been well bottled. Most of the Languedoc wines are sweet, and are an agreeable beverage for ladies. They are not considered, however, very wholesome, and should therefore be taken in small quantities; they are both white and red. The best is the Muscat Frontignan. Amongst the sweet wines, the next in quality is the Muscat de Lunelle; and in some years this is quite equal to the best Frontignan. There is another wine, called Jurançon, which is grown in the Lower Pyrénees, and which is remarkable for the great length of time that it will keep. This wine is peculiar from its having both the smell and taste of truffles. The wines of Provence are good, but the red are

rather too sweet. The white wines are generally of the Muscat kind. The most in esteem are those of Geminos, which are called Toulon wines. A very favourite wine with the English is the Vin de Tavelle. It is a very strong wine; in flavour something between Bordeaux and Burgundy. It will keep for a great number of years, and is not really good until it has been nearly four or five years in bottle. Some of the Tavelle wines have a sweetness, which goes off a little with age, and renders them fine dessert wines; others are almost as dry as Port. If Tavelle wine be good, it is a very excellent substitute for Port, and is regarded by many persons as superior. There is also this advantage in Tavelle, it can be had genuine, for it is, when first put into cask, a cheap wine, and there is no motive for adulteration.

Of the Picardin wine we have already spoken in the early part of this article. It varies very much in quality, according to the vineyard which produces it. Some of it is light-coloured and sweet; other Picardins are dry, and have an earthy flavour, like that of bad Cape wine. By paying a price for good Picardin, however, it may be had in such a state as almost to rival Sherry and Madeira. By mixing good Picardin with either Sherry or Madeira, in the proportion of one half, the flavour of those wines is retained, their quality is rather improved than deteriorated, and a great economy is necessarily effected; for the very best Picardins may be purchased in the country where they are grown at less than 10*l.* a hogshead; and, like Madeira, the more this wine is carried, the more it improves. We shall conclude this portion of our article, as regards French wine, by stating that it is of the greatest importance, in purchasing the Burgundy wines, to see that the *bouquet* is in fine order, for most of these wines are adulterated for the market with wines of an inferior quality; and as this cannot be done without injury to the *bouquet*, the smell may be made a criterion of excellence, or the contrary.

Wine in France is distinguished from the several degrees and steps of its preparation:—what is called *mère goutte*, or mother drop, is virgin wine, which runs out of the vat wherein the grapes are laid before they are stamped. Very little, if any, of this finds its way to market, as it is in small quantity, and is generally kept for the consumption of the grower; but the quality is really not superior to that which is produced by squeezing. The must is the liquid which results from stamping the grapes; a very filthy process, still practised in many parts of France, it being done by the naked feet of the vintagers; but the process is by no means general. The third result, under the old process of making wine, is the liquid obtained by squeezing by the hand, in the wine-press; and this is the state in which it is left to ferment. The entire process is carried on by some large wine-growers by machinery. When the grapes have been pressed, and the liquid drawn off, water is sometimes thrown over the husks, which are again pressed, and the result is a light drink, which is given to labourers and servants; but water is only added when the vintage is not abundant, for in the wine countries the grapes of an inferior kind are generally abundant enough for the grower to afford to give pure wine to his assistants; indeed, in abundant seasons it is not unusual to give away large quantities of the inferior wines, rather than go to the expense of casks to contain them. Wine is sometimes left to work in the vat, in order to increase the colour, and it is sometimes boiled before it is worked, in order that it may retain its native sweetness. It is hardly necessary to state that the natural colour of wine is given by the skin of the grape, which, being pressed, yields the colouring matter; according to the quantity of colouring matter in the skin, is the degree of shade of the wine. Much of the astringency of wine is also imparted by the *envelop* of the grape. In the south of France, the mode of proceeding for red wines is to squeeze or tread out the grapes, and leave them until the liquid has attained a certain degree of colour, after which they are pressed, and the wine is set to work. For white wines the grapes are pressed immediately after squeezing, and the liquid is left to work in the tun, for almost ten days; at the end of which time the vacuum is filled up by good wine of the same kind, which had already been worked. As, although the fermentation may appear to have subsided, new wine will for some time continue to expend itself, the space is from time to time filled up in the same way, until all agitation has subsided. When wines are to be fined for use, it is done as follows:—For a hogshead of wine, two ounces of isinglass, well beaten with a hammer, are dissolved in a quart of water, and when cold, it is whisked into a froth with a

little of the wine which is to be fined, and stirred into the cask with a stout stick, which will reach every part of it. The wine is then bunged up closely, and is in eight or ten days fit for use. Many wine coopers fine red wines by beating up the whites of eggs into a froth, and mixing it with some of the wine in the same way as they would use isinglass; but the isinglass finings is decidely preferable.

The quality of wine will depend materially on the degree of care exercised in getting in the vintage, as well as on the nature of the grape; for the best vintage may be spoiled by want of attention. In Hungary, from which we have Tokay, and many other rich and fine flavoured wines, the growers are exceedingly careful. For the most delicate wines, the grape is suffered to remain upon the vine until it has been half dried by the heat of the sun, and a large portion of the aqueous matter has, consequently, evaporated; and if the sun's heat should prove insufficient, the grapes are dried by the gentle heat of a furnace, and are then picked carefully from the stalks, all those which are faulty being excluded. The juice of this grape, when pressed out and put to ferment, is exceedingly sweet; but after having been kept a year, and racked from the lees, much of the sweetness has gone off, leaving a rich, oily wine, which brings a high price in the market. The Hungarians are careful, also, in preparing their inferior wines; but they do not sacrifice so much of the juice. They press out the juice of the grapes when they are considered ripe, and improve the quality with a larger or smaller quantity of the juice of the half-dried grapes, according to the price at which the wine is to be sold. Almost all the Hungarian wines are more or less sweet, but the sweetness is not of the cloying nature of that of the wines of other countries; and, from the care in the preparation, the higher priced wines will keep for a great number of years, during which they retain all their natural sweetness. In the south of France the Hungarian mode of proceeding is adopted for some of the Muscat wines, but little of this finds its way into the market, being kept for the use of the grower, or for making presents. It is an invariable rule in all the fine vintages to separate the spoiled grapes from those which are sound, and not to gather them until they have arrived at full maturity. The same care is not observed with inferior wines; and in unfavourable seasons they are gathered whilst they are wet, and with many of them quite musty, and are thrown into the pressing vats without discrimination.

Mr. Cyrus Redding, in the useful and agreeable work which we have already noticed, gives the following description of the mode of making and storing wines in different countries. After describing the way of gathering in the vintage in France, and informing us that for white wine the grapes are rarely picked from the clusters, the stems being put into the wine-press with the fruit, under the impression that the astringent principle contained in them imparts to the wine a capacity of endurance, and informing us that in Spain all the grapes spoiled, insect-eaten, and rotten, are pressed out with the good, even for the best sherries, whereas, in France, the spoiled grapes, except for the very common wines, are carefully rejected, he says—

"Grapes were anciently trodden out after being exposed on a level floor to the action of the solar rays for ten days, and were then placed in the shade for five days more, in order to mature the saccharine matter. This practice is still followed in certain cases in one or two of the islands of the Greek Archipelago; at St. Lucar in Spain, in Italy, at least in Calabria, and in a few of the north-eastern departments of France. The fermentation is facilitated greatly by this process. In some parts of France, a labourer with sabots (wooden shoes) treads the grapes out as they come from the vineyard in a square box, having holes in the bottom, placed over a vat, a very barbarous method. The murk is then removed, and he proceeds with fresh grapes, until the vat beneath is full. Sometimes they are squeezed in troughs, by naked men getting into the vats, using both sabots and hands at once. In other places the press is first used, under which the bunches of grapes are placed, and the must is pressed out; but it is found that by this mode the grapes oppose a resistance so strong as to render the operation tedious. A better mode than treading has been adopted, not unfrequently, in France. Two wooden cylinders, turning in opposite directions, are employed to crush the fruit. There is a still more complete invention of a machine by M. Acher, of Chartres, which does not permit a single grape to escape its action.

"The wine-press differs in construc-

tion in different countries. There are several kinds. It has already been observed, that for red wine the grapes are trodden before they are pressed, to disengage the colouring matter from the skins; and that in making white wine this operation is never performed. In either case, when the press is applied, the first pressing is dispatched as quickly as possible. Of presses, there are commonly the small and the large. The first is a simple screw-press, furnished with blocks of wood, to replace the void when the murk has been pressed nearly to its utmost. This common press is easily understood. Instead, however, of placing the bar which turns the screw in a hole in the screw itself, it is frequently omitted altogether. A wheel, of a diameter as large as the space between the cheeks of the press will allow, is substituted, the circumference of which is grooved to receive a rope, that it may act in the way a rope acts upon a drum in mining machinery. One end of this rope is attached to a capstan, with a wheel of large diameter, forming the circumference of half a dozen spokes, which are the levers. The rope from the press being wound round the main tree of the capstan, is turned by men at the extremity of the radii, and consequently exerts an immense power upon the murk. Others have a wheel fixed to the screw, by the spokes of which they are worked. Presses are generally of oak, about eight feet square. Some have two screws. Most of the presses used in wine countries might be greatly improved in the workmanship. In Spain, they are very rude, many being mere levers; while in certain districts portable ones are employed, carried from vineyard to vineyard.

"The plank which rests on the lower part of the press, on which the grapes are placed, is called the *maye* in France. It is furrowed, and slopes a little for the wine to run forwards, where one channel conveys it into a vat sunk in the ground. When the press is heaped as high as is thought necessary, three pieces, or rather beams of wood, are placed upon the grapes parallel with the side of the press—one in the middle, and one at each extremity of the heap, on which rest thick planks, their ends towards the cheeks. Upon these again rest transverse beams, and over them the beam attached to the screw comes down.

"At first the press is used gently, that the wine may not overflow. The pressure is then gradually increased, until the murk is moderately acted upon. This is the first pressing. The grapes that did not sustain pressure, being scattered over the edges of the heap, are now gathered up, the press relaxed, and being placed upon the murk, the press is tightened again. The wine from this is called of the second pressing. The edges of the whole mass are now squared down with a cutting instrument, so that the mass of fruit is reduced to the form of an immense oblong cake, upon which the cuttings of the edges are heaped, and the press worked again, which makes wine of the third pressing, or, as the wine maker calls it, 'wine of the first cutting.' The pressing and cutting are repeated two or three times, and what liquid flows is called among the labourers wine of the second or third cutting. Last of all, the murk is frequently steeped to make *piquette*, or small wine for the labourers. At Ay, in Champagne, the press is used with great power, and the murk is as hard as a board.

"The wine of the first pressing is always kept apart from the rest, especially when the season is hot, and the fruit ripe. It would be apt to take a red colour if mixed with wine of the second pressing, when it is designed to make white wine. There are seasons, however, when it is useful to mingle the first and second pressings. The third, in France, must never be mixed with the two first. In Spain, the *agua pies*, or last pressing, is often mingled with the first, although a jar or two of water has been flung upon the murk between the pressings.

"The larger class of wine-press consists of a screw, acting upon the extremity of two immense levers. It is capable of making no less than twenty-five pieces of wine in four hours. Where vineyards are extensive, as it is desirable to press the produce of the gathering in one day, however large in quantity, this press is useful; but it is the instrument for making a large quantity of secondary wine, rather than a little of a choice character, and is used principally by the larger wine growers. There is one species of wine made without beating, treading, or pressing; this is what they call in Spain '*lagrima*.' The grapes melting with ripeness, are suspended in bunches, and the wine is the produce of the droppings. This can only be effected with the *muscatel* grape of the warm South. In this way the richest Malaga is made. In Cyprus, the grapes are beaten with mallets on an inclined plane of marble, with a reservoir either at the side or at one end.

"The vats are always cleaned and put in order by the time the vintage commences, in those countries where due regard is had to the character of the wine. The fermentation, carried on in barrels in Spain, in France and Germany is effected in vats more or less capacious. Some wash their vats with particular substances. Vats made of stone are washed with layers of quick lime, to saturate the malic acid existing in the must. Many wash the vats with warm water if they are made of wood; or with brandy, decoctions of aromatic plants, salt water, boiling must, and similar liquids. The practice of using quick lime for this purpose is very liable to injure the wine.

"The quicker the vinous fermentation is effected, the better is the wine. To this end each vat is filled on the same day, wherever the process is well understood; but they are not quite filled up, lest the must should ferment over. Vats of a very large size are not often employed in cold climates, where the seasons are hazardous, because they take too long a time to fill. In warm climates, the larger the vat the more active is the fermentation.

"Fermentation is the mysterious change of certain vegetable matters, when separated from the vital stem, and about to form new combinations. It is rendered active by warmth, while it is retarded by cold. The great principle is the saccharine, without which it would be in vain to expect perfect fermentation. Yet the saccharine principle will remain inactive, unless it be combined with other vegetable matter in due quantity to effect the result desired. A relative proportion of sugar must combine with the substances thus necessary. An attempt has been made to ascertain, by an instrument, when fermentation is perfect, but its success is doubtful, and of the precise time experience alone still remains the judge.

"The temperature of twelve degrees of Reaumur, or fifty-nine of Fahrenheit, is most conducive to the success of this process; and therefore, when the weather retards the fermentation, it is customary in the North to add hot must, to hasten its progress: this must is not allowed to remain on the fire longer than to obtain the highest degree of heat possible without actual ebullition. If the season has been cold, sugar in a small quantity is sometimes added to the must, if the saccharine matter be deficient; shoots of peach or almond trees, or a handful or two of dry elder flowers, are also added. The must is stirred and agitated, and then covered up. In many places the mode of management is different from this, but not materially so. In warm weather, when fermentation proceeds naturally with sufficient rapidity, no artificial methods are taken to expedite it, as in the South of Europe. Even in the North, when the season is propitious, the fermentation is best left to nature.

"Vinous fermentation begins in a few hours, or may be retarded several days, especially if there be no communication between the must and the atmospheric air; for though wine will ferment when excluded from atmospheric communication, it then ferments exceedingly slow. Some erroneously contend that the wine thus treated is better, and keeps its bouquet in higher perfection.

"Sugar, vegetable extract, tartarous and malic acid, and water, are essential ingredients in the composition of wine: and as they vary in quantity in the fruit, different results are produced on the must undergoing fermentation. The vegetable extract, or leaven, is a principle plentiful in wheat, and bears the character of albumen, in which azote is also ascertained to be present. If on fermentation a good proportion of tartar does not appear, a dry wine will not be the product; for in the rich luscious wines there is the smaller quantity of tartar, the great richness of the grape occasioning the saccharine matter to be in excess. This difference in the fruit is caused by the climate and sun, and the excessive ripeness of the grape, even to the shrivelling of the skin in some cases. Thus the rich sweet grape of the climate of Malaga, in which sugar abounds, as may be expected, produces a wine very different from Burgundy, where the tartaric and saccharine principles are perhaps nearly on an equality. In the Malaga wine, the sugar is not all decomposed in fermentation; in Burgundy, it is wholly so. The saccharine matter is in dry wines wholly changed by fermentation into spirit, or alcohol, from simple vinous fermentation. This is most probably not the case with the luscious southern wines, or they would be much more spirituous than they are. Distillation, however, shews the quantity of alcohol that may be obtained from them to be much greater than from the wines of the North. In France, the wines of the Côte d'Or, or Burgundy, give only one-eighth of their weight in the brandy of commerce on distillation; those of the Gironde, or Bordelais, a fifth;

while a generous wine of the Drôme, yields a third part of spirit.

"The second fermentation in the cask is a miniature repetition of that in the vat. A precipitation again takes place, and the wine is afterwards racked. A third, called the insensible fermentation, continues for a long period after the wine appears as perfect as art can mature it. Time, which mellows the harshness of the wine, blends more intimately the component parts, while all extraneous matter and the tartar are thrown down, adhering to the sides of the cask. It seldom happens that the wines of the South become acid, because the saccharine principle is more powerful, from the action of the warmer sun, than in those of the North—but this will be noticed further on.

"Fermentation in the vat is at first what is called "tumultuous;" the carbonic gas ascends in bubbles to the surface with a hissing noise, and a scum is formed on the surface, consisting of the lighter portions of the impurities of the wine. Heat is evolved; the temperature of the wine increases to ninety or a hundred degrees. At length the vinous odour is perceived, and the fermentation ceasing, all is quiet as at first.

"Those wines which effervesce (*vins mousseux*) are impregnated deeply with carbonic acid gas, from their being drawn off before fermentation is complete. This gas disengages itself from all kinds of wine during the process of fermentation, and when it ceases to do so, the wine is limpid, and the taste purely vinous. The first period of fermentation is one of great disturbance in the must, over the surface of which is collected what the French call the *chapeau*, the head, or crust, which swells upward as the fermentation proceeds, the gas escaping through the pores, or cracks which form in it. When it is observed to sink down, the time is arrived to close the vat. Space enough must still be left for the carbonic gas to free itself. The time necessary to complete the fermentation differs according to the quality or ripeness of the grapes, the species of plant, the soil, and the temperature of the vineyard. In some places in France, as in Burgundy, the must remains in the vat from six to thirty hours only. Near Lyons, it is left six or eight days, or even as many as from twelve to twenty. In the south-east, from twenty-five to forty. At Narbonne, it is frequently kept for seventy days, and the fermentation being over, the wine clarifies in the vat, in contact with the stalks, which add strength to it. It appears that the head, daily acquiring greater consistency, at length completely excludes the atmospheric air, and the wine is deemed secure. This usage it must be unsafe to depend upon; there is great hazard to the wine in the practice. In Portugal, about seventy or eighty hours may be the average of fermentation; in Spain, from four to five days, varying according to the temperature. In Germany, the stalks are rarely suffered to remain during fermentation; in Portugal always, and in Spain too this is generally the practice.

"The vats and barrels require great attention; if they are new, the wood of which they are composed is apt to impart a bad and bitter taste to the wine. This is guarded against by repeated washings in cold, and afterwards in hot water, in which peach leaves are steeped, or by a washing of salt water, or rather soaking, to extract all which is disagreeable in the wood, and finally they are washed with boiling must, bunged, shaken, and left to cool. Old casks are washed in hot must, after the tartar has been scraped from them. In case of their exhibiting symptoms of decay, they are burned, for sooner or later the effects are sure to be perceived in the wine. Sulphur match is burned in those barrels which afford the least suspicion of their imparting a bad taste, and they are set in a dry place, being bunged up before the match has expired. Before burning the sulphur, the barrels must be carefully dried, for damp or water left in them will make the wine taste of sulphur. No pains are spared to guard against mischief to the wine from this cause. Oak is the wood preferred for casks; but in some parts of the Continent beech is employed, because there is an opinion that beech-wood imparts an agreeable flavour to the wine, and brings it earlier to perfection. Casks, or barrels, have different names in different provinces, or countries, without immediate reference to difference of measure. Thus, in the department of Marne, a cask is called *queue;* which in the Cher is denominated *tonneau;* in Indre et Loire, *poinçon;* in La Vendee and La Nievre, *pipe;* at Lyons, *botte;* at Bordeaux, *barrique.* When casks are of a large size they are named *muid;* and when of the largest that are made, *foudre.* The casks of Portugal are most commonly denominated pipes, so are those of Madeira. In Spain, at Barcelona and in Valentia, they are the pipe; at Xeres, the *botta* or butt.

"Earthen vessels, glazed, are among the most ancient receptacles for wine which casks have superseded. If they are the least porous, they cannot fail to be prejudicial. The ancients remedied this defect by waxing, pitching, or liming them; but the wine must have been liable to injury from these materials, and the carriage of earthen vases must have rendered them expensive from breakage. At Pesth in Hungary, marble vessels are employed to hold wine. In Cyprus, as hereafter stated, conical earthen vessels are used in fermenting the wine, sometimes pitched, or anointed when they come from the furnace, with a boiling mixture of turpentine and pitch, mixed with vine branch ashes, goats' hair, and very fine sand, which never falls off. These vessels contain from twelve to twenty barrels, and must not be confounded with the jar by which Cyprus wines are usually sold. Notwithstanding these last, a large proportion of Cyprus wine is transported in skins. Limed vessels, and those of marble, are liable to be acted upon by wine to its great detriment.

"The precise time for drawing off wine from the vat, after the fermentation is perfect, can be attained only by experience. The moment the head sinks, visible fermentation has ceased in the rising of gas bubbles, but the sensible heat being over, it is not always proper to draw off the liquid. Sometimes the proper period is not less than twenty hours after the wine drawn into a glass seems fine enough, and in all respects ready to draw. When the wine is drawn off, the murk remaining in the vat is again subjected to pressure. It is sometimes the case that this last wine is mixed with what is first drawn off from the vat, to its great deterioration."

Mr. Redding here gives some information as to cellarage; it is very similar to what we have given under the head CELLAR.

"The wine cellared from the vintage requires new cares to render it fit for the market. The casks, in consequence of the disengagement of the carbonic gas still remaining, are not quite filled up, to allow space for the secondary fermentation. About two inches from the bung is left vacant. A hole is made near the bung, and stopped with a wooden pin, to let out the gas from time to time, as it fills up the space above the wine, but care must be taken that no external air enter. When it is found that no more gas escapes, the barrels are filled, and hermetically closed. This last filling in France is known by the term *ouiller*, to ullage, and in some places this operation is performed every day for the first month, every fourth for the second, and every eighth until the wine is racked. In this way the celebrated Hermitage wines are treated. At Bordeaux it is performed every eighth day. The wine used for filling should be of a quality equal to that in the cask. The cellars must be visited daily, and the wine frequently tasted, to judge of its state.

"When casks are neglected to be filled up, a white mouldiness, styled 'the flower by the French, covers the surface of the wine, which soon renders it unfit for drinking. To remedy this, the atmospheric air is forced out, after which lighted sulphur is introduced, and the barrel is struck to make all the air bubbles rise to the surface, and force the mouldiness towards the bung; the cask is then gradually filled, and the mouldiness collected at the bung hole, until it all comes away.

"It is said that there is a sympathy between the wine in the cellar and the vine. The former is observed to work in a remarkable manner when the vine puts forth its buds. The fermentation at this period is often obliged to be resisted by artificial methods, by sulphate of lime, camphor, sulphuric acid, and even the application of ice.

"The next operation is the racking, to separate the wine from the lees. In Cyprus, the wine is kept on the lees to the last. In France, racking is indispensable; such is the difference arising from climate and soil. In some countries the wine is racked in the first December after the vintage, in others, once a year in February or March. The first year, in some places, wines are twice racked, in spring and autumn; in others in May and December, if possible, during a frost. The necessity for racking more than once a year depends upon the nature of the wine. Some wines, of a generous quality, will remain on the lees three or four years, but in general they should be racked before the first vernal equinox. There are some who, instead of racking, by troubling the wine, and remixing it with the lees, establish a second time a species of fermentation, which is intended to ameliorate its quality; but this must be executed with great care, to avoid ascescency, and the wine must be racked the instant it approaches fermentation, and be placed in a colder situation than that it previously oc-

cupied, having fined it before the racking, if it appear at all troubled. This should be done in dry, fine weather.

" In racking wine, the cask should be bored about three fingers' breadth above the projecting part of the staves, with an instrument made on purpose, and the cock introduced so as not to waste more than a few drops of the wine, and exclude in the operation the smallest portion of external air. The bung is slightly lifted, to permit air enough to enter and set the wine running. At Beaune, in the Côte d'Or, the wines of which rank so high in estimation, they are racked by means of a brass tap, having a straight stem. To this stem is fixed another tube, the end of which is inserted in a wooden pipe, of a slightly conical form, which is introduced into the empty cask. The cask is placed on the side; a small hole or two are bored with a gimlet in the uppermost stave, which, when the cask is full, are stopped up, and the cask set in its place. The wine is thus racked without the least disturbance.

" In some parts of France, as at Condrieu, on the Rhone, the wine is racked two or three times, twenty or thirty hours only passing between each operation. If the wine is displaced for any reason, while in the grower's hands, it is generally racked each time. At Xeres, the sherries are racked in general but once, although there may be here and there a particular exception to the rule.

" Wines which do not become limpid by racking, are submitted to the further process of fining, as afterwards described in this work, and then racked. Many kinds of wine require, from the extreme fineness of the particles of the lees held in suspension, to be put through this process before they are fit for the market. The wine, during the operation, is always strongly agitated with a cleft stick. It is observed that the inferior wines lose their harshness by this process, and that the best growths acquire greater delicacy.

" A word or two may here be added respecting the employment of sulphur matches, which sometimes imparts a slight taste to wines when ill done. Its object is to impart to wine clearness and the principle of preservation, and to prevent fermentation. A little cotton cloth is rolled up, until it is an inch or an inch and half in diameter, and six or seven inches long. This is dipped in melted sulphur, to which, rather fancifully, certain aromatic perfumes, extracted from sweet-smelling flowers, are sometimes added. The match is lighted, and suspended in the cask by means of an iron wire, the bung is then closed. This process injures the colour of some of the red wines, and the substitution of a little brandy flung into the cask, and set on fire by an inflamed string, or cord, while the hand is kept over the bung-hole, is found to answer the same purpose, without injuring the wine.

" In the south of France, a quantity of wine is made, called *muet*, for which the grapes are trodden and pressed at the vintage, and the wine is fined immediately, to prevent fermentation. This wine, or rather must, is next poured into a barrel, until it is only a fourth part filled; above the surface of the liquid several sulphur matches are then burned, and the bung closed upon the fumes. The cask is now violently shaken until the sulphureous gas is absorbed, so that none escapes on opening the bung. More must is then added, and fresh sulphur, and the cask treated as before. This is repeated several times, until the cask is full. This must never ferments; it has a sweetish flavour, and a strong smell of sulphur. A quantity of proof spirit is now added, and a wine highly spirituous is the product. It is sometimes called Calabrian wine. It is generally employed to give strength, sweetness, and durability to wines which lack these qualities."

Of late years, cargoes of grapes have been exported from France to England, and there converted into wine. In a few instances the plan has been successful; but, although, as a source of trade, this may answer the purpose of speculators, it is a poor economy to import the grapes from which wine is made, when the wine itself can be had in perfection. It is said that much of the British Champagne manufactured in London is made from grapes thus imported, and this may be true; but although the wine so made may have the taste and effervescing property of Champagne wine, it is hardly to be supposed that it can be good, for the grapes must be in an unripe state when packed, and in the transport they are liable to deterioration. It is not improbable that some of the imitation Champagne wine sold in England is made from English grapes; the want of natural saccharine matter being supplied by the addition of sugar, and the flavour of champagne being imparted by artificial means. There are seasons in England in

which wine, of by no means a bad quality, may be made from English grapes, but this can only be when the sun has had more than usual power. If the Hungarian plan of evaporating some of the aqueous fluid by artificial heat, when the sun will not do it, were to be tried, perhaps a very good wine might be produced; but even in that case, sugar must be added, and we doubt much whether it would not be much more economical to import wine than, even under the most favourable circumstances, to make it.

Very good table wine, both white and red, is made in some parts of Switzerland, and some of the Muscat wine of the Valois is delicious; but these wines are not sufficiently full-bodied for exportation to England, and in France they are not wanted. The wines of Italy are, for the most part, full-bodied; but many of them have an acidity mixed with a sweetness which is not agreeable. The wine most exported is the Lacryma Christi; but this is by no means equal in quality or flavour to some of the wines of the south of France, which are to be had cheaper. Falconian wine is the most esteemed of all the Italian wines, and bears a high price in foreign markets. It is not considered, however, by physicians, to be a wholesome beverage. The Rhenish wines enjoy a high reputation in England, and the lighter kind, called Moselle, is considered to be very wholesome. The praises of old Hock are in every mouth; but this wine, when in high perfection, is sold at an enormous price. The most esteemed wine of these growths is that of Johannisberg: this is reserved, almost exclusively, for the tables of the wealthy, as the finer sorts are sold as high as from fifteen to twenty-five shillings per bottle. Many physicians set down all the Rhenish wines as improper for dyspeptic persons, on account, as they say, of the excess of acid which they contain. We have already said that what are called acid wines are not necessarily over acid, and that the defect, if it exist, may be counteracted by the properties of the wine. We do not believe that a few glasses of genuine hock can injure any person whose stomach will bear wine at all. There are persons, indeed, to whom wine of any kind, hock, port, sherry, or claret, is like poison.

Notwithstanding the acknowledged superiority of the wines of France, taken collectively, over those of all other countries, the sale of French wines in England is in a very small proportion to that of the wines of Spain and Portugal; and, as table wine, the product of French vineyards is little seen, except in the houses of the wealthy. This is to be regretted; for certainly the vins ordinaires of France are very superior, as far as health is concerned, to those of the Peninsula. Amongst the Spanish wines there is one, Alicant, which, as a cordial, is much recommended to persons of debilitated constitution. Its effects are frequently almost miraculous; but it should be taken with great moderation, for it is not only alcoholic, but it has tonic properties of so decided a character, that excess in the use of it brings on fever, and therefore increases the debility which it was intended to remove. This wine, in spite of all the care which may be taken in fining it, has a tendency to become thick and ropy when it has been long in bottle. As soon as it begins to thicken, it should be poured from the bottles into a cask, and be again fined, after which it is to be re-bottled. If this is done, it will keep good for a number of years, and rather improve than fall off in flavour. Malaga wine is also recommended to convalescents. There are, however, so many qualities of Malaga, that the mere name of the wine is not sufficient to obtain for it the preference in such cases. The best Malaga has an oily appearance, and a fine richness of flavour, and is not so alcoholic as the general growth of that part of Spain. All the Spanish wines are more or less objectionable, on account of their strength; but there are some which are hardly potable, from the strong earthy flavour which they possess, and which arises chiefly from want of care in the cultivation. The soil alone would not cause this unpleasant flavour, if the vines were carefully cultivated. Many Spanish wines have also an unpleasant taste from their being kept in skins, particularly goat skins. The flavour communicated by these skins, although much modified by age, never disappears entirely. Spanish wine of the superior sort, grown in the neighbourhood of the sea ports, is not put into skins, but into wooden casks; a very large portion of the wines of Spain, however, having to be conveyed to a distance upon the backs of mules, is put into skins for the convenience of transport. The practice of putting wine into skins is much less common in Portugal. There is no wine which has a higher reputation abroad than sherry, when it is good. There is, on the other hand, no wine in which the qualities,

according to the vineyards which yield it, differ so much, or which are more susceptible of falsification. At Xeres itself, where this wine is grown, the price for the finer sorts is greater than what sherry is frequently sold for in England, after payment of the duty and expenses. It is not reasonable, therefore, to suppose that sherry can be at the same time good and low priced. The worse sherry is in its natural state, the larger is the quantity of brandy added to it before it is exported; for in this way only is it made full-bodied and fit for the London market. There is very little sherry, even of the finer qualities, exported without some brandy being added to it; and this practice is the more objectionable, as the brandy which is added is usually of a very inferior quality to that which is made in France. Almost every wine merchant, in selling sherry, warrants it to be free from the admixture of brandy; and he may do so very safely, for it is not easy to say, on analysis, (except from experience, as to the quantity of alcohol which a particular wine contains,) whether the spirit which is separated on distillation is that which was furnished by the wine itself, or whether any portion of it was added to the wine in the cask. When wines, in their natural state, are not sufficiently alcoholic for keeping, the addition of the quantity of brandy which is necessary to give to them body and maturity is not of itself prejudicial; but when this quantity is in excess, as is generally the case with inferior wines, it may be productive of derangement of the system, particularly when the brandy itself is of inferior quality. Sherries and Madeiras are also very much adulterated with white Cape wines. There is nothing deleterious in this mixture, but it is a fraud upon the public; even ordinary sherry being dearer than the best Cape wine. If two-thirds of white Cape be added to one-third of really good sherry, the flavour of the latter is communicated to the former, and a very marketable article is produced. It is said, however, that in many of these admixtures the quantity of sherry is less than one-third, and that certain drugs are added, to give to the wine the peculiar nut flavour of good sherry. One writer on wines has asserted that castor oil, in small quantity, will communicate much of the nut flavour to white Cape wine. We do not pretend to decide as to the truth or falsehood of this statement: it is certain that, as far as health is concerned, more injurious ingredients than castor oil might be added.

The wines of Greece vary very much in flavour and quality. The best are those of Cyprus, which will retain their goodness, both as to body and flavour, for even more than half a century. In its natural state, Cyprus wine is very agreeable, notwithstanding a slight taste of the skin in which it is kept before it is bottled; it is balsamic, and generally agrees with the stomach. Being, however, a very dear wine, it is subject to falsification; indeed, in France, where Cyprus wine figures in the *carte* of almost every restaurateur of note, it is nearly impossible to obtain a glass of wine under the name of Cyprus, in which there is a single drop of the real article. There are wine manufacturers in the south of France who, with the wines of their own country, and with the addition of drugs, imitate foreign wines of every description. The imitation is rarely such as to deceive a person who has only once tasted the wine which is imitated, but the public at large are deceived with great facility. The best Greek wine, after Cyprus, is that called Stançon, which is sweeter than Cyprus, but has a very agreeable bouquet. The Chio wine has also a high name, and is by many called nectar. This wine was much esteemed by the ancients, by whom it was used in their offerings to their gods. Very little of this wine finds its way to Europe. Syracuse wine is also excellent; but it is seldom seen out of the country. There is a malmsey wine made at Cyprus, which has a fine muscatel flavour, and is sold for Syracuse.

The wines of the Cape of Good Hope, both white and red, are imported into England in large quantities, and some of them are really very good and wholesome. The red wine called Pontac, and the white wine called Cape Stein, are, when carefully made, and from the best vineyards, equal to many of the wines of Spain and Portugal; but much of the Cape wine has what is called in France the *gout du terroir:* much of this depends upon the soil; but more depends upon the management of the vine and the preparation of its product. Great improvement has already taken place in the growth and preparation of wine at the Cape. Vines have been imported from France and planted in positions favourable to the development of their peculiar properties; and many French cultivators have been induced to emigrate to the Cape, where their experience must

prove of great benefit. At the Cape of Good Hope, as in France, and all wine countries, care alone will not produce the best qualities of wine in all situations. There, as in France, the peculiar position of one vineyard will command a great superiority over another, and a slight variation of soil will effect a vast difference in the character of the product; but if, in the natural course of things, one wine will continue to be superior to another, there is no reason why, in so favourable a climate for the production of wine, any of it should be bad. Some persons affect great contempt for all the wines of the Cape, merely because they are cheap; and yet there are probably some among them who do not scruple to serve them at their tables under borrowed names. They are certainly not unwholesome wines, and very few of them require brandy for exportation. That brandy is added by the wine merchants in London, to some of the lighter sorts, is probable; but if a respectable wine merchant be desired to deliver them to the purchaser in their natural state, he will do so. It is much to be desired that some enterprising wine grower at the Cape would turn his attention to the production of some of the lighter red wines for the table; such as those of Bordeaux. We know not whether this may be practicable. If it be practicable, and the English could be brought to the use of it as a substitute for the alcoholic wines of Spain and Portugal, a great national benefit would be conferred, and a new market would be opened to our colony. There is one Cape wine, Constantia, which rivals in excellence all that Europe can produce, but the quantity of this wine is small, and the price places it beyond the reach of the middle classes. We understand that the wine made from the vineyards immediately adjoining the estate which yields the Constantia, bears no resemblance to it. But even as regards this wine, we may still hope for successful competition, from care and perseverance.

HOME MADE WINES. Although we do not think it would be possible to substitute with advantage the wine made from English fruits for that of the grape, in the countries where it comes to full maturity, yet if foreign wine could be always had genuine, and at a moderate price, it is certain that very excellent wine may be made in England, and the fact of knowing what we drink, is alone an inducement to home manufacture. We therefore devote considerable space to this subject, and lay before our readers the most approved modes of preparation, with some useful remarks from three of our best authorities, Mr. Roberts, Mrs. Dalgairn, and Mrs. Rundell. Mr. Roberts, in his introductory remarks to his useful work called the British Wine Maker, says: "The chief object which the wine maker ought to have in view, is to convert the sugar of the fruit, and the sugar in a pure state, which he must necessarily introduce to bring the *must* up to a proper standard, into spirit, whatever the quantity which he means to manufacture may be. The nature of this conversion, and the circumstances attending it, form one of the most obscure departments of chemistry. That this decomposition, namely, the converting of the saccharine matter into spirit, is going on, can only be ascertained by the saccharometer, which will show the gradual progress of the attenuation through fermentation. This instrument also shews the specific gravity both of the pure juice, and the juice and water, as well as of the compound of juice, water, and sugar. To accomplish this end, portions of the *must* or compound must be taken out daily to be weighed by the instrument. I would strongly recommend those of my readers who are wine makers, and who are really desirous to excel in this art, to record the results of their daily examinations in a book kept for the purpose, that these may serve as guides to them in their future operations. It must be obvious to every reflecting mind, that without a knowledge of the fermentable matter one has to work upon, all attempts to obtain uniformity of wine must be unavailing."

[The word *must* is applied to the juice of the grapes from the time they are squeezed until vinous fermentation has commenced, and the liquor is casked, after which it is called wine. Amongst us, the same term denotes the compound comprising the materials used for making the wines, from the period of their being incorporated with each other until fermentation has been nearly completed. The word *wort* signifies the extract which is obtained from malt.]

"The following," says Mr. Roberts, "are the specific gravities of pure juice of some of our fruits, taken in favourable years. The gravity of a pound weight of different samples of raw sugar, honey, and raisins, held in solution by one gallon of water, at the temperature of 60° is also given, in order that the reader may have

a compass to steer by, in bringing his gravity to the standard required:—

Pure juice of red currants, highest gravity	60
— white do. do.	56
— black do. do.	56
— do. do. do.	50
— red do. do.	51
— do. do. do.	45
— apples, averages	46
— pears	49
— ripe gooseberry	36
— ⅔ oranges, January	49
— ⅔ lemons	38
— foreign grapes, brought here in jars, green	70
— do. do. black	68
1 lb. good raw sugar dissolved in one gallon of water	36½
1 lb. do. do. do. 2nd sample	35
1 lb. do. do. do. 3rd sample	30
1 lb. refined do. do. do.	36
1 lb. treacle, do. do.	30
1 lb. Scotch honey	30½
1 lb. foreign do.	29¼
1 lb. of Valentia raisins, in one gal. of water, 21 days.	18½
1 lb. of good Malaga do. do. do.	18
1 lb. do. do. do. do.	16
1 lb. do. do. do. do.	15
5 lbs. parsnips, boiled in one gal. of water for two and a half hours	15
5 lbs. beet root, do. do. do.	14
1 bushel of good malt, equal from 20 to 24lbs. of sugar.	

"The pure juice of the currant in a dry warm season, when the fruit is grown in a well-cultivated garden, and when dead ripe, will raise the instrument to 60. However, it varies a little from 50 to 60. In a cold wet season, the juice of the fruit, from the very same bushes, will not raise the instrument above 40, and sometimes not above 35.

"Such gravities as the latter, without the assistance of sugar, will be greatly insufficient to make a fermented liquor, except of a very meagre quality. Some people who have not sufficiently considered the subject, have asserted that sugar is unnecessary in the composition of domestic wine, providing pure juice is used. I was myself formerly inclined to favour this opinion; but have discovered, from the failure of many experiments, that it is absurdly erroneous, a mere chimera indeed; and the result has convinced me, that the more sugar that is used, providing it do not exceed 3½ lbs. to each gallon of the juice, the more generous will the wine be, and the longer will it keep, provided the attenuation be complete, which I repeat is impracticable where the quantity made is small. The more sugar that is employed, the less water it is necessary to add to the juice; for the essential ingredient, that is, natural leaven or yeast, is held in solution in the juice, by the help of which the sugar can alone be converted into spirit without artificial means —a means which should never be resorted to unless in extreme cases. By putting too much water into the juice, you deteriorate the leaven, the consequence of which will be, that much of the sugar will remain in an unaltered state, giving rise to a wine disagreeably sweet, sickly, and without sprightliness, and completely destitute of that vinous character which it ought to possess. Hence much of the prejudice entertained against home-made wine is not without foundation.

"I have found from experience, that in order to make a strong, generous wine, a *must* should not be under 115, although 120 is better, excepting for Champagne, when 105 to 110 will be quite sufficient. Taking it for granted that the standard is 120, and that the fruit in a good year will give on the average a gravity of 55, the deficiency then will be 65. This deficiency must be made up by sugar to 120, the standard. In a bad year, the fruit will not yield what it did in the good one, as before noticed. The deficiency of gravity will be greater, which the instrument will indicate. The pure juice must then be more and the water less, when water is used, which is always advisable; and, besides, more sugar will be necessary to bring the *must* to the standard 120.

"The common rule for making wine is, to use a greater weight of water than of fruit. My rule is, to put, on the average, equal measures of juice and water. This, perhaps, in a very favourable season, may be a little too much, especially if the quantity intended to be made is great. One-third juice and two-thirds water will perhaps be a good proportion, especially if the wine is to be soon used. This alone must depend upon the quality of the juice. It is, however, always best to err on the safe side, for the stronger the juice is, the better will be the fermentation. Let us suppose, then, that in a good season, we find, on examination, the pure juice to be 60, or any number under; by putting an equal portion of water as juice, the liquid will be reduced to 30. Let us fix, then, upon this weight 30 as

our standard, whether the season be favourable or the reverse. In a good year equal portions of pure juice and water will produce this gravity. In a bad one, the pure juice will probably admit of only one-third water. In this last-mentioned season, we may find by the instrument that the pure juice yields only 40 instead of 60; consequently, by adding the same measure of water as juice, we shall only get 20 instead of 30, making a deficiency of 10. This deficiency must be made up (after the discovery in the pure juice,) by adding a greater proportion of pure juice to the water until it rises to the proposed gravity 30, keeping always in mind, that the less gravity and quantity of pure juice our fruit yields, the less fermentable extract,—*i. e.*, natural leaven, we shall have to carry on our fermentation. Sugar and water, it should be premised, will not spontaneously ferment without a proportion of that necessary leaven which is held in solution in the juice of the fruit, or without using artificial means, such as brewer's yeast, or some other vegetable extract. By the saccharometer, we are taught the value of the juice. We have now to apply it, in order to ascertain the value of the compound of pure juice, water, and sugar. Every pound of good Jamaica sugar, mixed with one gallon of water, when thoroughly dissolved, should give a gravity of from 35 to 36½. We will assume here that the gravity is only 35. Now, as we require 90 to make up a *must* to the standard gravity of 120, it will require rather more than 2½ lbs. of sugar to each gallon of *must;* for by using only 2lbs. to the gallon, we shall get two thirty-fives, equal to 70, instead of 90, minus 20. By the addition of another half-pound of sugar to each gallon, we shall raise the 70 to 87½, being 2½ less than is required. A small portion of sugar may or may not be added at pleasure. The saccharometer will, of course, be our guide in the obscure process of fermentation; for, in proportion as the sweet or saccharine matter lessens, the liqueur becomes more vinous and spirituous, and therefore decreases in gravity. This instrument will clearly demonstrate the progressive decline of the *must* until it is reduced to the desired point of attenuation. By regulating our fermentation by this instrument, the practice of adding spirits to our domestic wines, especially to the extent which is now practised—these being erroneously supposed to preserve or improve them—will be found quite unnecessary, as it is a well-ascertained fact, that the durability of wines is shortened by the addition of spirits, as spirits decompose and displace the carbonic acid, and prevent the wines being lively and brisk, which should be the character of home-made wine. [This is not so great an error as Mr. Roberts supposes: many of our best foreign wines are much improved by the addition of a little *genuine* brandy.—Ed.] Some add spirits for the purpose of checking fermentation, or preventing the wine from turning sour. That spirits will not prevent wine running into the acetous fermentation, unless used in very considerable quantities, has been fully ascertained. We now see that spirits are of no use to the wine for checking fermentation; and we must own, that the addition of it to that wine which has in itself, perhaps, too much already, will prove injurious to the constitution of the consumer, as well as an expensive ingredient in the manufacture. Would those who make wine, and think it will not be good without the addition of spirits, give their *must* a small increase of pure juice and sugar, reducing those extra allowances with skill and attention, and taking the saccharometer for their guide, they would, I am sure, be convinced that the general and prevailing use of spirits in wine, in any stage of the process, is unnecessary, unwholesome, and expensive."

We are obliged again to differ from Mr. Roberts. The addition of good brandy, in a moderate quantity, cannot be unwholesome. What is the increased strength given to wine by an extra quantity of sugar, but alcohol?—Ed.

Mrs. Dalgairn, in her Introduction to "Domestic Wine Making," says:—

"All wines are reducible to four general divisions: of dry and strong; sweet; light and flavoured; and brisk. When a dry wine is desired, the liquor is suffered to remain in the vat for three, four, or more days, according to circumstances; and a cask is provided for it sufficiently large to prevent the yeast from escaping at the bung-hole. To make a sweet wine, the fermentation must be discouraged by speedily removing it from the vat to the cask, which is carefully filled as the fluid subsides, and by frequently racking or sulphuring, or by both. To produce a light-flavoured wine, similar to Burgundy, the fluid is allowed to remain from six to twenty hours in the vat; and, for wines to resemble Champagne, it is necessary

the juice should remain in the vat but a few hours. Where small quantities are operated upon, the fermentation may be begun in the cask, the mask or mash being previously strained; for in no case should solid matter be introduced into the cask. The wine is strongest when the fermentation has been partially carried on in close vessels, and the flavour is also better preserved. To have a wine resembling Champagne, a partially close mode of fermentation is adopted. For rich and strong sweet wines, the whole fermentation may be carried on openly; but, in all cases, it seems a useful practice to cover the vat with boards and blankets. The fermentation is much sooner completed in a large than in a small vessel. The sweeter and thicker juices require to be treated on a larger scale than the thinner ones. It is easy to make lemon wine in a cask of two gallons; but it is a very difficult task to operate on so small a quantity of thick and sweet raisin wine. The most favourable temperature for fermentation is about 54 degrees of Fahrenheit. When it languishes from cold, a portion of the fluid may be heated to a high degree of temperature, and mixed with the mass. The sweetest wines are most durable, and are improved by keeping; the thinnest and briskest ought to be drunk comparatively new. Boiling the fruit tends to make the wine sweet; and white sugar should always be used in preference to brown. The introduction of brandy neither prevents wine from turning sour, nor does it add to its durability, while it increases the expense, and diminishes its salubrity; but, for those who cannot overcome their prejudice in favour of established practices, it may be observed, that brandy will be least injurious when added before the fermentation is completed, in the proportion of a quart to every ten gallons.

"The necessity of making the vats and casks clean requires to be particularly inculcated on the makers of domestic wines. The taste communicated by new casks is not usually thought unpleasant; where it is so, first rinsing with hot salt and water, and afterwards with more hot water, will remove it. Old and musty casks should be unheaded and scraped, then cleaned, as before directed; and, lastly, rinsed with a portion of the fermenting liquor made boiling hot. In removing the wine from the vat to the casks, it is requisite that the vat should be tapped at such a distance from the bottom, as to allow the wine to flow clear off the sediment which may have collected at the lower part of the vessel, by which means the scum may be easily prevented from running into the receiver. If the wine is not disengaged from the solid matters, straining will be further necessary. The skins are sometimes fermented with the juice in the vat, but they must in no case be introduced into the cask. To clarify the wine completely, prepared fining (sold by James Edwards, Crutched Friars, London) may be used, in the proportion of a wineglassful to every five gallons of liquor; also isinglass or whites of eggs; half an ounce of isinglass, or nine eggs, is sufficient for fifty gallons of wine: whichever of these is employed, it is first diluted in a portion of the wine, and then strongly agitated with the whole. In about ten days, when the wine has become clear, it is again drawn off. Instead of the common method of sulphuring, the sulphate of potash is to be preferred, which may be used in the proportion of a drachm to a pipe of liquor, or the oxymuriate of potash, which is more easily procured. Dry cold weather ought to be selected for racking.

"Various kinds of wine, not to be distinguished from those of foreign growth, can in this country be made from grapes, and at a moderate expense: their being ripe is not a necessary circumstance; they may be used in any state, however immature, the quantity of sugar being proportionately increased. Where the vine is largely cultivated, the thinnings may be used, as various kinds of grapes, and of different degrees of ripeness, may be mixed together. In situations where the vine may not produce even unripe fruit, the tendrils and leaves may be used, as they possess properties similar to the green fruit; the leaves of the claret vine produce wine of a delicate red colour.

"Yeast should never be employed in making wine from native fruits. The deficiency of tartar in them, which in the grape promotes fermentation, may be supplied by the addition of cream of tartar, or, what is still better, crude tartar. Should the fermentation be slow, or appear as if it would not occur at all, no impatience need be felt on the subject; it will not finally be less effectual because it has been more tedious. Attention to the temperature will commonly be sufficient. The cask may also be frequently stirred, or the filling up of the cask

omitted, so that the scum, or head, may be compelled to remain in the liquor."

Mrs. Rundell is very brief; she merely says, "English wines would be found particularly useful, now foreign are so high priced, and they may be made at a quarter of the expense. If carefully made, and kept three or four years, a proportionate strength being given, they would answer the purpose of foreign wines, and cause a very considerable reduction in the expenditure."

We do not know of what foreign wines Mrs. Rundell is speaking, when she talks of making good and strong domestic wines at one-fourth of the expense. At the present price of foreign wines in England, if we do not speak of the most expensive sorts, the saving by making *good* domestic wines would not be much more than half; but even this saving is a great one; and we repeat that the consumers have the advantage of knowing that they drink an unadulterated liquor.

The Saccharometer. Agreeing with Mr. Roberts as to the advantage of using this instrument, although many good housewives may, from experience, know the strength of the liquor upon which they operate without it, we inform our readers that they may purchase it of any good optician, with a book of printed instructions for its use.

Ripe Grape Wine. Mr. Roberts' process: "To make this wine good, twenty pounds of grapes are used for each gallon of water; the grapes, after being picked from the stalks, are slightly broken with the hand. When carefully pressed, the water which is to be used is to be well mixed with the fruit so bruised, a sample is taken to be examined by the saccharometer, the gravity noted, and the tub covered. The next morning they are again well agitated and mixed, and a second sample taken, weighed and noted, when an increase of gravity will be shewn. These operations are performed morning and evening, until it is found that the gravity is less than at the last examination. This decrease assures us that the extraction has been completed; and nothing now remains but to draw off this liquor from the husks, which is accordingly done, as they can no longer communicate anything desirable or advantageous to the wine. The fruit being pressed and the liquor drawn off, the husks are then washed with as much water as is found necessary to deprive them of any good which may yet remain in them. This liquor is then strained from them and added to the former. The whole quantity is now measured, and a portion of it weighed by the saccharometer, in order to direct the operator in proportioning the sugar. In consequence of the coldness of this climate, even grapes, ripe grapes, are deficient in sugar, and necessarily require a portion of this article itself to supply the want. The higher the gravity of the juice and water is before putting in the sugar, the less sugar will it require for a complete fermentation. After the gravity of the juice and water is found, the proportion of sugar necessary to bring the *must* up to the standard gravity of 120 will easily be ascertained. This fruit, in a dry warm year, when perfectly ripe, and the vine grown in a favourable situation, will produce, in the pure juice, a gravity of 75. By adding the same portion of water as pure juice, the gravity of 75 will be reduced to 38. By using two-thirds of pure juice and one of water, the original gravity of 75 will be reduced to 50 instead of 38, leaving then a deficiency of 70, which must be made up by sugar. As one lb. of sugar dissolved in a gallon of water is equal to 36, therefore to supply the deficiency of 70, two lbs. of sugar to each gallon of juice and water will be required; and this will raise the gravity from 50 to 122. The wine is to be fermented in the usual manner.

"When the wine is intended to be a dry wine, it is reduced, at its lowest gravity to 15 or 20. When intended to be a sweet wine, to 30 or 35.

"When the adjective *dry* is applied to wine, it denotes that the liquor is divested of any perceptible sweetness. For instance, Mountain, or even Lisbon, from their sweetness, form a contrast to Sherry, which is a dry wine.

"Care should be taken to examine and note the gravity at least once a-week, until the cask is bunged up. Racking is necessary in this wine, as well as in all others; but it should not be performed until fermentation has in a great measure subsided, unless it should be too violent, when the racking is necessary to give it an effectual check. The cask must be slightly sulphured, as already noticed, and the deficiency from loss of lees made up.

"If the wine has been reduced to 15, one lb. of sugar-candy is put into the cask, which is then bunged up, and allowed to stand for fifteen months before being bottled. Two years in the wood,

instead of fifteen months, greatly improves grape wine. In this case, however, it is necessary to examine the wine every six months, and make up any deficiency of quantity by adding spirit, and a small portion of water and sugar."

The Honourable Charles Hamilton's Mode of Making Ripe Grape Wine:—"After many years' experience," says this gentleman, "the best method I found of making and managing it was this: I let the grapes hang till they had got all the maturity which the season would give them; then they were carefully cut off with a pair of scissors, and brought home to the wine-barn in small quantities, to prevent their heating or pressing upon one another; then they were all picked off the stalks, and all the mouldy or green ones were discarded before they were put in the press, where they were all pressed in a few hours after they were gathered. Much would run from them before the press squeezed them, from their own weight upon one another. This running was as clear as water and sweet as syrup; and all this of the first pressing, and part of the second, continued white; the other pressings grew reddish, and were not mixed with the best. As fast as the wine ran from the press into a large receiver, it was put into the hogsheads, and closely bunged up. In a few hours one could hear the fermentation begin, which would soon burst the casks, if not guarded against by hooping them strongly with iron, and securing them in strong wooden frames, and the heads with wedges. In the height of the fermentation, I have frequently seen the wine oozing through the pores of the staves.

"These hogsheads were left, all the depth of winter, in the cool barn, to reap the benefit of the frosts. When the fermentation was over—which was easily discovered by the cessation of the noise and oozing; but, to be more certain, by pegging the cask, when it would run quite clear—then it was racked off into clean hogsheads, and carried to the vaults, before any warmth of weather could raise a second fermentation. In March, the hogsheads were examined, and if any were not quite fine, they were fined down with common fish-glue in the usual manner; those that were fine of themselves were not fined down, and all were bottled about the end of March; and in about six weeks more they would be in perfect order for drinking, and would be in their prime for above one year; but the second year the flavour and sweetness would abate, and would gradually decline, until at last it lost all flavour and sweetness; and some that I kept sixteen years became so like old hock, that it might pass for such to one who was not a perfect connoisseur. The only art I ever used to it was putting three pounds of sugar-candy to some of the hogsheads, when the wine was first turned from the press, in order to conform to a rage that prevailed to drink nothing but the very sweet Champagne."

Mr. Hamilton says he sold some of the wine made in this way to wine merchants, for fifty guineas a hogshead.

Dr. Macculloch's Mode.—"It has been fully proved, that a compound, an artificial *must*, can be fabricated from due mixtures of sugar, with the extractive matter and saline substances of fruits, capable of undergoing a regular fermentation, and of forming good and perfect wine.

"The case is as applicable to the grape as to the gooseberry. Long ago, experiments were made in France by several chemists with green grapes and sugar, with complete success; I have repeated these experiments, and varied them with the best effects. The produce is varied with the management, and the results of the trials have been wines resembling Champagne, Grave, Rhenish, and Moselle, and of qualities so perfect, that the best judges and wine tasters have not been able to distinguish them from foreign wines. The grapes may be used in any state, however immature. When even but half grown, and perfectly hard, they succeed completely. It is evident that wines made on this principle will be more expensive than when made from ripe grapes, as a sufficient quantity of sugar must be used, to compensate for the deficiency of the natural sugar of the grape. But even then they are no more costly than currant or gooseberry wines, while at the same time their superiority is beyond all comparison. The hardest grapes will produce a wine of the strength of White Hermitage, with a proportion of 3lbs. of sugar to the gallon; and the expense will be trifling compared to the value of the produce. It might be supposed that these wines would necessarily be devoid of flavour; but this is by no means the case, since all the specimens which were made under my direction, were characterised by flavours as genuine

and decided as those of the foreign wine to which they approximated. I have little doubt that, under due management, on a large scale, as with sufficient age, wines of the Hock quality could equally well be produced here in the same way. Many trials must yet be made before we can hope to appreciate the extent of our resources in this manufacture.

"It is more than probable that different grapes, even in this immature state, would produce different wines; but these trials must be left to the efforts of individuals, and to the necessarily slow progress of experiment. With regard to the management, it must be founded on the operations followed in the wine countries, and of which a sufficiently full account for all the purposes of practice has already been given.

"It is, in the first place, obvious, that the grapes should be suffered (from motives of economy) to remain on the vine while there is any hope of gaining an accession either of strength or sweetness. They should then be carefully separated from the stems; those which are mouldy or rotten being at the same time rejected. Some judgment will be required in proportioning the fruit to the water, in the first instance, and to the sugar in the second. I have before said that the grape, when ripe, consists of sugar, combined with vegetable extractive matter, or the fermenting principle, and certain salts, besides the astringent and flavouring matter. As the colour is not developed in the immature grape, it need not be noticed here. But the proportions of these ingredients vary materially, according to the state of maturity. As a great part of the saline, and other constituents of the grape, appear to be converted into sugar during the progress of maturation, it is plain that, weight for weight, there will be more of the principles contained in the immature than in the mature fruit. To form, therefore, a *must* of such a quality as shall resemble the natural *must* of ripe fruit, it is necessary that water should be added to the immature juice, for the purpose of diluting, and thus diminishing the proportions of those saline matters, which would otherwise confer on the wine a degree of harshness difficult to overcome.

"As it is impossible to give positive rules to meet the infinitely varying and indefinable degree of maturity in which the grapes must often be used, and as such rules would, in fact, but tend to mislead, I shall content myself with laying down some general principles, leaving the application to the ingenuity and observation of the operator. If the object be to produce a wine like Champagne, or the white wines of Bordeaux, a small proportion of crude grape will be required. Grapes barely half grown require, for the production of wines of this class, to be used in the proportion of equality to water. If they are more grown, the proportion may be increased; if less, it may be diminished. If the intention be to make a wine resembling Hock, the proportion of grapes must be materially increased, and the wine, at first harsh, austere, and not drinkable when new, will, by a few years' residence in the cask, undergo that amelioration which time alone can give. To the proportions which I have described, varying quantities of sugar may be applied.

"A proportion of two pounds in a gallon of mixture, will yield a very light wine, and of no great durability, resembling, under the proper treatment, the inferior classes of Champagne wines, and under a different mode, a wine resembling Barsac, and the lighter of the Bordeaux wines. An increase of sugar to three pounds will yield a wine equal in strength to the best sorts of Champagne; or, if fermented to dryness, to the strongness of the white wines of Bordeaux. Larger doses of sugar will, doubtless, yield wines of different qualities; but of such proportions I cannot speak from experience. I may only caution the operator, who shall undertake these trials, that larger quantities of sugar require larger proportions of fruit, if it be his intention to work the wine to dryness, as the quantity of fruit above-mentioned is but barely sufficient to convert the proportion of three pounds above-named. With regard to the durability of these wines, I may add, that I have kept them for seven years, and during all that time with evident improvement. I should consider them to be as little liable to destruction as foreign wines of the very best fabric. While on the subject of sugar, I may also say, that the general cause of failure in those wines which are made in this country from ripe grapes is the deficiency of sugar, and that even these would be much improved by an addition of it. It is owing to this deficiency that these wines are perishable, and easily converted into vinegar, the natural *must* being too aqueous to produce a durable wine. The proportion of sugar need not be larger in

these cases; but, as before remarked, no positive rules can be given for it, since it must vary with the maturity and saccharine quality of the fruit, circumstances which differ almost every season. Two modes of management may be adopted with regard to the fruit, either subjecting the skins to fermentation or not. In the first case, a greater degree of austerity will be the consequence; and the wine will, consequently, vary in its qualities. If the object be to make a wine resembling Champagne, the skins may be separated previously to the fermentation. If this manufacture be conducted on a large scale, the result of the second pressing may be reserved to make a distinct wine. If on a small one, it may either be mixed with the first, or rejected altogether. The methods of conducting fermentation, as well as all the after management, need not be repeated here, as they are to be found in another part of the book. It is equally unnecessary to repeat, that wines produced in this way may be modified, either in flavour or colour, by the several expedients already detailed. But let me again inculcate, that the wine is not made when the ingredients have been introduced into the vessel. It is then that the labour begins, and nothing but care and attention to every part, and every minute circumstance, of the subsequent processes can ensure satisfaction, and produce valuable results. To such uses may the immature fruit of the vine be converted; but the capacities of that plant are not even yet exhausted.

"Situations may be found in this country where the vine may not produce even immature fruit; yet still it can be directed to the end of wine-making. Chemical examination has proved, that the young shoot, the tendrils, and the leaves of vine, possess properties, and contain substances, exactly similar to the crude fruit.

"It was no unnatural conclusion, that they might be equally used for the purposes of making wine. Experiments were accordingly instituted in France with this view, and they have been repeated here with success. From vine leaves, water, and sugar, wines have thus been produced, in no respect differing from the produce of the immature fruit, and consequently resembling wines of foreign growth. The few experiments which I have tried have been eminently successful. No further rules can be given respecting the management of the leaves in addition to those I have laid down for the treatment of the unripe fruit. Similar proportions and similar management will, in both cases, produce similar effects. The leaves, however, scarcely yielding anything to the press, require to be infused in the water some days before they are subjected to fermentation; and they seem to yield their soluble parts most readily to boiling water, without any material alteration in the result. The leaves of the Claret vine, thus treated, produce wine of a delicate red colour. Tartar appears also to be a useful addition in this case; and it may be added in the porportion of half a pound, or even one pound, to ten gallons of the *must*. One advantage results from the use of the leaves; this is, the facility with which they are re-produced during the growth of the vine; and thus, the produce of a small vineyard in leaves alone will be abundant; and that even of a single vine will be as great as is required for the use of most families, should they make this wine for their sole consumption. Let it always be remembered, that in all these cases the price of the sugar is the price of the wine. The expense of utensils and labour is comparatively trifling; and when the manufacture is on a small scale, is scarcely worthy of regard."

Macquer's Mode.—The following are the means used by the celebrated French chemist, Macquer, in making wine from unripe grapes, with the results:—"In the month of October, 1776, I procured from a garden in Paris a quantity of white grapes, sufficient to make twenty-five to thirty pints of wine. [The old Paris pint contained two pounds of water, and was, therefore, equal to one-fifth of our new imperial gallon.] The grapes were of the worst kind; and I chose them in so bad a state of maturity, that it appeared perfectly hopeless to make them into a drinkable wine. Nearly half the berries, and even entire clusters, were so green, that their acidity was insupportable. Without any other precaution than merely picking out the spoiled raisins, I caused the rest to be bruised along with their stalks, and the juice to be pressed out with the hand. The *must* was very foul, of a green colour, and had a mixed taste of sweet and sour, in which the latter was so predominant, that it set the teeth on edge. I dissolved in this liquid a quantity of coarse sugar, sufficient to give a good degree of sweetness to the *must;* and, without further preparation, I put it into

a cask which stood in an arbour at the bottom of my garden, where I left it to its fate. The fermentation commenced on the third day, and continued for eight days in a very moderate, but obvious, manner, after which time it ceased to be sensible.

"The wine being newly made, and still thick and impure, had a vinous odour, sharp and lively. The taste was rather harsh, for that of the sugar had disappeared as completely as if it never had existed. I allowed it to pass the winter in the cask; and on examining it in the month of March, I found that, without having been fined or racked, it had become transparent. Its taste, though still a little sharp, was nevertheless much more agreeable than it was immediately after the sensible fermentation had ceased. It was a little more soft and mellow, but it had not the least approach to sugar. It was then bottled; and on examining it in the month of October, 1777, I found it was pure, fine, very brilliant, agreeable to the taste, warm, and generous, and, in a word, like good white mellow wine made from the ripened grapes of a good vineyard in a favourable season. Many connoisseurs who tasted it gave the same opinion, and could not be made to believe that it was produced from green raisins and sugar.

"This success, which had surpassed my hopes, induced me to make another experiment of the same kind; which was still more decisive, on account of the extreme greenness and bad quality of the grapes which I employed.

"On the 6th of November, 1777, I had collected from the summer-house in a garden at Paris, a species of large *raisin*, which never ripens well in this climate, and which we know by the name of *verjus*, because its juice is chiefly employed in the kitchen as an acid seasoning. That of which I speak had scarcely begun to colour, although the season was so far advanced that it had been abandoned, without any hope of its acquiring sufficient maturity to be eatable. It was still so hard that I was obliged to heat it on the fire before I could extract its juice, of which at last I procured from eight to nine pints. This juice had a very sour taste, in which a slight sweetish flavour was with difficulty discovered. I dissolved in this *must* portions of common brown sugar, until it tasted very sweet. It required a greater quantity than in the former experiments, because its acidity was much stronger. After the dissolution of the sugar, the taste of the liquor, though very *sweet*, was, nevertheless, far from flattering; for both the *sweet* and the *sour*, were strongly and separately felt, so as to be extremely disagreeable to the palate.

"I put this peculiar *must* into an earthen jar, which it did not entirely fill, and covered it simply with a piece of cloth. The season being already very cold, I placed the jar in a room in which the heat was almost always kept at about sixty degrees, by means of a stove.

"After a few days the fermentation was scarcely sensible. The liquor seemed to me to be quite as sweet and acid as before; but the two flavours began to be better combined, and, on the whole, the taste was more agreeable.

"On the 14th of November, the fermentation was in full force; and a lighted taper, introduced into the empty part of the jar, was instantly extinguished.

"On the 30th, the sensible fermentation had entirely gone; and the introduced taper was no longer extinguished. The wine was, nevertheless, still very foul and milky. The savour had retained scarcely any sweet. It was brisk, sharp, and pleasant, like that of warm and generous wine, but it was a little tart and gaseous.

"I bunged up the jar, and placed it in a temperate situation, in order that the wine might improve by completing its insensible fermentation during the winter.

"At last, on the 17th of March, 1778, having examined this wine, I found it almost totally transparent. Its remaining sweet, as well as acid, taste had completely disappeared. It was that of a wine made from strong good grapes, and by no means unpleasant; but it had no perfume or *bouquet*, because the *raisin* we call *verjus* possesses no odorous principle; further, this wine, being yet new, having something to gain from the insensible fermentation, promises to become still more mellow and pleasing."

Mr. Roberts says, "In consequence of the great success Macquer met with, many others were induced to follow his example, until the practice of making wine from a green grape has become very common in the north of France. Macquer does not inform us what quantity of sugar he employed. To make wine from green grapes of this country, we would require to put water, or the quantity of our wine would be very small. There can be no doubt but the juice of unripe

grapes, would give us a gravity of 40; now, by employing 25 per cent. of water, or one-fourth water and three-fourths juice, it would reduce the 40 to 30; and bringing the *must* up to the standard gravity, 120, we would require 90 to be made up with sugar, which would take two and a-half pounds. I can have no doubt but, by following his example, after having attenuated it to 20, and bottling it off before the March following, no one could tell it from Champagne of foreign growth."

Wine made from the Leaves and Cuttings of the Vine.—"Wine made from the leaves of the grape," says Mr. Roberts, "as well as from the cuttings of the vine, is highly prized, and does not appear so decidedly a domestic wine as most of those made in this country, resembling in flavour more the foreign wine. The cuttings seem best calculated for making this wine. The best time for using them is at the second cutting of the vine, when they are to be carefully collected, and put into a large tub; should there not be a sufficient quantity of cuttings, the deficiency may be made up with leaves; they must be closely pressed in the tub, and as much boiling water put upon them as will cover them. When the heat is reduced to sixty degrees, it is advisable to take a sample for examination by the saccharometer. The whole is to be allowed to remain in the tub for several days, frequently stirring it. The original gravity will be low, and when by the saccharometer it is found to be decreasing, (which will not be for a few days,) the liquor is to be strained off from the cuttings, the latter being squeezed. A gallon or two of boiling water again put upon the cuttings, and allowed to remain until the heat has fallen to eighty or ninety, when the liquor is to be strained off, (squeezing again the cuttings,) and added to the former quantity. The whole is now to be measured and weighed, and the deficiency of gravity made up by adding sugar, either moist or lump, as the operator chooses, until the standard of 120 is obtained. If the fermentation appears languid, it is advisable to take out a quart of the liquor, warm it to ninety, and break into it a wineglassful of good brewer's yeast, until it is found to have increased its bulk one-half; when it is added to the whole liquor or *must*, mixing it well up, when there is little fear of fermentation being again vigorous." The after management is to be exactly the same as in the wine made from the unripe grapes, quoted from Dr. Macculloch.

Gooseberry Wine. Dr. Macculloch, speaking of gooseberry wine, says:—"The gooseberry is one of the fruits most commonly used, and is, in particular, well known as an ingredient in brisk wines, which are made to resemble, in appearance at least, the wines of Champagne. For this purpose it is used in an unripe state. It is well known in the wine countries, that, independently of those causes of briskness in wines, which consists in the management formerly described, this property always results from the use of unripe fruits, and is readily produced by mixing unripe grapes with ripe ones. The case is the same with the gooseberry. The fault of this wine, however, if it be considered as an imitation of Champagne, is a bad flavour, which is almost invariably communicated by the fruit, and that in proportion to its ripeness. To avoid this evil, so generally injurious to the brisk gooseberry wines, the fruit can scarcely be taken in a state too crude, as at this period the flavouring substance has not been developed. At the same time, the expressed juice should be alone used, care being taken to exclude the skins from the fermentation, as being the part in which the flavour principally resides. With these precautions, the noxious flavour may generally be prevented. It is true, that the produce is then without flavour, or nearly so, but this is by much the most tolerable fault in domestic wines, whose leading defect is almost invariably a disagreeable taste. Various proportions of fruit and sugar are used by different persons; but the most common consists of three pounds of sugar and four of fruit, to eight pounds of water. Here the proportion of fruit is too small compared to that of the sugar, and the fermentation is consequently, in general, so imperfect as to leave the wine disagreeably sweet. At the same time, the proportion of sugar is such as to render the wine stronger than the strongest wines of Champagne.

"If, therefore, this wine is to be amended in composition, it is either by reducing the sugar, if we are contented with a weaker wine, or by increasing the fruit, if we are desirous of retaining the greater strength. In managing the fermentation to a constant and successful result, the rules laid down, as practised for Champagne wine, are strictly applicable in the present case; and with these precautions and practices carefully attended to, the produce of the gooseberry will be invari-

ably successful. I may also add, that it is perfectly durable; as much so as Champagne wines of corresponding quality, provided equal care be taken in the bottling, the cellarage, and other management—all of them circumstances in which our domestic fabricators are too apt to fail, thinking that when they have mixed together a portion of sugar and fruit, their labour is finished, and the rest may be trusted to chance. They should consider, on the contrary, that it has but then commenced.

"If we are desirous of making a wine to imitate Champagne, it is necessary to watch for the period when the fermentation is re-excited by the arrival of spring.

"By bottling in this stage we ensure a brisk wine, which, if bottled either in the cold of winter, or after the second fermentation has been exhausted by the heats of summer, would be dead or still. This renewal of fermentation, or fretting, as it is sometimes called, is also a favourable time for the addition of flavouring matters, as they then give out their flavours, and combine with the wine. It is at this time also that spirits should be added to the wine, if it is ever allowable to make this addition. It is the only time at which alcohol can safely be added without destroying its vinosity, as it then enters into a kind of chemical combination with the wine. It is necessary, likewise, to consider the effects which the air produces in fermentation, although its presence may rather be considered as favourable than essential. If the liquor is shut up in close vessels, it does not readily ferment, although it still slowly undergoes this process, and is at length converted into perfect wine. It is ascertained that no air is absorbed during the vinous fermentation, although this happens in the acetous; but that the free and ready disengagement of the carbonic acid is the principal circumstance in which fermentation in open vessels differs from that in close ones. One important fact, however, is established, that the wine is stronger when the fermentation has been either partially or totally carried on in close vessels, and that the flavour is also better preserved; and it appears that a great part of the alcohol produced is dissipated by the carbonic acid, which holds it in solution, and which produces a well-known effect, both on the organ of smell, and on the nervous system in general, when this disengagement is made in the stomach It is not yet well explained how the carbonic acid is disposed of when produced in close vessels. Many of the practices followed in making particular wines depend on a consideration of these two modes of conducting the fermentation; but it rarely happens that an exclusive fermentation in close vessels is used. This is generally reserved for the last and most tranquil stage. A consideration of the effects produced by these different methods, and of the product which we wish to obtain, will be necessary to guide us in our choice of either of these two processes, or of a certain admixture of both. If the wine is meant to be still, and if it is not desirable to husband the strength and flavour, the whole fermentation may be carried on openly. This will be the case with strong and sweet wines. If, on the contrary, a wine of the character of Champagne is intended, which must retain its briskness, flavour, and strength, we must be guided in our practices by rules similar to those in use in that and other districts of France, and adopt a partially close mode of fermenting. In all cases, it appears to be a useful practice, even if the first fermentation is carried on in an open vat, to exclude the free access of air, by covering the vessel with boards and blankets. If the first fermentation is carried on in the vessel in which the liquor is meant to continue, (a case which only can occur when no solid matter is fermented with the fluid,) a slight covering will be sufficient. Whatever process has been adopted in the first instance, the bung may, after a time, be tightly put down, and ultimately tightened, a spile-hole being added to give an opportunity of relieving the vessel from time to time of the elastic fluid which might endanger its safety." Dr. Macculloch likewise states, page 162, "That the carbonic acid is not necessarily separated and disengaged from the wine, since the brisk wines of Champagne owe their sparkling quality to a portion of it which is retained by them, either in consequence of the period of bottling being duly chosen, or to a portion of leaven allowed to remain in the bottled wine, and which has a tendency to renew the fermentation under confinement. This quality is sought after in many wines, and it is often, in the worst class of Champagne wines, the only valuable one which they possess. It is owing to the necessity of having a superfluous quantity of leaven for producing this effect, that a brisk wine is with difficulty made, unless a

portion of unripe fruit enter into the composition. This is the case with the wines of Champagne, and equally so with the produce of our gooseberry, which has been conceived to resemble them."

Mrs. Dalgairn's Process.—The fruit must be selected when about full grown, but before it has shewn the least tendency to ripen; those gooseberries which have the least flavour when ripe are to be preferred, and perhaps the green Bath are the best; the smallest should be separated by a sieve, the unsound or bruised fruit rejected, and the remains of the blossoms and fruit-stalks rubbed off, or otherwise removed. For a cask of ten gallons, forty pounds of such fruit are to be put into a tub that has been carefully cleaned, and that will hold fifteen or twenty gallons; it is to be bruised in successive proportions, by a pressure sufficient to burst the berries without breaking the seeds, or materially compressing the skins. Four gallons of water are then to be poured into the vessel and the contents are to be carefully stirred, and squeezed in the hand, until the whole of the juice and pulp are separated from the seeds and skins; the materials are then to remain at rest from six to twenty-four hours, when they are to be strained through a coarse bag by as much force as can conveniently be applied to them; one gallon of fresh water may afterwards be passed through the mash.

Thirty pounds of loaf sugar are now to be dissolved in the juice thus procured, and water added, to make the whole eleven gallons in quantity; this, together with three ounces of tartar in its crude state, being put into a tub, a blanket is thrown over it, which is again covered with a board, and the vessel placed in a temperature varying from fifty-five to sixty degrees of Fahrenheit; here it may remain for twenty-four hours, or two days, as the fermentation may be more or less rapid; from this tub it is to be drawn off into the cask in which it is to ferment; and, as the fermentation proceeds, the superfluous portion of juice made for the purpose, must be poured in, so as to keep the liquor still near the bung-hole for ten or twelve days, or until the fermentation becomes a little languid, as may be known by the diminution of the hissing noise; the bung is to be driven in, and a hole bored by its side, into which a wooden peg is to be fitted; it may be loosened every two or three days, for the space of eight or ten days, to give the air vent, so as to prevent the cask from bursting. When there appears no longer any danger, the spike may be permanently tightened.

The wine thus made may remain over the winter in a cool cellar. If the operator is not inclined to bestow any further labour or expense upon it, it may be examined in some clear, cold day towards the end of February or beginning of March, when, if fine, as it will sometimes be, it may be bottled without further precaution. To ensure its fineness, however, it is a better practice to rack it, towards the end of December, into a fresh cask, so as to clear it from its first lees; or, should it then prove too sweet, instead of racking it, the fermentation may be renewed by stirring up the lees, or by rolling the cask. At whatever time it is racked, it should be fined in the usual way with isinglass. Sometimes it is found expedient to rack it a second time, and to repeat the fining; and, in any case, bottle it during the month of March.

If it is wished to have a very sweet wine, as well as a brisk wine, the quantity of sugar may be increased to forty pounds; and to ensure briskness, without excessive sweetness, the proportion of fruit may be fifty pounds when the sugar is thirty. If there should appear any danger of the sweetness vanishing altogether from wine thus formed, the fermentation may be checked by racking and fining, when it will be speedily fit for use.

Mr. Roberts's Method.—"At the commencement I use only one part of water and three of berries. An imperial gallon of fruit, when heaped, weighs 10 lbs., but it may be less. To avoid unnecessary calculation we may as well assume that an English pint of fruit weighs 1 lb., and that an English pint of water weighs the same. An English pint of water weighs really upwards of 1¼ lb., but this difference is of little consequence, as it is by measure, and not by weight, that we proportion the fruit and the water. To make a 15-gallon cask of this wine, you will require 22½ gallons of gooseberries, as the fruit does not produce much above one-third of juice; the 22½ gallons of fruit, consequently, will only produce 7½ gallons of juice. It is always advisable to make a two-gallon cask more, for the purpose of supplying the deficiency which will necessarily arise from racking off the large cask; so that, instead of filtering the grounds from the latter, and returning them into it, you will fill it up with fine wine from the small cask; afterwards filter the

grounds, and fill up the small cask with them. These additional two gallons will require extra fruit in proportion. In addition to this quantity, about two gallons more of *must* are required in order to supply the deficiency which will be occasioned by the process of fermentation and filling the casks which it will undergo; and this is done by adding the quantity of sugar necessary to bring it up to the required gravity, so that 19 gallons of *must* are requisite to make 17 gallons of wine. This method of employing two casks I would strongly recommend, both for this wine and for every other. The water and the berries are not all to be mixed up at once; three tubs are to be employed on this occasion, one for the berries, a second to bruise them in, and a third to receive them when they are bruised. One gallon of the berries is to be bruised at a time, in order that every berry may be broken, which can easily be accomplished in this manner, but would be almost impracticable were all the 22½ gallons to be broken together. Those bruised are to be removed to the third tub, and one-third of a gallon of water is to be added, and so on, until the 22½ gallons are bruised—that is, after each gallon of bruised fruit, one-third of a gallon of fruit is to be put to it, until the 22½ gallons of bruised fruit are emptied into the third tub, and the 7½ gallons of water are added. This refers only to the making of 15 gallons, not the 15 and the two gallons. The mass is then to be well mixed, a portion of the liquor to be taken out for examination by the saccharometer, and the specific gravity noted in a book for the purpose, which it is probable will be from 17 to 18 on the instrument; the tub is to be then covered up. The next morning the mass is again to be well agitated, or stirred up, and a second examination instituted. The gravity will not appear to have increased much, but as long as it does increase, the liquor must remain on the husks, because fermentation will not have yet commenced, for which no certain time can be assigned, as sometimes it may be within ten hours, and sometimes not until three days. The instrument is the only sure guide in this event; for, as soon as a decrease in gravity is perceived, fermentation has assuredly commenced. The husks must then be removed, after having been well pressed with the hand, and the liquor strained. But as they still contain some good, two or three gallons of water are to be poured on them; they may be again squeezed and strained, and this second liquor added to the former, which should not be less than 19 gallons, if the 15 and the two-gallon casks are to be filled. The second tub, which has been employed for bruising, is to be washed, and the whole liquor measured into it. The gravity is again to be found, for the purpose of ascertaining how much sugar will be necessary to raise the *must* to the standard gravity. We shall suppose that the compound has now been reduced to 15, by the additional two gallons of water, and our standard gravity being 110, we require 95, and that must be made up by adding sugar. By mixing 1lb. of good refined sugar (which must invariably be used in making this wine, to keep the colour pure) with every gallon of the juice and water, an increase of gravity will be observed to the extent of 36, at the temperature of sixty degrees. By adding a second pound to each gallon, a further increase of 36 will be observed, making 72, being still deficient 23;—⅔lb. more will be required, which will make an increase of 22½, and which will bring the *must* up to 109½.

Juice and water, (say) . .	15
2lbs. sugar, at 36 . . .	72
⅔lb. ditto	22½
	109½

"I have been in the habit of using, instead of 2⅔lbs. of sugar to each gallon, 2½lbs. of sugar, and ¼lb. of virgin honey to each gallon. The honey must be boiled with the same weight of water for fifteen minutes, and well skimmed during that period. This plan is a little more expensive, and besides the excess of gravity, will not be so much as the same weight of sugar; but the honey adds to the wine a soft and mellow flavour, which makes it more resemble the real Champagne. The whole being put together, and thoroughly agitated or stirred up, for the purpose of melting the sugar and honey, then the tub is covered up with a blanket; and this process of agitating during the first day must be repeated every alternate hour. After the last agitation, a portion must be taken out and examined by the instrument, and recorded. It now becomes only necessary to repeat this operation morning and evening; but it must be strictly attended to, until the gravity has been reduced to 90; but the wine would be greatly improved were it reduced to 80. It is then

to be strained through a fine sieve, and put into the casks, one of 15 gallons, the other of two, and the remainder, which may amount to half a gallon or a little more, be kept to fill up the casks; and this, for the first three days, should be done every three hours. A dish ought to be placed under each cask to receive the scum which the wine throws out during fermentation. There will always be a portion of fine which ought not to be thrown away, but kept for filling up the casks. A sample of the wine should be taken out every third day for examination by the saccharometer.

"To ensure perfect success in the manufacture of this wine, we cannot be too careful and strict in repeating the examination of the liquid during the whole process of fermentation. The latter ought to go on with as great regularity as possible; and should it either go on too rapidly or too slowly, means must be adopted to retard or to accelerate it accordingly. If it proceeds too rapidly, racking must be had recourse to, by which means the wine is separated from the lees where the fermenting matter is present in the greatest abundance. If it proceeds too slowly, the point is to agitate the whole contents of the casks, which may easily be done by employing a wooden stirrer. The French effect this by bunging up their casks, and rolling them to and fro.

"There has been nothing better invented, and more useful, than the manner of drawing off wines. Certain experience convinces that it is the lee that spoils wines; and that they are never better, nor more lively than when they have been well drawn off, whether you would bottle it or keep in the pieces; it ought always to be drawn off out of one vessel into another, at least twice into another vessel, well washed, leaving the lee in the former.

"Now I have brought the reader so far, I think it advisable to record here the method employed on the Continent by the makers of that class of wine, after it is casked. This I have found in a very scientific work of Dr. Shannan's, Appendix, p. 110. 'The French allow their wines to ferment in the casks ten or twelve days, because these wines throw out their ferment so much the more or less slowly, by how much they have more or less warmth, or as the years are more or less hot. After the wine has done fermenting, they stop up the vessels at the great bung-hole, and leave on the side forward an opening about the bigness of a French farthing, by which one may put in his finger. This they call *la broqueleur*, and they stop this up, ten or twelve days after, with a wooden peg of about two inches long, for the more readily taking it out and putting it in. All the while the wines are fermenting, the vessels are to be kept almost full, to give them an opportunity of casting out all that is impure. In order for this, they must be filled up for three days within two fingers of the bung. After they have been bunged up, they must be filled every eighth day, at the little hole, for the space of two or three weeks more; and after that, once a-day for fifteen days during one month or two; and after that, once every two months, as long as the wine remains in the vault, if it be there for years. When the wines have not body enough, or are too green, as it often happens in moist, cold years, and when they have too much liquor, as in hot and dry years, three weeks after the wines have been made, they must be rolled in the casks five or six turns, to mingle them with the lees, and this must be continued every eight days for three or four weeks. This mingling of the lee with the wine being repeated, will strengthen it, soften it, ripen it, and render it more forward, and make it fit to drink in as short a time as if it had been transported from one place to another. These wines must be let stand in the cellar till towards the 10th of April, when they carry them down into the vault; but as soon as it begins to be cold, they are to be carried up again into the cellar. It is of consequence to be observed, upon this subject, that the wines ought always to be in cool places, and never suffer the heat. And as the vaults are cool in the summer, and warm in the winter, as soon as it begins to be hot the wines must be carried down, whether they be in pieces or in bottles, into the vaults, and when it begins to be cold they must be carried up into the cellar.'

"The grand point is to endeavour to find out what quantity of the juice of the gooseberry will be necessary to attenuate one pound of good refined sugar to *zero*; that is to say, how much pure juice will be requisite to put into one gallon of water, sweetened with one pound of refined sugar, and in what state of ripeness the berry will give the greatest quantity of natural leaven, and the least of malic acid. If this were found out, we should then have data by which to regulate this part of the process with the greatest nicety. As the goose-

berry does not impart to the wine any flavour, except a bad one, it is advisable not to put more juice than absolute necessity requires to reduce the *must* to a proper degree. Gooseberry wine (Champagne) does not need so much care in this respect as other wines do, such as Currant, Strawberry, Mead, and others, because it does not require to be reduced to such an extent as they do. It will now be my endeavour to convey to the mind of the reader to what degree the *must* should be reduced, and how this reduction is to be accomplished. It was 90 when put into the cask. All possible means should now be used to excite fermentation. I reduce the gravity two-thirds, and my standard gravity, as noticed before, being 110 for gooseberry wine, this reduction will bring it to about 36. When it has decreased to this degree, I endeavour to check fermentation by racking, after having previously fined the wine with isinglass. Having reduced the gravity, I treat it in a way similar to that recommended by Dr. Macculloch. It is a very great improvement to sulphur the cask slightly. I wash the cask inside with whisky, and as every part of the interior requires to be wetted with the spirit, a fifteen gallon cask will require two bottles. The whisky, after wetting the cask, is allowed to remain. I return the clear wine into the cask, and, as there is a deficiency, occasioned by keeping back the lees, I make it up from the clear wine drawn from the small cask. Should this, however, not be sufficient to fill the cask, I add a bottle of whisky. I then put the lees taken from the large cask into the small one, bung both up, and allow the spiles to be slightly pressed in for one day or more, as I find necessary, and then put them firmly in."

[Good brandy is infinitely to be preferred.—Ed. of Domestic Dictionary.]

"This process of the first fining and racking I generally perform in the month of September, the same year in which the wine is made. Towards the end of November, if the weather is dry, I repeat the racking as before, (fining the wine and sulphuring the cask excepted,) and make up the deficiency by the loss of lees from the little cask, as on the former occasion. If the wine is not very fine on the second racking, I add half a pint of finings, (the method of making which I shall afterwards shew,) and bung both casks down, previously having taken out a portion for examination, when most probably the gravity will be found reduced to 30. I have never found this kind of wine reduced lower in gravity than 20; and at this reduced gravity, I have noticed that it was not sufficiently effervescent to resemble the wine which it was intended to imitate; but at 30 it almost invariably bore this characteristic, when made with the proportions of sugar and honey already described, while the coarse flavour imparted to it by the husks was much lessened. In fact, of this peculiar flavour the honey almost entirely deprives it. Gooseberry wine requires little or no spirits. If any is used, it must be at the first racking, in the manner already described. None must be used in the second. A twenty-fifth part is more than sufficient. I have found little or no difference in the wine, in consequence of bottling it before the spring following, but much difference if it is not bottled before the month of May. It is almost as sure to effervesce if bottled before the spring, as not to effervesce if bottled during the summer; for this reason, that if the bottling of the wine is delayed until summer, the heat of the weather having excited a fresh act of fermentation, the effervescent quality is impaired, and the wine consequently becomes silent. I lose no time after the second racking in November, if it has been attenuated to 28, or even as far as 35, and if it is beautifully clear, to bottle it. When bottled and well corked, I put it into a cold cellar, laying the bottles horizontally on sand, for the purpose of swelling the corks. About the month of April, I change the position of the bottles, and place them upright. The bottles must be laid flat again on sand the beginning of winter, and again placed upright the following April. By following these methods, I doubt not the reader will be encouraged to make a second quantity of this wine on a larger scale, assured that he will be amply compensated for his labour. I have now some Champagne in my cellar, of my own manufacture, ten years old, not deprived of its effervescency. I am convinced it will remain as good as it is as present for the next fourteen years. Most probably it will improve with age, until the whole of the saccharine matter is decomposed. A portion of this wine was examined by the instrument a few weeks ago; its gravity was 18."

Dr. Macculloch remarks that, "Inattention, or circumstances which cannot

always be controlled, will sometimes cause it to be sweet and still, and sometimes dry. In the former case, it may be re-manufactured the following season, by adding to it that proportion of juice from fresh fruit which the operator's judgment may dictate, and renewing the fermentation and subsequent treatment as before. In the latter case, as its briskness can never be restored, it must be treated as a dry wine, by decanting it into a sulphured cask, when it must be fined and bottled in the usual manner. Such dry wines are occasionally disagreeable to the taste in the first or second year, but are much improved by keeping.

"If the whole *marc* be allowed to remain in the juice during the first fermentation, the process will be more rapid, the wine stronger and less sweet; but it will acquire more flavour. If the wine is intended to be very sweet as well as brisk, the quantity of sugar may be increased to forty pounds; if less sweet and less strong, the sugar may be reduced to twenty-five pounds; it will then be brisk, but less durable, and ought to be consumed within a year. When the quantity of sugar is thirty pounds, it will be perhaps better to use fifty pounds of fruit than forty, as generally recommended. Wine may be made by nearly the same process from unripe currants and unripe grapes. In this process it may be observed, that no brandy is added to the wine after it is finished, although it is the invariable practice amongst makers of domestic wines to add it." Dr. Macculloch adds,—"That this practice has been introduced under the mistaken notion of preventing wines from turning sour, and enabling them to keep a longer time;" but he says, "that this admixture decomposes wine, and that, although slow, the process is certain. The first and most conspicuous effect is, the loss of that indefinable lively or brisk flavour, which all those who possess accuracy of taste can discover in French wines, or in natural wines. Brandy is not added to wines in France or Germany: the finer wines, Claret, Burgundy, and Hock, are totally destroyed by it. But the practice is universal in the wines of Spain, Portugal, and Sicily, which are intended for the English market. They are at first rough and strong, but, kept long enough in the cask, they at length ameliorate; their elements combine intimately, and their aroma is developed.

"If, however, brandy, or, what is more general, common malt spirit, is to be employed, the quantity of sugar is to be diminished at the rate of two pounds for every quart of spirit to be added."

Wine made from Ripe Gooseberries. The same authority says—"This wine may be made according to the same formula as of unripe gooseberries. Although the fruit should have been red, the wine will not be so; its tints will be of a flesh colour; for the red colouring matter is precipitated during the process. The following will not afford quite so good a wine as from unripe gooseberries; at least, it will require a far longer time to ameliorate to the same degree of goodness. Ten gallons of gooseberries are to be bruised in a tub, and left so for twenty-four hours. The pulp thus prepared is to be introduced, either at once or in successive portions, into a hair-cloth or canvas bag, and submitted to pressure. The matter remaining in the bag is to be returned into the tub, and five gallons of tolerably hot water are to be poured on; the whole is to be well mixed up. After thus remaining in the tub, well covered, for about twelve hours, the matter is to be pressed through the bag, and the liquor obtained is to be mixed with the original juice. The solid matter of the fruit is then worth very little, and may be thrown away. In every five gallons of the liquor, consisting of the mixture of original juice with the infusion, twelve pounds of white sugar are to be dissolved perfectly. If the liquor be now left to itself, it will, after some hours, shew symptoms of a commencing fermentation. In proportion as the fruit is ripe, the temperature of the weather ought to be high. Should it be very cool weather, the liquor should be placed near the fire. If the gooseberries were unripe, or just ripening, the fermentation will take place at a lower temperature and with more activity. The progress of the fermentation should be frequently ascertained by tasting the liquid, it becoming continually less sweet, until at length the sweetness totally disappears; at this period the fermentation is complete. When the fruit has been over-ripe, or when the weather is remarkably cool, the last portions of sugar remain a long time unaltered, and the fermentation is suspended. Placing the containing vessel near the fire will always renew the fermentation; so long as this degree of heat is kept up, the fermentation will proceed. When the quantity of wine under fermentation is very considerable, it will generally keep up its own temperature.

"Should the season be so warm, and the fermentation so rapid, as to excite fears of souring, which, however, can never happen while the quantity is so small as ten or twenty gallons in each fermenting tub, we can readily avert the danger by racking off from the lees, having first skimmed off the head of the yeast. When the fermentation has totally ceased, the wine is to be racked off, as clear as it can be procured. To every five gallons of it, two quarts of brandy, or good old malt spirit, are to be added, well mixed up, and left to settle; for the spirit causes a separation of flocks which previously had been in solution. After subsidence for perhaps a month, the clear liquor is to be cautiously drawn off, introduced into a cask which it just fills, and set by in a cool cellar for a great length of time. It is seldom that the impatience and curiosity of inexperienced makers of domestic wines for family use, can brook the delay of keeping the wine long enough to mellow sufficiently. The wine just described will require five years at least to be in its best condition, and must have been kept in wood all that time.

"It may then be bottled. A much shorter time will, however, render it tolerable."

Pearl Gooseberry Wine. (*Mrs. Rundell's mode.*) Take any quantity of the best pearl gooseberries, bruise them, and let them stand all night. The next morning press or squeeze them dry, allow the liquor to stand to settle for seven or eight hours, then pour off the clear juice from the sediment, measure it as it is put into another vessel, and add to every three pints of liquor a pound of double-refined sugar; break the sugar into lumps, and put it into the vessel with a piece of isinglass; stir it up, and at the end of three months bottle it, putting a lump of double-refined sugar into every bottle.

Gooseberry Wine. (*From the same authority.*) To every three pounds of gooseberries, put a pint of spring water unboiled, having first bruised the fruit with the hands in a tub; stir them very well; let them stand a whole day; then strain them off, and to every three pounds of gooseberries add a pint of water and a pound of sugar dissolved. Let it stand twenty-four hours longer, then skim the head clean off, and put the liquor into a vessel, and the scum into a flannel bag, adding the liquor that drains from it to that in the vessel; let it work two or three days before stopping it up close, and allow it to stand four months before it is bottled; when it is drawn out of the cask it should not be tapped too low.

Pink Champagne. Boil nine pounds of lump sugar in three gallons of water for half an hour, skim it well, and pour the liquor boiling hot over a gallon of red and white curratns picked, but not bruised; when nearly cold, put in a small tea-cupful of yeast; keep it working for two days, then strain it through a horse-hair sieve, put it into a small cask with half an ounce of isinglass well bruised; have rather more liquor than will fill the cask, to fill it up as it works over; in about a fortnight bung it up; let it stand till April; put into each bottle a lump of double-refined sugar; let the bottles remain one day uncorked; cork and wire them; they must stand upright in the cellar; when wanted, put a few on their sides for about a week.—*Ibid.*

English Champagne. Take of the amber hairy Champagne gooseberry, when it is just turning, an equal quantity of fruit and cold spring water, and bruise the gooseberries well in it; let the mixture stand for two or three days to ferment, and stir it frequently with a wooden spoon, taking care to place the vessel in a warm situation; then pass the liquor through a hair sieve, squeezing the pulp until it is quite dry; for every gallon of the liquor put three pounds and a half of the coarsest East India sugar, which must be placed in another vessel, and the acid liquor be poured upon it. Allow it to stand two or three days, in order that the fermentation may be properly effected, stirring it very frequently: then pass it through a flannel bag into the cask, and to every ten gallons of the liquor put one ounce of isinglass, one bottle of Madeira wine, and one bottle of rum; the two latter added after the cask has remained open for a month. A cask which has held brandy is to be preferred. Put in the bung after the expiration of the month; lay a piece of coarse cloth over it, and cover the whole with a thick coat of resin; let it stand twelve months, and then bottle it.

Obs.—A sample of this wine was sent to the Horticultural Society of Edinburgh, and exhibited amongst seventy different sorts, and, being pronounced the best, the honour of the gold medal was awarded to it: but on understanding that the fruit was of English growth, it was considered as a foreign wine, and therefore not entitled to the prize. Honourable mention

was, however, made concerning it in the Report of the Transactions of the Society. —*Ibid.*

Green Gooseberry Wine. Take thirty-two quarts of unripe gooseberries of the green kind, bruise them well, add thirty-two quarts of cold water; let them stand for four-and-twenty hours; drain the gooseberries well from the liquor through a sieve; put three pounds and a half of lump sugar to every gallon of liquor; put it into a cask with a bottle of the best gin. Let it stand six months, and then bottle it.

Obs. This is a receipt from a nobleman's butler, who used to boast that he never opened more than one bottle of Champagne at his master's table, all that followed being of his own manufacture. The directions are not quite so precise as those in the foregoing, but the cheapness of gin will admit of a bottle being allowed to each ten gallons.—*Ibid.*

Grape Champagne to Equal Foreign. Gather the grapes when they are about half-ripe; pound them in a tub, and to every quart of fruit thus pounded put two quarts of water; let it stand in a mash-tub for fourteen days; then draw it off, and to every gallon of liquor add three pounds of lump sugar; when the sugar is dissolved, cask it; and after it has done working bung it down. In about six months it will be fit to drink, when it should be bottled and the corks tied down, or wired, should it be kept longer than a year.—*Ibid.*

Raisin Wine. (*Mr. Roberts's mode.*) This wine may be made either sweet or dry, according to the taste of the manufacturer. The tedious part of the process is the proper separation of the stalks from the raisins, but this is absolutely necessary; for were they allowed to remain they would impart a disagreeably astringent flavour to the wine. There is in this fruit a sufficiency of fermenting matter—that is, natural leaven, to produce spontaneous and complete fermentation, without artificial means being had recourse to. To make seventeen gallons of this wine, fifteen gallons of *must* ought to be put into a large cask, and two into a small one; but in addition to this quantity, there ought to be about two gallons more, for the purpose of supplying the deficiency caused by evaporation; so that, altogether, there will be required to make seventeen gallons of this wine about nineteen gallons of *must;* of raisins, one hundred and four pounds will be required, being six pounds of fruit to each gallon of water. (It may be laid down as a rule, which has no exception, that not only is it more profitable to make a large than to make a small quantity of wine, but the quality of the article is thereby greatly improved, on account of the fermentation proceeding with more alacrity and with more equability in the one case than in the other.) After the raisins have been stripped from the stalks, they are to be put into a barrel of thirty-six gallons measure, the head of which has been taken out. Every twenty-eight pounds of raisins will imbibe about a gallon of water; hence, to make seventeen gallons of wine, (employing nineteen gallons of *must,*) about twenty-three gallons of water will be required. For facilitating our calculations, we shall suppose there are twenty-four gallons. Two-thirds of this quantity ought to be heated to between 90° and 100°, but not to exceed the latter degree of temperature; and, after reserving a small portion for washing the stalks, so as to deprive them of any saccharine matter which they may retain, this is to be poured upon the raisins in the barrel. The whole is then to be well stirred up and allowed to remain. The other third of water, or eight gallons, is to be reserved for the second infusion.

The operation of stirring and bruising the fruit must be carefully performed every morning and evening for eighteen days, more or less, according to the state of the weather. A sample of the liquor ought to be taken out for the purpose of being examined by the saccharometer at each operation, and the gravity recorded; for as long as the *must* continues to increase in weight, and even after attenuation has become apparent, fermentation is still extracting good from the fruit.

Whenever the gravity is found rapidly to decrease, it becomes necessary to withdraw the raisins from the liquor, and, after pressing them, to pour the remaining eight gallons of water upon them. This second infusion is conducted in the same manner as the former one. The husks are to be put into a tub, and washed with as much water as will make up nineteen gallons; being the quantity of *must* required to make seventeen gallons of wine, as before observed. In order to extract any good that may yet remain in them, they must be left for twenty-four hours, then re-pressed, and the strained liquor added to the former. The barrel in which the raisins were steeped is to be properly

washed, and the whole of the re-pressed juice measured into it, where it is allowed to ferment. A portion ought to be taken out for examination. As the *must* will now be found to be about 90 in gravity, in consequence of the strained liquor being put into it, as well as from the decrease in gravity caused by fermentation in the infusion, sugar is to be added, until the gravity of the *must* is brought up to one hundred and thirty-five, an allowance of ten gravity being made at the same time—that is, the raisin gravity of ninety should be reckoned one hundred instead of ninety.

It must be here observed that fermentation varies in different seasons of the year. In warm weather, it will go on so rapidly that the *must* will decrease in gravity in a greater proportion than it will increase, whilst in cold weather this will not be so apparent. When the gravity greatly decreases—that is, when it is found by the saccharometer to have fallen from ten to fifteen of gravity in twenty-four hours, ten degrees of gravity, in addition to what is allowed in the former instance, must be allowed on this account at the time of proportioning the sugar, to bring the *must* up to the standard.

Upon examination with the instrument, if the highest gravity be found only ninety, it must be reckoned one hundred, because at least ten degrees have been attenuated. Two processes are going on at the same time, those of extraction and attenuation. In the early stages of fermentation there is little attenuation; but as the temperature increases, which is always the case in the middle and latter stages of fermentation, the attenuation goes rapidly on; so much so is this the case, that a considerable quantity of good is extracted from the raisins which is not shewn by the instrument. It is to make allowance for this that ten degrees are added to the highest gravity indicated by the saccharometer.

"The gravity which I have found best for making this wine," says Mr. Roberts, "is one hundred and thirty-five, but one hundred and twenty will make an excellent article—that is, one hundred and twenty-five, as shewn by the saccharometer. Thus:—

Two infusions	=	90
Allowance for extraction, not indicated by the saccharometer .	=	10
One pound of sugar to each gallon	=	36
		136

To raise it to one hundred and thirty-six, it will require at least one pound of sugar to every gallon. The whole must now be well mixed, in order that the sugar may be dissolved. If the weather is cold, the barrel ought to be placed in a room where there is a fire, that the cold may not check the fermentation. The process of stirring and examination is to take place every morning; and if fermentation is not checked by cold or other casualties, in the course of a week the gravity will very likely fall to between ninety and one hundred. But this will in a great measure depend upon the warmth of the weather, and the punctuality with which the *must* is agitated. When it has fallen to the point of gravity ninety, it may be put into the casks for final fermentation. This operation will tend to check it; but to avoid danger, the casks should be washed out with boiling water, and the *must* put in whilst they are warm. Attention should be paid to ascertain that fermentation has not been seriously checked by the operation. If this evil has taken place, the *must* will be dead, and will not throw up the scum, whereas if it was going on properly it would do so. Should the *must* remain in this dead, or rather dormant state, for twelve hours, a small portion, say three table-spoonfuls, of good thick brewers' yeast should be mixed with a quart of this *must* heated to eighty degrees. This heated *must* and yeast must then be put into a vessel capable of containing two quarts, as it will expand. In about an hour after this, expansion will take place, and be accompanied by a lively fermentation. At this period it should be put into the casks, and the whole liquor well roused up, when there is little doubt it will have the desired effect. With raisin *must*, it is a rare case that artificial means are necessary to excite fermentation; it is rather inclined to ferment too violently, and, if so, this should be checked by removal to a colder situation.

(*Mrs. Rundell's method.*) To every six gallons of water put two ounces of hops and the largest stalks of the Malaga raisins, and boil for a quarter of an hour; strain it, and when nearly cold pour it on the fruit, allowing six pounds and a half, of which one-fifth should be Smyrna raisins, to every gallon of water. Let it stand for six weeks, stirring it every day; press the fruit, and then put the liquor into the cask; rack it in six weeks, or as soon as it is fine, and to every six gallons add a bottle of the best French brandy

Another: To every gallon of spring water put eight pounds of fresh Smyrnas in a large tub; stir it thoroughly every day for a month; then press the raisins in a horse-hair bag as dry as possible; put the liquor into a cask, and, when it has done hissing, pour in a bottle of the best brandy; stop it close for twelve months, then rack it off, but without the dregs; filter them through a bag of flannel of three or four folds, add the clear to the quantity, and pour one or two quarts of brandy, according to the size of the vessel. Stop it up, and at the end of three years you may either bottle it or drink it from the cask.

Raisin wine would be extremely good if made rich of the fruit, and kept long, which improves the flavour greatly.—*Ibid.*

Raisin Wine with Cider. Put two hundredweight of Malaga raisins into a cask, and pour upon them a hogshead of good sound cider that is not rough; stir it well two or three days, stop it, and let it stand six months; then rack into a cask that it will fill, and put in a gallon of the best brandy.

If raisin wine be much used, it would answer well to keep a cask always for it, and bottle off one year's wine just in time to make the next, which, allowing the six months of infusion, would make the wine to be eighteen months old. In cider counties this way is very economical; and, even if not thought strong enough, the addition of another quarter of a hundred of raisins would be sufficient, and the wine would still be very cheap.

When the raisins are pressed through a horse-hair bag, they will either produce a good spirit by distillation, and must be sent to a chemist who will do it, (but if for that purpose, they must be very little pressed,) or they will make excellent vinegar.

The stalks should be picked out for the above, and may be thrown into any cask of vinegar that is making, being very acid. —*Ibid.*

Raisin Wine without Cider. On four hundredweight of Malagas pour one hogshead of spring water, stir well daily for fourteen days, then squeeze the raisins in a horse-hair bag in a press, and tun the liquor; when it ceases to hiss, stop it close. In six months rack it off into another cask, or into a barrel, with toast and yeast to work, which there is more difficulty to make it do than most other liquors; when it ceases to hiss, put a quart of brandy to eight gallons, and stop up. Bottle in the spring, or at Christmas. The liquor must be kept in a warm place to make it work.—*Ibid.*

Raisin Wine. (*Mrs. Dalgairn.*) To every gallon of water, eight pounds of good raisins and half an ounce of tartar are allowed; the raisins being picked, they are to be put, together with the tartar, into a tub, which should be covered; the mash must be stirred every day till the sweetness has gone off, and the fruit has fallen a little, which may be in a month or six weeks; it is then to be strained, the raisins pressed to dryness, and the liquid put into the cask; no filling up is necessary, and the bung-hole is only to be so covered as to keep out the dust. When the wine has given over hissing, it is to be bunged down till the spring, when it is to be carefully fined and racked into a sulphured cask, and bottled, after being once more carefully fined.

Another: For a ten gallon cask, fifty pounds of Malaga, and twenty-five of Smyrna raisins, ten pounds of loaf sugar, and a quarter of a pound of crude tartar, are allowed. The raisins being separated from each other, and the strong stalks picked out, they are to be put, together with the other ingredients, into a vat, and thirteen gallons of cold spring water are to be poured over them; the whole is then to be well stirred, and the vat covered; it must be stirred twice a-day during the first fortnight, and afterwards once a-day. When the fermentation has become very strong, and the liquor acquires a vinous smell and taste, which may be in three or four weeks, it is to be prepared for the cask in the following manner: A sieve or a drainer, such as is used for sowens in Scotland, is to be put over a tub; in this the raisins are to be squeezed very hard with the hand; all the liquor is then to be run through a hair sieve, and put into the cask, and the remainder into bottles, from which the cask must be filled up twice a-day for a week; then once a-day, and less frequently as the fermentation begins to decline; when it is completed, the cask is to be bunged up, and allowed to stand for four months. Excellent vinegar may be made from the refuse.—*Ibid.*

Another: To twenty-eight gallons of water, one hundred and twelve pounds of Malaga, and twenty-eight pounds of Smyrna raisins, are allowed; the stalks being picked out, they are to be chopped very small, and with the water, and one pound of crude tartar, put into a tub, in which

they are allowed to remain for a fortnight. The raisins are then to be squeezed to dryness, and the liquor strained, put into a cask, and treated as wine from ripe currants.—*Ibid.*

Lemon Wine. To every gallon of water, four pounds of sugar, and the juice of ten lemons, are allowed; the lemons are to be pared very thin, and half the peel being put into a tub, the sugar and water are boiled and poured over it; when cold, the juice is added; if the fermentation does not begin in the course of a few days, it is to be promoted by the addition of a toast of bread covered with yeast; the peel is then taken out, and the liquor put into the cask, which must be bunged up when the fermentation ceases. In this, as in orange wine, the peel may be omitted.

Malt Wine. Thirty pounds of sugar are to be boiled half an hour with ten gallons of water, and well skimmed; when milkwarm, five gallons of new ale, from the vat, are added to it, and it is allowed to ferment two days in a tub; it is then put into the cask, with one pound of sugar-candy pounded, and four pounds of raisins of the sun, chopped; when the fermentation ceases, it is racked and fined. It may be bottled at the end of six or twelve months.

Currant Wine. (*Mr. Roberts' process.*) This gentleman says, "The currants should be dead ripe, for the riper the fruit is, it contains the less malic acid, and consequently requires a smaller quantity of sugar to bring up the *must* to the proper standard. They should also be gathered in a dry, warm day, and separated from the stalks. A barrel without the head, which will contain thirty-six gallons, is the proper vessel in which to conduct the first part of the process. To make twenty gallons, two casks, one of fifteen gallons, and the other of two, are here again required. The quantity of currants employed for this is sixteen gallons of white, and seven of red; twenty-three gallons in all. The fruit is lightly squeezed in small portions, with the hand, into the barrel without the head, that every individual currant may be broken. The whole of the fruit being well squeezed, the mass is roused up, and a portion of the juice taken out and examined by the saccharometer, for the purpose of being noted. The mass is allowed to remain, until by the saccharometer, a decrease of gravity is ascertained. At this period the juice is strained, the husks being particularly well squeezed, and put into a separate tub, when two gallons of cold water are thrown upon them, to extract the remaining good. The pure juice is now measured, and a sample weighed, in order to ascertain what quantity of water ought to be mixed with it. Should the gravity of the pure juice be sixty, which is the case in a very favourable season, the same measure of water as juice is used, which reduces the gravity to thirty, the standard of juice and water of this wine. On the contrary, should the gravity of pure juice be only fifty, that is, one-sixth less, one-sixth less of water is used. The gravity thirty is brought up to the standard 120, by the addition of sugar, either moist or lump, as taste may dictate. The water which is used for mixing with the pure juice is cold spring water, and that which is strained from the husks, allowing seventeen gallons of juice and water, fifteen for the large cask, and two for the small one; an extra quantity is required for losses during fermentation. When the sugar is dissolved, which takes some time, the *must*, being now in the fermenting tub, a portion is taken out, weighed by the saccharometer, and noted; and, if deficient in gravity, made up as in the other wines, the manufacture of which we have already described. One half pound of argol broken into the *must* will improve the flavour, and greatly assist fermentation. Nothing now remains but to reduce the gravity by fermentation, and to attenuate it so low as to produce a perfectly clear and vinous liquor. Samples of the *must*, after having been broken in the head or froth, which fermentation causes to rise to the surface, are taken once every day and noted. This operation of breaking in, and weighing, is carried on every day until the gravity has decreased to from eighty to ninety. This is not easily accomplished if the quantity manufactured is too small. We shall suppose, which ought to be the case, that the *must* is at eighty: it is casked in the manner already described. It is always advisable, with those wines which derive their sweetness from sugar, to wash out the casks with boiling water, and to put in the wine while the casks are warm, in order to invigorate the languid fermentation. All wines made from the fruits of this country require sugar. With regard to this, and all other wines, every inducement is used to encourage a vigorous fermentation, especially in a small quantity; for, as al-

ready stated, the heat so necessary to promote fermentation can only be equably kept up in a large quantity. If not sufficiently attenuated, a portion of the sugar will remain undecomposed, and the wine will have a dead, sweet, mawkish taste. The skill of the operator is now employed to carry on a steady and gradual fermentation. When it is languid, which is known by the appearance of the wine, various means are used to excite it. My method of procedure is to draw a gallon of the wine from the cask into a gallon measure; when full, the measure is put into a tub, and after boiling water is poured round it, it is allowed to remain until the wine ceases to rise in temperature. It is then returned into the cask, and the whole being well agitated, is put into a warm, dry room, where it must be kept perfectly full. Should the wine appear again languid, the lees at the bottom, into which a certain portion of yeast has fallen, must be roused up with a stirrer, and well incorporated with the wine. These casks, as well as those containing the wines already mentioned, should be raised sufficiently high to admit of a tub being placed under each at the time of racking, and space left under them for a dish to stand, to receive the yeast which the wine gives off. Currant wine ought to be reduced in gravity at least three-fourths — that is, to 30, before being bunged. If it can possibly be reduced four-fifths, it will be all the better for it. If the operator feels disposed to add either brandy or whiskey, or rectified spirits, let this be done when the gravity is seventy. The casks are filled and bunged down after visible signs of fermentation have disappeared. I beg to remind my reader that the mode of racking, fining, and filling up the deficiency in the great cask from the fine of the small one, is the same in this as in former wines. In order to have a fine mellow wine, this should not be bottled until the November twelvemonth. One very general error which domestic wine-makers fall into is, that of bottling too soon. Nothing can render the wine mellow and sparkling but age in the wood."

Mr. Roberts adds the following observation. "The introduction of sugar always increases the bulk of the liquor to the extent of nearly one gallon for every sixteen pounds of sugar employed. Losses, however, arise from evaporation, from filling up, &c., during the processes of fermentation, in this and every other instance; but these losses are more than fully compensated by what is gained from the introduction of the sugar. In ginger wine, however, and others in which boiling is had recourse to, there will be a loss of about twenty-five per cent."

As Mr. Roberts's mode of making Currant Wine will probably appear to many of our readers to be more scientific than is really necessary, we subjoin a few approved and much more simple receipts:—

(*Mrs. Dalgairn's Mode.*) Wine from Unripe Currants. This fruit is perhaps better calculated for brisk wines than the gooseberry; greater care must be taken in separating the stalks, but otherwise the mash is more easily managed. By working the juice and solid matter together in the vat along with the sugar, the wine will prove stronger, and less sweet, but it will acquire more flavour. When the skins are not to be fermented with the liquid, it may be introduced at once into the cask, without being previously fermented in the vat, and in all cases strained before it is put into the cask. The same proportions are allowed for this wine as for gooseberry wine, and the same rules may be followed.

Sweet Wine from Ripe Currants. The fruit is gathered when quite ripe, and the stalks being carefully picked out, it is bruised in the hands, and then strained through a canvass bag; to a ten gallon cask, forty pounds of fruit, thirty of sugar, and a quarter of a pound of tartar are allowed; the material having remained some hours in the tub in which it was mixed, it is removed to the cask, the bung-hole covered with a tile, and the cask is stirred every other day for ten days, and filled up every day, as the fluid wastes. The fermentation may continue from three to six weeks; when it has subsided, the wine is racked into a cask in which matches, dipped in sulphur, have been burned, or in which a little of the sulphate of potash, or of oxymuriate of potash, has been put. It should be again racked and fined in March, when the wine is completed, and may be bottled, or allowed to remain in the cask.

Black Currant Wine. The same variety of proportions are allowed in this as in the others already mentioned. The fruit being picked, it is brought to the boiling point in as much water as to avoid any risk of burning; it may then be strained and put into the cask, or the liquid and skins may, with the other in-

gredients, be first fermented in the vat or tub, by which the wine will acquire a higher colour and flavour.

(*Mr. Turner's Mode.*) To two quarts of bruised fruit carefully picked, add one quart of water; when this has stood a day and a night, squeeze and strain, and add a pound of fine lump sugar. Whether the currants be white or red, to every quart of liquor, if a pound and a quarter be added, the wine will be improved. Set the liquor in a deep pan or tub for four or five days, or until the scum rises, when it is to be put into the cask, and treated as other home made wines.

Obs.—We have made this wine as recommended by Mr. Turner, and it turned out very good. And here we must take the liberty of differing even from such an authority as Mrs. Rundell, who sometimes recommends that moist sugar should be used, probably because she thinks lump sugar liable to adulteration, and that the real strength cannot be known. We are inclined to think there is not so much adulteration in lump sugar as Mrs. Rundell seems to suppose; but the use of the Saccharometer, recommended by Mr. Roberts, will enable the wine-maker to ascertain the real degree of strength. Generally speaking, it is always better to use lump sugar for domestic wines, although it may appear to be more expensive. It is quite impossible to make wines well from the more delicate fruits with moist sugar. Neither do we approve of the system of Mrs. Rundell, in putting so large a quantity of water to the fruit as she recommends. If domestic wines are not made well, it is better not to make them at all.

(*Mrs. Rundell's Mode.*) To each gallon of the juice of the currants, add two of water, and three pounds and a half of moist sugar, when it has been in the cask a fortnight, put a bottle of brandy to every four gallons of wine, and when it has quite done hissing, bung it down.

Obs.—The quantity of brandy ordered by Mrs. Rundell is much greater than it need be, if more sugar and less water were used. In our opinion this receipt would be very much improved by putting only one gallon of water to each gallon of juice, and four pounds and a half of lump sugar. In this case, two bottles of brandy to sixteen gallons of the wine would be sufficient, and the wine would not cost much more than according to her receipt.

Currant and Raspberry Wine. Put five quarts of currants and a pint of raspberries to two gallons of water; let them soak a night, then squeeze and break them well. Next day rub them well in a fine wire sieve, till all the juice is obtained; then to every gallon put four pounds of very good Lisbon sugar, but not white, which is often adulterated tun it immediately, and lay the bung lightly on. Do not use anything to work it. In two or three days, put a bottle of brandy to every four gallons, bung it close, but leave the peg out at top for a few days. Keep it three years, and it will be very fine agreeable wine; four years would make it much better.—*Mrs. Rundell.*

Raspberry Wine. To every quart of well picked raspberries put a quart of water; bruise and let them stand two days; strain off the liquor, and to every gallon put three pounds of lump sugar; when dissolved, put the liquor in a barrel, and when fine, which will be in almost two months, bottle it, and to each bottle put a spoonful of brandy or a glass of wine.—*Ibid.*

[Mrs. Rundell cannot be serious when she talks of a spoonful of brandy. We recommend that if any be put, the quantity should be a wine-glassful.]

Black Currant Wine. To every three quarts of juice, put the same quantity of water unboiled; and to every three quarts of the liquor, add three pounds of very fine moist sugar. Put it into a cask, reserving a little for filling up. Put the cask in a warm dry room, and the liquor will ferment of itself. Skim off the refuse when the fermentation is over, and fill up with the reserved liquor. When it has ceased working pour three quarts of brandy to forty quarts of wine. Bung it close for nine months, then bottle it. It will be fit to drink in twelve months.—*Mrs. Rundell.*

Black Currant Wine to Imitate Constantia.—When this wine is properly made, it may very well be passed off for Constantia, and in fact it has been so.

Two measures of fruit and one of water are used; the fruit is lightly squeezed with the hand and put into a tub; the quantity of water intended to be used is then poured on it. The fruit and water are put into a copper, and boiled for ten minutes, then drawn off and strained. The berries must be again pressed, and two additional gallons of

water poured on the husks, to make up for the loss occasioned by boiling, and in order to extract the remaining good. This is also strained and added to the former quantity.

When cooled down to the temperature of ninety, the whole is measured, and a portion taken for examination by the saccharometer. Lump sugar is then added to bring up the gravity to 120 or 125. Pulverised or ground argol is then introduced, as already described, in the proportion of one pound of it to twenty gallons of the *must*. A ferment is generally wanted in all liquors that are boiled. To carry on a perfect fermentation, therefore, an English pint of good fresh brewers' yeast is broken in with the argol, and added to the compound when its temperature is eighty-five. All excitement is used to assist fermentation, to attenuate the *must* to as near fifty as possible, which is the final gravity, instead of thirty-five as in other wines. The longer this wine is kept in the cask before bottling the better.—*Mr. Roberts.*

White Currant Wine. (*Mr. Roberts's Mode.*) Mr. Roberts says:—I would advise the reader to boil the fruit employed in making this wine, as well as that which is to be imitation of Constantia. Take as many currants as you may conceive to be necessary, remembering that the fruit rarely produces one half of juice. To make a fifteen gallon and a two gallon cask, twenty gallons of fruit are necessary.

The fruit is to be picked from its stalks, lightly bruised, and two gallons of water poured on it. The fruit and water should then be put into a copper and boiled ten minutes, the liquor run off, the fruit squeezed, two gallons of water put upon the husks to extract the remaining good, and this water strained from the husks and added to the former liquor. Twenty days, more or less, previous to this, there have been steeped fifty-six pounds of Malaga raisins in ten gallons of water, the water being allowed to remain upon them, until, by the saccharometer, it is found that the gravity begins to decrease. It should be so contrived that the boiling of the currant may take place at this period, in order that the extract from the raisins may be immediately added to the juice of the currants. Two gallons of water are also poured upon the raisin husks to extract the remaining good. The whole liquor is now measured, weighed, and noted, and the deficiency in quantity made up with the water from the raisin husks, so that the whole may measure seventeen gallons, and the deficiency of gravity made up with loaf sugar to the standard 120. One pound of argol is thoroughly dissolved in a portion of the *must* and broken into the liquor. This *must* requires no other ferment than the extract from the raisins and the argol, both of which contain a considerable portion of this necessary ingredient. The farther treatment of this wine is precisely similar to that made from black currants; and if it can possibly be attenuated, by keeping it in a warm room, to thirty-five instead of fifty, it will prove a wine of a delicious flavour, no one being able to distinguish it from White Constantia.

Currant Wine.—The following is Rozier's receipt for making Currant Wine:—

"Take," says he, "any quantity of currants that you please; but the greater the quantity, the wine will be the more perfect. Collect them when they are perfectly ripe, after the dew and moisture are dissipated, and the heat of the day has become strong. Expose the berries in the sun for some hours at least, and then separate them from their stalks, putting them into a tun, or into a cask, of which one end has been taken out, to serve for that purpose. They are then to be bruised as well as possible by wooden pestles.

"If the juice appears to be viscous, or too thick, add a few pints of water, but moderately, and only give to it fluidity; because without fluidity there would be no tumultuary fermentation, which is absolutely necessary for the purpose of separating the constituent principles of the fluids which we wish to put in fermentation, and to assist them, by the division of their parts, in the formation of that ardent spirit which is the soul of all wines.

"If, on the contrary, the juice is too fluid, and does not contain a sufficiency of the saccharine principle, add a few pounds of sugar, stirring and agitating the whole until the additional *sweet* shall be perfectly incorporated.

"Fill your tun (or open cask) to within three or four inches of the top, and put it in a place of a medium temperature, (sixty to seventy degrees of heat), a situation to which you will be guided by the heat of the weather. If the place were too warm, the fermenta-

tion would be too tumultuous and rapid, and the wine would become acid. Cover the tun slightly with a piece of cloth, over which place its wooden head.

"At the end of a few hours, a whistling noise will be heard, which announces that the tumultuary fermentation is begun. Then the juice begins to occupy a greater space, and rises to the top. Lift up your cover from time to time, and whenever you perceive that the vinous mass begins to sink, draw off your wine into smaller casks, which you must put immediately into a cellar, to guard them from the too great heat of the weather.

"Leave the casks unbunged for a few days; and in proportion as they throw out their yeast, fill them up carefully with a portion of the same wine, which you must have in reserve for that purpose.

"When the tumultuary fermentation in the casks begins to diminish, stop them slightly with their bungs, but take care always to fill them up once at least every day. When the fermentation is no longer perceived, bung them close, without any vent.

"This wine should be suffered to remain two months on its *lees*, after which it may be racked; and it will be found to be a good vinous liquor, *slightly acidulous*, but not approaching in the least degree to what we would term *sour:* it will be true *Currant Wine*, and will have preserved all its perfume."

Wine from Mixed Fruits. Take black, red, and white currants, ripe cherries (blackhearts are the best,) and raspberries, of each an equal, or nearly an equal quantity; if the black currants be the most abundant, so much the better. To four pounds of the mixed fruit, well bruised, put one wine gallon of clear soft water; steep three days and nights in open vessels, frequently stirring up the mass, then strain through a hair sieve. The remaining pulp press to dryness. Put both liquors together, and to each gallon of the whole put three pounds of good, rich, moist sugar, of a bright yellow appearance. Let the whole stand again three days and nights, frequently stirring up as before, after skimming off the top; then turn it into casks, and let it remain, full and purging at the bunghole, about two weeks. Lastly, to every three gallons put one quart of good brandy, and bung close. If it does not soon drop fine, a steeping of isinglass may be introduced, and stirred into the liquid, in the proportion of about half an ounce to nine gallons. Gooseberries, especially the largest, rich flavoured, may be used in the mixture to great advantage; but it has been found the best way to prepare them separately, by more powerful bruising or pounding, so as to form the proper consistence in pulp, by putting six quarts of fruit to one gallon of water, pouring on the water at twice—the smaller quantity at night, and the larger the next morning. This process, finished as aforesaid, will make excellent wine; but this fluid, added to the former mixture, will sometimes improve the compound.

Elderberry Wine. Elderberries can be made to produce excellent wine, allowing to a ten-gallon cask forty pounds of fruit, forty pounds of sugar, and a quarter of a pound of tartar. When elderberry wine is desired for a warm cordial, it is made in the following manner:—Twenty-five pounds of fruit are to be boiled for an hour in eleven gallons of water, and along with it, tied in a piece of linen, one ounce of allspice, and two of ginger; forty pounds of sugar being put into a tub, the boiling liquor is strained over it, pressing the fruit quite dry; a quarter of a pound of crude tartar, or cream of tartar, is then added to the liquid; when it has stood two days in the tub, it may be removed to the cask, treated as for sweet wine, in the usual manner, and bottled in March following. When to be drunk, a portion of it is heated with some sugar, two or three cloves, and a little nutmeg.—*Mrs. Dalgairn.*

Elder Wine. Put four quarts of water upon eight quarts of berries, and let it stand a day or two; then boil it for about an hour, strain it, and put three pounds of moist sugar to every gallon of wine; then add an ounce of cloves and two ounces of ginger, boil it again, and work it with a toast dipped in yeast.—*Mrs. Rundell.*

Elder Wine. (*Mr. Roberts' mode.*) Different counties in England have different methods of making this wine. As in some it is in higher favour than in others, so they bestow more pains, and make consequently a superior wine. They employ the same measure of water as of picked berries. Before being mixed with the water the elderberries are slightly pressed, and allowed to remain in the juice; the following day they are put into a copper, and boiled for ten or fifteen minutes; they are then pressed and

strained through a sieve, the water to be employed being put upon the refuse, in order to wash out the remaining good; they are again pressed and strained, and the liquor added to the pure juice; the whole is then measured into the copper, (after examining it with the saccharometer,) with as much sugar as will bring up the gravity to one hundred and twenty. Each gallon will require from three pounds to three pounds and a half of sugar, three ounces of the best powdered ginger, and three ounces of allspice; the whole is boiled for thirty minutes, and run off from the copper, strained and measured into a tub for fermentation. This compound is cooled down to eighty-five degrees, eight ounces of crude tartar are dissolved in a portion of it as in other *musts;* when dissolved, it is added to the compound, with about half a pint of strong stiff brewers' yeast perfectly fresh, a sample taken, examined by the saccharometer, and the gravity noted; the whole again measured, and the deficiency made up. At this period the gravity is either increased or diminished, as they find by the saccharometer it requires. If to be increased, sugar is added; if to be diminished, warm water, at the temperature of one hundred degrees, is added: either way, it is well agitated and mixed up. The next day, the head of the compound, which fermentation has caused to rise on the surface, is broken in with the liquor, and the whole well agitated; a sample is again taken, examined, and recorded. The whole is allowed to remain in the fermenting tub until it attenuates one-fourth of its original gravity, which reduces it to ninety. In consequence of the fruit being boiled, the natural leaven or yeast is greatly impaired. This wine, and others that have their fruit boiled, require more excitement by artificial means than such as are made from fruit unboiled. When at ninety, it is casked, and every means used to cause it to attenuate to fifty or sixty; the cask is filled up every three hours, for the first two days, after which the sediment is incorporated with the mass by agitating it with a stick. It is allowed to remain unbunged until all visible signs of fermentation have disappeared, when it is racked, the cask washed with boiling water, and the wine returned into it when warm, the deficiency made up from the fine of the small cask, and the lees from the large cask put into the small one. This wine, as well as all home-made wines, improves in the cask; it is therefore advisable not to bottle it for at least twelve months. With regard to the quantity of spice, it is increased or diminished as the taste of the operator dictates.

White Elder Wine, in imitation of Frontiniac. In six gallons of water boil eighteen pounds of lump sugar and the whites of two eggs well beaten, skim it, and add a gallon of elder flowers of the white elderberry tree; when nearly cold, add six spoonfuls of lemon juice and four or five of yeast, to be well mixed in; stir it every day until it is casked, and when casking it put in eight pounds of the best raisins. Bottle in six months. This makes a beautiful wine, and is called English frontiniac.

Elder Flower Wine. (*Mrs. Rundell.*) Take twelve pounds of loaf sugar, and six pounds of the best raisins, cut small, and boil them in six gallons of water for an hour; then take half a peck of elder flowers, when ready to shake, put them into the liquor when it is nearly cold, with four table-spoonfuls of fresh yeast and six of lemon juice. Let it work for two days in the tub, then strain it, put it into the barrel, bung it up closely for two months, and then bottle it.

To preserve Elderberry Juice for future use. When you prepare elderberry juice, let your berries be fully ripe, and all the stalks (which are very many) be clean picked from them; then, if you have a press for drawing all the juice from them, have ready four hair-cloths, somewhat broader than your press, and lay one layer above another, having a hair-cloth betwixt every layer. The fruit must be laid very thin, and pressed first a little, and then more, till your press be drawn as close as you can, then take out the berries, and press all you have in the like manner; then take your pressed berries, break out all the lumps, and put them into an open-headed vessel, and put upon them as much liquor as will just cover them; let them infuse for seven or eight days; then press out the liquor, and either add it to the rest, or keep it separately for present use, putting your best juice into a cask proper for it to be kept in; put one gallon of malt spirits, not rectified, to every twenty gallons of elderberry juice, which will effectually preserve it from becoming sour for two or three years.

Birch Wine. To every gallon of juice from the birch tree, three pounds of sugar, one pound of raisins, half an ounce of crude tartar, and one ounce of almonds, are allowed; the juice, sugar, and raisins

are to be boiled twenty minutes, and then put into a tub, together with the tartar, and when it has fermented some days, it is to be strained and put into the cask, and also the almonds, which must be tied in a muslin bag. The fermentation having ceased, the almonds are to be withdrawn, and the cask bunged up, to stand about five months, when it may be fined and bottled.

Another: The following mode of making birch wine is given by Mr. Roberts: —This wine can only be made at one season of the year, when the sap of the birch is rising, which happens before the leaves make their appearance. Generally speaking, this period commences in the beginning of March. The proper time can be ascertained by boring a hole in a birch tree, and putting faucets into it: if the sap is thick and coloured, the proper season has arrived; but if it is thin and clear, it is rather too soon. This wine should not be made by those who do not live in a country where birch trees are plentiful, as it is highly advisable to procure as much sap in two days as is necessary for making the wine. The sap collected the first day is immediately bottled and well corked, as it deteriorates much by exposure to the air. The mode of procuring sap is by boring holes in the body of the tree, and putting in quills or pieces of elder, with the pith taken out of them, and placing vessels to receive the juice from the pieces of elder; if the tree is large, it may be bored in several places, and at different times in the same day. By this method several gallons of juice may be got from a few trees. When there is a sufficient quantity of juice collected in the receiving vessels the second day, (if the first day's collection is not enough,) it is immediately put into the copper along with the first day's collection, and boiled as long as any scum rises; during boiling, this scum is repeatedly taken off. When perfectly free of scum, it is run into the fermenting tub; then, when cooled down to ninety degrees, measured, a portion taken out and weighed by the saccharometer, and the gravity brought up to one hundred and twenty-five. Two quarts of the mixture are taken out and dissolved in two pounds of argol for every twenty gallons, and an English pint of good brewers' yeast added; when cooled to seventy-five degrees, this mixture of sap, argol, and yeast, is added to the whole *must*. Should the operator find, after measuring, that his proposed quantity is deficient, he must again collect as much juice as is necessary, remembering to make allowance for the loss occasioned by evaporation in the boiling, which will be at least twenty-five per cent. The second quantity is treated in the same manner as the first; and when cooled down to ninety degrees, added to it in the fermenting tub. In fact, it is better to boil each day's collection, if it can be possibly accomplished, than to keep the first day's sap. The fermenting tub should be kept in a warm room. The after management is as for ginger wine.

"Having," says Mr. Roberts, "recommended the use of argol, or crude tartar, in almost all the wines I have noticed, I now proceed to give the reader a short account of how it is produced, whence it is taken, and its analysis, assured that this will prevent any prejudice against it being entertained.

"During the slow fermentation that goes on in wine, a thick crust is deposited around the inside of the cask, varying in colour according to the nature of the wine, but being generally of a brownish or reddish hue, familiarly known by the name of argol: this crust is scraped from the inside of the cask after the wine is taken out. On examination it is found to be composed of tartaric acid, in combination with potassa, in the condition of a bi-tartrate, and with lime as a tartrate, along with extractive, colouring, and resinous matter—the proportion of these latter ingredients, in relation to the salt of potassa and of lime, depending on the nature of the wine from which it is deposited. The argol, or tartar, communicates to the *must* an agreeable acid, which holds in combination with it much of the natural leaven so necessary to fermentation."

Ginger Wine. To eight gallons of water, twelve pounds of sugar, three pounds of bitter oranges, five pounds of lemons, and thirteen ounces of ginger, are allowed; the sugar and the ginger, bruised, are to be boiled with the water half an hour, and allowed to stand till next day; the fruit is to be pared very thin, and the strained juice and half the peel put into a cask, with two gallons and a half of good whisky, or other spirit; when it has stood a night, the clear part of the boiled liquid is to be poured over it, the sediment being kept back; it does not ferment, and therefore it is not necessary that the cask should be full; it is immediately bunged up, and in a fortnight it must be fined, and in another fortnight it may be bottled. To improve

the colour, a table-spoonful of burnt sugar may be added when the cask is filled up, first diluting it with a portion of the liquor.

Another:—Peel three large lemons very thin, and put them with two ounces of the best white ginger, bruised; mix two pounds of loaf sugar with a gallon of water, on the fire, and boil until the scum rises; take this clearly off; then add the lemon-peel and ginger, let them boil half an hour, then put the whole into a tub, allow it to cool, and when rather more than milk-warm, add the juice of the lemons, and half a pound of raisins well chopped; then put the liquor into a cask, and stir in about three table-spoonfuls of good yeast; fill up the cask once a day for six days; then put in about the fifth part of a bottle of brandy to each gallon, or half an ounce of isinglass as the proportion to five gallons; reserve a pint of wine to fill up with while working.—*Mrs. Rundell.*

Another: Boil twenty-four ounces of ginger for an hour in sufficient water to cover it, take thirty-six good lemons, pare them very thin, and pour the boiling ginger upon the peel; let it stand a day or two; then squeeze the lemons, strain the juice, and put it into the cask, adding forty pounds of fine raw sugar, and fourteen pounds of Malaga raisins chopped; slice the ginger, and put it into the cask with the liquor it was boiled in; fill up the cask with cold spring water, stir it frequently, and in one month put in two bottles of brandy, and stop it down. These proportions are for twenty gallons of wine.

Ginger Wine from Malt. (*Mr. Roberts' process.* I have two ways (says Mr. Roberts) of making this wine: one from malt, sugar, ginger, and tartar; the other from sugar, ginger, and tartar, without malt. As I consider the former the better, I shall treat of it fully. The latter can be made in the same way, by bringing up the gravity with sugar alone, instead of with sugar and malt.

I commence this process exactly in the same way as in brewing ale; and for making a fifteen-gallon cask with a two-gallon cask, as in other wines, there will be required two bushels of the very best pale malt, about twenty pounds of sugar, and if the wine is desired warm of the ginger, two pounds of the best Jamaica ginger, thoroughly bruised, must be employed; if, however, we do not wish to make the wine very aromatic, one pound and a half will be sufficient. To run off eighteen gallons of malt extract, or wort, there will be required twenty-four gallons of water, as each bushel of malt will absorb rather more than three gallons of water. When I speak of gallons in any of the wines and other liquors, I invariably mean imperial measure. The mash-tub, as I shall now call it, because it is fitted up as such, is now placed as if for brewing, elevated so high as to allow the extract to run off from the malt into a shallow vessel, sufficient to hold from twenty-six to thirty gallons. The water must be boiling, and put into the mash tub, to the extent of twenty gallons. Four gallons of cold water, more or less, will be required to reduce the water from 212 degrees of heat to 182 by the thermometer, at which degree the malt is put into the mash-tub containing the heated liquor, and immediately thoroughly agitated until every lump is broken, and the whole mashed into an equal consistency. This operation of mashing occupies at least ten minutes. When this is done, it is covered up, and allowed to remain undisturbed for two hours. The copper is in the meantime partly refilled with water to be boiled, and then reduced, by the addition of cold water, to 180 degrees; or if the weather is cold, to 185 degrees. This water is to replace the malt extract or wort, which is drawn off from the malt at the expiration of two hours. This malt extract or wort is then drawn off from the mash-tub into the shallow vessel under it, great care being taken not to allow the wort to run in too great a volume at first. This is easily prevented by the cock being only a quarter turned. Were it turned to the full extent, the pressure would be so great as to bring with it a portion of the grains and sediment, and render the whole extract thick, whereas it ought to be beautifully transparent. Even when the cock is only one quarter turned, it is absolutely necessary to receive the first running in a pail, until the liquor is seen to be perfectly clear, when the pail is removed. The contents of the pail may be returned immediately into the mash-tub; the volume of the wort can now be increased. When three-fourths of the wort is drawn off from the mash, it is sufficient for the present, and the cock is turned. Ten gallons of the second boiling, now reduced in heat to 190 degrees, are spread upon the mash by means of a hand-bowl, in order that the surface may be completely wetted with this water. This is allowed to remain covered up for ten minutes.

The cock or tap is turned in a similar way as before, and nine or ten gallons of

the wort run into the former, in the shallow vessel. The tap is again turned, as all the extract necessary for the wine has been drawn off, which should not be less than twenty-two gallons.

The water in the copper has again got heated, and is reduced by cold water to 190 degrees, twenty gallons of which are thrown on the grains as formerly, and thoroughly mashed, and covered closely up. This second mashing will make fifteen gallons of good table ale, such as grocers sell at 2*s*. or 2*s*. 6*d*. per dozen. How this is to be obtained, I shall afterwards notice, and proceed in the meantime with the wine.

The copper being empty, the malt extract or wort is put into it to boil—the quantity having been measured, and the gravity ascertained and noted, for the purpose of proportioning the sugar. The standard for this *must* being likewise 120, the necessary quantity of sugar is put into the copper with the wort. Before boiling, and after it has boiled, it is skimmed. It is then allowed to boil for thirty minutes, the ginger having been added immediately after the wort has been skimmed. This compound, in consequence of boiling thirty minutes, loses in bulk from fourteen to fifteen per cent. (the less or greater per cent. as it boils slowly or quickly,) but increases proportionably in gravity. The whole is then drawn from the copper, and strained through a sieve into a vessel to ferment. In order to make up the deficiency in bulk occasioned by boiling, a deficiency which will be farther increased by evaporation, the refuse of strained ginger &c. is mixed with two or three gallons of cold water, as may appear sufficient, and put into a large pot to be boiled for one hour, which is again strained, and added to that in the fermenting vessel.

One pound of argol is put into two quarts of the wort, and treated in the manner already described. This acid, however, is almost insoluble; at least, after the greatest pains have been taken, a considerable portion will still remain undissolved. When it is reduced in heat to eighty-five degrees, nearly an English pint of good brewers' yeast is added. It may be useful to some to be informed, that half a pint of good stiff yeast from some brewers is equal to one pint from others. Therefore, the operator must be guided by the consistency. If it is thin, rather more will be required; if thick, less. At this period the quantity is measured, the gravity taken and noted, increased with sugar, or decreased with warm water at the temperature of about ninety degrees, as occasion may require. The mixture of *must*, argol, and yeast, is now broken into the whole mass, and well agitated at the temperature of eighty-five degrees. The fermenting tub is closely covered, and kept in a warm room. The next morning, upon examination, a white head will appear upon the surface of the wort, which is now broken in, and the whole again well mixed. This operation is repeated every morning, until fermentation appears on the decline. The gravity is now taken and noted, and if it is reduced to eighty or ninety, the casks that are to contain the wort are washed out with boiling water, and then filled with the wort while the casks are warm. The casks are to be turned a little off the perpendicular, and dishes placed under them, as before noticed in the case of Gooseberry wine, a portion being kept to fill the casks up from time to time. This operation of filling up is repeated several times a-day, for a few days. At the end of this time, a certain portion of the yeast will have fallen to the bottom in the shape of lees, and the fermentation in consequence will be languid. The lees are therefore again mixed with the wine (as it may now be called), by using a stick for this purpose. This is done twice a-week, for three weeks; at the end of which time a sample is taken out, weighed by the saccharometer, and noted. All possible care is now taken, and means are used to encourage fermentation, by rousing it with a stick when it appears languid, and afterwards filling up the casks.

I have found that ginger wine thus made will gradually ferment for nine or ten weeks, and by this time will have attenuated 70 to 80 of the original and standard gravity 120. The best time for making this wine is the month of March or April, when the warmth of the weather will assist to ensure a consistent fermentation. The bungs are not placed tightly in, until all appearance of fermentation has entirely ceased; and this will likely not be the case for three or four months. In the following spring this wine requires to be racked, and treated in exactly the same manner as the wines already noticed, fined, and bunged tightly down. It may be bottled in four or five weeks. I have found it beneficial, at the time of racking, to return the fine wine into three five-gallon casks, instead of into the fifteen-

gallon cask, and afterwards bottling off one as occasion may require. I have some wine made in this manner nearly seven years old, and no one could tell it from Malaga wine, did the flavour of the ginger not betray it. It is a rich, full, delicious wine; and this flavour of the ginger, which prevents its being passed off for Malaga, were I so inclined, is to the generality of people an improvement, while the ginger itself adds to the wholesomeness of the wine.

It is generally known that all wines made from infusions of sugar, or malt, or both, are less susceptible of fermentation than those made from the saccharine of raisins, or other fruits, and always require an auxiliary. Good brewers' yeast is generally employed. It certainly cannot be so good for a ferment as the yeast or lees from a good wine; and I think, besides, it has got a worse name than it deserves, providing it is quite fresh, and derived from good table ale. There can be no doubt that the quality of the ferment is influenced by that of the liquor from which it is taken; hence the necessity of procuring it from a good material. There can be no objection in employing it in this wine as a ferment, when the extract of malt forms the body of the wine.

I now return to the second mashing, which is to be made into table ale. The whole is run off from the mash-tub, in the same manner as the former for the wine, into the shallow vessel under it, and put into the copper to be boiled, with 1lb. of the very best East Kent hops; but if the beer is desired to be bitter, one and half pound will not be too much, especially if to be kept any time, and made in the spring of the year. The wort and hops are boiled one hour, and then strained through a sieve into a tub for fermentation. When it comes down to eighty degrees of heat, an English pint of good brewers' yeast is well mixed up with it. It is allowed to remain in the fermenting tub twenty-four hours, and then casked, a portion kept out to fill it up every two hours for the first day, and two or three times a-day afterwards, until fermentation appears to have subsided, which will not be the case for four or five days; when, after making a spile-hole, and keeping out the spile for a few days, it may be bunged tightly down, and in a fortnight or three weeks bottled.

The addition of half a pound of sugar to each gallon of wort will improve the beer, but this is entirely optional.

Mead Wine. Two casks, one of fifteen gallons, and another of two, having been prepared, and two and half pounds of honey being requisite for every gallon of water, forty-three pounds of honey are therefore necessary for making this quantity. All the impurities of the honey are extracted by mixing with it at first eleven gallons of water; six whites of eggs are mixed with a portion of this water, and the honey is added to the remainder of the water. This compound is then put into the copper, a brisk and clear fire being under it at first, and gradually allowed to decrease from the time the compound rises to the heat of 180 degrees to 190 degrees, as it is not allowed to rise to the boiling point; during the time it is on the fire it is frequently skimmed. When no more scum rises, it is run off into a fermenting tub, and when cooled down to ninety degrees it is measured, nine additional gallons of water put into the copper, to wash out what honey may remain, and when heated to 100 degrees, added to the former in the tub. One and three quarter pounds to two and a half pounds of argol are dissolved in half a gallon of the *must* at 190 degrees, the whole is measured, and the gravity ascertained, in order to know how much sugar is necessary to bring it up to 120, which is the standard for this wine. An English pint of stiff brewers' yeast is broken into the half-gallon of *must* and crude tartar, at eighty-five degrees, and when it has increased its bulk one-half, mixed well into the whole *must* at the temperature of eighty-five degrees. The greatest care is necessary, in procuring the yeast, to ensure its being very fresh, sweet, and good, as the least taint in the ferment communicates a taint to the wine. The whole is covered up; the next morning, after thorough agitation, a portion of it is taken out and weighed; and the after management is the same as in Ginger wine, except that at the first racking one-sixteenth of grain spirits is added. Should the operator wish the colour of this wine to be pink, his object will be attained by procuring ten pounds of beet-root, which must be scraped, cut very thin, and put into the fermenting-tub at the time the hot compound is run off from the copper, where it may remain until casking, when the *must* will be strained from it.

Should he wish the colour to be less deep, he may strain it just before adding the yeast. This probably may be the

better way. The bottling of this wine, at the very earliest, should not take place within two years.

Parsnip Wine. This wine is accounted by some as the best of our domestic wines, not made with the juice of fruit. It is generally made with five pounds of parsnips and three pounds of sugar to each gallon of water. The roots must be well washed, and then scraped, and washed a second time. They are, after this, cut into slices three-fourths of an inch thick, put into the copper with the necessary quantity of water, boiled one hour and a half, and the liquor strained as clear as possible, without bruising the parsnips. After straining, a portion should be taken out, and two pounds of argol added, if the quantity made is to the extent of from seventeen to twenty gallons. The argol is pounded, thoroughly dissolved in hot *must*, and mixed with the whole liquor. An English pint of good brewers' yeast is well mixed up with the *must*, when the heat is eighty degrees to eighty-five, but in warm, close weather, it need not exceed eighty degrees. It is then covered up, and kept in a warm room. The following morning the head, which is caused by fermentation, is broken in, a portion of the liquor taken out, weighed, and noted. This operation is repeated every morning until the gravity is reduced to ninety, or, if possible, to eighty; when at this gravity, two quarts are taken out, warmed to the degree of ninety, one-fourth of a pint of good brewers' yeast is mixed with it, and allowed to remain until it has expanded. The frothy head of the *must* is then taken off, and these two quarts of *must* and yeast broken into the whole skimmed mass, and what has been taken off preserved in a bottle, to assist the wine afterwards should fermentation become languid. The casks are then washed out with boiling water, and the *must* put in while they are warm. Great care is necessary to encourage fermentation in making this wine. The casks are filled up very frequently for the first three days, and afterwards morning and evening. Before the filling up, the wine is roused with a stick, in order to incorporate the lees with it, should the fermentation appear languid, which is very frequently the case: if this fail in exciting or encouraging fermentation, a small portion of what is kept for filling up should be heated to the degree of 100, a half English pint of the skimmings mixed with it, a portion taken out of the cask, and this put in instead, mixing it well up. The after process is conducted in the same manner as in Ginger wine.

Another: To five gallons of water eight pounds of parsnips and fifteen pounds of sugar are allowed; the parsnips being well cleaned, and cut into slices, are to be boiled in a whole or in a portion of the water; when quite soft, they are to be taken out and mashed, then returned to the water they were boiled in, and being well stirred, are put through a hair sieve; the sugar is then to be added to the strained liquor, and the quantity made up with boiled water; when nearly cold, it is to be put into the cask with two spoonfuls of yeast, and three ounces of crude tartar, and stirred every day till the fermentation subsides, which may be in ten days or a fortnight; it is then bunged up, and may be racked and fined in three or six months, and bottled in six months more.

Red Parsnip Wine. This wine is made by the same formula as the former, except that the gravity is brought up with loaf sugar, instead of raw sugar; and ten pounds of beet-roots are added, if a high colour is desirable, or seven pounds, if not. The beet-roots are scraped, washed, and sliced like the parsnips; not boiled, however, as they are, as this would destroy the brilliancy of the colour.

Balm Wine. This wine is made by pouring boiling water on the leaves of balm, after they have been separated from their stalks. One bushel of leaves to eight gallons of water is employed. When the water has been poured on them, they are well mixed up, and allowed to remain for twenty-four hours; they are then strained, and sugar is added in the same proportion as for other home-made wines. If it is properly made, it is a remarkably soft, pleasant wine, and improves greatly by keeping.

Cowslip Wine. To each gallon of water, three pounds of the best Malaga raisins, and three pounds of the best lump sugar are used. The raisins are stripped from the stalks, which are washed in three gallons of water. This liquor is then added to that on the raisins, which are allowed to remain steeping in the water until fermentation has extracted their sweet; at this period the raisins are pressed, and the liquor strained through a sieve into the fermenting tub: the remaining portion of water is put upon the raisins. To every gallon of raisin extract

one gallon of picked cowslip flowers is added, put into the fermenting tub, and allowed to remain in the *must* until it is casked, when it is strained. The after-management is the same as in Raisin wine.

Another: To every gallon of water weigh three pounds of lump sugar, boil the quantity half an hour, taking off the scum as it rises; when cool enough, put to it a crust of toasted bread dipped in thick yeast; let the liquor ferment in a tub thirty-six hours; then into the cask put, for every gallon, the peel of two, and rind of one lemon, and both of one Seville orange, and one gallon of cowslip pips; then pour on them the liquor. It must be carefully stirred every day, for a week; then to every five gallons, put in a bottle of brandy. Let the cask be close stopped, and stand only six weeks before you bottle off. Observe to use the best corks.

Damson and Raisin Wine. (*Mr. Roberts' process.*) To make a fifteen and a two-gallon cask of this wine, nine gallons of damsons and sixty pounds of raisins are required, the raisins having been previously steeped in twelve gallons of water, (as if for Raisin wine,) when attenuation has commenced, are pressed, and the quantity of extract ascertained.

The nine gallons of damsons are then squeezed in small quantities, say about a gallon at a time, in order that none may remain whole; then half a gallon of water is put upon each gallon of bruised fruit. The whole now being bruised, and the four gallons and a half of water added and mixed, the raisin extract is put with the pressed damsons and water, and allowed to remain for twenty-four hours; during which time they must be well stirred twice or thrice; they are then re-squeezed, the liquor strained and measured, and the deficiency in quantity made up, by putting as much water in this fruit as is found necessary: the quantity should not be under nineteen gallons. The gravity is taken after this, and the deficiency made up to the standard of 120 with sugar. One pound of crude tartar is to be put into this *must* in a way similar to that already described, (by dissolving it in heated *must*,) and cooled to 100 degrees.

This wine ferments well, and the attenuation is not so difficult as in other domestic wines, in consequence of both the damsons and raisins being possessed of a sufficient quantity of natural leaven or yeast. The *must* is allowed to remain in the fermenting tub until the gravity has decreased to seventy; if possible, to one half of the standard 120, which is sixty. It is then casked, and conducted the same as raisin wine. Great care is necessary not to break the stones of the damsons, in case of the kernels communicating their flavour to the wine. If we wish the wine to be dark in colour, the raisin extract is allowed to stand upon the damsons forty-eight hours, instead of twenty-four. This wine does not resemble in character any other domestic wines.

Strawberry Wine. The same weight of water as juice is required for making this wine. The fruit, that it may be thoroughly bruised, should be squeezed in small portions, after being deprived of its stalks; the water is then added, well mixed with the fruit, and allowed to stand on it forty-eight hours; the mixture must then be pressed through a sieve into the fermenting tub, the juice and water measured, and the deficiency of quantity made up, by putting as much water upon the refuse of fruit as is necessary. The fruit must again be squeezed, and the juice strained into the former quantity.

If the operator wishes the wine to be high in colour, three pounds of beet-root should be washed, scraped, sliced, and put into the fermenting tub, and allowed to remain there until the casking. Two days before casking, sixteen pounds weight or more of strawberries, must be tied up in a piece of thin muslin, and put in the fermenting tub, in order to impart to the wine a flavour of the fruit. As the process of fermentation in a great measure dissipates this flavour, the more fruit employed in this way, the higher will be the aroma of the wine. Should more fruit than sixteen pounds be used, it would be advisable to tie it up in two parcels.

Immediately before casking, the fruit is taken from the muslin and the juice, and squeezed through the sieve into the *must*. The fermentation will be complete without artificial means, provided it is carried on in a warm room. The after treatment is the same as in Red Currant wine.

Mulberry Wine. To every gallon of berries add the same quantity of water. Only a small portion of the berries should be bruised at a time, that they may be done more effectually. The water is then added, and allowed to remain on them for forty-eight hours, stirring them well night and morning during that time, when they are to be squeezed and strained, and the

juice measured into the fermenting tub. Add to each quart of juice one pound and a quarter of sugar, and proceed as with other wines.

Apricot Wine. This wine is made by bruising the fruit when perfectly ripe, and pouring boiling water on it. Twenty-four apricots to each gallon of water, will make a tolerable wine; but it would be greatly improved if ten jargonelle pears were sliced and added to each gallon. The whole is allowed to remain for twenty-four hours, stirring it frequently in the interim; afterwards, it must be pressed, and the liquor strained into a tub for fermentation. Take out two quarts for examination, after it has been measured. Dissolve a pound of tartar in it, and then add and mix it thoroughly with the strained juice. The deficiency of gravity to the extent of 120 to be made up with loaf-sugar. This wine will need a ferment; a quarter of a pint of very fresh brewers' yeast must be added, for the purpose of producing an early fermentation. In the after-management, proceed as for Ginger wine.—*Roberts.*

Orange Wine. The following is the formula for making a fifteen-gallon cask and a two-gallon cask:—Forty pounds of raisins are stalked, and twelve gallons of water put on them; the stalks are to be washed with two gallons of water additional, which is to be strained into the tub containing the raisins and water; the raisins are to undergo the steeping process, and when fermentation has extracted all that is valuable for wine-making, they are pressed, the liquor strained into a sufficiently large tub to hold double the quantity, the refuse washed with a gallon of water, again pressed, and this liquor strained on to the former quantity. One-half chest of oranges is generally employed for this quantity. Each orange is cut in two, and the juice squeezed into a vessel; the orange juice is then strained into the raisin extract, the whole measured, a portion taken out, and one pound of the white argol—that is, tartar from white wine, thoroughly dissolved in two quarts of the extract, and then well mixed into the fermenting mass; the quantity of sugar used must be three pounds to the gallon, which is to be added to the strained liquor. Should the quantity of liquor, or *must*, be found too small after measuring, the deficiency is made up by throwing over the orange skins the required quantity of water, heated to one hundred and seventy degrees; when cooled down to ninety, they are pressed, and the liquor strained into the *must*. To ensure an early and consistent fermentation, one-half of a pint of good brewers' yeast is added, and the whole thoroughly mixed, the fermenting vessel well covered up, and placed in a warm room. It is necessary to keep up an artificial warmth, because this wine is made early in spring, when the weather is cold, and uncongenial to fermentation. The following morning the *must* is well agitated, a portion examined by the saccharometer, and noted. If fermentation appears languid, an additional quarter of a pint of yeast must be used. The after-treatment is the same as in Raisin wine.

Another: For a ten-gallon cask, ninety bitter oranges are to be pared very thin, and the juice squeezed from them, which, with six gallons of water and twenty-eight pounds of sugar, is put into the cask; half the peel may be steeped in two gallons of water for twelve hours, and the water poured into the cask; they are again to be steeped in the remaining quantity of water, with which the cask is to be filled up; it must be stirred every day till the sugar is dissolved, and bunged up when the fermentation ceases. In two months it may be racked and fined, and in three months more bottled. Those who think brandy necessary may add a bottle at the end of the first two months. The wine will be more generally agreeable if the peel be altogether omitted.

Quince Wine. This wine is made when the quinces are fully ripe. When gathered they are thoroughly wiped; or, if the operator chooses to take the trouble of peeling them, this will deprive the liquor of much rank flavour which the skins communicate to it. The quinces are sliced longwise to keep the cores out, and weighed, to ascertain what water is necessary to be employed, as the same weight of water as fruit is used; the water is boiled and poured upon the fruit, which is then bruised in small portions, to ensure its being thoroughly done, and well mixed with the water; add the same quantity of sugar as for Currant wine, and proceed for the after-management as for other wines.

WORMWOOD. A bitter plant, which grows freely in gardens, and may be propagated by cuttings. Wormwood is one of the best bitters which we have as a stomachic, and excites the appetite; it is also said to be an excellent vermifuge, taken as an infusion. On the Continent, a liqueur (see Liqueurs) is made from wormwood, which is taken in water

shortly before dinner; and wormwood wine, made by infusing the fresh leaves in common light white wine, is also taken in the same way, to excite appetite. A tea spoonful of the juice of the leaves, taken in the morning, fasting, is said to give tone to a debilitated stomach. An essential oil is obtained from this plant by distillation, which, dissolved in spirits of wine, has nearly the same medicinal properties as the juice of the green leaves. A salt is also obtained from it, which is used as a worm medicine. The oil is sometimes rubbed over the belly for the same affection.

YEAST. This is an important article in domestic economy. There are several modes of making yeast, where good fresh beer yeast cannot be had; but this, when it can be obtained, is far superior to all others. Twenty-four hours before beer yeast is used, it should be put into a dish, and be well covered with fresh water. The quantity of water is not important, except that it should always be sufficient. At the end of the time specified, pour off the water and use the yeast, which will be found at the bottom. By adding a little salt, and putting the yeast into a bottle well corked, and placing it in a cold situation, it will keep good for several days.

Bran Yeast. Boil a pint of bran and a small handful of good hops in about two quarts of water, for about a quarter of an hour; strain it, and when lukewarm add four table-spoonfuls of beer yeast and three of brown sugar; then put before the fire to ferment, and bottle for use, keeping it in a cold place.

Potato Yeast. Take two pounds of boiled potatoes well bruised, and mix them with two quarts of boiling water; after passing them through a hair sieve, boil the liquid with an ounce of treacle, and two ounces of sugar. When just lukewarm, put three table-spoonfuls of good beer yeast, set it before the fire, and bottle off as above. This yeast has not, however, half the strength of that from beer. Another yeast may be made by adding a pint of good beer yeast to two gallons of water, five pounds of malt, and a quarter of a pound of hops; the hops, malt, and water, are to be boiled over a slow fire for a very long time, until the quantity is reduced to about three-fourths, then the yeast is to be added when milk-warm, and the whole being strained, it is to be bottled.

Considerable economy in the use of yeast may also be effected in the following manner:—Make two pounds of good wheaten flour into a thick paste with cold water, then keep adding water of 180 degrees, and working up until the paste is reduced to the consistency of ordinary yeast. When the mixture has cooled down to 75 degrees, or anything under 85 degrees, stir in two pounds of beer yeast, and let the mixture stand in the same temperature until it ferments; when it is at the height of the ferment it is fit for use. Another mode, is to add a quarter of the weight of the meal of molasses or honey, and to work up the paste into the consistency of pap with boiling water. When the temperature is about 85 degrees, the yeast is to be added, and the vessel is to be kept covered up at a temperature of about 80 degrees. The fermentation ought to take place in about an hour, but if it does not, more yeast must be added to assist it. This artificial yeast should be used as soon as possible, and beyond twelve hours it becomes sour.

Leaven. When yeast cannot be readily obtained, keep a portion of the dough of your last baking in a warm situation, until it has become sour, when it will serve instead of yeast to make the new dough rise. If the leaven has been kept more than four days in summer, or eight in winter, it should be mixed up again with a little warm water and flour, and be left to ferment for a few hours, when it will be fit for use. Bread made from leaven is considered lighter of digestion than that made from yeast, but it communicates, if used in sufficient quantity to render the bread very light, a sour taste to the whole of the baking.

A

DICTIONARY

OF

DOMESTIC MEDICINE.

BY JOHN REITCH, ESQ., M.D

ABSCESS, (Common.) By this is meant the conversion into matter, or pus, of the serum and blood in the adjoining cellular substance, in consequence of previous inflammation, in the inner surface of the skin and its surrounding part, and which inflammation did not pass off by a gradual cessation of all its symptoms, a cavity termed an abscess having formed itself.

Symptoms.—The person is attacked with reiterated shiverings; the inflammatory appearance of the part ceases quickly; a heavy and dull cold sensation is felt in the affected part, instead of the acute pain previously experienced, and the most elevated portion of the tumour appears soft and white, whilst the rest of the part has its redness increased. In most cases, however, the only obvious symptoms are, a quick subsidence of the inflammatory symptoms, repeated rigors, and a sense of weight and coldness in the part, followed by emaciation, nocturnal sweats, and other hectic signs.

Treatment.—When the tumour shews an evident tendency to suppurate, its progress is to be accelerated by the application of warm emollient cataplasms, renewed three or four times a-day. A poultice made of linseed, slightly bruised, and boiled up with milk and water, is the best; but when linseed cannot be obtained, a white bread poultice, with a small addition of oil, is to be used. Before the cataplasm is applied, the affected part should be well fomented with flannels wrung out of a warm infusion of emollient herbs. For this take

Camomile flowers,
Marshmallow leaves, each two ounces;
Poppy heads, bruised, an ounce;
Boiling water, two quarts;

Infuse them for a proper time, then pour off the liquor, and use it for fomentation.

Such tumours as are slow in suppurating, require stimulating poultices, as, for instance, those which are composed of onion, garlic, or galbanum, mixed with the white of an egg, and the common poultice. Warm plasters of galbanum, in this instance, sometimes prove useful, and have besides the advantage of not preventing the patient from attending to the ordinary occupations.

When the tumour is become very soft to the touch, and is near the surface, it is to be opened, either with a lancet, or a trocar, in the part which is most prominent, care being taken to press the matter perfectly out, after which the wound is to be dressed with dry lint, and a pledget, spread with the ceratum resinæ, to be laid over all. To support strength, a full diet, with a moderate allowance of wine, is requisite. If the wound does not heal readily, bark, and other tonics are to be used, till health is restored.

Good pus is of the consistence of cream, and of about the same colour, has no smell, and scarcely any taste. The matter of an abscess is either absorbed or dis-

charged, generally the latter; in either case, if under favourable circumstances, the cavity is gradually filled up by a healing process, which is termed granulation, owing to the new parts appearing in the form of small red grains. When this goes on well, the granulations are of a florid red colour, and the cavity becomes in a regular manner entirely filled up; its edges, when the matter of the abscess has been discharged externally, becoming nearly even with the sound skin.

When the granulating process is too slow, it may be hastened by taking Cinchona bark, at least an ounce a-day, and by supporting the system by a nutritive diet, with a moderate use of wine. The same is to be done, when the pus of the abscess is not of a good and proper consistency.

Abscess of the Liver. This is also formed in consequence of the previous inflammation of this organ not having gradually subsided. The symptoms are frequent rigors or shiverings, the sense of weight in the part increasing; the pains are less acute, but throbbing; the tongue becomes white, and the countenance is flushed. The treatment consists, first, in promoting the formation of proper pus, by taking a drachm of the powdered bark every two or three hours, and making, at the same time, use of a generous diet with a moderate quantity of wine, which course is to be continued till the suppuration is completed. Secondly, in causing the abscess to discharge externally, which is effected by a large emollient poultice being constantly kept over the part, which is to be kept well fomented twice a-day previous to the application of the cataplasm. The fluid discharged is commonly of a greyish colour, though not always so. To facilitate the discharge of the matter, the belly should be gradually compressed by means of a proper bandage. The dressing is to be simple, but frequently renewed. Bark, with bitters, wine, and a nutritive diet, are to close the cure. This disease should never be treated otherwise than under the directions of a medical man.

Abscess of the Lungs. This disease, which has likewise its origin in the previous inflammation of the organ, almost always terminates fatally. There are many pretended specifics, but, unfortunately, the cases of success are rare indeed.

ABORTION. By this is meant the expulsion of the contents of the womb at a period of pregnancy, so that it is impossible for the fœtus to live. Abortion may happen at any period of pregnancy, but it most frequently takes place about the third or fourth month. From the end of the third month to the period of quickening, there is a greater susceptibility; consequently, more miscarriages happen at that time than at any other. Miscarriages generally arise from fright, surprise, or accident.

Symptoms.—Abortion is often preceded by a general sense of coldness, slight pains in the loins and the lower region of the abdomen, and sometimes by a slight fever. After a short continuance of these symptoms, a loss of blood ensues. When the pregnancy is advanced beyond the third month, there is much bearing down and great derangement of the stomach, causing sickness and faintness.

Treatment.—A female subject to habitual abortions, should be bled just before the usual time of her miscarrying; she should likewise keep her bowels open with gentle purgatives, make use of a spare diet, consisting chiefly of vegetables, and avoid severe exercises of the body, and all agitations of the mind. The usual period of sleep should be abridged; the bed should consist of a hard mattress, in order to keep the body cool. Moderate exercise ought to be taken every day, care being had not to carry it to the length of fatigue.

For women of a full plethoric habit, besides drawing off a little blood from the arm when the pulse is full and throbbing, half of a grain of digitalis should be given twice or thrice a-day.

Women of weak habits, however, should never be bled; but, on the contrary, be put on a generous and nutritive diet, taking moderate exercise in a carriage, having recourse to cold bathing and to preparations of iron, with other tonics. In every instance of habitual abortion, whatever the condition of the female may be, it will be essential that the greatest attention be paid to avoid exciting causes.

As this is one of the conditions of the human frame which demands the greatest possible care, and the best medical treatment, we merely notice its general outlines, and abstain from noticing the various medicines which may be had recourse to, for they can only be used under medical advice, and according to the peculiar symptoms of the patient.

ACID, PRUSSIC. This acid exists in a natural state in bitter almonds, the

kernels o apricots, the leaves and blossoms of the peach, &c., from which it may be extracted by distillation. It has a sweet taste, smells like bitter almonds, and is very poisonous; producing convulsions resembling epilepsy, paralysis, and death.

Alkaline salts, and other stimulants, are proper remedies for an over-dose of prussic acid. The spirit of ammonia, largely diluted with water, is to be forced down the throat, to the extent of two or three drachms. Brandy, ether, and camphor, may also be employed.

Prussic, or hydrocyanic acid, has been used with success in many cases of dyspepsia, &c., as a sedative, but its effects are so uncertain, that it is doubtful whether it ought ever to be administered. In the first place, the preparations of it vary materially, and it is so liable to change from keeping, particularly from exposure to light, that its strength can rarely be ascertained with certainty; but the greatest danger of prussic acid as a medicine is, that what would be a perfectly safe dose for one person, would destroy another; and medical science has furnished no rules by which we may ascertain the dose to be administered with safety. Apparently weak persons have taken five, or even ten drops, of what is called the medicinal prussic acid, without apparent effect, whereas half that quantity has proved almost fatal to others who, judging by their general bodily strength, ought to have taken the same dose with impunity.

ACNE, or Blotched Face. This is characterized by an eruption of distinct, hard, and inflamed blotches, which remain for a considerable length of time, and often suppurate very slowly and partially. They appear on the face, particularly on the forehead, temples, and chin, and sometimes also on the neck, shoulders, and upper part of the breast; but never descend to the lower part of the body, or to the extremities. The eruption occurs mostly in persons of sanguine temperament, and in the early part of life, from the age of puberty to thirty-five. It is common to both sexes; but the most severe form of it is observed in young men. Persons attacked by this disease frequently enjoy good health, and cannot refer the cutaneous eruption to any obvious cause. This affection being generally local, is to be treated by external applications only, and the most proper are those of a gentle stimulating nature; such, for instance, as contain alcohol, strengthened or reduced, according to circumstances, by the addition of distilled water, as equal parts of spiritus tenuior, and rose or elder flower water. If the tubercles are much inflamed, and many of them pustular, the effect of a very acrid lotion would be to produce the formation of a crust of some extent, and to excite inflammatory redness in the adjoining skin. As the inflammatory disposition subsides, half a grain to one grain of the muriate of mercury, dissolved in spirit, is often useful. Diluted acetous acid, and the liquor ammoniæ acetatis, afford also an agreeable stimulant, in proper proportions. In slight cases, a lotion of sulphur, by pouring boiling water over it, and allowing it to infuse for twelve or fourteen hours—a quart of water being added to about an ounce of broken sulphur—has often been found useful, especially in removing the duskiness and roughness in the face connected with this disease.

The general health does not usually suffer, even under the aggravated forms of this disorder. Many persons, however, when labouring under this eruption, are liable to disorders of the stomach, to hæmorrhoids, and even to pulmonary consumption. The first appearance of the eruption is frequently to be ascribed to some irregularity of diet, or to swallowing some cold substance when overheated. Frequent purgatives, which are often resorted to to remove the disorder, are of no advantage, but, on the contrary, only tend to augment the disease in feeble habits.

Internally, medicines are generally supposed to effect very little; however, in some inveterate cases, amelioration has been observed when, in addition to the external treatment above named, small doses of soda, sulphur, and antimony, have been given in the following manner, with very good effect: take

Washed sulphur, half a drachm;
Subcarbonate of soda, from one scruple to half a drachm;
Tartarized antimony, the sixth of a grain.

Mix them. This powder is to be taken morning and night. Or,

Take subcarbonate of soda, twenty-five grains;
Washed sulphur, two scruples;
Antimonial powder, one grain.

Mix them, and take this powder twice daily.

The diet in indurated blotches, should be good, light, and nutritious, but not stimulating; consisting of animal and

farinaceous food, with well-dressed vegetables, wine and fermented liquors being omitted, or taken with great moderation.

ADDER, The Bite of the. The symptoms attending the bite of the adder, are acute pain in the wounded parts, together with a considerable degree of swelling, which is at first red, but becomes afterwards livid, and diffuses itself over the neighbouring parts. After a short time, the constitutional symptoms make their appearance; the person becomes faint; the pulse is small, and intermitting; nausea and vomiting ensue; the skin has a yellow tinge; and death not unfrequently is the result. The bite of the snake, or adder, of this country, however, is not violent in its symptoms, nor does it often prove fatal.

The treatment to be adopted in a case of this nature is to prevent the absorption of the virus into the system, by means of a ligature above the part, and by destroying the virulence of what has been introduced into the wound, by means of scarification, cupping, excision, caustic, or the application of soap lees, volatile alkali, or the spiritus ammonia succinatus; and employing, at the same time, strong diaphoretics internally, in order to determine to the surface. As an external application, a poultice of quick-lime, with oil and honey, has been recommended, as has likewise a cataplasm of garlic. This last has also been given internally with some advantage. To allay the itching and inflammation, the parts may be bathed frequently with a solution of opium in water, or with the liquor plumbi-acetatis sufficiently diluted. It will, at the same time, be necessary to make use of some cooling laxative and a spare diet. Where pustules arise on the parts that have been bitten, opening them with a lancet about the third day, and letting out the watery matter, will be proper.

AERIAL POISONS. The fumes arising from many of the metals in a state of fusion, or aerial solution, are extremely pernicious. Those from arsenic cause dryness of the tongue, a sense of suffocation, headache, vomiting, &c. The fumes from mercury are also highly deleterious; they occasion salivation, tremors, paralysis, and extreme weakness. Those arising from lead occasion asthma, pains in the chest and body, paralysis, &c.

The first symptoms which the person experiences on inhaling air vitiated with these and other deleterious fumes are giddiness, headache, lethargy, fainting, convulsions, and general torpor.

Immediately on discovering a person who has been suffocated by any kind of deleterious fume, the windows and doors ought to be opened, and the body undressed and exposed freely to cool air, being supported at the same time in a leaning posture on a chair; after a little time it must be covered with flannel or blankets, the face be sprinkled with vinegar, and the pit of the stomach with cold water. Vinegar properly diluted with cold water, may be introduced through a flexible catheter. After each application of vinegar and water, the skin ought to be rubbed with flannel, or a soft brush, the temples and insides of the nostrils be stimulated by applying volatile spirits, and bottles filled with warm water be laid to the sole of the foot, leaving the person for a few minutes in an undisturbed state. Clysters, consisting of vinegar and water, will be useful; and, on the return of life, an inclination to vomit should be promoted by a feather dipped in oil, while gentle friction is to be continued at intervals. The first symptoms indicating a happy change will be foaming at the mouth, and shivering of the whole body, especially after the effusion of cold water. Bloodletting, and the artificial introduction of air into the lungs, by means of a pipe or bellows adapted for the purpose, are also to be tried. These efforts should not be hastily abandoned, as persons have recovered after lying in an insensible state for some days.

AFFECTION, Painful, of the Nerves of the Face. The most frequent seat of the affection is the nerves over the cheek-bone, just below the eye; the nose, upper lip, teeth, and gums. Sometimes the forehead, and temple, and inner edges of the eye, and even the globe of the eye itself, are first affected. The lower jaw and tongue are sometimes affected in addition to the parts already named.

The true cause of this disease has not been as yet satisfactorily ascertained.

Treatment. The most certain and powerful remedy which has been employed in this most painful disease is belladonna; from two to three grains of the extract, or from twenty to forty drops of the tincture, in any vehicle, every four or five hours, during the paroxysm, to adults; the dose being diminished when ease is procured. Carbonate of iron, in doses of from ten grains to a scruple, has also been ad-

ministered with good effect. As an external remedy, laurel leaves sewn together, and laid at night upon the part, after warming them by the fire, frequently produces a very satisfactory effect.

AFTER-PAINS OF ACCOUCHEMENT. Shortly after delivery these pains usually come on, and they are frequently very severe. The quicker the accouchement has been, the slighter do these in general prove. When the after-pains are so troublesome as to deprive the patient of rest, it will be necessary to administer opiates joined with other anti-spasmodics, in the following manner: take

Cinnamon water, one ounce;
Tincture of opium (laudanum) thirty to thirty-five drops;
Castor, half a drachm;
Syrup of violets, two drachms.

Mix them. This draught is to be taken about bed-time. Or, take

Castor, five grains;
Camphor, three grains;
Opium, one grain and a half;
Confection of roses, a sufficiency to form a bolus, which is to be taken at bedtime.

Heated cloths or bladders filled with warm water, may be applied as an external fomentation. These means are to be assisted by keeping up a sufficient pressure on the belly by means of a broad bandage.

APOPLEXY. This disease consists in a sudden diminution, or abolition of all the senses, external and internal, and of all voluntary motion; whilst, at the same time, the heart and lungs continue to perform their action. In general it may readily be distinguished from intoxication, by the patient not being roused by shouting in his ear, by applying volatile spirits to his nostrils, or by shaking or pinching him.

Apoplexy makes its attack chiefly at an advanced period of life, and most usually on those who are of a corpulent habit, with a short neck, and large head, and who lead an inactive life, make use of a full diet, or drink to excess. Young persons are not, however, exempt from apoplexy.

The immediate cause of apoplexy is most frequently a compression of the brain, produced either by an accumulation of blood or serum. Sometimes, however, the immediate cause is only nervousness, or a particular condition of the stomach. Although the whole body is affected with the loss of sense and motion, apoplexy, nevertheless, sometimes takes place more upon one side than the other, and in this case, the side least affected with palsy is somewhat convulsed.

Treatment.—In apoplexy from plethora, no time should be lost in employing powerful remedies, the chief of which is early and copious bloodletting, to lessen the pressure on the brain. On the person's being seized with the fits, care must be taken to remove all pressure from about the neck, to support him in as erect a position as possible, and to allow a free admission of cool air. After general bleeding, leeches may be applied, if necessary, to the temples, and when sufficient evacuations have been procured by these means, we may apply a large blister to the nape of the neck, and small ones to the extremities, together with cataplasms to the soles of the feet, or warm fomentations. If the power of swallowing remains, some active purgative should be given, as follows:—Take

Compound infusion of senna, four ounces;
Tartrate of potass, six drachms;
Tincture of jalap, two drachms;
Syrup of buckthorn, three drachms.

Mix them, and let the half be taken for a dose; to be repeated after an hour or two, if necessary. Or,

Dissolve gamboge, three grains, in
Compound infusion of senna, one ounce, and add,
Tincture of jalap, two drachms;

Mix them for a draught, by mouth, in divided portions, and at proper intervals, so as not to excite any vomiting; but, if not, a couple of drops of croton oil are to be put on the patient's tongue, and then a strong lavement be administered, for which take

Senna leaves, three drachms;
Pure water, one pint;

Boil them slowly until reduced to half a pint, strain off the liquor, and add,

Sulphate of soda, one ounce;
Castor oil, one ounce.

Mix them for a clyster. Or,

Take compound extract of colocynth, half a drachm to a drachm;
Compound infusion of senna, eleven ounces;
Castor oil, one ounce.

Mix them, and inject this clyster immediately.

This is to be repeated every three or four hours, until sufficient evacuations have been procured. Stimuli of various kinds, such as volatile salts, and cordials,

as they determine the circulation to the head, are not advisable.

But, although stimulants are improper in apoplexy arising from other causes, still they may be employed with great safety and utility in those cases where it proceeds from any narcotic poison, as opium, and others, taken either into the stomach, or having otherwise been applied to the body; but even in such cases, proper evacuations should be procured. The external stimulants in general use are, volatile spirits applied to the nose and temples, rubifacient ointments to the breast and back, blisters, sinapisms, and the throwing cold water over several parts of the body, first carrying the person into the open air, which always proves useful in apoplexies of this kind.

Those who from a plethoric state of the blood are disposed to apoplexy, will act prudently in confining themselves to a very spare diet, carefully abstaining from strong liquors. Liquid nutriment is preferable to solid, and the body ought likewise to be kept open by some gentle laxative, taken occasionally. Nothing tight should be worn round the neck when in bed; the head ought to be supported at a proper height; the feet should be kept warm and dry, and the extremes of heat and cold avoided.

APPETITE, THE LOSS OF, OR ANOREXIA. A want of appetite and loathing of food is not usually an original affection, but it occurs as a symptom of some other disease, such as acidity in the stomach, or dyspepsia, and is therefore to be obviated by aromatics, bitters, bark joined with sulphuric acid, preparations of iron, &c.

When spontaneous, as where the stomach is loaded with bile, or crudities, an emetic in the evening, with some kind of stomachic purgative the next morning, will seldom fail to effect a cure.

ASTHMA, OR ANGINA PECTORIS. This disease is a spasmodic affection of the lungs, which comes on by paroxysms, most generally at night, and is attended by a frequent, difficult, and short respiration, together with a wheezing noise, tightness across the chest, or a cough; all of which symptoms are much increased when the patient is in a horizontal position. Dyspepsia always prevails, and appears to be a prominent feature in the predisposition. When the disease is attended with an accumulation and discharge of humours from the lungs, it is called the humid asthma; but when it is unaccompanied by any expectoration, it is known by the name of the dry or spasmodic asthma. The symptoms usually continue till towards the approach of the morning, and then a remission commonly takes place; the breathing becomes less laborious, and more full, and the person speaks and coughs with greater ease.

Causes.—Asthma, especially the spasmodic, is usually brought on by almost everything which increases the action of the heart, and stimulates the mucus membranes. Thus it is produced by intense heat, severe exercise, strong mental emotions, full meals, stimulating drinks, cold and damp air, and by dyspepsia, or irritation in the abdominal viscera. In some instances it proceeds from an hereditary predisposition, and in others from malconformation of the chest. The sudden accession of the paroxysms, generally after the first sleep, their returning at intervals, and the sense of tightness about the chest, occasioning the patient to get into an erect posture, and to fly for relief to the cold air, will readily distinguish asthma from other diseases.

Treatment.—We should endeavour to moderate the violence of the paroxysms, and, when they are subsided, to prevent their recurrence.

To moderate the severity of the paroxysms, one cannot employ a more efficacious mean than the inhaling warm steam frequently from an inhaler, or the spout of a teapot. An infusion of chamomile flowers, with the addition of a little ether, may be used on the occasion. In spasmodic asthma, smoking tobacco, or stramonium, has, in some cases, proved very beneficial. Ether and opium, taken internally, have been found most useful; but their value, particularly that of the latter, is frequently much enhanced by combining it as follows:—Take

Camphor mixture, ten drachms;
Spirit of sulphuric ether, forty to sixty drops;
Tincture of opium, fifteen drops.

Make them into a draught, to be taken every four or six hours.

Purging is attended with the same injurious effects as bleeding; but as costiveness must be obviated by a proper attention to diet, and where this proves insufficient, by the employment of gentle laxatives, therefore the following emollient clyster may be employed with advantage:—During the paroxysm, when there is costiveness, take

Compound decoction of marshmallow,
Mixture of assafœtida, of each five ounces;
Castor oil, half an ounce.
Mix them for a clyster.

The fetid gums, particularly assafœtida, in the following combination, have also been much employed in those cases of asthma where a spasmodic difficulty of breathing is obvious:—Take

Assafœtida mixture,
Camphor mixture, of each six drachms;
Spirit of sulphuric ether, thirty drops;
Tincture of opium, nine drops.
Mix them, and let this draught be taken every four or six hours.

As the free passage of air is obstructed in some species of asthma by a lodgment of mucous matter, the expulsion of this may be promoted by the administration of pectorals; such as gum ammoniac, squills, combined as follows:—take,

Mixture of ammonia, five ounces;
Oxymel of squills, three drachms;
Wine of tartarized antimony, forty drops;
Distilled vinegar, half an ounce.
Of this mixture, let two table-spoonfuls be taken occasionally, or when either the cough or shortness of breath is troublesome; or, take,

Mixture of ammonia, one ounce;
Solution of acetate of ammonia, two drachms;
Wine of tartarized antimony, fifteen drops;
Syrup of tolu, one drachm.
Mix them, and take the draught every six hours.

A decoction of madder root has, in some instances, been used with advantage.

When the patient is much troubled with flatulency of the stomach, acidities, and other symptoms of indigestion, it will be necessary to make use of absorbents, with stomachics and bitter infusions. Diaphoretics—such as tartarized antimony, or opium combined with ipecacuanha, may be given in that species of asthma which is dependent upon pulmonic irritation. The use of the foot bath, with mustard, may also be resorted to. A combination of digitalis with opium has proved highly advantageous in spasmodic asthma, when given in the dose of half a grain of each, every four or five hours. In the pituitous asthma, squills, combined with foxglove, as in the following prescription, might be more advisable:—Take

Powder of foxglove, six grains;
Compound squill pill, two scruples;
Syrup of tolu, a sufficiency to form a mass.
To be divided into twelve pills, of which let the patient take one three or four times daily.

These are the remedies to be employed during a paroxysm of asthma. In the intermission, tonics, such as the cinchona bark, bitter infusions, chalybeate waters, and preparations of iron, as the ferri subcarbonas, and ferri sulphas, should be had recourse to. Whatever preparation of iron may be employed, it should always be given in small doses at first; its use must also be suspended for a time, and saline draughts, with opium, be substituted.

In addition to the tonics, exercise, with a change of air, a nutritive but moderate diet, and an airy bed-room, will much assist recovery of health.

In the intervals of the attacks, it will be highly necessary for the patient to avoid the various exciting causes, to keep the bowels in a proper state, to guard against atmospherical vicissitudes, and to keep up a regular and uniform secretion from the pores of the skin by flannel. Lastly, to keep the mind easy—considering that asthma is, in most instances, more alarming than dangerous. All vinous, spirituous, and fermented liquors are injurious. Tea would likewise be objectionable, from its being usually drunk warm, and thus weakening the nerves of the stomach; coffee, when taken very strong, has been found advantageous. Garlic is sometimes of service to asthmatical persons. Acids of all kinds usually agree with them.

ATROPHY, or Atrophia. This means a gradual wasting of the body, usually attended with a loss of appetite and impaired digestion, depression of spirits and general languor.

Young persons of both sexes are apt to be attacked with this complaint before they arrive at the age of puberty, but particularly in large and populous cities, and those who are employed in manufactories, where their occupation and confinement reduce and enervate them.

The causes which commonly give rise to atrophy are, a poor diet, unwholesome air, scrofulous disposition, severe evacuations, abundant secretions, worms, a free use of spirituous liquors, and mental uneasiness. Sometimes, however, emaciation comes on without any evident cause.

It also very frequently arises from a morbid state of the mesenteric glands, brought on by a scrofulous inflammation, in children.

Symptoms.—Lassitude on the slightest exertion, loss of appetite, wasting of the muscular flesh, paleness of the countenance, with swelling and prominence o the abdomen, dropsical appearance of the lower extremities, and a fetid breath, manifest themselves at the beginning of the disease. When these symptoms have continued for a little time, they are followed by alternate paleness and flushing of the countenance, heat and dryness of the skin, a feeble and quick pulse, thirst, great debility, fretfulness, and disturbed sleep. In children of a scrofulous habit, atrophy is often accompanied with an enlargement of the mesenteric glands; and then costiveness or purging, and remitting fever, are also prevailing symptoms.

Treatment.—In all cases of atrophy, the patient should make use of food that is nutritive and easy of digestion; it should be taken often, but in a small quantity at a time. He should at the same time breathe a pure, dry, and wholesome air, aking such moderate exercise every day as his strength will admit.

To assist the digestive powers, it will be proper to put him under a course of stomachic bitters, bark, and chalybeates; mild laxatives, repeated at certain intervals, will also be necessary.

In children, the principal treatment in such cases will be for the purpose of removing the obstructions in the lymphatic system, and to effect a resolution of the indurated glands of the mesentery, and, lastly, to strengthen the system and establish a good digestion. Among the first—viz., for the removing of the obstructions, are indicated the mercurial and antimonial preparations, as also frictions to the abdomen, and the employment of a tepid salt-water bath. The hydrargyri submurias is the best mercurial preparation, and it may be given with some purgative—such as rhubarb, to be continued in small doses till there be some favourable change in the feel and size of the belly.

The emaciated state to which the child is reduced will, even if the obstruction should be removed, require the aid of tonics. To strengthen the stomach and the alimentary canal, we must have recourse to bitter infusions, joined with aromatics, bark, and steel, as in the following combinations:—Take

Infusion of gentian, three ounces and a half;
Tincture of cardamoms, half an ounce;
Subcarbonate of potass, half a drachm;
Mix them, and let a child's spoonful be taken twice or thrice a day. Or, take
Infusion of Peruvian bark, two ounces and a half;
Tincture of Columba, three drachms;
Subcarbonate of potass, one scruple.
Of this mixture, a child's spoonful to be taken twice in the day.

When atrophy arises as a consequence of suckling, the curative indications are, to restore the wasted strength, and to quiet or remove the fever. If the child be at the breast, it must be weaned immediately; the patient must live on milk, broths, jellies, sago, salop, Indian arrow-root, and tapioca, with eggs and a moderate quantity of animal food for dinner. Wine in moderation may, however, be taken. Lastly, a course of the bark, or bitters, with the diluted sulphuric acid, myrrh, and chalybeate, might be advantageously entered upon.

However, where there is any inflammatory action of the lungs going on at the same time, the diet must be confined to vegetables and milk, leaving out the bark and other bitters, but substituting laxatives and the saline mixture, with nitre, combined with small nauseating doses of tartarized antimony.

BLADDER, (Acute Inflammation of.) This disorder consists in tension and pain over the part, with a frequent desire and difficulty of evacuation, or a total suppression, with tenesmus. It is seldom a primary affection, but it arises in consequence of inflammation in the neighbouring parts. It is, however, sometimes occasioned by a suppression of the natural evacuation, consequent over-distention of the bladder, or by a stone of considerable size being lodged in the latter.

Treatment.—On the first coming on of this complaint, a quantity of blood, proportionable to the severity of the pain, and the age and habit of the patient, ought immediately to be taken away; and if the first bleeding does not afford considerable relief, the operation should be repeated on the same day, or on the next at farthest. After bleeding, we may make use of flannel cloths wrung out of a warm decoction of emollient herbs, or a bladder filled with warm water, to be kept constantly applied over the part which is painful; and by way of internal fomenta-

tion, an emollient clyster may be injected repeatedly.

The intestines are to be emptied by gentle aperients, employed in the following manner, as frequently as the occasion may require, as constipation ought chiefly to be guarded against:—Take

Manna, half on ounce;
Tartrate of potass, three drachms;
Warm water, one ounce and a half;
Tincture of senna, one drachm.

Mix them for a draught. Or, take

Castor oil, one ounce;
Mucilage of gum acacia,
Fennel water, of each half an ounce;
Tincture of jalap, fifty drops.

Mix them as a draught.

Should these means not afford relief to the patient, he ought then to be put frequently into a warm bath, continuing him in it for about fifteen minutes each time. The remedy will thus produce a powerful determination to the surface of the body, and greatly increase the action of the cutaneous exhalants.

Mild diaphoretics, such as the saline draught combined with tartarized antimony, will at the same time be proper.

In consequence of some previous inflammation, the mucous membrane of the bladder now and then becomes thickened, indurated, or ulcerated, and a considerable quantity of mucus, mixed with pus, passes off with the urine, giving to it the appearance of whey, and now and then blood is discharged.

In the treatment of such chronic cases, the attention is to be directed to prevent any collection of fæces in the rectum, by means of some cooling laxative, taken from time to time; to abate pain, by small doses of opium; and to inject the bladder two or three times a day with warm water, or some emollient decoction, by means of an elastic gum catheter, with a bottle of the same material fitted to it. Some of the balsams, such as the copaiba, terebinthina, &c., may be advisable. Where there is reason to suspect scirrhosity, the extractum conii, or hyoscyami, will be proper medicines, in addition to the former.

BLEEDING FROM THE NOSE, (Epistaxis.) In the nose, there is a considerable net-work of blood-vessels expanded on the internal surface of the nostrils, and covered only with a thin tegument: hence, upon any determination of a greater quantity of blood than ordinary to the vessels of the head, those of the nose are easily ruptured. In general, the blood flows only from one nostril, but in some cases it is discharged from both, then shewing a more aggravated state of the disorder.

Causes.—Persons of a sanguine and plethoric habit, and not yet advanced to manhood, are very liable to be attacked with this complaint. Peculiar weakness in the vessels of the part, and the decline of life, may also be considered as predisposing causes. Great heat, violent exertion, external violence, particular postures of the body, as well as everything which determines the blood to the head, are to be looked upon as its exciting causes.

Bleeding of the nose comes sometimes on without any previous warnings; but at others it is preceded by a pain and heaviness in the head, tingling in the ears, flushing of the face, heat and itching in the nostrils. In some instances a coldness of the feet, shivering of the whole body, together with costiveness, are observed to precede it.

Treatment. — Bleeding of the nose should not be suddenly stopped when it comes on in persons in good health, who are of a full and plethoric habit, or when it relieves any other disorder, and does not proceed so far as to induce debility But when it arises in elderly people, or returns too frequently, or when it continues till the patient becomes faint, it ought to be put a stop to as quickly as possible. To effect this, the person is to be exposed freely to cool air, and to be placed nearly in an erect position, with his head somewhat inclined backwards; to drink freely of cold liquors, and to make use of an antiphlogistic regimen. Besides these means, he may immerse his head in water impregnated with ammonia muriata, or common salt, and sniff vinegar diluted with cold water frequently up the nose, or inject some astringent lotion, as the following, by means of a syringe, into the nostril:—Take

Sulphate of zinc, one drachm;
Acetate of lead, ten grains;
Distilled water, ten ounces.

Mix them for an injection. Or, take

Powdered alum, two drachms;
Rose water, six ounces;
Distilled vinegar, one ounce.

Mix them, and use the liquor as a wash or injection.

Should the bleeding continue, a piece of lint, dipped either in a solution of the sulphate of copper in water, or of the sulphate of iron in brandy, may be introduced up the nostril. A tent, wetted with

the compound tincture of benzoin, and afterwards rolled up in equal parts of alum and sulphate of zinc, should be tried, upon the failure of the former. One of the most powerful remedies in this case, however, is charcoal, which may be applied by means of tents, first moistened with water, and then dipped in the powder; but in slight cases it will answer by being taken like snuff.

To assist the effect of all such applications, a little cold water should be sprinkled on the face of the patient. Whilst these steps are being taken, the body, if necessary, is to be kept open with cooling purgatives; and the patient is carefully to avoid all those circumstances which might either determine the blood to the head, or prevent its free return from it.

When the complaint is of long duration, the following medicines may be tried:—Take

Compound infusion of roses, six ounces;
Nitrate of potass, one drachm.

Shake them together; and of this mixture take three large spoonfuls every third hour. Or, take

Diluted sulphuric acid, twenty-four drops;
Pure water, one ounce and a half;
Syrup of roses, two drachms;
Tincture of opium, fifteen drops.

Mix them for a draught, to be taken three or four times a day.

After the bleeding has ceased, the patient must be careful not to remove the tents, (or plugs of lint,) or the clotted blood, but should allow them to come away of themselves, and to keep himself as quiet as possible.

Where bleeding from the nose arises in adults of a full plethoric habit, a frequent use of cooling purgatives, and an antiphlogistic regimen, will probably prevent any return of the complaint.

When it is occasioned by the suppression of some accustomed evacuation, such as the menses, or the hæmorrhoids, this is to be restored, if possible; but if we do not succeed, some other discharge, by means of either an issue or seton, must be substituted.

BLINDNESS IN THE NIGHT, or NYCTALOPIA. In this disease the sight is perfectly clear and distinct in the day time, but a total blindness takes place by night; from which occurrence it derives its name.

Causes.—This disorder is peculiar to the inhabitants of tropical climates, and the southern parts of Europe, and is supposed to proceed from torpor of the retina of the eye and the optic nerves, which suffer so much from the strong reflected rays of the sun by day as not to be susceptible of the faint light which the night furnishes. In some cases, however, it is connected with some derangement of the liver.

Symptoms.—It becomes apparent towards evening with a dimness of sight, which gradually increases as the night approaches; and the darker it gets, so much more indistinct does vision become.

Treatment.—Evacuation, both by bleeding and purging, has been recommended, but they have proved rather hurtful than useful. The eye should be washed several times a day, by means of an eye-cup, with cold water, or some gentle astringent collyrium—as, take

Sulphate of zinc, from eight to fifteen grains;
Rose water, four ounces.

Mix them.

The patient is to wear, at the same time, a green silk shade over his eyes, and avoid all exposure to the sun, or to any great glare of light.

In cases where the night blindness is connected with scurvy or any derangement of the liver, &c., the use of the Peruvian bark internally, joined with valerian and chalybeates, might be proper.

BLOODY URINE, or, HÆMATURIA. This disease is sometimes occasioned either by falls, blows, bruises, or some violent exertion—such as hard riding and jumping; but it often arises from a small stone lodged either in the kidney or ureter, which, by its irregularity, wounds the inner surface of the part it comes in contact with; in which case the blood discharged is usually somewhat coagulated, and deposits a sediment of a dark brown colour, resembling the grounds of coffee.

Symptoms.—A discharge of blood by urine, when proceeding from the kidney or ureter, is commonly attended with an acute pain and sense of weight in the back, and some difficulty in evacuating. When the blood proceeds immediately from the bladder, it is usually accompanied with a sense of heat and pain at the lower part of the abdomen.

The treatment of hæmaturia is to be according to the causes which have occasioned it. If it has been in consequence of some external injury, such as a blow or fall, or when the patient is of a full and plethoric habit, it may be proper to bleed,

giving at the same time a couple of tablespoonfuls of an acidulated infusion of roses, with a small quantity of nitre dissolved in it, every two or three hours, and employing also some gentle purgative—such as magnesia or Epsom salts, every second or third day, to keep the body open. If the hæmorrhage still continues, opium, in small doses, must be made use of every four or six hours. Where there is any deposit of slimy purulent matter in the urine, there ought to be taken about half a drachm of uva ursi in powder, three times a day, the patient making at the same time use of the double acidulated soda water for common drink. When the cause of it is a stone either in the kidney, ureter, or bladder, it is only to be cured by removing the cause; but as this may not be always practicable, the symptoms might be moderated by making the patient drink plentifully of mucilaginous liquors—such as thick barley water, solutions of gum acacia, or a decoction of marshmallows sweetened with honey; by taking small doses of opium joined with refrigerants; and by throwing up the intestines an emollient clyster.

BURNS and SCALDS. In almost all there arises, soon after its occurrence, a sense of coldness, amounting to shivering, which commonly soon goes off; but when the injury has been more violent, the shivering is severe and long continued.

Treatment.—In all accidents from scalds and burns, it seems to be of the utmost importance to apply a remedy at the instant; for by this means the violent anguish is allayed, and vesication, which in scalds of some extent lay the foundation for a tedious cure, is thus in a great degree prevented. Of the remedies most quickly to be procured on such occasions is that of plunging the part which has sustained the accident, without a moment's delay, into very cold water, or pumping upon it. The transition from torture to ease will then be rapid; and after the injured part has been placed in the water for some time, it will be sufficient to cover it with linen rags, moistened with water, passing over them from time to time streams of air, by means of a small tube or bellows, until a sense of freezing, or a considerable degree of cold, arises. The parts may further be smeared over with a feather dipped in the oily liniment prepared as follows:—Take

Olive oil, three ounces;
Lime water, six ounces.

Mix them.

Æther, or rectified spirit, applied in such a manner as to favour its speedy evaporation, and thereby the abstraction of heat, is also a very efficacious remedy. When there is no exposure from a separation of the skin, æther or rectified spirit, somewhat diluted, may be evaporated from the skin, by keeping a piece of thin linen cloth wetted therewith over the burned parts, and moistening it from time to time; but when the part has been deprived of its natural covering in consequence of the injury, it will be necessary to lay immediately over it a piece of thin bladder, and then the linen cloth as before, keeping it continually moist, by squeezing a sponge wetted with the evaporating liquid over it. As long as the pain and the heat lasts, this should be continued; but as soon as the inflammation is subdued, the process of evaporation must be discontinued, lest a greater loss of heat be occasioned to the whole frame than is consistent with life and health.

But in order to alleviate pain and procure rest, as there is generally a severe shock given to the nervous system in injuries of this nature, it will be well to have recourse to opiates, in such doses as shall be found sufficient to alleviate the severity of the pain and nervous irritation. When much febrile heat ensues, gentle laxatives and cooling draughts should be taken. If the parts become livid and black, so as to threaten the coming on of a mortification, then the cinchona bark and wine, with other suitable means, must be resorted to.

In ordinary burns and scalds, a common and very good domestic remedy is the pulp of a raw potatoe, grated and laid over the part. A better plan, however, is to mix up potatoe flour with milk or cream, and lay it on very thick, repeating this every two or three hours, until all pain has ceased. Cotton wool laid thickly over burns and scalds, is by many medical men considered an almost sovereign remedy; and certainly very important cures have been effected by it.

CANCER. A cancer is an ulcer of the very worst kind, with an uneven surface, and ragged and painful edges; it spreads in a very rapid manner, discharges a thin acrimonious matter, and has a very fetid smell.

Symptoms.—Cancer usually begins with a small swelling in the gland, unaccompanied by pain or any discoloration; it gradually increases both in size and hardness, in process of time is attended

with lancinating pains, and with varicose swellings of the surrounding veins. Occasionally it remains in this indolent state for some time, but in other instances it proceeds on to suppuration with great rapidity, and forms an ulcer. It has been supposed that its malignity is in proportion to the rapidity of its progress. When the disease begins to advance, the whole surface of the swelling puts on a purple shining appearance; and in this state it continues till ulceration is about to take place. The superincumbent parts at length give way to ulceration, and the patient experiences a temporary relief, from the discharge of a small quantity of matter. If the ulceration be extensive, it will be observed that, while one part of the sore is undergoing a sloughing process, another will be active in throwing forth luxuriant granulations of a loose and spongy texture. These changes appear sometimes to alternate with each other upon the ulcerated surface, and in their further progression give rise to considerable hæmorrhage.

Cancer of the Breast is chiefly a disease of middle and advanced life; from forty to fifty years is, perhaps, the most frequent period of its occurrence.

When the part has once arrived at a state of ulceration, it quickly puts on its malignant character. The pain attendant on the disease in its different stages, though varying in degree, is yet always of that peculiar darting kind which belongs to cancer.

Climate appears to have some degree of influence in predisposing to cancer. In cold northerly regions it is not only more frequent, but also less tractable. It has been observed that cancerous affections are most prevalent in persons of a scrofulous constitution. Cancer arises most frequently from some external injury, such as a blow, but is now and then also to be met with as the consequence of previous inflammation, excited by other causes.

Treatment.—In order to allay pain and irritation, and probably thereby retard the progress of the disease, we may employ opium internally, and likewise externally, mixed with preparations of lead, as follows:—Take

Solution of acetate of ammonia, one ounce;
Subacetate of lead, thirty drops;
Pure water, two ounces;
Tincture of opium, one drachm and a half;

Mix them for a lotion.

Or, take

Camphorated spirit, half an ounce;
Distilled vinegar, one ounce;
Solution of subacetate of lead, one drachm;
Tincture of opium, two drachms.

If these means are not, after a fair trial, attended with relief, a slight course of mercury, as mercurial friction in the neighbourhood of the diseased gland, together with small doses of hydrargyri submurias, internally, joined with antimony, should then be tried, at least when in the early stage of the disease, and be assisted by a decoction of guaiacum, sassafras, sarsaparilla, and mezereon.

When no advantage has been derived from any of the means mentioned, and the tumour is hastening on to ulceration, the only effectual remedy then left is the complete removal with the knife. When this has not been done, and suppuration and ulceration is already going on, efforts are to be directed, first, to correct the fetor and acrimony of the discharge; to defend the adjacent parts from its effects; and third, to quiet the pain, and lessen the irritability of the sore.

The first of these intentions is to be answered by washing the ulcer with muriatic acid diluted with three times its weight, or more, according to the irritability of the sore, and then applying a carrot poultice, or the cataplasma carbonis, which is composed of about half a pound of the common bread poultice, with two ounces of wood charcoal, in very fine powder. The charcoal should be taken fresh from the fire, and powdered very fine as soon as cool, and then put immediately into a bottle and corked, in order that it may not be exposed to the air. To obtain the second object, strict attention should be paid to cleanliness, and by dressing or covering the ulcer with mild cerates, composed of calamine, or the acetate of lead; and the third purpose, of quieting the pain and lessening the irritability of the sore, is to be obtained by fomenting it with a decoction of poppies, and then applying a cataplasm of hemlock, as also by the internal use of opium or hyoscyamus at the same time. Henbane and nightshade have also been employed in external applications, as well as hemlock. When used in this way, the leaves are to be boiled in milk, so as to form a decoction sufficiently strong, and with this the part must be frequently fomented. As a local application in external cancer, such as of the lip, breast, &c., lint dipped in a

solution of the subcarbonate of soda—viz., take

Subcarbonate of soda, three drachms;
Extract of henbane, two drachms;
Distilled water, made warm, eight ounces;

and applied to the ulcerated surface, renewing it as often as it becomes dry, has sometimes been attended with good effect, occasioning the discharge to assume a comparatively healthy appearance; the size of the ulcer being much reduced, and the pain lessened.

The preparations of iron used externally in ulcerated cancers, are the carbonate, the phosphate, oxyphosphate and acetate. The best mode of applying them is to blend them with water, to the consistence of a thin paste, with which the surface of the ulcer should be covered, and the application in general be renewed in twenty-four hours. The general effects of iron, when used in cases of ulcerated cancer, are a speedy mitigation of pain, an amendment in the appearance of the sore, and the correction of the fetor, with a diminution of the quantity of discharge.

In every species of open cancer, the air should be excluded as much as possible; a covering of double oiled silk should therefore be applied over the dressings.

CANINE APPETITE. (Bulimia.) In this disorder the person is affected with an insatiable, and almost perpetual desire of eating, in which, if he is not indulged, he is apt to fall into fainting fits.

Causes.—These are supposed to be acid in the stomach, and too great a sensibility or peculiar affection of the nervous coats of it.

Treatment.—When a ravenous appetite is occasioned by acidity in the stomach, it ought to be corrected by an emetic, with the use of alkalies after it. Where it is owing to the peculiar power of the stomach of dissolving, assimilating, and disposing of the aliment, its contractile power would probably be allayed by oil, fat meats, opiates, and a free use of tobacco, which latter may both be chewed and smoked. The liquor potassæ, administered in doses of about five and twenty or thirty drops, in a little veal broth, and repeated twice or thrice a day, might have a good effect. This ravenous appetite is, when not in great excess, merely a symptom of indigestion.

CARBUNCLE. (Anthrax.) This is an inflammatory tumour, which seldom suppurates perfectly, but discharges a thin, acrid humour.

Treatment.—A generous diet, with a liberal use of wine and bark, in combination with snake-root, together with opiates to alleviate pain and procure rest, will be the best internal remedies in this complaint. Warm fomentations with bruised poppy heads, and with an addition of a little rectified spirit, and a cataplasm of bark and yeast over the whole tumour, which ought to be renewed every four hours, are the best external applications.

If the tumour should not disperse on a fair trial of these means, but on the contrary shew an evident tendency to ulcerate and degenerate into a cancer, then the sooner it is extirpated, the better will it be for the patient. In most cases, however, the remedies here indicated will suffice; they never fail with what is called the common boil.

CATALEPSY. (Catalepsis.) This disease is that state of the muscular system in which the person loses voluntary motion, and commonly also the use of the five senses, but preserves the mobility of the muscles, and keeps the exact position wherein they are attacked.

Causes.—These are mostly of a general nature. Suppressed catamenia, worms, and painful emotions of the mind, as terror, grief, disappointment, profound meditation, anger, &c., have all been observed to have occasioned attacks of catalepsy. Women are more frequently attacked by it than men. It sometimes changes into epilepsy, apoplexy, or melancholia, and has been known sometimes to terminate fatally in a few days.

Treatment.—This must be governed in a great measure by reference to the cause of the malady. If it proceeds from plethora, the vessels should be unloaded by cupping at the back of the neck, and cathartics, blisters, a seton, or an issue must be used. When arising from causes of a debilitating nature, tonics joined with antispasmodics will be proper.

During the paroxysms, stimulating cataplasms may be applied to the palms of the hands and soles of the feet. Internally may be administered musk, joined with volatiles in the following manner:—Take

Musk mixture, three ounces;
Pennyroyal water, two ounces;
Fetid spirit of ammonia, two drachms;
Tincture of valerian, half an ounce.

Mix them, and let two table-spoonfuls be taken every two or three hours.

Animal magnetism has been recently tried in this malady, and it is pretended with success. We cannot, however, say

that the proofs of the cures which have been adduced are such as ought to diminish the doubt entertained of the reality of animal magnetism as a curative process.

CATARRH. (Catarrhus.) This consists in an increased excretion of mucus from the membrane of the nose, throat, and bronchia.

Symptoms.—This disease usually comes on with a dull pain, or sense of weight in the forehead, a redness of the eyes, and a fullness and heat in the nostrils, which symptoms are soon followed by the distillation of a thin acrid fluid from these parts, together with a soreness in the trachea, hoarseness, frequent sneezing, some difficulty of breathing, a dry cough, loss of appetite, general lassitude over the whole body, and chilliness; towards evening the pulse becomes considerably quickened, and a slight degree of fever arises. In the progress of the disorder, the cough is attended with an excretion of mucus, which at first is thin, white, and expectorated with some difficulty; but becoming gradually thicker, and of a yellow colour, is at length thrown off with greater ease and less coughing.

Causes.—The application of cold to the body seems evidently to be the remote cause of the disease. The immediate cause of the catarrh seems to be an increased afflux of fluids to the mucus membrane of the nose, fauces, and bronchia, in consequence of some degree of inflammation in these parts.

It attacks persons of all ages and constitutions, but more particularly the young, and those who have had any former affection of the lungs; it may also take place at any time of the year, when there are sudden changes of the weather from heat to cold.

Treatment.—In mild attacks of this disease, it may not be necessary to have recourse to the aid of medicine. In general it will suffice to be confined to the bed, and to use an abstemious regimen, drink plentifully of warm diluent mucilaginous liquors, such as barley-water, thin gruel, &c., acidulated with a small quantity of lemon juice, or crystal of tartar; but in violent attacks, where there is a great difficulty of breathing, much fever, and a full and frequent pulse, it will be necessary to employ various medicines in order to guard against the effects of general inflammation.

In such cases blood-letting and antiphlogistic remedies. If the difficulty of breathing is great, we should have recourse to local blood-letting by leeches, after which it will be proper to apply a blister over the part affected. To encourage perspiration and expectoration, it will be good to administer small and often repeated doses of antimonials, or other diaphoretics, as, take

Juice of lemon, one ounce and a half;
Subcarbonate of ammonia, half a drachm,
Pure water, five ounces;
Tartarized antimony, one grain and a half;
Syrup of tolu, half an ounce.

Of this mixture two large spoonfuls are to be taken every three hours. Or, take

Solution of acetate of ammonia, half an ounce;
Camphorated mixture, one ounce;
Wine of tartarized antimony, eighteen drops;
Syrup of marshmallows, two drachms.

Mix them as a draught, to be taken every four hours.

The effect of these medicines may be assisted by drinking plentifully of mucilaginous diluted liquors and acidulated, being confined at the same time to bed.

Twenty drops of liquor volatil cornu cervi, in half a pint of wine whey, when warm in bed, will soon bring on a profuse sweat. When neutral salts are sufficiently diluted with water and taken, a copious perspiration is likewise procured. Half an ounce of vinegar, saturated with ammonia until the effervescence has ceased (as in the liquor ammonia acetatis,) and taken every two or three hours, will serve this purpose very well. Nitre is, however, a medicine which, when the discharge is too thin, or saline, may increase the coughing.

A secretion of mucus in the lungs and fauces may likewise be assisted by administering pectorals, such as squills and gum ammoniac, in the following forms:—Take

Mixture of ammoniac, five ounces and a half;
Oxymel of squills, half an ounce.

Of this mixture two dessert spoonfuls may be taken now and then, or when the cough is troublesome. Also by applying to the lungs and fauces the steams arising from warm vinegar and water, by means of the spout of a large teapot, or a funnel inverted over a basin.

When the cough is troublesome, and there is great soreness in the throat, the following remedies may be used with advantage:—Take

Mucilage of gum acacia, five ounces;
Oil of sweet almonds, one ounce;
Syrup of Tolu, half an ounce;
Extract of henbane, three grains;
Solution of the subcarbonate of ammonia, half a drachm.

Mix them, and of this emulsion the patient may take a large spoonful frequently.

After the inflammatory symptoms have abated, opiates will afford effectual relief; particularly when the rest is disturbed, an opiate, in the following form, should be given at bed time:—Take

Solution of acetate of ammonia, three drachms;
Mucilage of gum acacia, one ounce;
Syrup of tolu, one drachm;
Tincture of opium, forty drops.

Mix them for a draught, to be taken on going to bed. Or take,

Compound powder of ipecacuanha, twelve grains.

If costiveness prevails in the course of the disease, it ought to be removed by gentle laxatives.

When the mucous membrane of the nose is much affected, it may be smeared externally, from time to time, with a little tallow, or spermaceti ointment.

The diet of the patient should be cooling and spare, as water-gruel, chicken-broth, beef-tea, vegetables, &c. But it sometimes happens, that after the inflammatory symptoms have subsided, a weakness is left, with an increased secretion from the lungs, which may continue for many months, without the least appearance of purulence. In such cases, the person is to avoid all fresh exposures to cold, and be always warmly clothed. When the disease has been running on for some considerable time, or has become habitual altogether, the person should continue long in bed in the morning, and go early to bed at night. He is likewise to abstain from wine, and all food which is hard of digestion; to breathe as pure open air as possible, and to use gentle exercise daily, on horseback if possible.

Much benefit has been derived in some instances of chronic catarrh, by using a warm bath, but particularly the vapour bath. When the secretion of the chest is gradually lessened, and debility alone remains, the vapour bath may be alternated with the cold one, using the latter twice, and the vapour bath once a week. A constant external irritation on the chest should at the same time be kept up by plasters of Burgundy pitch, to which a little camphor may be added, and also by blistering. Opiates should also be employed to mitigate the cough, and tonics to support strength.

There is still another species of catarrh, or cold, with which persons advanced in life are apt to be afflicted. They are seized with a cough, which at length becomes habitual and chronic, continuing for many years, and becoming extremely distressing. Its attacks are most common early in the morning, and the sufferer is thrown into fits of coughing, which last a long time, and are only terminated by a free expectoration taking place, when relief is immediately obtained. The next morning, however, the same distressing symptoms again appear, and thus the strength of the person is nearly exhausted.

It seems to arise from an unusual quantity of mucus secreted in the lungs, which, by impeding respiration, or irritating these parts, produces the cough. When the complaint is protracted, the expectoration ceases, the skin gets cold, the pulse small and fluttering, the person becomes drowsy, the face tumid and discoloured, the lips livid, and the breathing more and more difficult, till at last suffocation ensues.

Treatment.—A combination of squill and gum ammoniac, in the following form, will be proper in this species of catarrh, or cold:—Take

Gum myrrh, in powder, one drachm;
Gum ammoniac, half a drachm;
Powdered squill, ten grains;
Syrup of tolu, a sufficiency to form the mass, which is to be divided into pills of five grains each, and two to be taken morning and night. Or,
Dissolve myrrh, half a drachm, in
Pure water, one ounce; then add
Mixture of ammoniac, five ounces;
Oxymel of squill, half an ounce;
Compound tincture of camphor, two drachms.

Mix them, and take a large spoonful twice or thrice a day.

Tonics will likewise be useful in the combination of sulphate of iron with subcarbonate of potass and myrrh. Opium, by checking the expectoration, might prove prejudicial. Digitalis, in the following form, is likely to produce much benefit:—Take

Mixture of ammoniac, five ounces and a half;
Oxymel of squill, half an ounce;
Tincture of foxglove, forty drops.

Mix them, and let a large spoonful be taken from time to time when either the

cough or shortness of breath is troublesome.

CHICKEN-POX. (Varicella.) This disease, like the small-pox, seems to be the consequence of some specific contagion, and affects, like the other, a person but once during life.

The chicken-pox is preceded by chilliness, followed by flushings and heat, pains in the head and back, thirst, restlessness, and a quick pulse; but at other times no such symptoms are perceptible. About the second or third day, the pustules become filled with a watery fluid, and about the fifth day they usually dry away.

Treatment.—In general it is only necessary to make use of a spare diet on the first appearance of the eruption, and to take one or two cooling purgatives afterwards; but should the fever be high, it will then be advisable to have the patient take frequent small doses of some antimonial, with saline draughts, and nitre,—as advised under the head of simple fever; drinking at the same time plentifully of cold diluting liquors, and to keep the body open with gentle laxatives, or emollient clysters.

CHILBLAIN. (Pernio.) This is a painful inflammatory swelling, of a deep purple, or leaden colour, to which the fingers, toes, heels, and other extreme parts of the body are subject, on being exposed to a severe degree of cold. The pain is not constant, but rather pungent and shooting at particular times, and an insupportable itching attends. In some instances the skin remains entire, but in others it breaks, and discharges a thin fluid. When the degree of cold has been very great and long-continued, the parts affected are apt to mortify, and to slough off, leaving a foul, ill-conditioned ulcer.

Causes.—As has been stated, a severe degree of cold. Children and old people, are, however, more liable to be troubled with chilblains than those of a middle age; such, also, as are of a scrofulous habit are remarked to suffer severely from them.

Treatment.—The best mode of preventing these affections is to avoid with much care any exposure to wet or cold. On the approach of winter, those who are subject to chilblains should be careful to cover the parts which are apt to be injured with woollen gloves and stockings, and not expose the hands or feet too precipitately, when cold, to a considerable degree of heat. As soon as any part is perceived to be affected, it will be proper to rub it well with warm spirits of rosemary, to which a small addition of oil of turpentine has been previously made; after which, soft linen is to be applied, moistened with camphorated spirits, or any of the following embrocations:—Take

Alum, two drachms;
Distilled vinegar,
Proof spirit, of each half a pint.

Mix them. Or, take

Compound camphor liniment,
Soap liniment, of each half an ounce;
Oil of turpentine, three drachms.

Mix them; and let them be kept on constantly.

When the swellings break, poultices and emollient ointments may be applied for a few days, but should not be persisted in long, as they are apt to induce excrescences, which it will be difficult afterwards to remove. The occasional application of caustic to the edges, and the dressing the sore daily with the unguentum hydrargyri nitratis, will effectually prevent any excess of granulation. Should this unguentum be of too strong a nature, it may be easily reduced by a small addition of spermaceti ointment.

CHOLERA, or Vomiting and Purging. Frequent and violent discharges of bilious matter, both upwards and downwards, with painful gripings, constitute the disease called cholera morbus.

Symptoms.—The disease usually comes on with nausea, soreness, pain, distention and flatulency in the stomach, and acute griping pains in the bowels, succeeded, after a time, by a severe and frequent vomiting and purging of bilious matter, heat, thirst, a hurried respiration, and a frequent, but weak and fluttering pulse. When the disease is not violent, these symptoms gradually cease after a day or two, leaving the patient in a debilitated and exhausted state; but where the disease proceeds with much violence, there arises great depression of strength, with cold sweats, considerable anxiety, a hurried and short respiration, cramps in the legs, coldness of the extremities, and hiccups, with a sinking and irregularity of the pulse, which quickly terminates in death.

Causes.—A specific contagion, and the sudden transition from heat to cold. In some instances the disease has been observed to proceed from obstructed perspiration, and also from food which has passed readily into the acetous fermentation, from unripe fruits, and acrid ingesta.

Treatment.—From the very irritable state of the stomach on the first attack of

the disease, it will be necessary to make the patient drink plentifully of diluent liquors, such as barley-water, rice-gruel, animal broth, especially chicken; and, to assist the effect of their operation, tepid mucilaginous clysters may likewise be injected.

In addition to these means, flannel cloths, wrung out in a warm decoction of poppy-heads, slightly bruised, with an addition of one-fourth of camphorated spirit, may be applied to the region of the stomach, taking care to renew them as often as they become cold. Warmth should likewise be applied to the extremities, by means of bottles filled with hot water.

In order to allay and put a stop to the irritation, opium in sufficiently large doses, but at the same time in as small a bulk as possible, should be given, added to a small saline draught, swallowed in the act of effervescence. After the administration of opium in the manner advised, it will be proper to immerse the patient as soon as possible in a warm bath.

In the advanced stage of the disease, where the pulse is weak, and the extremities are cold, opiates joined with aromatics, as in the confectio opii, and musk in large doses, may be employed with advantage.

But as even in the smallest bulk, opium, when given by the mouth, is frequently rejected in cholera morbus, it will be best to give it in lavements, by which, frequently in a very short space of time, all urgent symptoms are removed. Clysters, containing about a drachm of laudanum, should be injected from time to time, as long as the irritation of the stomach continues. When great pain and irritation at the stomach prevails, good effects have often been experienced from the external application of opium to the epigastric region, in the form of an embrocation:—Take

Camphorated spirit, half an ounce;
Tincture of opium, one ounce.

Mix them, and rub a little of the embrocation frequently over the region of the stomach.

As soon as the violence of the attack has somewhat subsided, an aperient draught, as follows, may be administered:—Take

Sulphate of magnesia, two drachms;
Compound infusion of roses, ten drachms;
Syrup of saffron, one drachm.

Mix them, and let the draught be repeated every four hours as long as may be necessary.

To strengthen the stomach and the intestines, after the violence of the attack has somewhat subsided, columba root and cascarilla bark, when combined in the following manner, will be useful medicines:—Take

Infusion of cascarilla, one ounce and a half;
Tincture of columba, three drachms;
Compound tincture of cardamoms, one drachm;

Mix them, and let this draught be taken three times a day. Or, take

Powder of columba, ten grains;
Powder of ginger,
Subcarbonate of iron, of each five grains,
Syrup of roses, a sufficiency to form a bolus, which is to be taken twice every day.

On recovery, the patient should pay particular attention to his diet, carefully abstaining from all things which might promote a return of the disease, and using only such as are light and nutritious. He is likewise to pay a minute attention to the functions of the skin, by flannel and other warm clothing; while the night air, and sudden alterations of temperature are to be cautiously guarded against.

CHOLIC, (Colica.) This consists in a painful distention of the whole lower region of the abdomen, with a twisting round the navel in particular, often accompanied with vomiting, costiveness, and a spasmodic contraction of the muscles of the whole abdomen.

Symptoms.—In the bilious cholic there is loss of appetite, bitter taste in the mouth, thirst, febrile heat, costiveness, and a vomiting of bilious matter, attended with an acute pain round the region of the navel; and as the disease advances, the former becomes more frequent, and the latter more severe and lasting.

In the flatulent cholic there is great costiveness, attended with pain, soreness, and griping of the bowels; a rumbling noise, distention of the stomach, an inclination to vomit, and coldness of the extremities.

In the hysteric cholic there is nausea and sickness at the stomach, accompanied with severe spasms, costiveness, and lowness of spirits.

Causes.—The disease is produced by various causes—such as crude and acid food, flatus, a redundance of acrid bile, long continued costiveness, metallic poisons, hysteria, the application of cold and moisture, and worms in the intestines.

Treatment.—In the bilious cholic, if there is great irritation at the stomach

with frequent vomiting, a saline draught may be taken every two or three hours, in the act of effervescence, with an addition of about five-and-twenty drops of tincture of opium; but if only nausea prevails, the person should drink plentifully of chamomile tea. Externally, we may apply flannel cloths wrung out in a warm decoction of emollient herbs, or a bladder filled with hot water, interposing from time to time frictions with anodyne liniment. When the nausea and vomiting have ceased, he should take some active purgative; as, for instance, take

Powder of jalap, half a drachm;
Submuriate of mercury, five grains;
Syrup of buckthorn, a sufficiency.

Form the mass into five pills, to be taken for a dose; the operation of which may be assisted by a free use of diluent liquors, such as thin gruel and animal broth. Should the purge be rejected by the mouth, or not operate quickly, we must then attempt to evacuate the intestines by clysters, making use of mild laxatives at first.

In the flatulent cholic, the cure may be begun by giving a wine glass of some aromatic cordial combined with an opiate, such as,—take

Peppermint water, one ounce;
Spirit of carraway, half an ounce;
Compound tincture of lavender, one drachm;
Tincture of opium, thirty drops.

Mix them into a draught. Or, take

Compound tincture of cardamoms, three drachms;
Tincture of opium, forty drops;
Peppermint water, one ounce and a half.

Mix them for a draught.

If relief is not soon obtained, a carminative clyster, as the following, may be injected every three or four hours, and warm fomentations, with an addition of rectified spirit, be applied over the whole region of the stomach:—Take

Aniseed, bruised,
Chamomile flowers, of each half an ounce;
Pure water, one pint and a half.

Boil them slowly, until the water is reduced to eleven ounces, and to the strained liquor, add

Sulphate of soda, six drachms;
Castor oil, one ounce;

Mix them for a clyster. Or, take

Oil of turpentine, half an ounce;
Yolk of egg, a sufficiency.

Mix them well together in a marble mortar, then slowly add

Thin water gruel, twelve ounces.

Mix them for a clyster.

Should this not procure a copious evacuation, some stomachic purgative may be administered by the mouth:—Take

Compound tincture of senna, one ounce;
Tincture of jalap, one drachm.

Mix them for a dose. Or, take

Compound infusion of senna, five ounces;
Compound tincture of the same, six drachms;
Sulphate of magnesia, one ounce;
Syrup of ginger, half an ounce.

Of this stomachic purgative, let the patient take three table spoonfuls every two hours, until the bowels are well acted upon.

Ammonia, joined with carminatives, will be very proper in the flatulent cholic. If the disease continues to increase with violence, then bleeding, warm bath, and blistering over the part more particularly affected, must be had recourse to.

In the hysteric cholic it will seldom be necessary to make use of evacuation; but should costiveness prevail, it will be necessary to give some gentle laxative. Take

Powdered rhubarb, one scruple;
Spirit of aniseed, half an ounce;
Cinnamon water, one ounce;
Tincture of jalap, one drachm.

Make them into a draught, which is to be taken immediately—administering at the same time, every four or six hours, the clyster of turpentine recommended in the flatulent cholic. If there be vomiting, the stomach may be cleansed by drinking one or two cupfuls of chamomile tea; after which the patient may take some antispasmodic medicine—as,

Dill water, four ounces and a half;
Spirit of sulphuric æther, one drachm;
Fetid spirit of ammonia, half a drachm;
Tincture of opium, fifty drops;
———— castor, half an ounce.

Of this mixture, two large spoonfuls may be taken every three or four hours.

Those who are subject to attacks of the cholic should cautiously abstain from all kinds of crude flatulent food, and from fermented liquors. They should also avoid as much as possible any exposure to wet and moisture, taking due care to obviate costiveness by a timely use of some gentle laxative, and should wear flannel next to the skin

CONVULSIONS, (IN CHILDREN.) Violent spasmodic affections sometimes attack infants without any apparent cause;

but in general they are produced either by a lodgment of some acrid matter in the intestines, or wind pent up; or they arise from teething, worms, or the accession of some constitutional disease—as, for example, the small-pox, scarlatina, &c. Any trifling matter, capable of irritating the nervous system, will induce symptomatic convulsions in some infants.

When convulsions proceed from any other cause than an eruption of the small-pox, they are always dangerous as well as alarming. When the intervals are short, although the fit itself be not long or violent, the disease is to be considered as more dangerous than when severe paroxysms are attended with long intervals.

Treatment.—The chief object ought to be the removal, if possible, of the cause which has given rise to the malady. If occasioned by indigestion, a gentle emetic may be given in the form of a weak solution of tartarized antimony, of which a tea-spoonful may be administered every ten or fifteen minutes, until the desired effect is procured. When supposed to proceed from acrid matter in the bowels, a laxative clyster, assisted by some gentle aperient, such as calomel, followed by an infusion of senna, with a little tincture of jalap, should be given by the mouth; and if from teething, whenever the tooth can be discovered, scarifications may be made with the edge of a lancet immediately over it, and this operation is to be repeated several days, until the tooth makes its way, or the convulsion ceases.

As worms are looked upon as a frequent cause of recurring convulsions, the remedies should always be employed which are advised under that head.

CORPULENCE, (Polysarcia.)—This, when it arrives at a certain height, becomes a real disorder. The accumulation of fat about the kidneys and mesentery, swell the abdomen and obstruct the motions of the diaphragm; owing to which it is that corpulent people find a difficulty in breathing; but when the whole habit is in a manner overwhelmed with an oily fluid, the enlargement of the cellular interstices will necessarily interrupt the general distribution and circulation through the nervous and vascular systems.

Causes.—A free indulgence of the appetite in the use of nutritive food and fermented liquors, conjoined with an inactive life. When a person of a constitution which is predisposed to obesity is enabled to indulge in good feeding, and leads a calm indolent life, free from mental inquietude, and sleeps much, corpulence generally ensues.

Treatment.—To get rid of too much fat, without any injury to the constitution, the person should, in a very gradual manner, diminish the usual quantity of his aliment, take less of nutritious substances for his food; he should drink as little as he can of malt liquors, use regular and active exercise daily, abstain from suppers, take short rest, sleep but few hours, and rise early every morning. He may put a bandage round the abdomen, so that it can be tightened or relaxed with ease. It will, however, be prudent in all cases to reduce obesity in a gradual manner; which, as a distinguished physician has observed, may be done effectually by keeping the eyes open, the mouth shut, and the legs in motion; or, in other words, by eating and drinking sparingly, by sleeping little, and by taking much active exercise. Diaphoretics, with the occasional use of moderate purging, have been employed. The aerated alkaline water may be taken as the ordinary drink.

Vinegar and lemon juice are often used to reduce corpulency; but an excessive use of acids is apt to destroy the digestive powers.

CRAMP, (Tetanus,) is an involuntary and almost constant contraction of all or several of the muscles, while the senses remain perfect and entire. It may be considered as of two kinds—viz., symptomatic, as the consequence of wounds; and idiopathic, when occasioned by exposure to cold.

Symptoms.—In some instances cramp comes on suddenly and with great violence, but usually it makes its attacks in a gradual manner; in which case a slight stiffness is at first perceived in the back part of the neck, which, after a short time, becomes considerably increased, and at last renders the motion of the head both difficult and painful. With the rigidity of the head there is likewise an uneasy sensation at the root of the tongue, together with some difficulty of swallowing; and great tightness is perceived about the chest. A stiffness also takes place in the jaws, and the teeth soon become so closely set together as not to admit of the smallest opening. In some cases the spasms, returning with great frequency, become more general, and affect not only the muscles of the neck and jaws, but like-

wise those of the whole of the spine, so as to bend the trunk of the body very forcibly backwards or forwards. During the whole course of the disorder, the abdominal muscles are violently affected with spasms; so that the abdomen is strongly contracted, and feels very hard, most obstinate costiveness prevails, and the limbs are rigidly extended.

Causes.—These affections are occasioned either by exposure to cold when under profuse perspiration, sleeping in the open air on damp ground; or by the presence of irritating substances in the stomach and bowels, such as worms; or by some irritation of the nerves, in consequence of local injury by puncture, incision or laceration, surgical operations, gunshot wounds; and, lastly, in consequence of some affection of the mind.

Treatment.—If it proceeds from a wound or puncture, the injured part should be carefully examined, and any extraneous body that may have lodged therein extracted as quickly as possible; care being at the same time taken to dilate or freely lay open the wound. It may be further advantageous to pour a small quantity of a strong solution of opium into the wound, and to dress it after with a little lint dipped in the same, and laying a pledget spread with some digestive ointment over the whole. Opium is the medicine which has been employed with the best effect in cases of tetanus or cramp; but it should always be given in moderate doses at first, and be increased gradually, adjusting it to the effect which it produces on the patient, and not to the quantity which is taken. A combination with opium and other remedies, as the following, may best be used, taking care to increase the quantity of opium in each succeeding dose :—

Take

Musk, ten grains;
Spirit of cinnamon, two drachms;
Camphor mixture, one ounce;
Tincture of opium, forty drops.

Mix them for a draught, to be taken every third or fourth hour. Or, take

Camphor mixture, six ounces and a half;
Compound spirit of æther, half an ounce;
Tincture of opium, two drachms.

Of this mixture the dose may be two table-spoonfuls every three hours.

Besides giving opium internally, it may likewise be employed externally, by rubbing the parts frequently which are most affected with spasms, with equal parts of the linimentum saponis, and the tinctura opii; or, take

Opium reduced to a powder, one drachm;
Camphor, fifteen grains;
Prepared lard, half an ounce.

Mix them as an ointment. Or, take

Prepared lard, one ounce;
Oil of amber, half an ounce;
Opium, pulverized, two drachms.

Mix them.

To procure a relaxation of the spasm, the cold or warm bath has been often made use of with advantage; but the warm bath is entitled to the preference.

As costiveness is a constant attendant on cramp, it may be obviated by the following remedies :—Take

Compound infusion of senna, one ounce and a half;
Sulphate of soda, half an ounce;
Tincture of jalap, two drachms;
Syrup of buckthorn, one drachm.

Mix them for a draught, while the power of swallowing remains, and after it has ceased, by the regular exhibition of clysters.

Throughout the whole course of the disorder, the patient's strength is to be supported by wine, mixed with such things as he can easily swallow, and where this power ceases, nutritive clysters must be substituted.

CRITICAL PERIOD OF FEMALES. When this occurs to females, whether before the usual term, or accidentally, they should, if of a full plethoric habit, be careful to confine themselves to a more spare diet than usual. They should likewise take some regular exercise, and keep their body open by a use of some mild laxative, such as confectio sennæ, the purgative quality of which might be increased, if required, by adding a small quantity of powdered jalap. When the person is sensible of a seeming fulness of the vessels, with giddiness, and occasional pains in the head, small bleedings, by applying leeches to the temples, may likewise be advisable.

If ulcers break out in the legs, or any other part of the body, they ought to be regarded as critical discharges, and should by no means be healed up without substituting some other drain, by an issue. If the suppression of natural functions peculiar to females be accidental, every thing possible must be done to invigorate the system, so as to propitiate its return. If tonics do not produce fever, drinking ferruginated waters will do much good. Where the means of the patient will per-

mit, travelling should be resorted to; the mind should be kept cheerful, and abundant exercise in the open air should be taken. Drugs are to be avoided as much as possible.

DANCE OF ST. VITUS. (Chorea Sancti Viti.) This disease is marked by convulsive actions, most generally confined to one side, and affecting principally the arm and leg. It is chiefly incident to young persons of both sexes, and makes its attacks between the age of ten and fifteen, occurring but seldom after that of puberty.

Symptoms.—The fits are sometimes preceded by a coldness of the feet and limbs, or a kind of tingling sensation that ascends like cold air up the spine; there is a flatulent pain in the left hypochondrium, with obstinate costiveness. At other times the accession begins with yawning, stretching, anxiety, about the heart palpitations, nausea, difficulty of swallowing, noise in the ears, giddiness, and pains in the head and teeth, and then comes on convulsive motions, which discover themselves by a kind of lameness or instability of one of the legs, which the person draws after him in a ridiculous manner, as if it was paralytic; nor can he hold the arm of the same side still for a moment. Sometimes various attempts at running and leaping take place, and at others the head and trunk of the body are affected with convulsive motions. The eye loses its lustre and intelligence, and the countenance is pale, and expressive of vacancy; deglutition is occasionally performed with difficulty, and articulation is often impeded, and sometimes completely suspended. In many instances the mind is afflicted with some degree of fatuity, and often shews the same causeless emotions, such as weeping and laughing, as in hysteria.

Causes.—The dance of St. Vitus is occasioned by various irritations, as teething, worms, acrid matter in the bowels, &c. It arises, likewise, in consequence of violent affections of the mind, as horror, fright, and anger. Occasionally it depends upon an excessive impulse of blood in the brain. In many cases it is produced by general weakness and irritability of the nervous system, and in a few it takes place from sympathy at seeing the disease in others, or by imitating them.

Treatment.—Where the disorder arises in those of a weak, irritable habit, and is wholly unconnected with any species of irritation, either of teething, worms, or acrid matter in the intestines, purgings should not be employed, but recourse is to be had to strengthening remedies. Cinchona bark in large doses, with the assistance of cold bathing, has often effected a cure.

To tonics may be joined antispasmodic remedies, as opium, musk, and belladonna. During a use of these medicines, if costiveness prevails, it should be removed by some gentle laxative. Should the disease resist these means, electric shocks may be directed through the body. Terror suddenly excited has been known to effect a cure. The application of a perpetual blister to the os sacrum has, in addition to electricity, occasionally been found useful. Dry cupping has also been employed with advantage, the same as the insertion of a seton in the neck.

DEAFNESS. (Paracusis.) Deafness may be occasioned by anything that proves injurious to the ear, as loud noises, violent colds, inflammation, or ulceration of the membrane of the ear, hard wax, or other substances, which interrupt the sound; too great a dryness, or too much moisture in the parts; or by debility, or paralysis of the auditory nerves.

Treatment.—It is often difficult to remove deafness, but more especially where it prevails as a consequence of a wound, ulcer, or inflammation of the tympanum. Where it proceeds from malconformation, it admits of no cure. When deafness is occasioned by wax sticking in the ear, or by any defective or diseased action of the glands of the ear, a little of either of the following remedies may be used, by dropping it into the ear:—Take

Ox gall, three drachms;
Balsam of Peru, one drachm.

Mix them. Or, take

Muriate of soda, (salt,) one drachm;
Distilled water, a sufficiency to dissolve the former.

Or it may be applied at the end of a small dossil of cotton every morning and night, previously syringing the ear with a little warm milk and water, or soap and water.

If a thin acrid or fetid discharge accompanies the difficulty of hearing, it will be advisable to apply a small blister behind the ear, and render it perpetual by dressit with the unguentum cantharidis.

When the disease proceeds from cold, particularly affecting the head, the patient should be careful to keep this warm by night, the effect of which may be increased by putting the feet into warm water pre-

viously to getting into bed, and taking some proper diaphoretic.

If the deafness is owing to debility of some part of the organ, or arises in consequence of any nervous affection, it is then to be removed by the following stimulants being dropped into the ear:—Take

Oil of sweet almonds, half an ounce;
Oil of turpentine, forty drops.

Or, take

Olive oil, half an ounce;
Solution of ammonia, thirty drops.

By drawing sparks with an electrical machine, by galvanism, and by cold bathing.

Tobacco smoke is a remedy which has been employed in some cases of severe deafness with great success. The mode of using it is to fill the mouth with the smoke of the strongest tobacco, instantly to close the mouth, and nose, and then for the person to make all possible effort, as if he meant to force the smoke through the nose, which must be prevented by holding the nostrils very tight; this forces the smoke into the ear. The efforts are to be repeated till one or both ears give a seeming crack, immediately on which the hearing returns. Or the ear may be syringed with a decoction of tobacco, made by pouring a pint of boiling water on an ounce of tobacco. This is sometimes a very successful remedy in nervous deafness.

DIABETES manifests itself by weariness and disinclination to motion or exertion, with the feelings of weakness, dryness, and harshness of the skin, costiveness, great thirst, a voracious appetite, gradual emaciation of the whole body, and a frequent discharge of urine, containing a large proportion of saccharine and other matter, which is generally voided in a quantity far exceeding that of the aliment or fluid introduced.

Causes.—Diabetes may be occasioned by a use of strong diuretic medicines, intemperance of life, and hard drinking; by severe evacuations, immoderate use of acid drinks, excessive labour, joined to a poor, vapid diet, and the depressing passions, or anything that tends to produce an impoverished state of the blood, or general debility. Those of a shattered constitution, and those who are in the decline of life, are most subject to its attacks. Some individuals have an hereditary disposition to the disease.

Treatment.—This consists generally in attempting to change the character of the evacuation, and to restore the tone of the organs.

The first object has been attempted by the use of remedies which open the pores, such as emetics exhibited occasionally, diaphoretics, the warm bath at about 96 or 98 degrees of Fahrenheit, additional clothing, or the removal to a warm climate. As diaphoretic remedies, the compound powder of ipecacuanha, and antimonials combined with opium, have principally been employed. Blisters are sometimes applied over the region of each kidney in succession, and kept open afterwards by the unguentum cantharidis, or ceratum sabinæ.

To obtain the second object, astringents combined with tonics have been used. The astringents mostly applied are alum, sulphate of iron, gum kino, catechu, and the sulphuric and nitric acids; but the first and second are the most efficacious, and may be given as follows:—Take

Alum, twelve grains;
Sulphate of zinc, two grains;
Opium, half a grain;
Confection of roses, a sufficiency to form a bolus.

To be taken three or four times a day, washing it down with about four ounces of lime water.

The tonics generally employed are the different preparations of bark, myrrh, and chalybeates, together with cold bathing. The Bristol hot-well waters, when drunk at the fountain-head, have long been known for their good effects in this disease; if the situation of the patient does not admit of their being resorted to, lime water may be substituted instead, taken in the quantity of a pint or a quart a-day, mixed with an equal proportion of milk, and having about half an ounce of gum acaciæ dissolved in each pint of milk. Administering large doses of opium has occasionally been found highly useful in this disease. To assist the effect of the means which have here been enumerated, gentle exercise, with frequent friction over the kidneys, by means of a flesh-brush or flannel, when not in a blistered state, together with warm clothing next to the skin, ought to be used. The patient is at the same time to abstain from all strong drink, to make use of animal food as much as possible, instead of vegetable, and by all means to avoid external cold, as anything that checks the perspiration cannot fail to determine a large quantity of fluids to the kidneys. While these are done, costiveness is to be avoided, the body to be kept perfectly open, either with rhubarb or an infusion of senna. When diabetes is the consequence of hysteria,

hypochondriasis, or asthma, the proper remedies for the primary disorder should be given.

DROPSY consists in an unnatural accumulation of a serous or watery fluid in some parts of the body. Infants, youth, and adults, are equally liable to these effusions in the various cavities of the body. When it is diffused under the skin, either generally or partially, it is called *anasarca*. When it is deposited in the cranium, it is called *hydro-cephalus;* when in the chest, *hydro-thorax;* when in the cavity of the abdomen, *ascites*. Dropsy of the abdomen is much more frequent than that of the chest. The dropsy of the cellular membrane, or anasarca, shews itself at first with a swelling of the feet and ancles towards evening, which, for a time, disappears again in the morning. The swelling is soft and elastic, and when pressed upon with the finger retains its mark for some time, the skin becoming at the same time much paler than usual. By degrees the swelling ascends, and occupies the thighs and the upper parts of the body, until at last even the face and eyelids appear full and bloated. The breathing becomes difficult, and is accompanied by a cough; the urine is small in quantity, high coloured, and deposits a reddish sediment; the belly is costive, the perspiration much obstructed, the countenance yellow, and a considerable degree of thirst, with emaciation of the whole body, prevails, with a great sense of heaviness, and a slow fever.

The *causes* of this disease are, a family predisposition, excessive and long-continued evacuations, a free use of fermented or spirituous liquors, confirmed and incurable dyspepsia, scirrhosities of the liver, spleen, pancreas, mesentery, and other abdominal viscera, preceding diseases, and a suppression of accustomed evacuations.

Treatment.—This ought in general to consist in the removing of the remote causes of the disease, in the evacuation of the serous fluid already collected, and in restoring the tone of the system, and strengthening the general habit. If the dropsy has arisen in consequence of intemperance, a free use of spirituous liquors, exposure to a moist atmosphere, or the having had recourse to copious and frequent evacuations, these ought carefully to be avoided in future.

To get rid of the serous fluid already collected, either slight scarifications, or small punctures, must be made, so superficial as to extend to no greater depth than the cellular membrane; and to promote a discharge of the liquid, the punctured parts should be bathed three or four times a day with the following fomentation:—Take

Marshmallow leaves,
Camomile flowers, of each one ounce and a half;
Pure water, two quarts.

Boil them slowly for some time, then strain off the liquor, and use it for fomentation.

An emetic of the cupri sulphas, as follows, is the most proper, as having less tendency to exhaust than any other:—Take

Sulphate of copper, from five to ten grains;
Powder of ipecacuanha, five grains.

Mix them, and let this powder be taken every second or third morning.

Purgatives of a drastic nature, as for instance:—Take

Scammony, twelve grains;
Submuriate of mercury, five grains;
Powdered ginger, six grains.

Mix them for a dose. Or, take

Powdered jalap,
Scammony, of each twelve grains;
Compound powder of cinnamon, ten grains.

Mix them.

These, as they are most readily communicated to the system, carry off a portion, and excite absorption. The potassæ supertartras, however, is a purgative which may be given with the best effect, as follows:—Take

Supertartrate of potass, three drachms;
Gamboge, two grains;
Powdered nutmeg, ten grains.

Mix them. Or, take

Powder of wild cucumber, from one to two grains;
Supertartrate of potass, one drachm;
Compound powder of cinnamon, five grains.

Mix them for a dose.

To administer purgatives with the greatest advantage, they ought to be repeated at as short intervals as the patient can bear.

Diaphoretics are another class of medicines which have been employed in dropsy; but in general these prove inefficacious, and only tend to general debility. However, if other remedies should fail, they may be given thus:—Take

Camphor, five grains;
Antimonial powder, two grains;
Aromatic confection, ten grains.

Make them into a bolus, to be taken at

bed time, directing the patient at the same time to be laid between blankets, with a shirt and trowsers, and flannel next to the skin, and to drink plentifully of tepid liquors, of which none is more proper than whey, in which a good quantity of white mustard seed has been boiled. The evacuations which will be attended with the least danger of inducing debility, and at the same time with the best effect, is by the kidneys; on this account diuretics are more generally employed in all cases of dropsy than any other class of medicines. Of diuretics, none seems to be more active than the digitalis, on account of its acting powerfully on the nervous system, destroying its mobility, and weakening the vital powers, by repressing arterial action. In employing the foxglove in dropsy, it may be given in infusion: as take

Infusion of purple foxglove, six drachms;
Compound tincture of cardamoms, two drachms;
Spirit of nitric æther, one drachm.

Mix them, and take this draught twice or thrice a day.

Or the foxglove may be given in substance, washing it down with a teacupful of any diuretic infusion. Also, a combination of potassæ supertartras with digitalis or squills—as, for instance, take

Supertartrate of potass, two drachms;
Compound powder of cinnamon, five grains;
Powder of foxglove, one grain.

Mix them. It may be taken twice or thrice a day. Or, take

Powder of foxglove, from half a grain to one grain;
Powder of squills, one grain;
Supertartrate of potass, two drachms.

Mix them: and this powder to be taken thrice a day; interposing purgatives occasionally, the greatest advantage may be derived.

Beer, boiled with juniper berries, is much recommended as a diuretic drink.

The third object to be obtained is to strengthen the system, and the tonic remedies best adapted for this would be more advantageously combined with diuretics, as in the following:—Take

Compound infusion of gentian, one ounce;
Tincture of Peruvian bark, two drachms;
Tincture of Spanish fly, fifteen drops;
Acetate of potass, ten grains.

Mix them. This draught may be taken three times a day. Or, take

Myrrh, hal. a drachm; dissolve it in
Compound spirit of juniper, two drachms; and add
Pimento water, one ounce and a half;
Tincture of foxglove, twenty drops.

Mix them.

This plan may be adopted from the commencement of the disease, keeping the body open at the same time with some gentle aperient.

The diet in this case of dropsy ought to be light and nourishing; consisting chiefly of meats which are of easy digestion, and pungent aromatic vegetables—as garlic, mustard, onions, cresses, horseradish, shalots, &c. If wine is wished for, Rhenish will be most proper; for common drink, the following may be used:—Take

Horseradish root, sliced,
Mustard seed, bruised, of each half an ounce;
Boiling water, one pint,

Infuse them for twelve hours, and to the strained liquor add

Acetate of potass, three drachms;
Compound spirit of juniper, two ounces.

Mix them, and let the patient drink a wine-glassful three or four times a day.

If the person lives in a damp situation, he ought to be removed into a dry one, and if possible into a warmer climate.

Dropsy of the Belly, (Ascites.) This species of dropsy is marked by a tense swelling of the abdomen, accompanied by an evident fluctuation.

Symptoms.—A protuberance is first perceived, which extends gradually, and keeps on increasing until the whole abdomen becomes at length uniformly swelled and tense. As the collection of water becomes more considerable, the difficulty of breathing is much increased, the countenance exhibits a pale and bloated appearance, an immoderate thirst arises, the skin is dry and parched, and the urine is scanty, thick, and high-coloured, and deposits a sediment. It has been observed that during this disease the derangement in the general system is greater than in any other species of dropsy.

The treatment should be directed to the two following objects—1, to evacuate the accumulated fluid; and, 2, to prevent any fresh collection. To answer the first of these intentions, recourse is generally had to purgatives of a drastic nature, or to diuretics. If all means fail, and the pressure and tension of the abdomen become insupportable, tapping must be

resorted to. In drawing off the water, a proper degree of pressure should be made on the abdomen by means of a broad bandage, and this ought to be kept up for some time. The re-accumulation is sometimes obviated by removing the causes which induced the disease, and by strengthening the tone of the parts in particular, and of the system in general. For instance, if the disease proceeds from chronic visceral obstruction, by mercurial friction over the abdomen, and an occasional drastic purgative. A scruple, or half a drachm of the unguentum hydrargyri may be rubbed in over the belly until the mouth becomes slightly affected, while from one to two grains of elaterium may be given once or twice a week. When the disease arises in weak, delicate habits, from debility, tonics, aromatics, and stimulants, combined with diuretics, as directed for anasarca, together with a nutritive diet, exercise, and pure air, will be most appropriate.

Dropsy of the Chest, (Hydrothorax.) This species of dropsy consists in oppression of breathing, particularly on motion, and when in a horizontal posture; sudden starting from sleep, with anxiety and palpitation of the heart, cough, occasional fainting, paleness of the countenance, swellings of the lower extremities, thirst, and a diminution of urine, which is high coloured, and deposits a red sediment.

Causes.—These are about the same with those which produce the other species of dropsy. It chiefly attacks males who have addicted themselves to free living, especially to intoxicating liquors, and who are in advanced life. Such as have long suffered from gout and asthma are much exposed to it. It prevails also as a part of general dropsy.

Treatment.—This should be conducted on the same plan as that of anasarca—viz., by purgatives and diuretics. Emetics, however, and purgatives of a too drastic nature, are not calculated to do much good, as they produce too great a degree of weakness. A combination, as follows, may be given on going to bed :—Take

Supertartrate of potass, from ten to twenty grains;
Submuriate of mercury, from two to four grains;
Powdered ginger, five grains;
Syrup, a sufficiency to form a bolus:

With something still more active—as, take

Comp. infusion of senna, ten drachms;
Tartrate of potass, one drachm;
Tincture of jalap, two drachms;
Syrup of buckthorn, one drachm.

Mix them, and let this draught be taken in the morning, if necessary.

These would produce very beneficial effects. The remedies, however, most to be relied on in hydrothorax are diuretics, and especially the squill; for, besides its diuretic effect, it possesses that of promoting an evacuation from the lungs, and it ought to be given in as large a quantity as the stomach will bear, without exciting nausea. Besides the powder, we may employ the oxymel and vinegar of squill, or the tincture, and even with more advantage. If, after a sufficient length of time, we should fail to procure any good effects from a use of the squill, digitalis ought to be tried in the following combination :—Take

Leaves of purple foxglove, bruised, one drachm and a half;
Canella bark, bruised, one scruple;
Boiling water, eight ounces.

Let them infuse for four hours in a covered vessel, then strain off the liquor for use. Or, take

Infusion of foxglove, from half an ounce to an ounce;
Peppermint water, three drachms;
Spirit of nitric æther, one drachm.

Mix them, and let this draught be taken twice or thrice a day.

In female constitutions, or in males whose strength has been much reduced, this medicine should not be given oftener than twice in the day; and it would not be advisable to continue the digitalis for any length of time, but rather to stop for certain intervals with its use, in order to guard against its producing any deleterious effects, and disordering the stomach of the patient. When, after a fair trial of both the squill and the digitalis, the flow of urine is not increased, they should be combined with saline medicines, in the following manner:—Take

Powder of foxglove, six grains;
Supertartrate of potass, six drachms;
Compound powder of cinnamon, one scruple.

Mix them, and divide them into six papers, of which take one dose twice or thrice a day, mixed in a small tea-cupful of an infusion of juniper berries. Or, take

Powder of foxglove,
Powder of squill, of each nine grains;
Extract of gentian, one scruple;
Oil of juniper, twelve drops;
Syrup, a sufficiency to form the mass:

which is to be divided into twelve pills, of which let one be taken thrice a day, with the following draught :—Take

Supertartrate of potass, from one to two drachms ;
Warm water, ounce and a half ;
Compound spirit of juniper, two drachms ;
Compound tincture of cinnamon, one drachm.

Mix them for a draught.

At the same time that these remedies are administered, blisters should be applied to the chest, shifting them from one side of it to the other, whenever they shew a disposition to heal up. Where there is convulsive breathing, resembling asthma, it may be relieved by giving a grain of opium every hour for two or three doses, with about a drachm of æther in cold water, continuing at the same time the digitalis, as before recommended. When the accompanying cough is so urgent as to prevent sleep and aggravate every other symptom, opiates, combined with squills and other expectorants, should be given. The great coldness of the body of a dropsical subject, and the total want of perspiration, evidently points out the necessity of warm clothing ; and there are no cases in which a flannel covering will not prove beneficial to the patient. As soon as the relief of urgent symptoms will permit, no time should elapse without the patient either walking or riding on horseback, or in an open carriage ; for the frequent but gentle exercise of the body, and the moderate exertion of the muscles, together with the salutary influence of a pure healthy atmosphere, will assist much in giving tone, vigour, and energy to the whole frame.

DRY BELLY-ACHE, (Colica Pictonum.) This disease is characterized by obstinate costiveness, with a vomiting of acrid bile, with strong convulsive spasms in the intestines and the abdominal muscles.

Symptoms.—The disease comes on gradually, with a pain at the pit of the stomach, extending downwards to the intestines. After a short time, the pains increase considerably in violence, the whole region of the belly is highly painful to the touch, the intestines themselves exhibit symptoms of violent spasms, and there is constant restlessness, with a frequent vomiting of an acrid matter, but more particularly after taking either food or medicine. On a further increase of the symptoms, the spasms become more frequent and more violent, the costiveness proves invincible, and an inflammation of the intestines ensues.

Causes.—The dry belly-ache is occasioned by long-continued costiveness ; by an accumulation of acrid bile ; by cold applied either to the extremities or to the belly itself ; by a free use of unripe fruits ; by great irregularity in the mode of living ; by acrid food or drink—such as sour wines or cider ; and by the inhalation of vapours arising from a decomposition of lead—hence painters and glaziers are frequently attacked by it.

The treatment of this disorder consists in—1. Guarding against inflammation of the intestines where the attack is severe, and the patient young and plethoric. 2. In removing the spasms by means of various antispasmodic remedies ; and, 3. By exciting the action of the intestines by purgatives and other means. To accomplish the first, it will be advisable to draw off a quantity of blood, proportionate to the age and habit of the patient, if the attack is violent, at an early period of the complaint. In debilitated habits, elderly people, and mild attacks, its use may with propriety be dispensed with. We should next resort to antispasmodics, for the purpose of removing spasms. The remedies in general use for this purpose are, fomentations applied to the abdomen, by means of flannel cloths wrung out in a warm decoction of poppy heads, with an addition of rectified spirit ; frequent immersion in warm baths ; or taking the patient out of bed, making him walk on a cold, damp floor, barefooted, throwing at the same time cold water on his feet, legs, and thighs ; and the internal use of opium in considerable doses. Where these means fail to produce the desired effect, we ought to have recourse to anodyne clysters, as follows :—Take

Infusion of senna, ten ounces ;
Opium, in solution, three grains.

Mix them for a clyster.

The application of a large blister to the abdomen may sometimes prove useful. In those cases where, from the great irritability of the stomach, opium cannot sit long enough upon it, it might be attended with advantage to convey it into the system by means of friction, in the following forms :—Take

Opium, in fine powder, half a drachm to one drachm ;
Camphor, rubbed down, fifteen grains ;
Prepared lard, one ounce. Mix them.

Or, take

Camphorated spirit, one ounce;
Tincture of opium, half an ounce.
Mix them, and use them as a liniment, repeating it at short intervals of about two hours, until some sensible effect is observed.

As soon as the spasms suffer some little relaxation, and the stomach is somewhat composed, a mild cathartic, as the following:—Take

Castor oil, half an ounce;
Mucilage of gum acacia, a sufficiency.
Mix them in a mortar. Then add, gradually,

Peppermint water, one ounce;
Tincture of opium, twenty-five drops.
Mix them, and let this draught be taken every six hours, at the same time assisting the operation of the medicine by administering a laxative clyster, as follows:—dissolve

Extract of colocynth, half a drachm, in
Infusion of senna, ten ounces; and add
Sulphate of soda, half an ounce;
Castor oil, one ounce.
Mix them for a clyster.

This is to be repeated every three or four hours, should the desired effect not be produced speedily.

The oil extracted from the seeds of the croton tiglium is an active purgative, and would seem to be of particular use where, in consequence of great irritability of the stomach, medicines in any quantity or bulk cannot be retained. The proper dose is one to two drops on a bit of sugar, or with a little crumb of bread formed into a pill.

When the effort to put a stop to the vomiting and spasms, as likewise to procure evacuations, is crowned with success, a return of the disease must be carefully guarded against, by keeping the body regular and open with some aperient medicine, giving small doses of opium from time to time, and cautioning the patient against exposing himself to cold, or any other exciting cause. The tone of the primæ viæ is afterwards to be restored by a use of tonics and stomachic bitters, as recommended for the cure of dyspepsia.

Should a tingling sensation be felt down the spine, together with a feebleness and numbness in the extremities, the parts affected may be rubbed with some kind of stimulating application; besides which, the patient should frequently make use of warm-bathing, always giving a preference to natural baths where they can be resorted to. In addition to these remedies, a long-continued use of cinchona bark, bitters, chalybeates, and friction with a flesh-brush, assisted by electricity, may be employed. Flannel should be worn next to the skin.

The paralysis, or loss of power in particular limbs, which is one of the serious consequences resulting from the poison of lead, is found to be peculiarly relieved by a use of the Bath waters, when applied externally, either generally, or upon the part affected, by bathing and pumping, the former three times in the week, and the latter on the diseased limbs and spine, to the amount of four or five hundred strokes every other day. Where there is considerable debility, and want of due tone in the stomach, the waters may be taken internally with very great advantage. The waters also of Bareges and Aix-la-Chapelle are said to be highly useful in paralysis arising from the poison of lead.

In the *colic of painters*, mercury with opium, followed by sulphate of magnesia and other laxatives, appears to be the best mode of cure. Sulphur, or sulphureous waters, should be avoided, as being likely to prove deleterious.

DYSENTERY, (Dysenteria,) is a disease in which there is an inflammation of the mucous membrane of the intestines, accompanied with frequent purging, severe griping pains, and some degree of fever.

Symptoms.—An attack of dysentery is sometimes preceded by loss of appetite, costiveness, flatulency, sickness at the stomach, and a slight vomiting. These symptoms are in general the forerunners of the griping, and increased propensity to stool, which afterwards occur; but it sometimes happens that the local affection is perceived first. When the inflammation begins to occupy the lower parts of the intestines, the stools become more frequent and less abundant, and in passing through the inflamed parts they occasion great pain, so that every evacuation is preceded by a severe griping. The evacuations are sometimes composed of frothy mucus streaked with blood, and at other times of an acrid, watery humour. Sometimes pure blood is voided, and in some instances a quantity of purulent matter is passed. It frequently happens, from the violent efforts which are made to discharge the irritating matters, that a portion of the gut is forced beyond the verge of the anus, which in progress of the disease proves a distressing symptom.

When the symptoms run high, great

prostration of strength, with a putrid tendency, and fetid and involuntary discharges ensue, and the disease often terminates fatally in the course of a few days; but when they are more moderate, it is frequently protracted to a considerable length of time, and induces great emaciation and debility, going, however, off at last by a gentle perspiration diffused over the whole body; the fever, thirst, and griping then ceasing, and the evacuations becoming more like those of a healthy state of the body.

Causes.—Dysentery occurs chiefly in the autumn, and is often occasioned by cold or moisture succeeding quickly to intense heat or great drought, whereby the perspiration is suddenly checked. It is likewise occasioned by the use of unwholesome and putrid food, and by noxious exhalations and vapours. A particular disposition in the atmosphere seems often to predispose, or give rise to the dysentery, in which case it is epidemic.

Treatment.—In most cases the cure may be begun by taking a gentle emetic in the evening, and the next morning either castor oil, or some saline purgative, which should be repeated every second or third day:—Take

Sulphate of soda, six drachms;
Manna, half an ounce;
Warm water, one ounce and a half;
Compound tincture of senna, two drachms.

Mix them as a purgative draught.

Should the pain and irritation continue after the use of this medicine, take

Decoction of starch, five ounces;
Olive oil, half an ounce.

Add, occasionally,

Tincture of opium, half a drachm to one drachm.

Mix them for a lavement.

All vain attempts to discharge the contents of the bowels, as also all violent strainings, ought carefully to be avoided by the patient throughout the disease.

In the first stage of the dysentery, it would be improper to employ either opiates or astringents; but in the second stage, where the patient's strength is exhausted, these remedies will prove beneficial, taking care to obviate costiveness by a few grains of rhubarb, or some other gentle laxative. In this stage of the disease, should the patient's rest be much disturbed from the frequency of the motions, an opiate in the following form may be taken:—Take

Cinnamon water, six drachms;
Spirit of pimento, half an ounce;
Syrup of ginger, one drachm;
Tincture of opium, forty drops.

Mix them as a draught, to be taken at bed time.

Warm fomentations may also be applied to the anus, and a bladder filled with hot water to the hypogastric region; these are likely to afford great relief.

The astringent remedies best adapted for the cure of dysentery, are the different preparations of catechu, gum kino, logwood, &c., combined in the following manner:—Take

Extract of logwood, one drachm;
Chalk mixture, four ounces;
Tincture of catechu, two drachms;
Spirit of nutmeg, one ounce.

Of this mixture take two table-spoonfuls every four hours, the patient at the same time taking port wine, properly diluted with water, for his ordinary drink.

The impaired tone of the intestines is likewise to be restored by a use of tonics and bitters, together with a little nutritive diet and moderate exercise; as for instance, take

Simarouba bark, bruised,
Cascarilla bark, of each half an ounce.

Boil them in a pint of water, until reduced to eight ounces; strain off the liquor, and add,

Spirit of cinnamon, two ounces;
Tincture of opium, forty-five drops.

Every sort of food which readily tends to putrefaction ought carefully to be avoided, throughout the whole course of the disorder, as also all kinds of fermented and spirituous liquors; supporting the patient's strength with preparations of barley, rice, sago, flour, panada, Indian arrow-root boiled in milk, occasionally varied for gelatinous broths. During the state of convalescence, port wine or Madeira, or even a moderate quantity of brandy, properly diluted with water, may be allowed.

Persons recovering from dysentery should observe the greatest caution and regularity in their mode of living, and they should go warmly clothed, by wearing flannel next the skin, as the disease is very liable to be brought on again, from any fresh exposure to cold, wet, damp, night air, or sudden atmospherical vicissitudes. The importance of warm clothing is too obvious for more to be said respecting it. A waistcoat of flannel or fleecy hosiery next to the skin ought always to be worn, as likewise drawers of

the same, and these should be laid aside with caution, and by slow degrees—viz., cutting away a small portion daily.

EAR, INFLAMMATION OF. (Otitis.) This disorder is for the most part unaccompanied by fever, although the sufferings of the person are very great; but in some instances it is attended with fever, delirium, and convulsions.

Causes.—Inflammation of the ear is produced by the same causes as other inflammations, but by none more readily than a partial exposure to cold.

Treatment.—When the affection is merely local, local remedies alone are necessary, except cathartics. Local bloodletting, the application of a blister behind the ear, and of warmth, are the means chiefly to be relied on. If the pain does not abate, but on the contrary should continue to increase, suppuration may be expected, and it may be encouraged by the application of emollient poultices and warm vapour, and when the abscess bursts, or is opened, we may syringe the ear from time to time with some mucilaginous and gently astringent decoction.

When the inflammation of the ear is accompanied with universal pain diffused over the whole head, together with fever, delirium, or coma, the most powerful general and local remedies are then to be used. Suppuration is generally the consequence of violent inflammation, and then the structure of the whole internal ear is often destroyed. In such cases, the sense of hearing is wholly lost. Fistulous ulcers are also now and then the consequence of suppuration, and prove very troublesome. Ear-ache sometimes continues many days without any apparent inflammation, and is then frequently removed by filling the ear with cotton or wool, wetted with tincture of opium, or ether, or even with warm oil, or warm water. Sometimes a pain in the ear is the consequence of sympathy with a diseased tooth, in which case the ether should be applied to the cheek over the suspected tooth, or a grain of opium, with a little camphor, be applied to the tooth itself.

ELEPHANTIASIS. This disease attacks the skin and the membrane of the lower extremities, and gives to the limbs a bulk so monstrous, and a form so hideous, that they have been compared to the feet of an elephant, from which appearance the name of elephantiasis has been taken. The disease is in general, however, confined to one leg.

Symptoms.—It sometimes comes on gradually, without much previous indisposition, but more commonly the person is seized with a coldness and shivering, pains in the head, back, and loins, and some degree of nausea. No suppuration, however, ensues, but a red streak may be observed running down the thigh. As the inflammation increases in the parts, the fever generally abates; it however returns again at uncertain periods, leaving the leg at last very hard, difficult of motion, and greatly swelled, with varicose, turgid veins, the skin rough and rugged. Scales appear, also, on the surface, which do not fall off, but are enlarged; uneven lumps, with deep fissures, are formed, and the leg and foot become at length of an enormous size and hideous appearance.

Causes.—Elephantiasis has generally been supposed to arise in consequence of some slight attack of fever, on the cessation of which, the malady goes to the leg, and occasions a distention and tumefaction of the limb, which is afterwards overspread with uneven lumps and deep fissures.

Treatment.—Should any great degree of nausea prevail, it may be advisable to take an emetic, and after its operation, if the body should be costive, some gentle purgative may be used. To promote a moderate perspiration, the diaphoretics advised under the head of simple fever may be prescribed; to assist the effect of which, the person should drink plentifully of warm diluting liquors. The parts affected are to be well fomented with cloths dipped in a warm infusion of emollient herbs, and afterwards be wrapped up in flannel. At the commencement, warm bathing may be of use. When the fever goes off, bark may be taken with advantage. If suitable means have been neglected on the first attack of the disease, and the leg has become much enlarged, with a scaly and irregular surface, no cure can be expected. It is probable, however, that gentle alteratives, as

Precipitated sulphur of antimony, two scruples;
Submuriate of mercury, one scruple;
Powdered gum guaiacum, one drachm;
Syrup, a sufficiency to form the mass,

out of which thirty pills are to be made, one or two of which may be taken night and morning, with half a pint of the compound decoction of sarsaparilla, together with warm bathing, will retard its progress. The compound decoction of sarsaparilla may also be used with advantage.

EPILEPSY. (Epilepsia.) This disease consists in a sudden deprivation of the senses, accompanied with a violent convulsive motion of the whole body. It attacks by fits, which after a certain duration go off, leaving the person, most commonly, in his usual state; but sometimes a considerable degree of stupor and weakness remains behind, particularly where the disease is of frequent recurrence.

Symptoms.—An attack of epilepsy is now and then preceded by a heavy pain in the head, dimness of sight, noise in the ears, palpitations, flatulency in the stomach and intestines, weariness, and a small degree of stupor, and, in a few cases, there prevails a sense of something like a cold vapour rising up to the head; but it more generally happens that the patient falls down suddenly, without much previous notice; his eyes are then distorted, or inverted, so as that only the whites of them can be seen; his fingers are closely clenched, his limbs are much agitated; he foams at his mouth, and he loses all sense of feeling.

After a continuance of the convulsions for some time, they abate gradually, and the patient continues for a short period in a state of insensibility, but on coming to himself feels very languid and exhausted, and does not retain the smallest recollection of what has passed during the fit.

Causes.—The causes which give rise to epilepsy are blows, wounds, fractures, and other injuries done to the head by external violence, together with plethora of the vessels of the head, or lodgments of water in the brain, &c. Epilepsy has also been known to arise from an affection of the spinal marrow, violent affections of the nervous system, sudden frights, fits of passion, great emotions of the mind, frequent intoxication, worms in the stomach or intestines, teething, the suppression of some long accustomed evacuation, and poisons received into the body. Sometimes it is hereditary.

Treatment.—This should be according to the cause which occasions the disease. When it is sympathetic, and arises from worms, remedies possessing the power of destroying or dislodging them must be employed. The oil of turpentine has been found a very useful medicine in some cases of epileptic fits. It may be administered in the form of an emulsion, prepared by diffusing the oil by means of honey, or mucilage, in some strong aromatic water; and about half an ounce of this, containing a drachm of the oil, may be taken three times a-day, in a tea-cupful of milk. When it proceeds from teething, that part of the gum which appears to be inflamed should be deeply scarified, the body be kept open by laxative medicines, and the feet be bathed in warm water. When epilepsy occurs without any symptom of direct pressure on the brain, and there is occasional sickness, attended with flatulency, disturbed sleep, and other marks of a disordered digestion, it will be right to evacuate the contents of the stomach by an emetic, consisting of a solution of the sulphate of zinc in an aqueous infusion of ipecacuanha, and to repeat it in six, eight, or ten days, according to circumstances; the dose must vary according to the age of the patient, and the different degrees of the irritability of the stomach, and no general rule can apply to every case. Afterwards, if the stomach should exhibit marks of weakness, light bitter infusions may be given, assisted by some active stimulant, as ammonia, or cajeput oil. Where there is a great prevalence of acid, from imperfect digestion of vegetable food, soda, liquor potassæ, or liquor potassæ subcarbonatis, may be combined with the bitter. If the bowels are confined at the same time, magnesia may be employed advantageously. On the contrary, if too much relaxed, which is seldom the case, chalk preparations may be resorted to.

If epilepsy appears to proceed from any suppressed discharge, in particular the bleeding hæmorrhoids, leeches should be applied to the hæmorrhoidal vessels, together with fomentations, and we should at the same time administer aloetic cathartics.

Where it attacks children of a costive habit, active purgatives should be employed. A combination of the submuriate of mercury and jalap will be very proper.

The occasional causes which are to be avoided are, intoxication, fits of passion, and all other emotions of the mind. When an attack can be foreseen, no medicine, perhaps, will be more likely to prevent an epileptic fit than an emetic given about an hour before its approach. Removing to another country, and changing former habits and the manner of living, may likewise be serviceable in such cases. If the predisposition to the disease has arisen from a plethoric state of the system, or from a turgescence in the vessels of the head, this is to be obviated by bleeding, both generally and topically, but more particularly the latter; by an abstemious diet and proper exercise; and by a seton in the neck.

When the predisposition is owing to a state of debility, we are to obviate and

prevent its effects, by recommending the patient to breathe a cool air, to make use of a generous, nutritive diet, to take daily exercise adapted to his strength, and to go frequently into a cold bath. Besides adopting these steps, he should enter into a regular course of antispasmodics, and astringent and tonic medicines.

The antispasmodics in general use are valerian, castor, musk, ether, arnica, opium, &c., given in the following combinations:—Take

Dill water, one ounce and a half;
Ammoniated tincture of valerian, thirty drops;
Tincture of castor, one drachm;
Spirit of sulphuric ether, thirty drops.

Mix them for a draught, to be taken twice or thrice a-day. Or, take

Infusion of cascarilla bark, one ounce and a half;
Ammoniated tincture of valerian, thirty drops;
Tincture of columba, two drachms;
Tincture of henbane, twenty-two drops.

Mix them for a draught.

A combination of opium and valerian, or of opium and musk, as follows, will be likely to prove very useful:—Take

Musk,
Castor, of each ten grains;
Opium, half a grain;
Confection of roses, a sufficiency to form a bolus, which may be taken every six hours. Or, take
Oil of amber, half an ounce;
Tincture of opium, two drachms.

Mix them, and take twenty drops, twice or thrice a-day, in a little water.

In particular should these be given before the return of the expected paroxysm, and be repeated at proper intervals, increasing the dose in a gradual manner, in proportion to the violence or frequent recurrence of the fits.

Where the disease depends upon a plethoric state, it would be highly improper to make use of opium, but when this is not the case, opium will prove a safe and powerful remedy. When given in large doses, such as two grains in substance, or sixty or seventy drops in the tincture, on the approach of a fit, it has been known to prevent it altogether; but should it fail in this, it will at least lessen its violence. If the stomach rejects it, the external use of opium may possibly be resorted to with much advantage, and it may likewise be employed in this way during the convulsions. The whole spine of the back may be moistened with tinctura opii, or a liniment, consisting of six grains of pure opium, well triturated with a little prepared lard, may be rubbed in.

As a tonic, the cinchona bark has been much recommended in the cure of this disease. When taken for a constancy, it may be combined with valerian; as, take

Decoction of Peruvian bark, ten drachms;
Compound tincture of the same, two drachms;
Ammoniated tincture of valerian, thirty drops.

Mix these for a draught, to be taken thrice a-day.

The preparations of iron most used are, the ferri sulphas, and the ferrum ammoniacum, as for instance:—Take

Ammoniated iron, ten to fifteen grains;
Extract of gentian, ten grains;
Syrup, a sufficiency to form a bolus:

Which may be taken thrice a-day. Or, take

Ammoniated tincture of iron, twenty-two drops, twice or thrice a-day, in a glass of water;

which may be increased gradually to as much as the stomach can bear.

The oxide of zinc is much recommended, and may be given as follows:—Take

Oxide of zinc, twelve grains;
Compound powder of cinnamon, fifteen grains;
Powder of Peruvian bark, one drachm.

Mix them, and divide the powder into twelve papers, of which take one dose three times a-day. Or, take

Oxide of zinc, twenty-four grains;
Extract of gentian, half a drachm;
Syrup, a sufficiency to form the mass;

which is to be divided into twelve pills, of which two may be taken morning and evening, with one ounce and a half of a decoction of Peruvian bark.

The nitrate of silver has been found a valuable medicine in the cure of epilepsy, even where the disease has been of many years standing, and has resisted the power of other medicines, when given, such as—Take

Nitrate of silver, three grains; dissolve it in a few drops of
Distilled water; then add
Crumb of bread, a sufficiency to form a mass;

Which is to be made into twenty pills. The dose may be from one to two, twice or thrice a-day.

The diet in epilepsy should consist of such things as are light, nutritive, and easy of digestion, taking care to avoid whatever is apt to prove flatulent. During the

intervals, the patient is to keep himself as cheerful and tranquil as possible, carefully guarding against all violent passions, or other emotions, and he should take care never to put himself in a hazardous situation, lest a fit should happen to attack him at that period. Rubbing the nose, temples, and pit of the stomach with ether, may possibly help to abbreviate the fit by its action on the olfactory organ.

ERYSIPELAS. This is an inflammatory affection, accompanied usually with drowsiness, often with delirium when the face is affected, and with a fever of a few days' continuance.

Symptoms.—In slight cases, where it attacks the extremities, it makes its appearance with a roughness, heat, pain, and redness of the skin, which becomes pale when the finger is pressed upon it, and again returns to its former colour when it is removed. If the attack be mild, these symptoms will continue only for a few days; the surface of the part affected will become yellow, the outer skin will fall off in scales, and no further inconvenience will be experienced. But if the attack has been severe, there will ensue pains in the head and back, great heat, thirst, and restlessness, the part affected will slightly swell, and about the fourth day a number of little vesicles, containing a limpid, and in some cases a yellow fluid, will arise. In unfavourable cases, blisters are formed, which sometimes degenerate into obstinate ulcers, which now and then become gangrenous.

When erysipelas attacks the face, it comes on with chilliness, succeeded by heat, restlessness, thirst, and other febrile symptoms, with a drowsiness, or tendency to delirium, and the pulse is very frequent and full. At the end of two or three days a fiery redness appears on some part of the face, and this at length extends to the scalp, and then gradually down the neck, leaving a tumefaction in every part the redness has occupied. The whole face at length becomes turgid, and the eyelids are so much swelled as to deprive the patient of sight. The fever is increased as the latter extends, and the disposition to delirium is sometimes so increased as to endanger life.

Causes.—It is brought on by several causes that are apt to excite inflammation, such as injuries of all kinds, the external application of acrid matter to the skin, exposure to cold, obstructed perspiration, suppressed evacuations, and the presence of irritating matter in the primæ viæ.

Treatment.—If the skin is hot and dry, the pulse full, strong, hard, and frequent, and the head affected with severe pain, stupor, or delirium, it will be proper to have recourse to bleeding, cooling purgatives, diaphoretics, and an antiphlogistic regimen. But in old or infirm constitutions, or when the disease is merely local, and does not affect the head, bleeding will be improper.

As erysipelas fever often terminates by sweat, mild diaphoretics, combined as follows, should be used:—Take

Camphorated mixture, one ounce;
Solution of acetate of ammonia, three drachms;
Wine of tartarized antimony, eighteen drops;
Syrup, one drachm.

Mix them into a draught, to be taken every four hours; drinking plentifully of thin gruel, or warm barley water.

In cases where the head and face are affected, mustard applied to the feet will be highly advisable.

As vesicles of various sizes arise in the course of the disease, the most proper application will be some dry meal powder—such as starch, wheat flour, oatmeal, or chalk; but oatmeal may perhaps be preferable to the rest, on account of its not being likely to cake and become hard. External applications, which reduce the heat of the skin, will also be advantageous. Cooling lotions—as equal parts of the liquor ammon. acetatis in water, with the addition of a little vinegar and camphorated spirits, might also be employed with much benefit, and relief to the feelings of the patient.

When effusion is found to have occurred in any considerable quantity, it should be discharged by making a small opening.

When, however, erysipelas arises in advanced life, or a weak, delicate habit, and is accompanied with symptoms of irritation—such as depression of strength, a quick small pulse, &c., bark of cinchona, mineral acids, snake root, camphor, aromatic confection, and wine, should be used. If the disease is mild, and unaccompanied with fever, it will be sufficient for the patient to keep within doors, without being confined to bed.

When the inflammatory symptoms run high, the diet should consist of light nourishing things—such as preparations of barley, sago, tapioca, rice, Indian arrow-root, panada, and the like. The drink should be lemonade, tamarind-beverage,

or barley water acidulated with some vegetable acid; but in those cases where symptoms of irritation prevail, a more generous diet, such as animal broths and a moderate use of wine, will be advisable.

EXCESSIVE PERSPIRATION, (Ephidrosis.) This is commonly owing to general weakness and debility, accompanied with a preternatural determination to the surface of the body. It is generally to be met with in the last stage of pulmonary consumption.

Treatment.—The cure of this complaint is to be effected by covering the body lightly with apparel and bed-clothes; by keeping the chamber of a moderate temperature; by determining from the surface of the body by means of diuretics and gentle laxatives; and, lastly, by strengthening the system by chalybeates and other tonic medicines, cold bathing, avoiding at the same time too long an indulgence in bed, and the use of warm slops.

In the colliquative sweating which attends hectic fever, the diluted sulphuric acid is much employed.

EXCORIATIONS AND ULCERATIONS IN INFANTS. From a neglect of proper cleanliness, children are very apt to become chafed in the wrinkles of the neck, behind the ears, and in the groin.

To remedy occurrences of this nature, it will be proper to bathe the excoriated parts twice or thrice a-day with a little warm milk and water, and afterwards to sprinkle them with some absorbent powder, such as calamine, laying over all a bit of scorched linen rag. Where the excoriation is very considerable, a wash composed of two parts of rectified spirit and one of common water, may be used. A little of the ceratum plumbi superacetatis, spread upon fine lint, may be employed as a dressing. We are, however, to be cautious in drying up discharges behind the ears in infants, as very bad consequences have been observed to ensue from making use of repellent applications in such cases.

In some children of a gross habit of body, and particularly about the time of teething, a species of excoriation, extending low down in the neck, is apt to take place, which at length degenerates into large deep sores, not unfrequently terminating in gangrene. Here fomentations of cinchona bark will be necessary; and we should at the same time administer its powder internally.

When ulcerations ensue, and they are large and painful, fomentations of poppy heads boiled in milk will prove beneficial. Should they shew no disposition to heal after such treatment, some mercurial application may be used, such as the following:—Take

Submuriate of mercury, one drachm;
Elderflower ointment, one ounce.

Mix them for use as an ointment. Or, take

White precipitated mercury, half a drachm;
Spermaceti ointment, half an ounce.

Mix them.

This may be laid on morning and evening, spread on a bit of soft lint. Where alteratives are necessary, small doses of the submuriate of mercury, with the testacea, may be given; but in these cases, as in all others where other than the most simple remedies and the most simple treatment are prescribed, do not neglect calling in good medical aid.

Excoriations of the Nipples. From the constant state of irritation in which these parts are kept with those who give suck, excoriations are very apt to happen. When they do arise, the parts should be washed two or three times a day with a diluted solution of alum, the superacetate of lead, or a few drops of the liquor plumbi acetatis in rose water, and then be sprinkled with a little powder of calamine; or they may be dressed with a little of the following preparation:—Take

Sub-borate of soda, half a drachm;
Honey, half an ounce;
Wheaten flour, a sufficiency to give the whole a proper consistence.

To prevent the sore from being aggravated by sticking to the clothes, a little cup made of wax may be laid over the nipple, which is the part most apt to suffer. If only one nipple is affected, the child may be confined to the other; but if both are affected, the female must desist from the duties of a mother until the excoriations are somewhat healed; taking care, however, to have her breasts drawn regularly twice or thrice a day. As long as there is a necessity of applying any of the preparations of lead to the nipples, it will be prudent not to give suck to the child, as it might be materially injured by it. When this cannot, however, be dispensed with, the parts should be well washed with a little warm water each time previous to giving the child the breast.

EYES, INFLAMMATION OF THE, (Ophthalmia.) In this disorder

the inflammation is seated either in the membrane of the eye, its deep seated parts, muscles, and the lachrymal gland, or in the subaceous glands placed in the edges of the eyelids; but sometimes all these parts are affected in consequence of sympathy; and it rarely happens that any of these suffer in a considerable degree without the inflammation extending further.

Symptoms.—The common ophthalmia usually comes on with a sensation as if some gritty particles had insinuated themselves under the eyelids, accompanied with great heat, redness, and pricking, darting pains. As it increases, the parts swell, and the vessels become not only increased in size and turgid, but appear more numerous than in the natural state. Great pain is excited upon the least motion of the ball of the eye; the patient cannot bear the light; and an effusion of tears from the lachrymal gland ensues, which is of so acrid a nature as to excoriate any part on which it happens to fall. These appearances, after some days' continuance, gradually abate, and at length entirely cease; but in some cases a discharge of thick glutinous matter ensues, which collects in considerable quantities about the angles of the eye, particularly during sleep. Where only one eye has been affected, it is often succeeded by an inflammation of the other, particularly in a scrofulous habit.

Causes.—These are, external injuries; such as blows, contusions, and wounds on the eye; extraneous bodies, of an irritating nature, introduced under the eyelids; exposure to bleak winds and cold; little inflammatory tumours, called sties, which rise on the eyelids; various acrid fumes—such as the smoke of pitcoal, that of wood, turf, &c.; too free a use of vinous and spirituous liquors; the suppression of accustomed discharges; the long application of a strong light, or fixed attention to minute objects.

Treatment.—It is almost unnecessary to observe, that when inflammation of the eye has arisen from any extraneous body getting into the eye—as particles of sand, dust, lime or metal, small flies, the hairs of the eyelids, &c., the irritating cause ought immediately to be removed, and the part defended from the light by the patient's wearing a deep shade of green silk, and sitting in a darkened room.

After topical bleeding, some purgative remedies may be taken, and be repeated every third or fourth day, as long as may be found necessary. A few grains of calomel, with a sufficient quantity of jalap, or a solution of any of the neutral salts, will best answer the purpose.

When the complaint has arisen from exposure to cold, or other causes suppressing the perspiration, it is probable that the patient may benefit from small doses of antimony, so as to excite perspiration. Foot bathing may also be employed with the same intention. To abate the inflammation and irritation, it is usual to have recourse to the frequent application of some cooling and astringent wash, which is applied to the eye by means of an eye cup, or by wet pledgets. Any of the following lotions may be used:—Take

Sulphate of zinc,
Acetate of lead, of each eight grains;
Distilled water, six ounces.

Mix them for a wash for the eyes. Or, take

Solution of acetate of ammonia,
Rose water, of each two ounces;
Camphor mixture, one ounce.

Mix them.

Where the pain is very acute, forty or fifty drops of the vinous tincture of opium may be added to any of the foregoing applications; or the eyes may be bathed frequently with a decoction of bruised poppy-heads. In such cases an internal use of opium will also be advisable; and it may, therefore, be taken in doses of a quarter of a grain, repeated every four or six hours.

When the disease is found not to yield to bleeding, both general and topical, duly repeated, purgatives, emetics, and fomentations, it will be proper to put a blister at the back of the neck, or behind the ear on the side of the eye which is affected, supposing only one to be diseased; and to promote a proper discharge, it ought to be dressed with some stimulating liniment, as, take

Resin cerate, one ounce;
Cerate of Spanish fly, three drachms.

Mix them into the form of an ointment. Or, take

Savine cerate, one ounce.

In those cases where the disorder appears to be constitutional, or to be kept up by any acrimonious humour in the habit, a seton in the neck will be advisable. As the eyelids, when inflamed, are apt to be glued together by a thick, glutinous matter, which is secreted, their edges should be anointed with a little of the following:—Take

Prepared tutty, one drachm;
Spermaceti ointment, one ounce.

Mix them.

Or, take

Prepared lard, one ounce;
Sulphate of zinc, half a drachm.

Mix them.

In all cases of inflammation of the eye, it will be necessary to avoid everything which might occasion irritation; for which reason, the patient ought to be confined to a dark chamber, or, at least, he should wear a blind of green silk over the eye, to prevent a great glare of light; and he ought likewise to abstain from reading, writing, and from all food of a heating or stimulating nature, and the use of vinous or spirituous liquors.

In severe cases the diet should be very spare and light, and the drink consist chiefly of some mild farinaceous decoction, which, while it allays thirst and supplies sufficient nourishment, tends both to moderate excitement and to promote perspiration.

After the removal of the disorder, it may be necessary to employ means to prevent its return, by continuing the use of blisters behind the ears, or the insertion of an issue. In some instances, when it is connected with a debilitated habit, the best means of preventing its return are those which tend to strengthen the vessels of the eye, or the system in general.

One of the most powerful of these means is the cold bath, which may be employed either by immersing the whole body, or by washing the head in cold water, once or twice a day. The application of cold water to the eyes themselves, or of any astringent wash, by means of an eye-cup, twice or thrice a day, may likewise be serviceable in preventing the return of ophthalmia, or removing it after it has become habitual. Cinchona bark and other tonics will also have a good effect, The following lotion in this case will be found of great benefit:—

Spring water, half a pint;
Brandy, a table-spoonful;
Vinegar, a tea-spoonful.

FACE, PIMPLED AND BLOTCHED. These appear on the face, especially on the forehead and temples, and sometimes also on the neck, shoulders, and upper parts of the breast, but never descend to the lower parts of the body, or to the extremities. It is common to both sexes; but the most severe form of it is seen in young men.

Treatment.—The affection being generally local, is to be treated by external applications; as lotions containing alcohol, strengthened or reduced according to circumstances. But there is another species of pimples, which are larger as well as more indurated and permanent. These are of a conical form, and are occasionally somewhat acuminated, as if tending to suppuration, being at the same time of bright roseate hue; but many of them continue for a great length of time in a hard elevated state. They are, however, always tender to the touch; so that washing the face, shaving, the friction of the clothes, &c., produce pain. The disease in its most severe form exhibits the eruption nearly covering the face, breast, shoulders, and top of the back.

The general health does not suffer even under this aggravated form of the eruption. Many persons, however, are liable to disorders of the bowels and stomach. to hæmorrhoids, and some even to pulmonary consumption. Its first appearance, too, is frequently ascribed to some irregularity of diet.

Treatment.—By a steady use of external stimulants, combined with a proper regulation of diet and exercise, this species of blotches is often greatly alleviated. A spirituous lotion, at first a little diluted, and containing the oxymuriate of mercury, in the proportion of a grain and somewhat less to the ounce of the vehicle, is often very beneficial. Other stimulants may be used; as, for instance, take

Oil of almonds, one ounce;
Solution of potass, two drachms;
Rose water, six ounces and a half.

Mix them. Let this wash be used three or four times a day. Or, take

Mixture of bitter almonds, five ounces and a half;
Camphorated spirit, half an ounce.

Mix them for a wash.

In general, it will be found requisite to augment the activity of all these applications in the progress of the treatment.

The diet should be good, light, and nutritious, but not stimulating; consisting of animal food, with well-dressed vegetables, and the farinacea, wine and fermented liquors being omitted, or taken with great moderation.

In some inveterate cases, an increased amendment has been observed when, in addition to the external treatment indicated, small doses of soda, sulphur, and antimony, are taken:—

Washed sulphur, half a drachm;
Subcarbonate of soda, from one scruple to half a drachm;
Tartarized antimony, the sixth of a grain.

Mix them. This powder is to be taken morning and night. Or, take

Subcarbonate of soda, twenty-five grains;
Washed sulphur, two scruples;
Antimonial powder, one grain.

Mix them, and take this powder twice daily.

FALLING OF THE FUNDAMENT IN CHILDREN, (Prolapsus ani.) This disease is often met with in children of a weak habit, or who have been much afflicted with severe purgings. It is also a frequent consequence of irritation in the rectum, arising from the nestling of ascarides in the gut.

Treatment.—Considerable advantages have been experienced from a frequent use of astringent injections; as, take

Decoction of oak bark, four ounces;
Tincture of opium, twelve to fifteen drops.

Mix them for an injection. Or for the same purpose, take

Lime water,
Infusion of galls, of each two ounces;
Vinous tincture of opium, twelve drops.

The same may be used as a wash to the protruded parts; after which they may be sprinkled with a little Armenian bole, powdered very fine, and then reduced. To effect this, the protruded parts should first be well fomented with a decoction of poppy-heads; after which a gradual and general compression of the protruded gut is to be made, that it may thereby be reduced and placed within the anus. In children it is often difficult to reduce the last folds if the finger is pushed through the orifice; for when it is again withdrawn, the gut slips down. A piece of stiff paper may, therefore, be made in the form of a cone, and its point softened by wetting it, and the whole surface should also be oiled. Having done this, it should then be placed upon the point of the finger, and so made to push the last portion of the gut within the anus; the cone will, after this, slip out easily, without bringing down the gut with it.

The child should not be permitted to strain, nor take the usual position at stool. It should be kept in the erect posture, and his hips ought to be held together, so as to compress and support the gut.

With the view of strengthening the parts, the debility of which is in general to be considered as the chief cause of this disease, not only cold baths, in a general way, but likewise cold water should be thrown more directly on the buttocks and loins of the child. Besides these, tonics, such as steel, myrrh, and the cinchona bark, should be given.

[This distressing inconvenience is not confined to children; but when it appears in adults, the same treatment may be observed.]

FAINTING, (Syncope.) This means a decreased action, and sometimes a total cessation, of the pulse and respiration.

Symptoms.—It is sometimes preceded by anxiety, a sense of fulness ascending from the stomach towards the head, confusion of ideas, dimness of sight, and coldness of the extremities, fainting, and sometimes vomiting or convulsions.

Causes.—Sudden and violent emotions of the mind, pungent and other kinds of odours, derangement of the stomach, debility from preceding disorders, bloodletting, hæmorrhages, organic affections of the heart, such as aneurisms, &c.

Treatment.—During the paroxysm, the nostrils are to be stimulated with volatile spirits, or salts, and the face to be sprinkled with cold water. Where fainting arises in consequence of hæmorrhage, the patient should be placed in a recumbent posture; and in all cases a free admission of pure cool air should be allowed. If the disease be the consequence of debility, or defective excitement, the system should be strengthened by the use of bark, sulphuric acid, stomachic bitters, and chalybeates, together with cold bathing. It need hardly be mentioned that all exciting causes should be as much as possible avoided.

FEVER, INTERMITTENT. A fever is said to be intermittent when it consists of a succession of paroxysms, between each of which there is a distinct and perfect intermission from fever symptoms.

Different names have been applied to this sort of fever, according to the distance of time observed between the periods of its return. When it comes on within the space of every twenty-four hours, it is called a quotidian; when it returns every other day, or there is a space of forty-eight hours between its attacks, it is called a tertian; and when it takes place on the first and fourth day, with an in-

terval of seventy-two hours, it is named a quartan.

Symptoms.—The cold stage commences with languor, a sense of debility, and slowness in motion; frequent yawning and stretching, and an aversion to food. The face and the extremities become pale, the features shrink, the bulk of every external part is diminished, and the skin over the whole body appears constricted, as if cold had been applied to it. At length the person feels very cold, as if universal rigors came on; the respiration is small, frequent, and anxious; the urine is almost colourless; sensibility is greatly impaired, and the pulse is small, frequent, and often irregular.

These symptoms abating after a short time, the second stage commences with an increase of heat over the whole body, redness of the face, dryness of the skin, thirst, pain in the head, throbbing in the temples, anxiety, and restlessness; the respiration is fuller and more free, but still frequent; the tongue is furred, and the pulse has become regular, hard, and full. If the attack has been very severe, delirium will sometimes arise. When these symptoms have continued for some time, a moisture breaks out on the forehead, and by degrees becomes a sweat, and this at length extends over the whole body. As this sweat continues to flow, the heat of the body abates, the thirst ceases, the urine deposites a sediment, respiration is free and full, and most of the functions are restored to their ordinary state: the patient is, however, left in a weak and wearied condition. This constitutes the third stage.

After a specific interval, according to the species of the ague, a fresh paroxysm commences in the manner just described, which, when they are of short duration, and regular in their occurrence, a speedy recovery may be expected; but when long, violent, and attended with much anxiety and delirium, the event is doubtful. Relapses are of very common occurrence.

Causes.—Marsh miasma, or the effluvia arising from stagnant water or marshy ground, when acted upon by heat. A watery, poor diet, great fatigue, long watching, intemperance, grief, much anxiety, debility, exposure to cold, lying in damp rooms or beds, wearing damp linen, a warm moist, or cold damp atmosphere, the suppression of some long accustomed evacuation, and the recession of eruptions and preceding diseases, have been considered as the general exciting causes of intermittent fever.

Treatment.—The objects in the treatment of intermittents are, first, to put as speedy as possible a stop to the fit when it has taken place; and, secondly, during the intermission to prevent its return. To obtain the first of these objects, it would be proper to have recourse to warm diluent liquids and cordial diaphoretics, as, for instance, take

Camphorated mixture, twelve drachms;
Subcarbonate of ammonia, five grains;
Wine of tartarized antimony, about fifteen drops;
Common syrup, one drachm.

Mix them. One of these draughts is to be taken every three or four hours. Or, take

Subcarbonate of potass, one scruple;
Lemon juice, sufficient to saturate it;
Cinnamon water, two drachms;
Pure water, one ounce;
Tartarized antimony, one-sixth of a grain;
Syrup of orange peel, one drachm.

Mix them for a draught.

Then fomentations, or bottles filled with hot water applied to the feet, or the more general remedy of a vapour bath. Should, notwithstanding these precautions, the febrile symptoms run high, gentle diaphoretics, in small and frequently repeated doses, may then be made use of as follows:—Take

Juice of lemon, half an ounce;
Subcarbonate of potass, one scruple, or enough to saturate it;
Mint water, one ounce;
Tartarized antimony, the sixth of a grain;
Common syrup, two drachms.

Mix them for a draught, which is to be repeated every three hours. Or, take

Solution of acetate of ammonia, three drachms;
Cinnamon water, two drachms;
Pure water, five drachms;
Wine of tartarized antimony, fifteen drops;
Syrup of orange peel, one drachm.

Mix them for a draught.

In order to increase the effect of these remedies, the patient ought to drink frequently of tepid diluting liquors. Where there is much nausea and vomiting, the stomach may be cleansed with one or two basinfuls of chamomile tea. If incommoded by a cough, attended with a pain in the side, affecting the breathing, a blister may be applied; and should these

affections not be relieved by the remedy, it may not be improper to have a small quantity of blood taken away. If the head becomes much affected, either during the paroxysms, or intermissions, the application of a blister to the back, and of leeches to the temples, will be advisable. Should there be great coldness of the legs, with a sinking of the pulse, cataplasms of mustard may be applied to the soles of the feet for a proper length of time.

When the intermission takes place, the cinchona bark is to be given during the intervals, in large doses. One or two drachms of the powder may be taken every hour, if the stomach will bear so much, as the benefits to be expected from this medicine greatly depend on a large quantity being administered in a short space of time; for five or six ounces of bark taken in a few days will be attended with a much better effect than perhaps as many pounds taken in the course of some weeks. If it does not sit easy on the stomach in substance, a decoction or infusion of it must be substituted, or the extract may be taken as follows, joining a few drops of diluted sulphuric acid:—Take

Extract of Peruvian bark, fifteen grains;
Decoction of the same, one ounce and a half;
Tincture of orange peel, one drachm.

Mix them, and let this draught be taken every other hour.

Where the intermissions between the paroxysms are long, as in the tertian and quartan fever, the bark should be delayed being taken until within eight hours or so of the accession of the cold fit. If all the mentioned forms of taking the bark are nauseated and rejected by the stomach, it may be given in clysters, in which form it likewise proves very efficacious. For this purpose, about a drachm of its extract, dissolved in a sufficient quantity of water, with the addition of a few drops of the tincture of opium, in order to its being longer retained, will be most proper. For the cure of intermittents in children, the bark has sometimes proved effectual when applied externally, by putting the powder of it into a quilted waistcoat. In most intermittents it would, perhaps, be the best practice to unite opium with the cinchona bark, as it would enable the stomach to bear much larger doses of the latter, and likewise add very considerably to its good effects.

In intermittents of long continuance, where the person is advanced in years, and weak, the habit phlegmatic, the season rainy, and the situation damp, it will be proper to make an addition of snake root and some warm aromatic to the cinchona bark, in the following combination:—Take

Peruvian bark, bruised, one ounce;
Pure water, one pint.

Boil it over a slow fire until reduced to half a pint; strain it, and when cool add

Tincture of snake root,
Compound tincture of cardamoms, six drachms of each.

Mix them, and take three large spoonfuls for a dose several times a day. And when the symptoms have more of an inflammatory tendency, it may be given with a small portion of the potassæ subcarbonas, as follows:—Take

Decoction of Peruvian bark, one ounce and a half;
Subcarbonate of potass, from ten to fifteen grains;
Syrup of marshmallows, two drachms.

Mix them. This draught may be taken every four hours.

In all cases of intermittents, it will not be sufficient that the recurrence of paroxysms be stopped for once or twice by the use of the bark; a relapse is commonly to be expected, and it should therefore be prevented by a continued exhibition of the medicine at proper intervals. Even for some weeks after the disease appears to be removed, it may be advisable to take a little of it occasionally, particularly in damp weather, or during the prevalence of an easterly wind. In intermittents, where, from flatulency, distention of the abdomen, or costiveness, it becomes necessary to have recourse to laxatives, something of a warm aromatic nature may be given; as, for instance, take

Powdered rhubarb, fifteen grains;
Compound powder of cinnamon, five grains.

Mix them. Or, take

Infusion of senna, one ounce and a half;
Tincture of rhubarb, two drachms;
Compound tincture of lavender, one drachm.

Mix them into a draught, which should be taken during the intermissions, so that its operation shall have ceased before the accession of the next paroxysm.

It often happens, when intermittents have continued a long time, that scirrhosities of the liver or spleen take place. In such a case it may be proper to take the following remedies with the cinchona bark:—Take

Peruvian bark, in powder, one ounce;
Powdered rhubarb, one drachm and a half;
Subcarbanate of soda, two drachms;
Syrup of ginger, as much as may be sufficient to form the whole into an electuary:

Of which take about a tea-spoonful three or four times a day.

If these do not answer, mercury must be administered:—Take

Submuriate of mercury, (calomel,) one grain;
Opium confection, three grains.

Form these into a pill, to be taken every night. Or, take

Mercurial pill, three grains;
Opiate pill, two grains.

Form them into a pill, to be taken as the former.

A small dose should be given every night, so as just to affect the mouth; but the tonic medicines are to be continued. If the patient cannot take this remedy internally, he must substitute its external use in the form of unction.

Dropsy likewise arises sometimes from mere weakness, and is occasioned by the long continuance of the disease. In such instances it may be removed by exhibiting the bark of cinchona, together with stomachic bitters, diuretics, and chalybeates. As the strength returns, and the patient recovers health, the dropsical appearances will diminish by degrees. During the fits of an intermittent, the patient's strength is to be supported by food of a light nutritive nature, such as preparations of barley, sago, panada, and the like; but when the fit is off, he may be allowed animal food, and a moderate use of wine. A change of air and situation has sometimes a happy effect in removing an intermittent, particularly if from a low marshy country to an elevated one. In autumnal intermittents, it has been found that the air of a city or large town is more favourable than that of the country, owing, most likely to the great number of fires that are always burning. When none of the viscera are affected, cold bathing may be used.

As intermittents are very apt to return, the patient should carefully avoid all such causes as might produce a fresh attack. Should he be troubled by a giddiness of the head, which is not a rare case, even after a slight attack of this fever, it may generally be relieved by volatiles, and the bark and wine: as, take

Mint water, three ounces and a half;
Aromatic ammoniated spirit, forty-five drops;
Syrup of orange peel, half an ounce.

Mix them. The dose may be one large spoonful three or four times a day.

Fever, Remittent. By this is meant, where the fever abates, but does not go off entirely before a fresh attack ensues; or, in other words, where one paroxysm succeeds the other so quickly, that the patient is never without some degree of fever. It is to be also observed, that the remissions happen at very irregular periods, and are of uncertain duration, being sometimes longer and sometimes shorter.

Symptoms. — Preceding an attack of a remittent fever, the patient is usually heavy and languid, and is troubled with anxiety, listlessness, sighing, yawning, and alternate fits of heat and cold. On its accession he experiences severe pain in the head and back, intense heat over the whole body, with thirst, difficulty of breathing, and great dejection of spirits; the tongue is white, the eyes and skin appear yellow; there is a pain and sense of swelling about the region of the stomach; nausea, and a vomiting of bilious matter ensue, and the pulse is frequent and small.

After a continuance of these symptoms for a time, the fever abates considerably, or goes off imperfectly, by a gentle moisture diffused partly over the body; but in a few hours it returns with the same appearances as before. In this manner, with exacerbations and remissions, it proceeds at last to a crisis, or is changed into a fever of a different kind. This, however, is the mildest form under which the remittent fever ever makes its appearance; for some time delirium arises, or the remission is scarcely perceptible, and is immediately followed by another paroxysm, in which there is a considerable aggravation of all the symptoms. The heat of the body is greatly increased, the face highly flushed, the thirst excessive, the tongue is covered with a dark brown fur; respiration laborious, the pulse quick, throbbing, and tremulous, and delirium ensues. At the distance of some time, another short or imperfect remission again takes place; but the symptoms return once more with redoubled violence, and at length destroy the patient.

Causes.—This sort of fever is principally induced, like the intermittent, by

marsh miasma, or the exhalation arising from stagnant water impregnated with the decaying remains of animal and vegetable substances, and is most apt to arise when calm, close, and sultry weather quickly succeeds heavy rains, or great inundations. In warm climates particularly, the remittent is a very prevalent type of fever, and often appears under a highly aggravated and violent form, prevailing epidemically.

Treatment.—It would seem that bleeding is a necessary operation in this fever, where the patient is young and of a full plethoric habit; but in warm climates it will be better to omit it. In all protracted cases of this fever, under every climate, where the pulse is weak and the head much affected, the application of leeches to the temples, and blisters, will be more advisable than general bleeding. To assist in allaying the violence of the fever, the patient is to be kept perfectly quiet, the covering of his bed is to be light, and his chamber of a moderate temperature, by allowing a free admission of cool air into it. He should be presented from time to time with some cooling acidulated liquor, such as lemonade, tamarind beverage, or a solution of the supertartrate of potass, or even cold water. Throughout the whole course of the disease, it will be advisable to change his body linen, as well as that of the bed, frequently; to sprinkle his chamber often with vinegar, and to remove immediately all his evacuations. As in most cases of this disease there is a determination to the brain, the patient's head should be kept rather elevated, and being shaved, numerous folds of linen, moistened with vinegar and water, may be kept constantly applied to it; his feet may be immersed occasionally in warm water. As nausea usually prevails at the commencement of the disease, it will, in all cases, be right to cleanse the stomach, by giving a gentle emetic of ipecacuanha, or a solution of tartarized antimony; which latter may, perhaps, be preferable. The operation of this emetic being over, the bowels may then be emptied by some gentle laxative, which will seldom fail in bringing off a quantity of dark bilious matter. It will be most advisable to begin with the following laxatives:—Take

Tartrate of potass, two drachms;
Compound infusion of senna, one ounce and a half;
Tincture of jalap, one drachm.

Mix them for a draught.

Or, take

Powdered rhubarb, from ten to twenty grains;
Submuriate of mercury, five grains;
Common syrup, as much as will form the mass:

Which divide into four pills, to be taken at once, assisted now and then with aperient clysters.

After these evacuations, and where there is no delirium present, an opiate will be found of great service in quieting the emotions induced by the discharges, and in enabling the patient to retain on his stomach both nourishment and medicines.

In the progress of the disease, where much debility has arisen, aspersion, or sponging the body over with cold water and vinegar, or, rather, with a mixture composed of half an ounce of pure nitric acid, and half an ounce of pure muriatic acid to three pints of water, together with an internal use of wine, may be substituted for effusion or immersion. To alter the type of the fever, if possible, and bring the remission into perfect intermission, by promoting a gentle diaphoresis, it will be proper to give antimonials in small and frequently repeated doses—as, take

James's powder, four grains;
Camphor, three grains;
Confection of roses, a sufficiency to form them into a bolus or two pills:

To be taken every third or fourth hour; and to assist their effect, the patient should take frequent small draughts of some tepid diluting liquor.

Where frequent vomitings prevail, antimonials will not be proper; but in their stead the saline medicine is to be taken, so that the effervescence shall take place in the stomach, with the addition of about ten drops of tincture of opium to each dose. Flannel cloths, wrung out in a warm decoction of chamomile flowers and bruised poppy-heads, with an addition of rectified spirits, are to be kept constantly applied over the region of this organ.

Should these means fail in procuring the desired effect, a large blister may be put immediately over the part, which will be found in general a very effectual remedy. Blisters likewise prove highly serviceable in the latter stages of a remittent fever, when the spirits flag, and the pulse is low and fluttering, with insensibility, or a disposition to coma. In such

cases they may be applied between the shoulders, or to the legs. Sinapisms of mustard may also be put to the soles of the feet.

When a severe vomiting has arisen, the patient ought to swallow as little drink as possible; for whatever reaches the stomach is sure to be rejected shortly with considerable violence; and each time it is thrown into these convulsive motions, the disease is strengthened and the person exhausted. Under such circumstances, it will be better to support the strength by administering clysters, composed of broths and other nutritious liquids, than to attempt it by giving anything by the mouth. When the stomach is not in an irritable state, and anything is retained readily, the patient is to be supported by food of a light, generous nature. During the remission, a little wine may be mixed with it.

As soon as the fever shews a disposition to yield, and a perfect remission takes place, bark of cinchona, in substance, ought to be taken, and in such doses as the stomach will easily bear: if about twenty drops of diluted sulphuric acid are added to each dose, the effect will be increased. If the bark should occasion a purging, about ten drops of the tincture of opium, or a drachm of the tincture of catechu, may be added to each dose.

To guard against a relapse, the cinchona should be continued for some days after a cessation of the attacks, and not be too hastily left off, as is sometimes the case. Everything that may have a tendency to bring on a fresh attack of fever is carefully to be avoided during the state of convalescence. A change of air and situation, particularly if it has been low and damp, may have a good effect in expediting the patient's recovery; and if the appetite does not return readily, he may take stomachic bitters with advantage.

In seasons and places where this fever is prevalent, it will be advisable, by way of preventive, to take a proper dose of the compound tincture of bark about twice a-day, but more particularly on an empty stomach in the morning.

Fever, Continued. Fevers of this nature continue for several days with nearly the same violence, having evident exacerbations and remissions daily.

Symptoms.—An attack of the simple continued fever is generally marked by the patient's being seized with a considerable degree of languor, or sense of debility, together with a sluggishness in motion, and frequent yawning and stretching; the face and the extremities at the same time become pale, and the skin over the whole surface of the body appears constricted; he then perceives a sensation of cold in his back, passing from thence over his whole frame; this sense of cold continues to increase; tremors in the limbs, and rigors of the body succeed. With these there is a loss of appetite, want of taste in the mouth, slight pains in the head, back, and loins, and a small and frequent respiration.

The sense of cold and its effects, after a little time, become less violent, and are alternated with flushings, and at last they are succeeded by great heat diffused generally over the whole body; the face looks flushed, the skin is dry, and likewise the tongue; universal restlessness prevails, with a violent pain in the head, oppression at the chest, sickness at the stomach, and an inclination to vomit. There is likewise great thirst and costiveness, and the pulse is full and frequent, beating perhaps 90, 100, or 120 strokes in a minute. When the symptoms run very high, and there is a considerable determination of blood to the head, delirium will arise. In this fever, as well as most others of the continued kind, there is generally an increase of the symptoms towards evening.

If the disease is likely to prove fatal, either by its long duration, or by the severity of its symptoms, picking at the bedclothes, involuntary discharges by urine and stool, coldness of the extremities, and hiccups, will be observed; where no such appearances take place, the disease will go through its course, and at length cease. The symptoms pointing out the approach of a crisis are, the pulse becoming soft, moderate, and near its natural rate, the tongue losing its fur, and becoming clean, with an abatement of thirst; the skin being covered with a gentle moisture, and feeling soft to the touch; the secretory organs performing their several offices, and the urine depositing flaky crystals of a dirty red colour, and becoming turbid on being allowed to stand any time. The days on which it is supposed the termination of continued fever happens are, the third, fifth, seventh, ninth, eleventh, fourteenth, seventeenth, and twentieth.

Causes.—Everything which has a tendency to enervate the body may be looked upon as a remote cause of fever, and accordingly it is often found to arise from great bodily fatigue, too great an indul-

gence in sensual pleasures, violent exertions, intemperance in drinking, and sometimes, also, from the suppression of some long accustomed discharge. The most usual and universal cause of this fever, however, is the application of cold to the body, giving a check to perspiration. Exhalations arising from animal or vegetable substances in a state of putrefaction, are looked upon as another general cause of fever; marshy or moist grounds acted upon by heat for any length of time, usually send forth exhalations, which prove a never failing source of fever. Lastly, the breathing of air contaminated by the vapour arising either directly or originally from the body of a person labouring under the disease, is also a frequent cause of continued fever.

Treatment.—In this fever, as in the others, all motion of the body should be avoided, especially that which requires the exercise of the muscles; the patient ought, therefore, to be confined to his bed. The exercise of the mind proving a stimulus to the body, all impressions which lead to thought, especially those which may excite motion or passion, are to be carefully shunned. The chamber ought not to be close and warm, but, on the contrary, perfectly cool and sufficiently ventilated, taking care, however, that the air does not come in a direct stream or current upon the patient. He is likewise to be lightly covered with bed clothes.

That sort of aliment which gives the least stimulus will be the most proper; the food should be light, nourishing, and easy of digestion, consisting of preparations of barley, oatmeal, sago, vermicelli, tapioca, and Indian arrow-root, varying them now and then for panada, roasted apples, &c. Animal broths should only be taken when in a state of convalescence. For drink, barley-water, linseed tea, toast and water, milk whey, thin gruel, and lemonade may be used, but carefully avoiding the use of any kind of spirituous or fermented liquor.

As the stomach and the rest of the alimentary canal are manifestly affected, in many cases of fever, in a higher degree than other parts of the body, emetics and purgatives are, therefore, usually the first means which present themselves to the notice of the physician.

If there are any crudities or corrupted humour producing nausea, or vomiting, it will be necessary to try to dislodge them by administering a gentle emetic, prepared as follows:—Take

Powdered ipecacuanha, fifteen grains;
Tartarized antimony, one grain;
Mint water, one ounce and a half.

Mix these for an emetic draught.

To assist its operation, the patient should drink freely of lukewarm water, or an infusion of chamomile flowers.

In order to remove the feculent contents of the bowels, some gentle laxative as the following, may be used:—Take

Tartrate of potass, half an ounce;
Manna, one ounce;
Warm water, three ounces.

Mix them, and of the solution take the half for a dose, which repeat after two hours, unless the bowels are sufficiently acted upon by the former; and through the remainder of the disease, the body should be kept open, if necessary, by a repetition of some such medicine, administered as the occasion may require, or by means of the following aperient clyster:—Take

Sulphate of soda, half an ounce;
Compound decoction of mallow, twelve ounces;
Olive oil, half an ounce.

Mix them for an aperient clyster.

Where the disorder seems to have arisen from, or to be kept up by, a redundant secretion of bile, mild purgatives will be still more necessary, and the submuriate of mercury, joined with a few grains of jalap, or cathartic extract, may best answer the purpose. Purgative medicines are sometimes combined with antimonials—as, take

Submuriate of mercury, five grains;
Antimonial powder, from one to two grains.

Mix them.

If great heat with much thirst prevail, cooling medicines may be taken with advantage; and the most useful of this class is the nitrate of potass, which may either be joined with others—as, take

Lemon juice, half an ounce;
Subcarbonate of potass, one scruple, or a sufficiency.

After being saturated, add

Nitrate of potass, ten grains;
Pure water, one ounce;
Syrup of violets, one drachm.

Mix them, and let the draught be taken every three hours.

Or it may be added to whatever the patient uses for common drink; as, for instance, take

Decoction of barley, two pints;
Nitrate of potass, two drachms.

Mix them for an ordinary drink.

Acids of all kinds, when sufficiently diluted, are refrigerant remedies, well adapted to continued fevers. Those most in use are the sulphuric, muriatic, and vegetable acids, but more particularly the latter, such as the acid of tamarinds, oranges, lemons, mulberries, &c. Cold water may likewise be drunk.

With a view to determine the circulation to the surface of the body, it will be right to resort to an early use of such medicines as possess this peculiar power. To excite a perspiration, it will in many cases be sufficient only to make the patient lie in bed, and drink plentifully of diluting liquors; but should these simple means not prove efficacious, it will then be necessary to resort to more powerful remedies.

Neutral salts, when taken into the stomach, soon produce a sense of heat on the surface of the body; and if it be covered close, and kept moderately warm, a gentle sweat is often readily brought on. These remedies, therefore, being possessed of the power of determining to the surface, are highly useful in fever, and may be taken as follows:—Take

Subcarbonate of ammonia, ten grains;
Lemon juice, half an ounce;
Mint water, one ounce;
Compound tincture of lavender, ten drops;
Syrup of marshmallow, two drachms;

Mix them for a draught. Or, take

Lemon juice, one ounce and a half;
Subcarbonate of potass, about a drachm.

After the effervescence has ceased, add

Mint water, one ounce;
Pure water, three ounces;
Tartarized antimony, from one grain and a half to two grains;
Common syrup, two drachms.

Mix them, and let the patient take two large spoonfuls every three hours.

To increase the diaphoretic effect of these medicines, the patient should take frequent small draughts of some tepid liquor. Warm bathing, and fomenting the lower extremities may also be employed in order to produce moderate sweating. Sweating, however, when excited in fevers by stimulant, heating, and inflammatory medicines, is almost sure to prove hurtful. It likewise proves injurious when excited by much external heat. When sweating is partial, and confined to the superior parts of the body, it will be more likely to prove hurtful than salutary.

If a cough accompanies the fever, and a rawness and soreness in the fauces, together with a tightness at the chest are present, then, besides pursuing the antiphlogistic plan, demulcents, as the following, should be made use of:—Take

Spermaceti, two drachms;
Yolk of an egg, sufficiency to dissolve the former; then add
Pennyroyal water, four ounces;
Vinegar of squill, two drachms;
Syrup of tolu, three drachms.

Mix them well together, and let the patient take a mouthful from time to time. Or, take

Mucilage of acacia,
Pure water, each three ounces;
Nitrate of potass, one drachm;
Wine of tartarized antimony, forty drops;
Syrup of lemons, half an ounce.

Mix them, and give about two large spoonfuls occasionally, or when the cough is troublesome.

Should a vomiting arise in the course of this fever, and the irritation prove considerable, a saline draught may be taken in the act of effervescence, or it may be taken so that this shall take place in the stomach. The manner of doing it is by giving the patient about half an ounce of lemon juice, mixed up with a little mint water and syrup, and immediately afterwards, about a scruple of the potassæ subcarbonas, dissolved in an ounce of common water. If the irritation at the stomach is not abated by this means, a few drops of the tincture of opium may be added, with a little cinnamon water.

Purging should be checked by the following remedies:—Take

Aromatic confection, two drachms;
Cinnamon water, one ounce;
Pure water, three ounces;
Tincture of catechu, two drachms.

Mix them, and let two table-spoonfuls be taken after every liquid stool.

In the progress of this fever it sometimes happens that particular parts of the body are much affected, and that there prevails either great oppression of breathing, or that violent pains in the head, stupor, or delirium, ensue. In all such cases, the application of a blister near the affected part will be proper, and relief will often be speedily procured by it. Where there is any unusual coldness of the extremities, with a sinking pulse, blisters to the inside of the legs will likewise prove highly serviceable. Their efficacy in such cases may be increased by the application of stimulating cataplasms to the soles of

the feet and palms of the hand such as, take

Bruised mustard seed,
Crumb of bread, each half a pound;
Vinegar, a sufficiency to form the whole into a cataplasm.

Camphor, ammonia, musk, and ether, are remedies which may be used at the same time, either separately or combined together, and the patient should be allowed a liberal use of wine, both in a diluted and undiluted state. The camphor is to be given as follows:—dissolve

Camphor, half a drachm, in
Fresh milk, two ounces; then add
Pure water, six ounces.

Mix them together.

In fever there is often a great interruption to sleep, and the more violent the fever, the greater, in general, is the interruption. It will be requisite, in order to procure rest, to keep the patient as quiet as possible, and, if absolutely necessary, the spiritus etheris nitrici, and Hoffman's liquor, will be the least exceptionable.

As, however, this fever is, in some instances, continued and kept up solely by debility, then in such cases, if the symptoms are mild, the use of the cinchona bark may be ventured on in the following form:—Take

Peruvian bark, bruised, one ounce;
Pure water, one pint and a half.

Boil these slowly till reduced to one pint, then strain off the liquor, and add

Tincture of columba, one ounce.

Mix them, and of the decoction let three table-spoonfuls be taken every four hours.

With some persons the cinchona bark will not sit easy on the stomach in any shape. In such a case the quassia may be substituted—as, take

Quassia, two drachms;
Boiling water, six ounces.

Strain off the liquor after one hour's infusion, and add

Tincture of columba,
Compound tincture of cardamoms, each half an ounce.

Mix them, and take two table-spoonfuls every three hours, with fifteen drops of diluted sulphuric acid.

On a recovery from fever, the patient should cautiously avoid any fatigue, exposure to cold, or improper food. As restoratives, a generous diet, with a moderate use of wine, will be serviceable, and if the season of the year will admit of cold bathing, it will likewise be advisable. A change of air, with moderate daily exercise will prove powerful auxiliaries in enabling the convalescent to regain his strength. Where the appetite is defective, we may prescribe stomachic bitters.

GIDDINESS IN THE HEAD. (Vertigo.) This disorder usually proceeds either from too great a fulness of blood in the vessels of the head, or is the consequence of either dyspepsia or hysteria.

Symptoms.—The patient is seized on a sudden with a swimming in the head, and is in danger of falling down.

Treatment.—This complaint is attended with no danger, when it arises as a symptom of any nervous disorder, but when it takes place in consequence of an over fulness of blood in the vessels of the head, either general or topical bleeding by the application of several leeches to the temples, together with a frequent use of cooling purgatives, and a spare regimen, ought to be employed; and if not relieved, an issue with a seton will be necessary.

GLANDS. (Diseased Mesenteric Glands.) Children of a scrofulous habit are very often affected with a diseased state of the mesenteric glands; the little patient usually complaining of a deep seated lancinating pain within the abdomen, which gradually enlarges, while the other parts of the body are emaciated.

Symptoms.—The countenance becomes altered, the eyes seem glassy and sunk in their sockets, the nose is sharpened, the cheeks are of a marble whiteness, unless they are flushed with hectic fever. The state of the bowels is variable, though more commonly relaxed than otherwise. Although the appetite is tolerably good, nay, often voracious, yet neither health nor strength result from it. In the advanced state of the disease, the child is fretful, peevish, and inactive. There is usually an accession of fever towards the evening. The skin is dry to the touch, and the cuticle is not unfrequently thrown off in scales. The most unfavourable symptoms are a rapid increase of the emaciation, the abdomen being much enlarged, and tense, and the cuticle peeling off.

Treatment.—A gentle action upon the intestines by aperients will be very useful, and therefore the following should be given, in a dose proportioned to the age of the child, twice every week:—Take

Submuriate of mercury, from two to four grains;
Powder of rhubarb, four to ten grains.

Mix them as a cathartic. Or, take

Submuriate of mercury, from two to four grains;
Tartrate of potass, eight grains to one scruple.
Mix them.

On the intermediate days some slight tonic may be administered twice or thrice a-day. But the more severe the evening paroxysm, the greater caution will be necessary in the exhibition of tonics, and the less restraint be required in the use of purgatives. Exciting the surface of the body to a healthy action, by warm-bathing every second or third night, and employing frictions of the following liniment night and morning, over the whole of the abdomen, will greatly assist and expedite the cure:—Take

Compound soap liniment, and use it for an embrocation.

Or, take

Compound camphor liniment.

The diet should be milk, gruel, sago, and other kinds of farinaceous food, with an admixture of dressed vegetables. Provided the child exceeds the age of two or three years, a small quantity of animal food may be allowed. Animal broths, jellies, &c., may be given to all that are weaned. Exercise in the open air should be especially recommended, and as that of the sea usually proves beneficial to such patients, where a residence near the coast is practicable, it should be adopted.

GOUT. (PODAGRA.) In this disease the pains generally attack the small joints, arising without any apparent external cause, but preceded generally by an unusual affection of the stomach, infecting the articulations of the feet and hands, particularly the great toe, and the less inclined to shift, yet alternating with affections of the stomach, or other internal parts.

Symptoms.—A paroxysm of regular gout sometimes comes on suddenly without any warning; at other times it is preceded by an unusual coldness of the feet and legs, a suppression of perspiration in them, and numbness; or by a sense of pricking about the whole of the lower extremities, and with these symptoms the appetite is diminished, the stomach is troubled with flatulency and indigestion, a degree of torpor and languor is felt over the whole body, great lassitude is experienced after the least exercise, the body is costive, and the urine is pallid. On the night of the attack, the patient is awakened by the severity of the pain, which has affected either the joint of the great toe, the heel, calf of the leg, or perhaps the whole of the foot; and this becoming at length more violent, is succeeded by rigors and other febrile symptoms, together with a severe throbbing and inflammation in the part. Sometimes both feet become swelled and inflamed, so that neither of them can be put to the ground.

Towards morning the patient falls asleep, and a gentle sweat breaks out, and terminates the paroxysm, a number of which constitute what is called a fit of the gout, the duration of which will be longer or shorter, according to the disposition of the body to the disease, the season of the year, and the age and strength of the patient.

When the paroxysm has thus taken place, although there is an alleviation of pain at the expiration of some hours, still the patient is not entirely relieved from it, and for some evenings successively he has a return of both pain and fever, which continue with more or less violence until morning.

Gout, with little exception, acquires strength with each returning fit, both as to the number of parts which it attacks, and as to the duration and degree of suffering. A premature old age comes on, and together with painful and crippled limbs, the nervous system is so enfeebled, that both body and mind become less equal to sustain the conflict.

It sometimes happens that from certain causes no inflammatory affection of the joints is produced; in which case the stomach becomes particularly affected, and the patient is troubled with flatulency, indigestion, violent pain, nausea, vomiting, and a peculiar sense of cold in the epigastric region. These affections are often accompanied with much dejection of spirit. In some cases, the head is affected with pains and giddiness, and in other cases the chest suffers from the disease, and palpitations, faintings, cramps, and asthma arise.

In repelled gout, we generally find the disease on the stomach, producing violent pain, sickness, and vomiting; and the symptoms are so violent, that the patients think themselves dying. It seems closely connected with a spasmodic affection of the stomach.

Causes.—Hereditary predisposition, a peculiar saline acrimony existing in the blood, good living, and a sedentary life; intemperance of every kind, late hours, intense application to study, much grief or anxiety of mind, exposure to cold, particularly by getting wet in the feet, and too free a use of acidulated liquors.

Treatment.—During a paroxysm of the gout, if the attack is severe; it will be necessary to confine the patient in bed, keeping the inflamed parts of a moderate temperature. He is, at the same time, to be kept as quiet and as free from all irritation as possible. If the patient is young and plethoric, he should abstain from all sorts of animal foods, aromatics, and fermented liquors, living on water-gruel, panada, sago, arrow-root, and other farinaceous substances. His drink should be some mild diluting beverage, such as barley-water, toast and water, or tea. In elderly people, where the tone of the stomach is weak, a more generous diet, with a moderate use of wine, may be allowed.

Local application, consisting of the following:—Take

Alcohol, eight ounces;
Camphor mixture, sixteen ounces;

Mix them.

This lotion is to be made lukewarm, by the addition of a small quantity of warm water, and to be applied constantly to the parts affected.

Gentle sudorifics, as the following, are sometimes useful:—Take

Antimonial powder, two grains;
Subcarbonate of ammonia, eight grains;
Confection of roses, a sufficiency to form a bolus, which may be taken every three or four hours. Or, take
Lemon juice, half an ounce;
Subcarbonate of ammonia, a sufficiency for saturation.

Then add

Pure water, six drachms;
Wine of tartarized antimony, fifteen to twenty-two drops;
Syrup of orange peel, one drachm.

This draught is to be given every four or six hours.

On the termination of a fit of the gout, a fresh paroxysm is to be delayed, or rendered less violent, by observing great temperance during the intervals, by moderate regular exercise every day, by avoiding cold, and by strengthening the body. Drinking half a pint, daily, of the double acidulated soda water, may possibly have a good effect during the intervals of the paroxysm.

When the stomach or intestines become affected in consequence of retrocedent gout, immediate relief ought to be attempted, by making the patient drink freely of wine, or even brandy, joined with aromatics. In affections of this nature, strong spirits impregnated with assafœtida or garlic may also be given with much advantage. Opiates joined with aromatics, or with camphor—as, take

Opium, one grain;
Camphor, five grains;
Subcarbonate of ammonia, six grains;
Aromatic confection, five grains.

Make them into a bolus, to be taken when requisite. Or, take

Camphor mixture, one ounce and a half;
Subcarbonate of ammonia, ten grains;
Tincture of opium, twelve drops;
Spirit of sulphuric ether, thirty drops.

Mix them. Take this draught every three hours.

When the gout attacks the lungs, and produces asthma, blisters should be applied to the breast or back, and stimulating cataplasms to the soles of the feet, and opiates and antispasmodics should be administered internally.

In those who have an hereditary predisposition to gout, it is certain that it may often be prevented from taking place by paying an early and strict attention to temperance and exercise, and avoiding all exposure to cold.

GRAVEL AND STONE. (LITHIASIS.) These diseases depend upon a particular secretion of the kidneys to form a calculous matter, and are supposed to be owing to the presence of an acid principle in them, termed uric acid.

Symptoms.—A fit of the gravel is attended with a fixed pain in the loins, numbness of the thigh on the side affected, nausea, and vomiting, and not unfrequently with a slight suppression of urine. As the irritating matter removes from the kidney down into the ureter, it sometimes produces such acute pain as to occasion faintings and convulsive fits. One of the principal symptoms of calculus in the kidney, is the dark appearance of the urine, as if it were mixed with coffee grounds.

The symptoms which attend on a stone in the bladder are, a frequent inclination to make water, which flows in a small quantity: the patient cannot bear any kind of rough motion, neither can he make use of any severe exercise.

Causes.—A long use of fermented liquors, of wines abounding with tartar, sedentary employments, and gout. The period of life from infancy to about fifteen years, is most subject to the formation of calculi in the bladder.

Treatment.—In violent paroxysms of pain, recourse must be had to fomentations, consisting of equal parts of the de-

coction of poppy heads, and the compound decoction of mallows, applied externally and internally, by clysters:—Take

Oil of turpentine, one drachm;
Yolk of egg, a sufficiency.

Mix them, and add

Oatmeal gruel, twelve ounces;
Tincture of opium, from thirty to sixty drops.

Mix them for a clyster. Or, take

Decoction of linseed, twelve ounces;
Sulphate of soda, half an ounce;
Castor oil, three drachms to one ounce;
Tincture of opium, from half a drachm to one.

Mix them for a clyster; and where these prove ineffectual, the patient should be put into a warm bath.

With these means he should drink plentifully of diluting mucilaginous liquors, and take some proper opiate; as, for instance—Take

Fennel water, one ounce and a half;
Solution of subcarbonate of potass, twenty drops;
Spirit of nitric ether, half a drachm;
Tincture of opium, twenty to thirty drops.

Mix them.

This draught is to be taken three times a-day, and may be repeated according to the urgency of the symptoms. When the pain has somewhat subsided, it will be right to give some opening medicine, such as the oleum ricini; but if the stomach should reject this, about two drachms of the sulphate of magnesia, in linseed tea, with or without four or five drops of the tincture of opium, may answer the intention. Diuretics and blisters would be improper. To regulate and simplify the diet, will be found highly important; and vegetables, as being more readily digestible, and more easily assimilated by some weak stomachs, than animal food, is a much more appropriate fare for individuals subject to these disorders. They should likewise be moderate in the use of generous wines and spirituous liquors, the last of which should always be well diluted with a large proportion of water.

Many who have been much incommoded with gravelly complaints, have experienced relief by using the garden leek, prepared in the following manner:—

Take a handful of the roots or fibrous parts, with a few sprigs of fennel, and boil them in two quarts of water, over a gentle fire, until the half is evaporated; then pour off the remainder, strain it, and drink about a pint a-day.

GRIPES IN INFANTS. When the food becomes acid on the stomach of the infant, it gives rise to gripings, in consequence of which the child is continually crying and restless, draws up its knees to the belly, with the presence of abdominal tension.

Causes.—Improper, or too much food, weak digestion, bad milk, and that natural tendency there is in the stomach of all children to generate acidity.

Symptoms.—Continual crying, screaming, drawing up of the legs forcibly to the body, hiccups, vomiting, diarrhœa, flatulency, sour eructations, green stools, and a depression of strength; and where the irritation is very considerable, convulsions are apt to ensue.

Treatment.—If acidity prevails in a high degree, and the infant is troubled with sour belchings, it may be advisable to evacuate its contents by a weak solution of tartarized antimony, given in the quantity of one or two tea-spoonfuls every quarter of an hour, until a sufficient effect has been procured; after which a few grains of rhubarb and magnesia may be ordered, to carry off the remaining offending matter. Should flatulency prevail, the following clyster may be given:—Take

Barley water, four ounces;
Olive oil, two drachms;
Oil of aniseed, six drops.

Mix them for a clyster. Add, occasionally, when the child is much griped—

Tincture of opium, eight to ten drops.

Besides adopting these steps, it will be proper to apply warmth externally to the stomach and bowels, by means of heated bran, or chamomile flowers, put into a soft flannel bag, which probably will greatly assist in abating the pain. Children that are partly brought up with the spoon, and who are very subject to flatulency, should always have a few carraway seeds boiled up with their food.

As a costive habit of body is very apt to occasion flatulency and griping pains in infants, they should be obviated by giving twice or thrice a-week, as the occasion may require, a small quantity of the oleum ricini; or we may substitute a few grains of magnesia in a spoonful of the aqua anethi, sweetened with a little syrup of roses, to which may be added a few drops of tincture of senna, in order to render it warmer, and quicken its operation.

HEADACHE. (Cephalalgia.) This affection is in some instances general over

the whole of the head, at other times it is confined to a particular side.

Symptoms.—The symptoms which attend on a pain in the head usually vary according to the cause which has produced it.

Causes.—The causes which give rise to the headache are most usually indigestion, the hindrance of a free circulation of blood through the head, long exposure to the sun, translations of gouty and rheumatic matter from other parts of the body, the stoppage of long-accustomed evacuations, inebriety, and lastly, too great a determination of blood to the head, or in consequence of some nervous disease, as hysteria and hypochondria.

Treatment.—Where there is a foulness in the stomach, it will be advisable to take a gentle emetic; and if any costiveness prevails, this should be removed by some proper laxative. Where the disease proceeds from an over fulness of the vessels, or from too great a determination of blood to the head, a proper quantity may be drawn off by the application of several leeches to the temples; the patient afterwards taking care to use a spare regimen, to keep his body perfectly open, and to wear nothing tight about his neck. To alleviate the pain at the time, linen cloths wetted in vinegar and water, or in camphorated spirits, may be applied to the forehead and temples. When a headache arises from a translation of gout or rheumatism from some other part, it will be advisable to excite a slight inflammation in the extremities, by the application of small blisters; and at the same time to open the body by taking some stomachic purgative, as the tincture of rhei composita.

In the headache which arises as a consequence of some nervous affection, the most proper medicines will be valerian, camphor, castor, assafœtida, and ether, together with cinchona bark and steel, which may be administered under the heads of hysteria and hypochondria. Rubbing the temples from time to time with a little ether, may also have a good effect.

The habit is to be rendered at the same time more robust, by gentle and regular exercise every day in the open air; by a diet consisting chiefly of animal food, with a moderate quantity of wine; and by great regularity as to the hours of rest and rising, and also of meals.

HICCUP. (Singultus.) Hiccups are a spasmodic affection of the stomach and diaphragm, arising from some peculiar irritation. They are generally symptomatic, but in some instances they appear as a primary disease.

When prevailing as a primary affection, they are never attended with danger, and are, in general, easily removed; but when they arise in any acute disorder, or after a mortification has taken place, they may always be looked upon as the forerunners of death.

Treatment.—A common hiccup is often removed by taking a few small draughts of cold water in quick succession, or by a sudden excitement of some degree of fear or surprise.

When simple means do not answer, recourse must be had to antispasmodics, the most useful of which, for this disease, seem to be ether, musk, and opium, combined together, or given separately.

In the accidental hiccup of youth, or of very old people, a pretty certain remedy is a small quantity of any powerful acid, such as a tea-spoonful of vinegar, or lemon juice, or a little peppermint water, acidulated with a few drops of sulphuric acid.

HYPOCHONDRIAC AFFECTIONS. (Hypochondriasis.) This disease, which is likewise known by the name of low spirits, consists in a certain state of mind along with dyspepsia, wherein the greatest evils are apprehended upon the slightest ground, and in respect to such apprehensions there is always the most obstinate belief and persuasion.

Symptoms.—The hypochondriac affection is attended with inactivity, a want of resolution with respect to all undertakings, lowness and dejection of spirits, together with a flatulency in the stomach and bowels, acid eructations, costiveness, a copious discharge of pale urine, spasmodic pains in the head and other parts of the body, and palpitations.

Causes.—Hypochondriasis seems to depend on a loss of energy in the brain, or on a torpid state of the nervous system, induced by various remote causes, such as close and intense study, long and serious attention to abstruse subjects, great anxiety of mind, leading an inactive or sedentary life, a use of crude, flatulent, or unwholesome food, long continued evacuations, and great irregularity and intemperance.

Treatment.—The process of cure is to excite the nervous energy, to remove or alleviate the symptoms, and to strengthen the alimentary canal. To effect the first of these objects, the patient's attention is to be engaged and diverted to other

objects than his own feelings; to engage in such pursuits as will afford him moderate exercise in the open air, and by all means to avoid absolute idleness.

To obviate acidities in the stomach, and answer the second object, it will be necessary for the patient to make use of absorbents, as advised under the head of indigestion. Flatulency is another constant attendant, and it is to be prevented by making use of carminatives, essential oils, and spices, as prescribed for indigestion.

Besides these affections, hypochondriacs are apt to be troubled with spasmodic pains in the head and stomach, to relieve which, it may be proper to employ such medicines as ether, musk, and opium, either given separately, or combined together, as follows:—Take

Spirit of sulphuric ether, from thirty to forty-five drops for a dose.

Or, take

Musk mixture, one ounce and a half;

Spirit of sulphuric ether, thirty drops.

Make them into a draught, to be taken three times a-day.

Nervous people are apt to be troubled with flying atoms before their eyes, (muscæ volitantes,) the cure of which consists in relieving the mind from intense application and objects of anxiety, clearing the bowels by a brisk purgative, and then taking some volatile medicines.

To answer the third purpose, that of strengthening the alimentary canal, and to promote the secretions, a plaster of cumini is to be applied to the abdomen, and chalybeates are to be used, as for indigestion. The use of a warm bath is generally resorted to with decided advantage by hypochondriac patients. Frictions of the whole body every morning and evening, for ten minutes or longer, with coarse flannel cloths, will be beneficial.

For the perfect cure, as well as the prevention of hypochondria, there is no means better adapted than bodily exercise in the open air. The diet in hypochondriasis should consist of what is light, generous, and nutritive, avoiding what is apt to prove either acescent or flatulent; and therefore animal food will be the most proper. The stomach ought never to be overloaded; neither should it be suffered to remain perfectly empty. If a faintness is perceived at any time between meals, a bit of cake or biscuit may be taken, with a glass of wine. Port wine, sherry, or good Madeira, properly diluted with water, may be used for ordinary drink, instead of malt liquor; but should these disagree with the stomach, water, with a small proportion of brandy, may be drunk in their stead. Tea and coffee are improper articles of diet for hypochondriacs, but more particularly when taken very warm. For breakfast, cocoa or chocolate, or an infusion of aromatic herbs and roots—such as balm, sage, and ginger, may be substituted.

HYSTERIC DISEASE. (Hysteria.) This disease attacks in paroxysms or fits, which are sometimes preceded by dejection of spirits, effusion of tears, sickness at the stomach, and palpitation at the heart.

Symptoms.—The patient feels a pain on the left side, with a sense of distention, advancing upwards till it gets into the stomach; and removing from thence into the throat, it occasions, by its pressure, a sensation as if a ball was lodged there. Spasms and hiccups are likewise symptoms attending on the hysteric disease.

Causes.—A delicate habit, inactivity, a sedentary life, grief, anxiety of mind, late hours, dissipation, excessive evacuations, the suppression or obstruction of the menstrual flux, and the constant use of a low diet, or of crude unwholesome food.

Treatment.—In this two objects are to be attended to. The first is to allay the spasmodic symptoms, which constitute the fit: the second is to lessen the excitability of the nervous system, and to strengthen the whole frame during the intermission of the paroxysms. The first is to be obtained by bleeding, if the patient is young and plethoric. During the fit, it will be the safest to rouse the patient by applying burnt feathers, assafœtida, or volatile salts, or spirits, to the nose; by rubbing the temples with æther, and by putting the feet into warm water.

In cases of costiveness, a laxative clyster, with an addition of assafœtida, or castor oil, may be thrown up into the intestines. Where the fit continues for some time, clysters of turpentine may be given with advantage, as follows:—Take

Oil of turpentine, three drachms;

Mucilage of gum acacia, half an ounce.

Mix them well together in a mortar, and add

Thin gruel, eleven ounces, for a clyster.

A blister may at the same time be applied to the inside of each leg. During the fit due care is to be taken that the

patient sustains no injury from the violence of her struggles.

As soon as she is perceived to be capable of swallowing some medicines, some antispasmodics,—as, take

Mixture of assafœtida, six ounces;
Ammoniated tincture of valerian, two drachms;
Spirit of sulphuric æther, one drachm.

Of this mixture the patient may take two table-spoonfuls every six hours. Or, take

Ammoniated tincture of valerian, one drachm;
Compound spirit of lavender, two drachms;
Spirit of cinnamon, three drachms;
Camphor mixture, six ounces.

Mix them, and two table-spoonfuls should be given three or four times a day.

When the spasms are very violent, and the fit of long duration, opium may be employed, in addition to other spasmodics. In common cases it will be best to avoid this, however, as it leaves the patient remarkably low, particularly if long continued. The mind should be kept constantly easy and cheerful, and, if possible, be always engaged in some agreeable and interesting pursuit. If the stomach is affected at any time with crudities or bile, so as to excite nausea, a gentle emetic may be taken to remove it; or if there is a tendency to costiveness, it may be obviated by some gentle laxative, as advised under the head of indigestion.

INDIGESTION. (Dyspepsia.) This disease is principally to be met with in those who devote much time to study, or who lead either a very sedentary or irregular life. The disease is a frequent attendant on chronic weakness.

Symptoms.—With a furred tongue, there is perceived a disagreeable taste in the morning, and the breath in many instances acquires an offensive smell. In some cases of depraved digestion, there is nearly a complete disrelish for food; but still the appetite is not greatly impaired, as, at the stated periods of the patient's meals, he can eat heartily, although without much gratification. In stomach complaints, in addition to defective appetite, indigestion, flatulency in a high degree, costiveness, vertigo, and palpitations, do also occur. The mind in such cases is frequently irritable and desponding, and great anxiety is observable in the countenance. Restlessness prevails at night, the sleep is disturbed by frightful dreams and startings, and does not afford much refreshment.

Causes.—Grief and uneasiness of mind, intense study, indolence, profuse evacuations, hard drinking, (particularly of spirituous liquors, and of tea,) tobacco, opium, or other narcotics, immoderate repletion, and over-distention of the stomach, a deficiency in the secretion of the bile, pancreatic or gastric juice, diseases of the liver and spleen, and exposure to moist and cold air without exercise, are the causes which usually occasion indigestion —the same as everything which weakens the nerves.

Treatment.—This must consist of means to remove the remote causes, which have been enumerated, and to obviate the symptoms which contribute to aggravate the disease, and to restore the tone of the organ, if possible.

To effect the first of these, it will be necessary sometimes to renounce such habits or pursuits as may have tended to give rise to the disease—such, for instance, as to leave the crowded city and its allurements, to shun luxurious tables, indolence, and late hours. To accomplish the second object, that of removing the symptoms which contribute to maintain or to aggravate the disease, it will be necessary to correct the morbid acidity in the stomach by the following:—

Let the person take from two to four ounces daily of lime water.

Or, take

Solution of potass, one drachm;
Solution of lime, seven ounces.

Mix them, and take a table-spoonful twice a day in a little beef tea.

The pain and flatulency in the stomach and intestines should be assuaged by carminatives,—as, take

Prepared chalk, twelve grains;
Powdered nutmeg, three grains;
Rhubarb, in powder, five grains.

Mix them. This powder may be taken morning and evening. Or, take

Prepared chalk, twelve grains;
Peppermint water, half an ounce;
Pure water, one ounce;
Spirit of pimento, two drachms;
Tincture of opium, twelve drops.

Mix them. This draught is to be taken three times a day.

And, lastly, to obviate costiveness, the following is to be made use of:—Take

Aloectic pills with myrrh, fifteen grains.

Divide the mass into three pills for a dose.

Or, take

Socotrine aloes,
Powdered rhubarb, of each one drachm;
Compound powder of cinnamon, one scruple;
Hard soap, half a drachm;
Syrup, a sufficiency to form the mass;

Which is to be divided into fifty pills, of which two will be a sufficient dose, joined with such aromatics as will promote a ready discharge of the contents of the intestines, without hurrying their action. Friction with the hand over the region of the stomach and bowels, every morning and night, might promote that effect. Where dyspepsia is occasioned by defective biliary secretion, and is combined with a diseased state of the liver, spleen, or biliary duct, a pill, containing about two grains of calomel, may be taken every third night, succeeded, the next morning, by an aperient draught, composed of one ounce and a half of infusion of senna, with two or three drachms of sulphate of magnesia.

The medicines best calculated to restore the tone of the stomach are aromatics and astringent bitters,—as, take

Compound infusion of gentian, one ounce and a half;
Compound tincture of cardamoms, two drachms;
Tincture of myrrh, one drachm.

Mix them. This draught is to be given three times a day. Or, take

Infusion of Columba root, ten drachms;
Tincture of cascarilla,
Tincture of orange peel, of each, one drachm.

Mix them for a draught.

As, likewise, the cinchona bark in the following form:—Take

Decoction of Peruvian bark, one ounce and a half;
Tincture of Columba, two drachms;
Tincture of myrrh, one drachm.

Mix them, and take this draught thrice a day.

The mineral acids and chalybeates; as, take

Muriated tincture of iron, fifteen to twenty-four drops thrice a day, in any vehicle.

The latter, in particular, are of eminent service in an impaired and capricious appetite, and weakness of the assimilating organs, irregular digestion, flatulent distention of the abdomen, and occasional vomiting of viscid mucus.

To strengthen the system, whereby the powers of the stomach will be made stronger, the person should take daily exercise; he should breathe a pure, dry, and temperate air, rise early every morning, go soon to bed at night, lead a temperate life, adapt his dress to the climate and changes of the weather, and bathe frequently in cold water.

The use of a tepid bath, of about 96 or 98 degrees of heat, for half an hour every other day, for two or three months, has, in many instances, proved of great service to dyspeptic persons. Indeed, it would be best to begin with tepid bathing, and to reduce the temperature gradually.

The mind is to be amused at the same time that the body is employed; hence it is that mineral springs have always been found very efficacious in alleviating dyspeptic complaints.

The diet in indigestion ought to be nutritive and generous, consisting chiefly of animal food; and it should be taken every three or four hours, and never exceed a few ounces at any time. Moreover, due care is to be taken to masticate it properly. Instead of fermented bread, the patient should eat biscuit with his food. No diluent fluids should be taken at his meals, nor till some time after each repast, nor should the quantity of the fluid taken at once ever exceed half a pint, nor be repeated oftener than at intervals of three hours.

A moderate use of wines ought to be allowed; but should these disagree with the patient, and become acid on his stomach, weak brandy and water may be substituted for his ordinary drink. Under no other circumstances should ardent spirits be made use of.

INFLAMMATION. (Phlegmasia.) The character of this order of diseases is fever, with topical pain; the blood, upon venesection, exhibiting a buffy surface. The chief seat of this sort of inflammation is the inner surface of the true skin, and the cellular substance contiguous to it, from which it extends to the adjoining parts of the cellular membrane and skin; so that the surface soon assumes a florid colour, the tumour at the same time extending both in depth and circumference.

Symptoms.—It comes on with an itching, dryness, redness, and increased heat and circulation in the affected part; which symptoms are shortly succeeded by a circumscribed tumour, through which shooting and throbbing pains extend. If the inflammation runs high, and is of considerable extent, then an increased

action of the heart and arteries takes place; the pulse becomes full, hard, and quick; the skin dry and hot; great thirst arises; and a feverish disposition ensues.

Inflammation usually terminates either by resolution, suppuration, or gangrene. By resolution is meant the natural cure, or going off of the inflammation, by a gradual cessation of all the symptoms, the state and texture of the part remaining entire. By suppuration is implied the conversion into matter, or pus, of the serum, or coagulable lymph and blood. By gangrene is meant a mortification not actually formed, but approaching.

When the patient is seized with reiterated shiverings; when the fever and inflammatory appearances cease quickly, without any perceptible reason; when a heavy, cold, and dull uneasiness is experienced in the part affected, instead of acute pain; when the most elevated portion of the tumour appears soft and white, while the rest has its redness increased, then we may be assured that a termination in suppuration has ensued.

The symptoms which denote the termination of inflammation, in incipient mortification, are, a sudden diminution of the pain and sympathetic fever; secondly, a livid discoloration of the part, which, from being yellowish, becomes of a green hue; thirdly, detachment of the cuticle, under which a turbid fluid is effused. The term gangrene has been applied to the disease in this stage; but when the part has become black and fibrous, and destitute of natural heat, sensation, and motion, it is denominated sphacelus.

Treatment.—If the inflammation has proceeded from a lodgment of some extraneous bodies, these ought immediately to be removed. In cases of local inflammation, it may be obviated by drawing a quantity of blood immediately from the neighbourhood of the part affected, either by cupping, or by the application of several leeches. It may likewise be well to have recourse to purgative medicines; those of a mild nature, together with laxative clysters, deserve a preference.

In common inflammation, or where the part is so tender and painful as not to be able to bear the weight of a poultice, we must apply a piece of soft linen, moistened in the following lotion:—Take

Solution of acetate of ammonia,
Distilled water,
Rectified spirit, each, two ounces.

Mix them, and use as a wash.

Or, take

Muriate of ammonia, one drachm;
Distilled vinegar, two ounces;
Camphorated spirits, one ounce;
Solution of subacetate of lead, twenty-four drops.

Mix them for a wash.

It is to be understood that these remedies are to be applied cold, and that they are to be renewed as often as they become stiff, hard, or warm.

When the inflammatory symptoms run so high as to affect the system, the following should be taken:—

Nitrate of potass, from half to one drachm;
Hot water, eight ounces;
Tartarized antimony, two grains;
Syrup of violets, two drachms.

Mix them, and take two table-spoonfuls for a dose, or take

Saline draught, one ounce and a half;
Nitrate of potass, ten or fifteen grains;
Wine of tartarized antimony, eighteen drops;
Common syrup, one drachm.

Mix them as a draught, to be taken every three hours.

If, notwithstanding these means, the tumour should shew an evident tendency to suppurate, we are then to accelerate the progress, by the application of warm emollient cataplasms, which ought to be renewed three or four times a day. If linseed can be procured, a poultice made of this, slightly bruised and boiled up with milk and water, will be preferable, on account of its emollient quality; but when it is not to be obtained, the white bread poultice, with a small addition of oil, may be used. Previous, however, to the application of the poultice, the part affected should be well fomented with flannels, wrung out of a warm decoction of emollient herbs; as, take

Chamomile flowers,
Marshmallow leaves, each, two ounces;
Poppy heads, bruised, one ounce;
Boiling water, two quarts.

Infuse them for a proper time; then pour off the liquor, and use it for fomentation.

Should the inflammation threaten to terminate in gangrene, then a reliance is to be placed on a liberal use of the bark of cinchona, together with a nutritive diet, and such a quantity of wine as will be sufficient to keep up the pulse. When the gangrene arises from debility, then opium may be combined with the bark.

The cataplasma carbonis (which is pre-

pared by mixing two ounces of wood charcoal, reduced to a very fine powder, with half a pound of the common farinaceous poultice) is an application much recommended.

As a gentle stimulus to parts in a state of gangrene, a weak solution of ammonia muriata in vinegar and water, taking a drachm of the salt to two ounces of vinegar, and six of water.

It will be further necessary to obviate the effect of the opium in the intestines, by a frequent use of some mild laxative, or emollient clyster, so as to procure one or two evacuations daily.

JAUNDICE, (Icterus,) is characterized by a yellowness of the skin, more especially observable in the eyes, a bitter taste in the mouth, with a sense of pain in the right side.

Symptoms.—The jaundice comes on with languor, inactivity, loathing of food, flatulency, acidities in the stomach and bowels, and costiveness. As it advances in its progress, the skin and the eyes become tinged of a deep yellow; there is a bitter taste in the mouth, with frequent nausea and vomiting; the urine is very high coloured; the stools are of a grey or clayey appearance, and a dull obtuse pain is felt on the right side, under the ribs.

Causes.—Jaundice usually takes place in consequence of an interrupted excretion of the bile. In some cases it may, however, be owing to a redundant secretion of the bile. Further, it is produced by gall-stones, by enlargements of the pancreas, the liver, and the other organs of the abdomen, as well as by the passions of the mind.

Treatment.—In full plethoric habits, and where the symptoms run high, it will be necessary, first, to take away a quantity of blood, proportionable to the state of the pulse, the severity of the pain, and the age of the patient.

The patient should next be put into a warm bath, in which he may be allowed to continue until some degree of fainting is excited; he is then to be removed to bed, and to take an opiate, which may be repeated every four or six hours, until ease is procured: and as the stomach is generally so irritable during the attack, that everything taken into it is immediately rejected, especially fluids, it will, perhaps, be the best way to give it in a pill. Besides these means, the constant application of a bladder filled with warm water, immediately over the region of the part which is most painful, as also the throwing up emollient clysters, may be useful. Small nauseating doses of antimonials, or of the pulvis ipecacuanha compositus, together with a free use of diluting liquors, might probably afford some relief.

Where the disease proceeds either from stones in the gall bladder, or from spasmodic stricture, it would be advisable, after having pursued the steps before recommended, to make use of the following purgatives:—Take

Powdered rhubarb, one scruple;
Extract of dandelion, half a drachm;
Submuriate of mercury, twelve grains;
Syrup, a sufficiency.

Divide the mass into twenty-four pills, and take two or three at bed-time. Or, take

Submuriate of mercury, five grains;
Powder of jalap, half a drachm;
Honey, a sufficiency to form a bolus:

Which may be taken occasionally.

But where jaundice arises in consequence of some chronic affection of the liver, active purgatives would be likely to do harm, by inducing much debility. In instances of this nature, neutral salts should be taken. The warm bath and anodynes, by their relaxing and antispasmodic power, will prove very useful, when the disease proceeds from stones or strictures.

The symptoms which usually prove most distressing in jaundice are, the pain in the side, sickness at the stomach, and costiveness. The two former of these will generally be relieved by bleeding, the warm bath, fomentation applied to the part, the exhibition of emollient clysters, and opiates, as before advised. Where these fail, the application of a large blister may possibly be attended with a better effect. Should the nausea and vomiting continue, in spite of these means, the saline medicine, in the act of effervescence, may be given, or something of a cordial antispasmodic nature, as the following:—Take

Aromatic confection, one drachm;
Pure water, five ounces and a half;
Spirit of pimento, half an ounce;
Aromatic spirit of ammonia, half a drachm;
Tincture of opium, forty drops.

Of this mixture let two or three tablespoonfuls be taken when the nausea and sickness are urgent.

Costiveness is to be removed by gentle

laxatives, such as are given in the following formula :—Take

Castor oil, two ounces ;
Mucilage of gum acacia, one ounce.

Mix them in a mortar, and add

Dill water, one ounce ;
Tincture of jalap, three drachms ;

Take the half for a dose, as the occasion may require. Or, take

Powder of jalap, one scruple ;
Supertartrate of potass, two scruples.

Mix them for a dose.

When the disease is of a chronic nature, and is attended with dropsical swellings, it will be proper to employ diuretics, as recommended under the head of dropsy, and to strengthen the general system at the same time with astringent bitters, chalybeates, mineral waters, a nutritive generous diet, and gentle daily exercise. Moderate quantities of both soda and seltzer waters will be proper. A diet consisting chiefly of vegetables appears to be best calculated for persons labouring under jaundice, or in whom bilious concretions are apt to form.

KIDNEYS, INFLAMMATION OF THE. (Nephritis.) This inflammation is principally seated in the external membrane of the kidney, and is to be distinguished from cholic by the pain being seated very far back, and by the urine being of a deep red colour, voided frequently, and in a small quantity at a time.

Symptoms.—The inflammation of the kidney is attended with a sharp pain on the affected side, and there is a frequent desire to make urine, with much difficulty in passing ; the body is costive, the skin is dry and hot, the patient feels great uneasiness when he endeavours to walk or sit in an upright position, and he is incon moded with nausea and vomiting, and there is often costiveness and cholic.

Causes.—These are, external contusions, strains of the back, acrids conveyed to the kidneys in the course of circulation, violent and severe exercise, exposure to cold, and sand or stone in the kidney. In some habits, there is an evident predisposition to this complaint, particularly the gouty.

Treatment.—A quantity of blood, proportionable to the severity of the pain and the age and habit of the patient, ought immediately to be taken away ; and if the first bleeding does not afford considerable relief, the operation should be repeated on the same day, or the next at farthest. Topical bleeding, with several leeches over the kidney affected, may be afterwards resorted to. After bleeding, flannel cloths wrung out of a warm decoction of emollient herbs, or a bladder filled with warm water, is to be kept constantly applied over the affected part ; and, by way of internal fomentation, an emollient clyster may frequently be injected. The patient is at the same time to be directed to drink plentifully of mild diluents, such as barley water, thin gruel, whey, linseed, or marshmallow tea. The intestines are to be emptied by gentle aperients ; as, take

Manna, half an ounce ;
Tartrate of potass, three drachms ;
Warm water, one ounce and a half ;
Tincture of senna, one drachm.

Mix them for a draught. Or, take

Castor oil, one ounce ;
Mucilage of gum acacia,
Fennel water, of each half an ounce ;
Tincture of jalap, fifty drops.

Mix them as a draught, and let them be employed as frequently as occasion may require, in addition to emollient clysters, as constipation ought carefully to be guarded against.

Should these means have been adopted without affording relief to the patient, he ought then to be put frequently into a warm bath, continuing him in it for fifteen minutes each time. Mild diaphoretics, such as the saline medicines combined with nauseating doses of tartarized antimony, will at the same time be proper. A decoction of the dried leaves of the peach tree, drank in the quantity of a pint a day, has been found a good remedy in inflammation of the kidneys. In this disease, every kind of food which is of a stimulating nature ought carefully to be avoided, and such only as are lenient and nutritive should be used, as everything which is heating or acrid proves a stimulus to the kidneys.

Emollient and thin liquors should be drank plentifully ; and the patient should take frequent small draughts of them, notwithstanding the vomiting.

Those who are liable to frequent returns of the disease, or to obstructions in the kidneys, ought carefully to avoid getting wet in the feet, as also all exposures to cold ; they ought to lie on a mattress in preference to a feather bed ; their exercise should be moderate ; and they should use no kind of wine which abounds with tartar.

KING'S EVIL. (Scrofula.) This

disorder consists in hard, indolent tumours of some of the glands, in various parts of the body, but particularly in the neck, behind the ears, and under the chin, which, after a time, suppurate, and degenerate into ulcers, from which, instead of pus, a white curdled matter is generally discharged.

Symptoms.—The first appearance of the disorder is commonly in that of small oval or spherical tumours under the skin, unattended by any pain or discoloration. These appear, in general, upon the sides of the neck, below the ear, or under the chin; but in some cases the joints of the elbows, or ancles, or those of the fingers and toes, are the parts first affected.

After some length of time, the tumours become larger and more fixed, the skin which covers them acquires a purple, or livid colour, and, being much inflamed, they at last suppurate, and break into little holes, from which, at first, a matter somewhat puriform oozes out; but this changes by degrees into a kind of viscid serous discharge, much intermixed with small pieces of a white substance, resembling the curd of milk.

The tumours subside gradually, while the ulcers at the same time open more, and spread unequally in various directions; after a while some of the ulcers heal, but other tumours quickly form in different parts of the body, and proceed on, in the same slow manner as the former ones, to suppuration.

In some cases the joints become affected; they swell, and are incommoded by excruciating, deep-seated pain, which is much increased upon the slightest motion. The swelling and pain continuing to increase, the muscles of the limbs become at length much wasted. Matter is soon afterwards formed, and this is discharged at small openings made by the bursting of the skin. Being, however, of an acrimonious nature, it corrodes the ligaments and cartilages, and produces a caries of the neighbouring bones. By an absorption of the matter into the system, hectic fever at last arises, and in the end proves fatal.

Causes.—A long continuance of inclement weather may increase any predisposition to scrofula; and in persons already much predisposed to it, any uncommon, though temporary, exposure to wet and cold, is sometimes an exciting cause. Every other circumstance which weakens the constitution, and impairs the general strength of the system, predisposes to scrofula; thus, breathing impure tainted air, unfit for respiration, and living upon food of an unwholesome and indigestible nature, which does not afford proper nourishment to the body, favours an attack of scrofula, by reducing the strength of the system, and making the person weak. The neglect of personal cleanliness, and of salutary exercise, indolence, inactivity, the want of warm clothing, confinement in cold, damp habitations, may all be regarded as so many exciting causes.

Treatment.—This naturally divides itself into two periods. The first is that in which, without any local sore or other marked symptoms of disease, there is a sufficient evidence of a scrofulous predisposition prevalent in the system. The other is that in which some local sore, or other scrofulous symptom, which requires appropriate management, has actually taken place. There is great reason to expect benefit in placing the patient in a different situation or circumstances. If, for instance, the continuance of improper diet has seemed to favour the appearance of the disease, an amelioration of it will naturally counteract this tendency. A similar advantage will be derived from substituting the respiration of pure salubrious air, instead of what is tainted and unwholesome.

The languor and debility which prevail in scrofula, naturally indicate the necessity of employing a plentiful supply of wholesome nourishment, in such quantity as the stomach can bear without being overloaded; and of this, light animal food ought to form a fair proportion. The quantity must be regulated by the appetite and powers of digestion. Milk, puddings, rice, and other farinaceous substances, ought to constitute the remainder of the patient's diet. Where there is occasional atony in the stomach, and languor, a moderate allowance of wine will be likely to prove salutary; but it will be best to take it between meals, with a bit of bread, or cake. It will be further advisable to take, every day, regular and moderate exercise, and to bathe in either warm or cold, simple or impregnated water. Cold bathing, especially in the sea, is a remedy universally employed in scrofula. But in order that cold bathing may be practised with safety and advantage, the constitution should have vigour to sustain the shock of immersion without inconvenience. If the immersion be succeeded by a general glow over the surface of the body, and the patient feels cheerful, and

has a keen appetite, we may conclude that the bath agrees with him; but if he shivers on coming out of the water, continues chilled, and becomes drowsy, we may be assured that the cold bathing will not prove serviceable, and that it ought, therefore, to be discontinued. At the commencement of a course of warm bathing, an immersion from twelve to twenty minutes, with a temperature varying from ninety to one hundred degrees of Fahrenheit's thermometer, may be recommended.

To promote the efficacy of the warm bath, frictions with some stimulant substance are often employed, and with advantage, particularly in certain cases of scaly scrofulous eruptions, and some of the more solid kinds.

Alteratives, such as—Take
Black sulphuret of mercury, fifteen grains;
Antimonial powder, one grain.
Mix them. Take this powder night and morning, or the Plummer's pill; as—Take
Submuriate of mercury,
Precipitated sulphur of antimony, of each half a drachm;
Syrup, a sufficiency to form the mass, which is to be divided into thirty pills, one of which is to be taken night and morning.

Narcotic medicines, but more particularly hemlock, are also recommended for the cure of scrofula, both in the stage of swelling, and in that of ulceration. When administered internally, it should be as follows:—Take
Extract of Peruvian bark, two drachms;
Extract of hemlock, one drachm.
Mix them, and make forty pills out of the mass, of which two to three may be taken twice or thrice a-day.

Burnt sponge is another remedy which has been much administered in scrofula, and frequently with advantage. It may be taken either in the form of a bolus or a draught; as—Take
Burnt sponge, from a scruple to half a drachm;
Powder of rhubarb, three grains;
Honey, a sufficiency to form a bolus.
Let this be taken twice a-day. Or, take
Burnt sponge, one scruple;
Aromatic confection, ten grains;
Mint water, from one ounce to one ounce and a half.
Mix them as a draught, and let this be taken twice a-day.

A more active medicine, however, is the sodæ subcarbonas, which may be taken as follows:—Take
Carbonate of soda, three drachms
Powder of Peruvian bark, one ounce and a half;
Mucilage of gum acacia, a sufficiency to form an electuary, of which let the bulk of a nutmeg be taken thrice a-day. Or, take
Decoction of Peruvian bark, ten drachms;
Compound tincture of cardamoms, one drachm and a half;
Carbonate of soda, fifteen grains.
Mix them, and let this draught be taken twice or thrice a-day.

Of the mineral tonics, iron, and the sulphuric and nitric acids, are most valued for their virtues in the cure of scrofula, and they agree with all stages of the disease. Of the preparations of iron, the subcarbonate ferrum ammoniatum, and muriated solution, have been found most efficacious. Mineral waters of the sulphureous and chalybeate class are likewise serviceable in this disease.

Where the glands of the neck have already become much enlarged, relief may be obtained by anointing the parts, morning and night, with an ointment composed of one drachm of tartarized antimony, rubbed with an ounce of lard.

When the process of suppuration is sufficiently advanced, the contents of the abscess are to be evacuated by a lancet, or otherwise by repeated puncture.

In order to correct the discharge, and dispose the ulcer to heal, verdigris and burnt alum are usually employed, which is either to be sprinkled over the ulcers, or to be applied, mixed up with some mild ointment, as the unguentum ceræ.

Scrofulous ulcers, which had resisted many other remedies, have healed under a weak mixture of nitric acid with water. In sores, which are spreading and irritable, the application of an aqueous solution of opium, or hemlock, and afterwards a solution of zinc, may be beneficial.

Painful and deep-seated ulcerations, the consequence of a scrofulous habit, and which are attended with much local irritation, have been relieved by a use of the Malvern water.

LEPROSY (Lepra.) This disorder consists in an eruption of copper-coloured spots, dispersed over various parts of the body, together with a glossy and scaly appearance of the skin.

Symptoms—The leprosy shews itself in numerous copper-coloured spots, dispersed over the whole body, and are attended with a degree of insensibility. As the disease advances, the skin begins to grow

rough and scaly, the features of the face become greatly enlarged, especially above the eyebrows, the hairs of which, and the beard fall off; the nostrils ulcerate, the voice is hoarse, the lobes of the ears are greatly thickened, the breath is highly offensive and virulent, and sores arise in various parts of the body.

Causes.—The disease arises sometimes from an hereditary disposition, but it more commonly proceeds from infection.

Treatment.—If any relief is to be obtained, it is chiefly from a regular and rigid observance of a vegetable diet, commenced on the first appearance of its approach. At the same time that the patient gives up the use of animal food, he ought also to avoid all heating liquors, such as wine and spirits. Besides paying much attention to diet, he is likewise to take a due proportion of moderate exercise, and to keep his body regularly open, by efficient laxatives.

A solution of hydragyri oxymuriatis, and Plummer's pill, as follows, is a remedy much in repute:—Take

Submuriate of mercury,
Precipitated sulphur of antimony, of each half a drachm;
Gum guaiacum, two drachms;
Syrup, a sufficiency.

Form sixty pills out of the mass, and let from one to four be taken every night at bedtime.

The mild species of leprosy, met with in cold climates, is to be removed by small doses of mercury, conjoined with antimony, as in the pilula hydrargyri submuriatis composita, given so as to produce an alterative effect, assisted by warm-bathing, and a decoction of the woods mezereon, lobelia, and the decoction of dulcamara. These will cleanse and soften the skin.

LIVER, INFLAMMATION OF THE (Hepatitis). This disease has generally been considered as of two kinds, the one acute and the other chronic.

Symptoms.—The acute species of liver complaint comes on with a sense of chilliness, preceding pain in the right side of the abdomen, sometimes dull, sometimes sharp, extending up to the clavicle and shoulder of that side, and is accompanied by a cough, oppression of breathing, together with nausea and sickness, and often with a vomiting of bilious matter; the intestines are generally inactive, the urine is of a deep red saffron colour, and small in quantity; there is a loss of appetite, great thirst, the skin is hot and dry at the same time, and the tongue is covered with a white, and sometimes a yellowish fur.

The chronic species is usually accompanied with a morbid complexion, loss of appetite and flesh, lowness of spirits, and despondency of mind, headache, or giddiness, general weakness, morbid sensibility, costiveness, flatulency, acidity, an obtuse pain in the region of the liver, extending to the shoulder, and not unfrequently with a slight difficulty of breathing. The symptoms are, however, often so mild and insignificant as to pass almost unnoticed.

Causes.—Besides all those producing other inflammations, this disease may be occasioned by violent exercise, by intense summer heats, by long-continued ague, by high living, and by an intemperate use of vinous and spirituous liquors. Suppressed secretions, inflammations, compression, and mental solicitude, are very general causes of obstructions and diseases of the liver.

Treatment.—In acute inflammation of the liver, it will be proper to adopt general bleeding, proportioning the quantity that is taken away to the severity of the pain and the degree of fever that is present. After the bleeding, a dose of calomel, with jalap, should be taken, and be repeated every other day, till the inflammation subsides.

In every case of acute inflammation of the liver, a farinaceous or gruel diet is to be strictly enjoined at the commencement, carefully avoiding animal food, in broths or otherwise; the thirst is to be assuaged by a free use of cooling drinks, impregnated with vegetable acids. Cool air is to be freely admitted into the apartment of the sick, and the intestines are to be kept perfectly open with gentle purgatives, such as the following:—Take

Compound infusion of senna, one ounce and a half;
Sulphate of magnesia, three drachms;
Tincture of jalap,
Syrup of buckthorn, of each one drachm.

Mix them for a draught.

Perspiration should be excited by means of nauseating doses of tartarized antimony, to which nitrate of potass might be joined, as in the following:—Take

Saline draught, one ounce and a half;
Nitrate of potass, from ten to fifteen grains;
Tartarized antimony, the sixth of a grain;
Syrup of marshmallows, two drachms.

Mix them for a febrifuge draught.

Foot-bathing, with a plentiful use of mild diluent and cooling liquids, will also be proper.

If after having strictly pursued the course pointed out, during four or five days, the disease is found not to give way, the aid of mercury should be called in. The most proper way of introducing mercury into the system, will be by rubbing in a small quantity of the ointment in the neighbourhood of the part affected, every night, until a slight degree of salivation is excited, by which means the swelling and hardness of the liver will be dispersed. It will be advisable to rub the ointment on the right side, in preference to any other part, because some advantage may possibly be derived from the mere friction over it. If the disease yields readily, a short course of mercury will be sufficient, but if not, its use ought to be continued for perhaps five or six weeks.

The usual plan of cure in chronic inflammation of the liver, is by mercury. It should, however, be given in small doses, and slowly, so as to keep up a brassy taste in the mouth for a considerable time, as it promotes the secretion of bile, and excites perspiration. To increase the latter effect, it has, however, been found useful to combine it with a small proportion of antimonial powder, as likewise of opium, to protect the bowels from irritation.

The next thing is to keep up the regular action of the intestines; with this view, one or two of the pills composed as follows:—Take

Compound extract of colocynth, one scruple;
Tartarized antimony, four grains;
Oil of carraway, seven drops;
Common syrup, a sufficiency to form the mass, which is to be made into thirty pills.

A tepid bath will be useful, but some caution will be requisite in avoiding subsequent chilliness. Warm mineral waters may also be taken internally.

When there is much local uneasiness, repeated blisters may be had recourse to with some advantage. The diet best adapted for persons labouring under chronic inflammation of the liver, is such as is nutritive and easy of digestion, avoiding salted meats, and greasy substances. By degrees it may be improved by the addition of broths, light animal food, &c., until health is perfectly restored. If wine is drank, it must be diluted with water. Malt liquors will seldom agree, and spirituous ones should be altogether avoided.

Persons of a bilious habit, and who are at the same time costive, will find much benefit by taking two or three of the following aperient pills:—Take

Compound extract of colocynth, one drachm;
Extract of jalap, half a drachm;
Tartarized antimony, four grains;
Soap, one drachm;
Oil of carraway, twelve drops;
Syrup of buckthorn, a sufficiency to form the mass into forty pills.

LOOSENESS (Diarrhœa.) This consists in frequent and copious discharges of feculent matter by stool, accompanied by griping, and often, at first, with a slight degree of vomiting.

Symptoms.—Each discharge is usually preceded by a murmuring noise, and flatulence in the intestines, together with a sense of weight and uneasiness in the lower part of the belly, which ceases on the discharge taking place, but are again renewed before the one which is to succeed ensues. As the disease advances, the countenance turns pale, and the skin is dry and rigid. If it continues for any length of time, universal emaciation, dropsy of the lower extremities, and relaxation of every part ensue, together with a great loss of strength.

Causes.—The application of cold to the surface of the body, so as to give a check to perspiration, as likewise passions of the mind, and certain diseases, as dentition, gout, rheumatism, fever, &c.

Treatment.—When the looseness has arisen from crude and acrid matter in the stomach, it may be useful to take a gentle emetic in the evening, and some opening medicine in the morning; as, for instance, —Take

Powder of rhubarb, one scruple;
Common water, one ounce and a half;
Compound spirit of lavender, half a drachm.

Mix them for a draught.

Or, take

Dill water, six drachms;
Tincture of rhubarb, half an ounce;
Prepared chalk, one scruple;
Syrup of ginger, one drachm.

This is to be taken as a draught.

If it has proceeded from obstructed perspiration, in consequence of exposure to cold, we must then endeavour to restore this by nauseating doses of ipecacuanha, as follows; or of some antimonial preparation, which may be repeated every two or three hours:—Take

Compound powder of ipecacuanha, three grains;
Cinnamon, five grains;
Confection of roses, a sufficiency to form a bolus, which is to be taken every four hours.

Along with these remedies, a decoction of barley, rice, marshmallows, the emulsion of gum acacia, and linseed tea, should be used.

When looseness seems to have arisen and to be kept up by acid generated in the intestinal canal, and which may be known by the frequent eructations of air, and griping pains in the bowels, it will be necessary to take the following:—Take
Chalk mixture, four ounces;
Spirit of cinnamon, one ounce;
Solution of subcarbonate of ammonia, one drachm;
Tincture of opium, forty drops.
Of this mixture, let the patient take two large spoonfuls occasionally. Or, take
Mixture of burnt hartshorn, one pint in the course of the day, as ordinary drink.

When gout, repelled from the extremities, falls on the intestines, and occasions a diarrhœa, it must again be drawn towards the extremities by warm fomentations, cataplasms, or blisters. The perspiration is at the same time to be promoted by drinking plentifully of wine whey. If these means fail, a gentle dose of some stomachic purgative, such as the tinctura rhei compos., may be taken; after which the absorbent mixture just mentioned may be used in frequently repeated doses, with an addition of twelve drops of tincture of opium to each.

The looseness which attends on dentition should never be checked, unless it prevails in so high a degree as to prove hurtful to the child; in which case four or five grains of toasted rhubarb, with about eight or ten of prepared chalk, or magnesia, may be given. This, if repeated three or four times, will generally correct the acidity, and put a stop to the griping stools. If it fails, then the following mixture may be tried:—Take
Powdered rhubarb, fifteen grains;
Subcarbonate of magnesia, half a drachm;
Dill water, three ounces;
Aromatic spirit of ammonia, twenty-four drops.
Tincture of opium, twenty drops.
Of this mixture, two or three tea-spoonfuls are to be taken twice or thrice daily, as may be judged necessary.

In order to suspend the increased action of the bowels in looseness, it will be sometimes proper to have recourse to opiates, which may be taken as follows:—Take
Confection of opium, fifteen grains;
Cinnamon water,
Pimento water, of each six drachms;
Tincture of kino, one drachm;
Compound tincture of lavender, half a drachm.
This draught may be taken every four or six hours.

In cases where the irritability of the intestines depends upon a loss of tone, and which may occur from a debility of the whole system, or from causes acting on the bowels in particular, the following should be used:—Take
Powdered alum,
Catechu, of each ten grains;
Opium, half a grain;
Confection of roses, a sufficiency to form a bolus, which is to be taken three or four times a-day. Or, take
Chalk mixture, five ounces;
Extract of logwood, half a drachm;
Pimento water, two ounces;
Tincture of kino, one drachm;
Syrup of ginger, two drachms.
Of this mixture, the dose may be two large spoonfuls, three or four times a-day.

As tonic medicines, the following may be used:—Take
Cascarilla bark, bruised,
Simarouba bark, bruised, of each two drachms;
Pure water, one pint.
Boil them slowly until reduced to eight ounces, strain off the liquor, and add
Spirit of cinnamon, one ounce;
Tincture of kino, two drachms.
Of this mixture, let three large spoonfuls be taken three or four times every day. Or, take
Infusion of cusparia bark, six ounces;
Tincture of columba, one ounce;
Tincture of catechu, two drachms;
Spirit of pimento, half an ounce.
Mix them.

From whatever cause a looseness may proceed, whenever it is found to check it, the diet ought to consist of rice boiled with milk, flavoured with cinnamon, together with preparations of sago, or Indian arrow-root, and the lighter sorts of meats roasted, as veal, lamb, or chickens. Weak brandy and water, or diluted wine, may be substituted for malt liquor, as common drink.

Those who are liable to frequent returns of this disease, either from a peculiar weakness, or from too great an irritability

of the bowels, should live temperately, avoiding crude summer fruits, most kind of vegetables, all unwholesome food, and meats of hard digestion. They ought, also, to beware of cold, moisture, or whatever may obstruct the perspiration, and they should wear flannel next to the skin.

LUNGS, INFLAMMATION OF THE (Peripneumonia, or Pneumonia). This disease is denoted by a difficulty of breathing, obtuse pain in some part of the chest, cough, a frequent full pulse, high-coloured urine, and other symptoms of inflammatory fever.

Symptoms.—True inflammation of the lungs comes on with an obtuse pain in the chest, or side, great difficulty of breathing, together with a cough, dryness of the skin, heat, anxiety, flushing of the face, and thirst.

In the beginning the cough is frequently dry, and without expectoration; but in some cases it is moist, even from the first; and the matter spit up is various both in colour and consistence, being often streaked with blood.

Causes.—The most general are the application of cold to the body, which gives a check to the perspiration, and determines a great flow of blood to the lungs. Other causes, such as violent exertions in singing, speaking, or playing on wind instruments, severe exercise, external injuries, a free indulgence in the use of fermented liquors, intemperance, and suppressed evacuations.

Treatment.—In addition to early and copious bleeding, blisters may be made use of in any stage of the disease. If the bowels require evacuation, strong purgatives ought not to be given, but gentle opening medicines, of a cooling nature, should be used, particularly at the commencement of the disease, as the following:—Take

Manna, three drachms;
Sulphate of magnesia, two drachms;
Compound infusion of senna, one ounce and a half.

Mix them for a draught. Or, take

Castor oil, one ounce.

A free expectoration being the means which nature most usually adopts for carrying off the inflammation, we ought to promote it as much as possible, by giving such medicines as are supposed to have a power of promoting a secretion from the glands of the throat, and also such as will contribute to alleviate the cough, by protecting the parts against the acrimony of the mucus, for instance, the following combination:—Take

Spermaceti, two drachms;
Yolk of egg, a sufficiency for solution.

Then add,

Pennyroyal water, four ounces;
Nitrate of potass, one drachm;
Oxymel of squill, three drachms.

Mix them, and let a spoonful be taken occasionally, or whenever the cough is troublesome. Or, take

Mucilage of gum acacia, five ounces;
Syrup of lemons, one ounce;
Tincture of balsam of tolu, one drachm;
Compound tincture of camphor, three drachms.

Mix them.

To assist the operation of these remedies, as well as to relax the lungs, it will be useful to use the steams arising from a warm infusion of marshmallow, chamomile flowers, &c., with an addition of vinegar, to be inhaled repeatedly throughout the course of the day.

With a view of assisting expectoration, and promoting perspiration, the following remedies may be used:—Take

Antimonial powder, one grain and a half to three grains;
Confection of roses, ten grains.

Mix them into a bolus, to be taken every three hours Or, take

James's powder, four grains for a dose.

It will be, at the same time, proper to take frequent small draughts of some mild liquor, such as barley-water, or thin gruel, to which should be added a little lemon juice, to give it a taste.

Making use of a warm foot-bath every other night, will be likely to do much good.

Nitre, in the following combination, will be proper:—Take

Lemon juice, one ounce and a half;
Subcarbonate of potass, one drachm;
Mint water, one ounce;
Nitrate of potass, one drachm;
Syrup of tolu, half an ounce.

Of this mixture the dose may be three table-spoonfuls every four hours. Or, take

Solution of acetate of ammonia, three drachms;
Spirit of nitric ether, half a drachm;
Wine of tartarized antimony, twenty-one drops;
Common syrup, one drachm.

Mix them for a draught, to be taken every four hours.

After the expectoration has appeared, copious bleeding and purging must be given up, as they might check it; costive-

ness, however, should be removed by clysters. During the whole course of the complaint, the patient should keep to his bed, lying with head and shoulders as much elevated as possible; his chamber is to be kept of a proper temperature, neither below fifty, nor above sixty degrees of heat, and his strength be supported with food of a light, nutritive nature, such as roasted or boiled apples, panada, &c. Thin gruel, and barley water, sweetened with honey, should be used as common drink; the same might be a decoction of liquorice in which a small portion of currant jelly is to be dissolved, in order to give it a more pleasing taste.

On recovering, all exposures to cold should carefully be guarded against, as it might occasion a relapse, which is apt to recur in this complaint, and which may bring on pulmonary consumption.

MADNESS (MANIA.) This disorder of the mind displays itself most generally in a false perception of things, in the loss of the command over the train of thoughts, and in a resistance of the passions to the command of the will. There are two species of madness, the melancholic and furious; in both of these the association of ideas is equally incorrect.

Symptoms.—The forerunning symptoms are the following: the patient complains of a sense of tightness at the region of the stomach, a sense of heat in the bowels, and costiveness, experiences a kind of uneasiness and fear which he cannot account for, and feels little disposition for, and even incapacity to sleep. Soon after these, an incoherence of thoughts betrays itself in his outward conduct, he speaks with a deep hollow voice, walks with a quick and precipitate step, then stops suddenly.

Furious madness is marked by severe pains in the head, redness of the face, wildness of the countenance, rolling of the eye, grinding of the teeth, unaccountable malice to certain persons, particularly to the nearest relations and friends, and to such places and scenes as formerly afforded particular pleasure.

Causes.—These are, the affections of the mind, such as anxiety, grief, love, jealousy, sudden fright, violent fits of anger, ambition, pride, religious terror, and abstruse study. Violent exercise, intemperance of every kind, and particularly in the use of spirituous liquors, a sedentary life, the suppression of periodical and occasional discharges and secretions and also excessive evacuations, are its remote causes besides that of an hereditary disposition.

Treatment.—This consists generally in the management of the patient, and in the aid which remedies may afford.

In the management, the principal objects are, a rigid regard to cleanliness, a judicious regulation both of mental and bodily exercise, without fatigue and exhaustion; and, lastly, a union of lenity and firmness.

It should always be the object to gain the confidence of the patient, though not by unfair means, and to awake in him proper respect and obedience.

In the management of insane persons, exercise and employment is chiefly to be kept in view. They ought to be made to rise early, to take such exercise as their condition will admit of, and to take their meals at stated times.

With regard to the medicinal treatment, purging is the most generally useful, and the following combination of remedies may best be used:—Take

Compound infusion of senna, one ounce and a half;
Tartrate of potass, two drachms;
Tincture of jalap, two drachms;
Syrup of buckthorn, one drachm.

Mix them for a cathartic draught.

At the commencement of a paroxysm of furious madness, where there is high excitement, purging, and abstraction of blood from the head by means of leeches, will be necessary. In addition to these, the head should be shaved, and linen cloths wetted in some evaporating lotion be kept constantly applied to it; but in melancholia, where both the mind and the body are generally depressed, neither active purging nor bleeding would be proper.

Where the patient is much tormented by want of sleep, the following may be given with advantage:—Take

Camphor, ten grains;
Extract of henbane, five grains;
Syrup, a sufficiency.

Let the mass be formed into three pills, which may be taken every six hours.

Warm bathing may be useful, but cold rarely so.

With regard to the diet of the insane, it should be in accordance with the particular state of the patient. When madness has been the consequence of great debility, a nutritive diet should be allowed, besides a regular course of cinchona bark, and other bitters, the patient taking at the same time such daily exercise as his strength will admit.

In the state of convalescence, the mind and attention are to be occupied by cheerful conversation, music, light reading, and afterwards by a change of scene and regular daily exercise.

MALIGNANT AND PUTRID FEVER. (Typhus Gravior.) This fever is so named in consequence of the malignancy of its nature, and the signs of putrefaction which are observable towards the end of it.

Symptoms.—At the first attack of this fever, the person feels languid, dejection of spirits, great loss of muscular strength, pains in the head, back, and the extremities; the eyes are heavy, yellowish, and often a little inflamed, the tongue is dry and parched, the respiration laborious, the breath hot and offensive, the urine pale, the body costive, and the pulse quick and small.

Causes.—These are generally contagion, conveyed either from the body of a person labouring under this disease, or through some clothes, or other things; the exhalations arising from animal or vegetable substances in a decayed state, poor diet, hard labour, and too great an indulgence in enervating pleasures.

Treatment.—The most proper remedy, at the first onset of the disorder, will be an emetic, consisting of about fifteen grains of ipecacuanha, with one grain of tartarized antimony, and to drink after it of an infusion of chamomile flowers. After the effect of the emetic is over, the bowels may be kept open by the following purgative:—Take

Manna, two drachms;
Tartrate of potass, three drachms;
Compound infusion of senna, one ounce and a half.

Mix them for a dose. Or, take

Submuriate of mercury, five grains;
Compound extract of colocynth, ten grains.

Make the mass into three pills, to be taken at once.

Should the desired effect not be produced by these remedies, an opening clyster, as the following, may be administered:—Take

Compound decoction of marshmallow, twelve ounces;
Sulphate of soda, half an ounce;
Olive oil, one ounce.

Mix them for a clyster.

The patient should never be left two days without a motion, as costiveness may bring on delirium.

The drink ought to be cold, and acidulated with the juice of oranges or lemons. The mineral acids, as the sulphuric and muriatic, are likewise advantageous.

In order to promote perspiration, the following may be used:—Take

Camphor, four grains;
Powder of ipecacuanha, three grains;
Aromatic confection, ten grains.

Make them into a bolus, which may be taken every six hours.

But profuse sweating should not be allowed, as it would certainly be prejudicial.

Where there is great pain in the head, or delirium, the application of cold, as a large towel, dipped in the coldest water and applied all over the head, will prove beneficial. At first, it will be desirable to apply it with such quickness as to produce some degree of shivering. In severe cases, powdered ice may be applied to the shaven head.

Where dark spots begin to appear on the body, and hæmorrhage takes place, the following should be given:—Take

Oxygenated muriate of potass, from one scruple to half a drachm;
Tincture of orange peel, one drachm;
Cinnamon water, one ounce and a half;
Common syrup, one drachm.

Mix them. This draught may be taken every three hours. Or, take

Decoction of bark, seven ounces;
Tincture of snake root,
Cinnamon, each half an ounce.

Shake them together, and of the mixture let the patient take about four table-spoonfuls every three hours, with from ten to twenty-four drops of diluted nitric acid.

A clyster of diluted vinegar may be administered at the same time—as, Take

Compound decoction of marshmallow, six ounces;
Common vinegar, two ounces and a half.

Mix them for a clyster.

In the advanced state of this complaint, where it is of the greatest consequence to procure rest to the patient, if there is no great delirium, the following remedies may be used with advantage:—Take

Solution of acetate of ammonia, three drachms;
Cinnamon water, one ounce;
Tincture of opium, forty drops;
Syrup, two drachms.

Mix them for a draught.

A slight looseness of the bowels, attended with a gentle moisture on the skin, towards the termination of this disease, sometimes assists in carrying it off;

at where it does not seem to produce this effect, it should be tried to have a stop put to it by the following:—Take

Aromatic confection, half a drachm;
Cinnamon and pimento water, of each one ounce and a half;
Pure water, two ounces;
Tincture of kino, two drachms;
Tincture of opium, forty-five drops.

Of this mixture take two large spoonfuls every four hours.

When the fever has been removed, and the symptoms ceased, its return should be prevented by a liberal use of cinchona bark, infusion of gentian, and other stomachic tonics; and, in order to restore health, the patient should be directed to use a nourishing diet, with wine in moderation, and to take such moderate exercise as the state of his strength will admit.

The precaution for others, which it is necessary to pursue during the prevalence of this fever, consists in removing the patient to a room in the remotest part of the house, and which room is to be well aired and kept clean. The bed linen should be changed frequently; and whatever comes from the patient should be immediately removed and emptied. None but the necessary attendants should have any communication with the sick, and these should take care not to sit down upon his bed.

For the purpose of destroying contagion, and purifying infected air, the fumigation of muriatic acid seems to deserve the preference, in consequence of its being more diffusible than the others; and it is to be used in the following manner:—Put one pound of common salt into an earthen vessel, and pour over it, from time to time, a small quantity of sulphuric acid, till the whole salt is moistened. If the air is foul and peculiarly offensive, a gentle heat may be put under the vessel, to extricate a large quantity of vapour; but in general the mere addition of the acid to the salt will be sufficient, if the apartment is not very large.

Means for Preserving the Health of Europeans in Warm Climates. All such persons as are plethoric and robust, when they approach a warm climate, should, on their voyage, be bled in proportion to their strength; but if this has been neglected during the voyage, it should be done immediately on landing on shore.

After the bleeding, the bowels are to be opened by some cooling purgative; and if the person is of a bilious habit, an emetic ought even to precede it. These having been gone through, calomel, from two to four grains, should be begun to be taken every other night, either in the form of a pill or of a powder, mixed in some thick vehicle, until the gums become somewhat affected. If the medicine runs through the bowels, a grain of opium, or a few drops of the tincture, may be added to each dose. When the mouth shews the mercurial action, a dose of some cooling laxative medicine ought to be taken, after two or three days, leaving out the calomel. Those that are not easily affected by mercury will do best to persevere.

On landing, the greatest temperance must be observed in the diet, and every exposure to the sun in the middle of the day, be avoided; the same as to the cool air at night. Every European should further avoid arriving in a tropical climate during the rainy season of the year—that is, between the month of August and the end of October.

If it can be done, such a situation ought to be chosen for a residence as is somewhat elevated and dry, open to the air and the sun, and remote from woods, stagnant waters, or marshy grounds. If no such a situation can be procured, the highest apartment in the house should be chosen to sleep in.

About half an ounce of the compound tincture of bark may be taken every morning on an empty stomach, repeating the dose again in the evening. In particular places, where marshy vapours abound, smoking tobacco may be useful. The diet of Europeans, when newly arrived in a warm climate, should consist of a greater proportion of vegetable food than of animal; and such articles of the latter should be avoided as are either salted or very highly seasoned. A free use of acidulous fruits will be useful, as they serve not only to assuage thirst, but to correct a tendency to putrefaction in the fluids. An infusion of preserved tamarinds in water will, however, be a more salutary beverage. Drinking cold liquors of any kind, when the body is much heated by exercise, and the perspiration profuse, cannot be too much avoided.

All new settlers should very moderately indulge in the delicacies of the table, as well as in all kinds of vinous and spirituous liquors, giving wine the preference to spirits.

They have, further, carefully to avoid

all exposures to a current of air, or moisture, particularly when the body is heated by exercise; to return early home, to avoid the night dews; and, lastly, to avoid a costive habit, by taking, from time to time, some cooling laxative medicine. Going early to bed, and rising betimes in the morning, is particularly conducive to health in a warm climate; and if gentle exercise be added in the morning, it will be highly salutary. Should cold bathing be first used, the body would thereby be much invigorated. Where the convenience of a proper bath is not to be procured, water properly cooled by having been exposed all night to the air in pots, or in a tub, may be thrown over the body. Minor ablutions at other periods in the day may also have a good effect. This practice would, however, be injurious to those who labour under any visceral derangement; and for such, a slight tepid bath may be substituted with advantage. The habiliments of new settlers should consist of coats made of thin woollen cloth, with waistcoats and breeches of dimity nankeen. What is worn next to the skin should be made of cotton in preference to linen, as this last, when moistened with perspiration, in consequence of any severe exercise, is very apt to convey a sense of chilliness when the body becomes inactive again. Calico shirts will, therefore, be preferable to linen ones. Those who are afflicted with rheumatic pains may substitute a waistcoat of thin flannel next to the skin. New settlers should further observe the greatest caution in changing their clothes as soon as possible, after getting wet.

MEASLES. (Rubeola.) This disorder shews itself in red spots over parts of the body, which go away in small mealy desquamation of the skin after a few days.

Symptoms. — The eruption of good measles is usually preceded by a chilliness and shivering, succeeded by heat, thirst, anxiety, pains in the head, back, and loins, heaviness and redness of the face and eyes, with an effusion of tears, swelling of the eyelids, nausea, and sometimes a vomiting of bilious matter: and, added to these, there are hoarseness, dry cough, and a discharge of acrid matter from the nose.

In measles, the same as in other fever complaints, the symptoms generally relent in the morning, but return in the evening with increased severity.

About the third or fourth day, small red spots, similar to flea bites, appear in clusters about the face, neck, and breast; and in a day or two more the whole body is covered with them. On the fifth or sixth day the spots, from a vivid red, are changed to a brownish hue, and begin to dry away about the face; about the eighth or ninth day they disappear on the breast and other parts of the body, with a mealy desquamation of the cuticle.

The malignant form of the disease is accompanied with typhus fever, and with dark spots, and the eruption appears earlier.

The measles may prevail at all seasons of the year, as an epidemy, but the middle of the winter is the time they are usually more prevalent. They attack persons of all ages, but children are most liable to them. When genuine, the measles rarely affect persons but once, and their contagion seems to be of a specific nature.

Treatment.—Where there is a considerable difficulty of breathing, a troublesome cough, or any other symptoms indicating inflammation in the lungs, the local abstraction of blood, by means of leeches, may be repeated from time to time, but not otherwise.

During the whole duration of the complaint, it will be best to keep the body open, and if costiveness prevails, it should be obviated by giving some Epsom salts, or by administering a clyster. Should the difficulty of breathing not be removed by leeches, a blister may be applied between the shoulders.

The cough being usually very troublesome, it will be advisable to make use of some of the remedies assigned under the head of catarrh. The patient should, besides, drink freely of barley water, and linseed tea, gently acidulated with lemon juice. A warm foot bath will also be of much service.

When the cough troubles the patient much by night, and deprives him of rest, the following should be given:—Take

Solution of acetate of ammonia, half an ounce;
Pure water, one ounce;
Spirit of nitric æther, forty drops;
Wine of tartarized antimony, twenty-two drops;
Tincture of opium, forty drops;
Syrup of Tolu, two drachms;

Mix them for a draught.

For children, it will be better to substitute the syrupus papaveris for the opium; which latter ought always to be

employed in this complaint with great caution. In strong cases of measles, recourse should be had to the following remedies:—Take

Camphor mixture, ten drachms;
Spirit of nitric æther, one drachm;
Tincture of foxglove, twenty-two drops;
Syrup of poppies, two drachms.

Mix them for a draught.

Where the eruption disappears before the proper period, and great anxiety, delirium, or convulsions prevail, warm bath, blisters to the chest and legs, as also the administration of wine properly diluted, and the following remedies must be made use of:—Take

Antimonial powder, two grains;
Camphor, three grains;
Subcarbonate of ammonia, four grains;
Confection of orange peel, a sufficiency to form a bolus:

Which is to be given every four or six hours. Or, take

Solution of acetate of ammonia, one ounce;
Camphor mixture, five ounces;
Compound spirit of sulphuric æther, two drachms;
Wine of tartarized antimony, thirty drops—shake them.

Of this mixture take two table-spoonfuls every second or third hour.

During the whole course of the complaint, the patient ought to be confined to his bed, and avoid any exposure to cold air, as it might interrupt the eruption; but great heat, and too strong covering of bed-clothes, must at the same time be avoided. The degree of temperature must be regulated by the patient's feelings. A liquid and cooling diet should be adopted at the commencement of the measles, always taking care not to carry it so far as to produce debility. Where the disease assumes a malignant character, a quantity of wine, proportionate to the age of the patient, should be allowed, in addition to bark and mineral acids. After the cessation of the eruption, it will be well to give some cooling purgative, in order to prevent inflammation of the eyes, or some other complaint following after it.

As weeping from the eyes, and slight inflammations of the same, are apt to take place after the measles, it would be well to wash them occasionally with a little rose water, in which a few grains of the sulphate of zinc have been dissolved, and at the same time to avoid exposure to a glaring light.

When the measles prevail epidemically, it may be advisable to confine such children as never had them to a vegetable diet, giving them a gentle opening medicine, once or twice a week, as they will then be likely to have a mild form of the complaint.

MECONIUM, RETENTION OF THE. A dark-coloured matter is contained in the bowels of all infants at their birth, and is usually discharged by them the two or three first days. Where it does not take place in the course of a day or so, the help of medicines is necessary; and the best that can be employed are about two drachms of castor oil, or a solution of manna in water, or equal parts of oil of almonds and syrup. If these do not act readily, then a clyster of thin gruel, with a little olive oil and common salt, may be administered.

MENSES, IMMODERATE FLOW OF. (Menorrhagia.) This is to be considered as taking place when the menses return more frequently than what is natural, continue longer than usual, or are more abundant than ordinary with the same persons at other times.

Symptoms.—It is often preceded by headache and giddiness, and is afterwards attended with pains in the back and loins, some degree of thirst, universal heat, and, when in consequence of debility, paleness of visage, and coldness of the extremities, besides some other nervous complaints.

Causes.—A general fulness of habit, violent exercise, costiveness, application of wet and cold to the feet, debility, frequent miscarriages, and violent passions.

Treatment.—In general, it will be sufficient to keep the body open, with the following laxative medicines:—Take

Tartrate of potass, half an ounce;
Manna, three drachms;
Warm water, three ounces;
Compound tincture of lavender, half a drachm.

Shake them, and of this mixture take the half for a dose. Or, take

Sulphate of magnesia, two ounces;
Warm water, six ounces;
Compound tincture of senna, half an ounce;
Syrup of roses, two drachms.

Of this mixture let four table-spoonfuls be taken for a dose.

Further, administer some cooling remedies—as, take

Subcarbonate of potass, one scruple;
Lemon juice, half an ounce;
Nitrate of potass, fifteen grains;
Pure water, one ounce;
Common syrup, two drachms.

Mix them, and take the draught every three hours. Or, take

Compound infusion of roses, one ounce and a half;
Nitrate of potass, ten grains;

Adding, if necessary,

Tincture of opium, fifteen drops.

Mix them, and repeat this draught every four hours.

At the same time, a spare regimen is to be kept, and the patient should freely drink of acidulous liquors, such as lemonade or tamarind beverage. The chamber is to be very cool, and the bed or mattress to be lightly covered with clothes.

In those cases where the hemorrhage is profuse, and resists the remedies already mentioned, the following should be made use of:—Take

Alum, twelve grains;
Gum kino, eight grains;
Confection of roses, a sufficiency to form a bolus:

Which is to be taken every third or fourth hour, occasionally adding opium, half a grain. Or, take

Extract of catechu, twelve grains;
Alum, purified, ten grains;
Confection of roses, a sufficiency to form a bolus.

If the complaint is the consequence of debility, or of general laxity in the system, the following might be made use of:—Take

Decoction of Peruvian bark, one ounce and a half;
Tincture of Angustura bark,
Compound tincture of cardamoms, of each one drachm.

Mix them for a draught, to be taken thrice a day, adding occasionally,

Diluted sulphuric acid, eighteen drops.

Lastly, to assist the effect of these remedies, cold bathing may be used, together with gentle exercise, and a nutritive diet, with wine. Where chalybeate springs can be resorted to, the use of such waters will prove very beneficial.

MILIARY FEVER. (Miliaris.) This fever is so called in consequence of the small pustules, or bladders, which appear on the skin, resembling in shape and size the seeds of millet, being commonly most numerous on the breast, back, and other parts where there is most moisture on the skin, and being attended with dejection of spirits.

Symptoms.—The complaint makes its attack with a slight shivering, which is followed by heat, restlessness, loss of strength, anxiety, oppression at the chest, and a low, quick pulse. The tongue appears white, the body is costive, and delirium is apt to arise.

After a short time, the patient feels an itching, and soon after numbers of small pustules make their appearance, first upon the neck and breast, and then gradually over the whole body. About the second day, small vesicles are observed on the top of each pimple, and in two or three days more they break, and are succeeded by small crusts, which fall off in scales.

Causes.—All that is debilitating, a lax habit of the body, general weakness, moist, changeable weather, the presence of irritating matter in the intestines, and a hot regimen.

Treatment.—The patient is to be kept cool, and therefore should not be covered with too many bed-clothes, neither should the room be kept hot, but, on the contrary, a sufficient ventilation is to be allowed, so as to keep up a moderate temperature. Too free an admission of cold air should also be guarded against.

When the irruption is accompanied by inflammation, it will be necessary to have recourse to gentle opening medicines; but when there is a disposition to debility, the strength should be supported with wine and a nutritive diet, together with tonics, as the cinchona bark and acids. If delirium comes on, blisters should be applied; and in case of convulsions, musk and opium will be proper. Should the eruption disappear suddenly, the endeavour is to be chiefly directed to the bringing it out again, by promoting a sweat, by means of remedies promoting perspiration, camphor, friction on the skin, and external warmth. Should there be at the same time any considerable evacuation, it must not be checked all at once.

MILK FEVER. When on the third or fourth day after delivery the breasts become hard, swelled, and painful, small fever will sometimes arise, which is termed milk fever.

Symptoms.—The fever is accompanied by nausea, restlessness, pains in the head and back, and a considerable degree of thirst.

Treatment.—Besides confining the patient to a spare diet, and keeping her very quiet, costiveness should be avoided

by means of cooling opening medicines, and she should, in all other respects, be treated like persons labouring under a simple fever.

MINERAL POISONS. The chief of these are, lead, nitrate of silver, tartarized antimony, arsenic, acids, and alkalies. Lead, when introduced into the stomach, produces languor, tremors, cholic, palsy, and convulsions.

An over-dose of tartarized antimony sometimes occasions death; producing, at first, vomiting, a languid pulse, coldness of the extremities, insensibility, and sometimes convulsions.

After arsenic has been taken, a burning sensation is soon felt in the stomach, excruciating pains in the bowels, and a severe vomiting arises, together with an unquenchable thirst, much anxiety, and restlessness. If the quantity taken has been considerable, an inflammation of the intestines will be the consequence, which will soon terminate in gangrene, distention of the abdomen, coldness of the extremities, fetid vomiting, and stools, and, lastly, death.

In all cases of poison, it will be necessary to procure, as quickly as possible, an evacuation of the contents of the stomach, either by means of the stomach pump, or of a strong emetic, as, take

Sulphate of zinc, from fifteen grains to half a drachm;

Powder of ipecacuanha, ten grains.

Mix them, and let this powder be taken immediately. Or, take

Tartarized antimony, two grains;

Sulphate of zinc, from fifteen grains to one scruple;

Pure water, one ounce.

Mix them for an emetic draught.

The patient is to drink freely afterwards of a decoction of barley, with gum acacia, mutton and veal broths, linseed tea, and milk.

To obviate the deleterious effects of lead, the remedies to be employed are, opium, the warm bath, castor oil; or the sulphate of soda, purgative clysters, and emetics. Common flour of sulphur may be taken with advantage, followed by a large quantity of diluted alkali. Against all poisons of the sulphuric, nitric, or muriatic acid, calcined magnesia will be the best remedy. The patient should take, as soon as possible, a mixture of the subcarbonate of magnesia and water, in the proportion of an ounce of the former to a pint of the latter. Of this a glassful should be taken every four or six minutes, in order to favour vomiting, and prevent the acid from acting on the coats of the stomach. After the vomiting, several leeches should be applied to the abdomen, in order to prevent inflammation; fomentations should also be applied for the like purpose, and a warm bath be also taken. Should relief not be obtained by these means, blood is to be drawn from the arm, in greater or less quantities, according to the urgency of the symptoms. All food is to be left off for the time; but diluents, such as milk, linseed tea, and gruel, are to be taken plentifully, and laxative clysters be injected frequently. During convalescence, a return to the usual diet should be very gradual.

Acetic acid, or vinegar diluted with water, is the best antidote against the effects of an over-dose of any alkali. During the effects of all mineral poisons, which are frequently long and painful, the patient ought to be nourished by milk, gruel, farinaceous preparations, and nutritive broths. The thirst, which usually is great, may be allayed by frequently washing the mouth with cold water, in preference to drinking any quantity of watery liquors, lest vomiting should be excited.

MOSQUITOES, THE BITES OF. Europeans, on their first arriving in the West Indies, and other tropical countries, usually suffer much from the bites of mosquitoes, which are a species of gnats, and on whatever part of the body they pitch, they produce tumours, which are attended with a high degree of itching and inflammation, so that one cannot refrain from scratching, which occasions ulcerations.

To allay the itching, the parts should be bathed frequently with a solution of opium in water, or with the liquor plumbi acetatis sufficiently diluted. It will be necessary to take some cooling purgative, and to live sparingly. Those who suffer much from the bites of these insects, should wear gloves and long linen trousers by day, in order to defend themselves from their attacks; and by night they should sleep under the cover of a net, which, being made of thin lawn, is cool, and shuts them out well.

MUMPS. (Cynanche Parotidea.) This disorder chiefly affects the children of the lower classes of people, and is also often epidemic.

Symptoms. — An external moveable

swelling arises on both sides of the neck; in some instances, however, it is confined to one side. The swelling commonly continues to increase, becomes large, hard, and somewhat painful, till on the fourth day it begins to decline, and in a few days entirely goes off, as does the fever likewise.

Treatment.—The mumps do not often require the use of remedies, but only to have the head and face kept warm, to avoid taking cold, and to keep the bowels open by cooling purgatives. However, should the swellings in the neck disappear suddenly, and the fever increase, so as to affect the brain, it will be necessary to endeavour to reproduce the swellings by warm fomentations, and the following liniment:—Take

Strong liniment of ammonia, one ounce.

Or take

Camphorated spirits, one ounce;
Solution of subcarbonate of ammonia, two drachms;
Tincture of Spanish fly, half a drachm.

Mix them for a liniment.

Besides these, there should be taken internally an emetic—as, take

Nitrate of potass, one drachm;
Tartarized antimony, one grain and a half.

Mix them together, and divide them into six papers, of which one dose is to be taken every four hours. Or, take

Saline draught, one ounce and a half;
Wine of tartarized antimony, from fifteen to twenty drops;
Syrup of orange peel, one drachm.

Mix them into a draught, which is to be taken every three hours.

Blisters are likewise to be applied.

NERVOUS FEVER. (Typhus Mitior.) This fever is particularly distinguished by its affecting the brain, and by its attacking principally those who are weak and debilitated.

Symptoms.—The fever generally comes on with great mildness. At first there is only a slight chilliness felt, which is not followed by any heat, or redness of the face; which latter is usually pale and sunk. However, some degree of lassitude is felt, as also anxiety and dejection of spirits, and loathing of food. As the disease advances, there arises, in the course of a few days, a difficulty of breathing, pains in the head, accompanied with a confusion of ideas; there is great depression of strength felt, the tongue becomes dry, and is covered with a dark fur; the pulse is small and low, cold clammy sweats burst out on the forehead and backs of the hands; the urine is pale and watery, like whey, and the whole nervous system is much affected. There is seldom, however, high delirium.

Causes.—Much study, the neglect of proper exercise, the free indulgence in enervating liquors, and other debaucheries; the want of sufficient nourishment; damp and impure air; and, lastly, contagion.

Treatment.—If there is much nausea, it will be proper to take, at the coming on of the complaint, an emetic, consisting of fifteen grains of ipecacuanha; or, should any costiveness prevail, some purgative medicine will be proper; which latter is also to be repeated from time to time, the same as some clysters. Of the purgative medicines, the following will be most suitable:—Take

Submuriate of mercury, three grains;
Powdered jalap, ten grains;
Syrup of buckthorn, a sufficiency to form the mass:

Which divide into three pills.

To relieve the brain, the application of leeches to the temples will be most advisable, in persons of a weak constitution, but of a plethoric habit.

Those remedies which produce a mild perspiration, as the following, might be given with advantage:—Take

Lemon juice, half an ounce;
Subcarbonate of potass, one scruple;
Cinnamon water, one ounce;
Aromatic confection, ten grains;
Syrup of ginger, two drachms.

Mix them, and let this draught be taken every four hours. Or, take

Camphorated mixture, ten drachms;
Solution of acetate of ammonia, three drachms;
Spirit of nitric æther, thirty drops.

Mix them.

This draught may be taken every four hours. The use of cold drink, the lightening of the bed-clothes, and the free admittance of fresh air, should at the same time be attended to.

Where there is great pain in the head felt, together with restlessness, cold should be applied to the head, by means of large towels dipped in very cold water, mixed with vinegar or rectified spirit, and be renewed frequently, until the patient feels easier, the heat becomes less, and a disposition to sleep begins to be felt. Should purging arise, it is to be stopped by the following:—Take

Chalk mixture, four ounces;
Tincture of catechu, two drachms;
Tincture of opium, forty-five drops;
Cinnamon water, two ounces;
Mix them. Two table-spoonfuls to be taken every six hours.

Profuse sweats are to be obviated by the patient being lightly covered with bed-clothes, by keeping his hands and arms wholly uncovered, and by having fresh air freely admitted into the chamber, and by taking his drinks cool and acidulated.

If there arises much rambling of the thoughts, in consequence of a want of sleep, so as to make it necessary to have recourse to opium, in order to procure it, it should be given in the following form:—Take

Solution of the acetate of ammonia, three drachms;
Cinnamon water, one ounce;
Tincture of opium, thirty drops;
Syrup of ginger, two drachms.
Mix them for a draught. Or, take

Camphorated mixture, one ounce;
Wine of tartarized antimony, twenty-two drops;
Syrup of poppies, three drachms.
Mix them for a draught.

When the fever advances, and symptoms of real debility are apparent, wine may not only be given in the form of negus, but likewise mixed with either sago, gruel, panada, or arrow-root. However, wine should never be given in too great a quantity, nor at too early a period of the complaint; half a bottle in the day may be regarded as a moderate quantity; and, in general, the use of wine ought to be proportioned to the degree of debility, to the age of the patient, and to the effects it produces on him.

Spirits, when given, should be much diluted; and when wine disagrees with the patient, punch or cider, together with aromatics, may be substituted.

Throughout the whole course of the complaint, the patient is to be kept perfectly quiet and in a cheerful state of mind, and his chamber should be freely ventilated, and his bed be lightly covered with clothes. The cinchona bark should only be given when there is no affection of the head present, and the remissions of the fever are regular; but when the skin and tongue are dry, and the remissions are irregular, bark, in whatever form it may be given, will prove prejudicial. In bad cases of this fever, it may be necessary to have recourse to the following remedies besides those mentioned:—Take

Musk, ten grains;
Cinnamon water, one ounce and a half;
Sulphuric æther, twenty-five drops;
Tincture of opium, sixteen drops.
Mix them for a draught, to be taken three times a-day. Or, take

Subcarbonate of ammonia, five grains;
Camphor, four grains;
Opium, half a grain;
Aromatic confection, a sufficiency to form the whole into a bolus:
To be taken every six hours.

After the fever is removed, and the patient begins to regain his strength, he should take daily exercise; and if the appetite does not readily return on the cessation of the fever, the following stomachic bitters should be used:—Take

Compound infusion of gentian, four ounces;
Compound tincture of cardamoms,
Tincture of columba, of each half an ounce.
Mix them, and give two table-spoonfuls morning, noon, and evening, adding, occasionally, twenty-two drops of the diluted sulphuric acid. Or, take

Infusion of cascarilla, ten drachms;
Compound tincture of gentian,
Compound tincture of cinnamon, of each one drachm;
Diluted sulphuric acid, twenty drops.
Mix them into a draught, which is to be taken three times a day.

Sometimes there arises a degree of madness, or temporary alienation of the mind, at the termination of typhus fever. All that can be done under such circumstances is to support the patient's strength with a generous nutritive diet, to keep him as quiet and tranquil as possible, and to give him tonics, avoiding at the same time all copious evacuations.

NETTLE RASH. (Urticaria.) This disease is so called in consequence of its being attended by an eruption of the skin, similar to what is produced by the stinging of nettles.

Symptoms.—In some instances a slight degree of fever either precedes or accompanies the eruption; which latter is not confined to any particular spot, but is dispersed over the whole body, and is always accompanied by a considerable degree of itching. It generally subsides in the day, and breaks forth again in the evening. In some persons it lasts only a few days, in others, many months.

Causes.—These are supposed to be

suppressed perspiration, or some irritating matter in the stomach.

Treatment.—A cool regimen, and keeping the body open with Epsom salts, are generally sufficient; if it has arisen from anything noxious being eaten, an emetic should be administered at the commencement of the complaint. If the disorder proves obstinate, small doses of calomel and nitric acid should be taken. An infusion of serpentaria, made in the proportion of two drachms to a pint of water, is much recommended. Infants at the breast are sometimes liable to this species of eruption, which in general requires little attention, and often disappears in a few hours. In case of the body being much covered with eruptions, and their remaining long out, care should be taken that they are not repelled suddenly by any exposure to cold, or by any other improper treatment. Should the eruption happen to strike in, and the child suffer much from the repulsion, recourse should be had to the tepid bath and light cordials, in order to cause their return to the surface of the body.

NIGHT-MARE. (Incubus.) A person labouring under this complaint feels such an oppression as to think some living being is sitting on his chest, which inspires his mind with terror, and impedes his respiration.

Symptoms.—It always attacks during sleep, when that is profound; and first in the shape of a disagreeable dream. The person imagines himself then to be exposed to some danger, or to be pursued by an enemy, whom he finds it impossible to avoid. When the paroxysm actually takes place, the uneasiness of the person in his dream rapidly increases, till he feels oppressed with some weight, which confines him on his back, and prevents his breathing. The sensation is then the most painful; the person becomes every instant more awake, and, conscious of his situation, he makes violent efforts to move his limbs, especially his arms, with the view of throwing off the incumbent weight; but the muscles will not obey the impulse of the will; the difficulty of breathing goes on all the while increasing; the heart is affected with palpitation; the countenance appears ghastly, and the eyes halt open. If left to himself, the person lies in this state generally a minute or two, when he recovers all at once the power of moving; upon which he awakens thoroughly. If the person does not change his position, the paroxysm is very apt to recur, as the propensity to sleep is very great, and if indulged in, another night-mare is generally inevitable. When this disease is established, some confusion of the head, singing in the ears, and spectres before the eyes, will often remain for a time after the person is roused; as also an unpleasant taste in the mouth, a sense of weight at the stomach, and a palpitation of the heart.

Causes.—Cramps of the muscles of the chest, indigestion, and distention of the stomach and bowels, caused by flatulency, constipation, and acid eructations.

Treatment.—If the symptoms of indigestion are urgent, the following draught should be taken:—Take

Subcarbonate of potass, twelve grains;
Peppermint water, one ounce;
Compound tincture of cardamoms, three drachms;
Syrup of ginger, one drachm.

Mix them for a draught.

This should be repeated as often as the occasion may require it. Costiveness is to be removed by some grains of rhubarb with magnesia. When there is much languor and debility, with loss of appetite, the pill of iron, with myrrh, together with the decoction of bark, or the infusion of gentian, quassia, or any other agreeable bitters, are to be taken as recommended under the head of indigestion. The carbonate of soda, mixed with some ale or porter, will form a pleasant beverage.

Persons subject to night-mare ought carefully to shun all kinds of food likely to prove flatulent, or of difficult digestion, particularly for their supper. They should also guard themselves against all intemperance, and should avoid gloomy thoughts, a sedentary life, intense study, and late hours. Moreover, they should always have some person to sleep near them, so as to be awakened immediately upon their groans and struggles. Where medicine is not to be had, a glass of any cordial will frequently dispel flatulency.

OBSTINATE COSTIVENESS. (Obstipatio.) This consists in a retention of the excrement, accompanied with an unusual hardness and dryness of the evacuations, so as to render them difficult, and sometimes painful.

Symptoms.—Besides the defect of stools, there sometimes exist nausea, want of appetite, flatulency, pains in the head, and a degree of fever.

Causes.—These are the neglecting at the usual time of going to stool, extraor-

dinary heat of the body, and copious sweats; by the taking food that is dry, heating, and of difficult digestion, a sedentary life, the gout, or a diseased state of the liver and spleen.

Treatment.—The disease is to be obviated by an attention to diet, by observing regular periods for soliciting motions and where these means fail, by having recourse to laxatives, the most proper of which are those that afford the least irritation, as, for instance—Take

Tartrate of potass, half an ounce;
Manna, two drachms;
Hot water, three ounces;
Tincture of jalap, two drachms.

Mix them, and let the half be taken for a dose. Or, take

Compound infusion of senna, five ounces;
Sulphate of magnesia, half an ounce;
Syrup of buckthorn, two drachms.

Mix them. Four table-poonfuls may be taken for a dose, and the same quantity be repeated in three hours, if the bowels are not sufficiently moved.

In those cases where costiveness has become inveterate, and the usual remedies have been of no avail, charcoal finely levigated, and mixed with three ounces of confectio sennæ, and two drachms of the carbonate of soda added to it, should be taken from half an ounce to an ounce at a time, as circumstances may require.

PAIN IN THE STOMACH. (Gastrodynia.) This complaint often occurs in those who are affected with indigestion, and who labour under heartburn, eructations, and flatulency. It originates in inactivity of the stomach, whence the food, instead of being digested, runs into fermentation, and produces acid; sometimes the gastric juice itself becomes acid, so as to give pain to the stomach. The heartburn arising from this disorder, is sometimes attended with an emaciation of the body.

As a remedy, the sulphuric acid, in a diluted state, may be employed, together with a due quantity of brandy, or other spirit, diluted with water, or Seltzer water. But in order to procure permament relief, the digestive powers should be strengthened by a blister externally, and by the use of aromatic bitters internally, as advised under the head of Indigestion.

The diet should consist of such things as do not ferment; such as animal food, shell-fish, and biscuit; and in general the food should be well masticated. A waistcoat made so tight as slightly to compress the stomach and bowels, might be of service.

Lastly, the oxyde of bismuth, taken from about three grains, with twenty grains of gum tragacanth, three times a day, is a remedy much recommended.

PALPITATION. (Palpitatio.) This disease consists in an irregular and violent palpitation of the heart.

Symptoms.—During the attacks, the motion of the heart is performed with great rapidity, and generally with more force than usual, which may be felt with the hand, seen with the eye, and even sometimes heard with the ear. There is frequently shortness of breath, a purplish hue of the lips and cheeks, and several other anxious and painful sensations.

Causes.—An organic affection of the heart itself, and of the arteries immediately proceeding from it; plethora, or debility of the system in general, and nervous irritability.

Treatment.—If it arises from plethora, bleeding, with cooling purgatives, should be adopted. If from general debility, stomachic bitters and cold-bathing will be of service. When in consequence of nervous irritability, ether, castor, musk, with tonic, will be proper remedies. But if the disease arises from an organic affection of the heart, and of the large blood-vessels that immediately proceed from it, in consequence of aneurisms, then all that is to be done is to avoid carefully all the circumstances which may expose to any increased action of the heart and the blood system, as violent exercise, fits of passion, great exertions of the body, a stimulating diet, and spirituous liquors.

PALSY. (Paralysis.) This disorder consists in either a diminution or a total loss of the powers of motion and sensibility, in certain parts of the body; in some instances the disease is confined to a particular part, but more generally to one whole side of the body.

Symptoms.—Palsy usually comes on with an unexpected and immediate loss of motion, and of the sensibility of the part affected; however, in a few instances, it is preceded by numbness, coldness, and paleness, and sometimes also by slight convulsive twitches. In cases where the head is much affected, the eye and mouth are drawn on one side, the memory and judgment are much impaired, and the speech is indistinct and incoherent. If the extremities are affected, the muscles begin to waste away, after the palsy has lasted a considerable time.

Causes.—Apoplexy, tumours, distortions of the spine, suppression of usual evacuations, fractures, wounds, and external injuries, long exposure to the poisonous fumes of metals or minerals, and whatever tends to relax and enervate the system, as a sedentary and luxurious life, intense study, great anxiety and distress of mind.

Treatment.—When palsy takes place in a young person of a full plethoric habit, and the head appears to be much affected, it will be advisable to take away some blood, after which it will be proper to give an active purgative, as advised under the head of Apoplexy, but where palsy arises in a debilitated constitution, neither bleeding nor purging should be resorted to. If costiveness prevails, it should be removed by the tincture of rhubarb. In decrepid persons in particular, it will be proper to apply some external stimulus to the parts affected, as well as along the spine, by rubbing the latter with a flesh brush impregnated with flour or essence of mustard, several times a-day.

Warm bathing is a remedy much employed in palsy, but in those that are of a plethoric habit, its use might prove injurious, though in enfeebled constitutions it would prove beneficial. The following liniment may be used:—Take

Olive oil, two ounces;
Oil of turpentine, one ounce.

Mix them for a liniment. Or, take

Camphorated spirit, one ounce;
Tincture of Spanish fly, two drachms;
Solution of subcarbonate of ammonia, half an ounce.

Mix them.

Electricity, both by sparks and by shocks, is another remedy which is mostly employed in palsy with good effect; but care should be taken to use it only with a moderate force, as also to apply it to parts which are most remote from the head. Galvanism might also be employed with advantage; and the exercise of dumb bells would be of great assistance.

When palsy affects different parts of the body at once, internal remedies should also be made use of; as, for instance—Take

White mustard seed, two tea-spoonfuls, twice or thrice a day, washing it down with a little cold water. Or, take of

Bruised mustard seeds,
Horse-radish root, of each two ounces;
Orange peel, bruised, half an ounce:
Pure water, two pints.

Boil them slowly until reduced to one pint, then strain off the liquor, and let the patient take a wine-glassful, three times a-day, adding occasionally,

Ammoniated tincture of valerian, thirty drops.

The following remedy has also been much recommended:—Take

Flowers of leopards's bane, two or three drachms;
Boiling water, ten ounces.

Let them infuse for an hour in a covered vessel, then strain off the liquor. Take

Of the strained liquor, ten drachms;
Compound tincture of cardamoms, two drachms;
Syrup of ginger, one drachm.

Mix them, and let this draught be taken thrice a d y.

Great advantage has been derived from this medicine, in cases of nervous palsy, in which tonics, joined with aromatics, as advised under the head of Indigestion, should also be used.

In palsy, the diet should be light, nutritive, and of a warm aromatic nature. If the patient is able to walk, he should take such daily exercise as his strength will admit; but if deprived of the use of his legs, he ought to be carried about in a carriage, and frictions with strong stimulants should frequently be applied to the parts affected. Flannel is to be worn next to the skin, and all exposure to damp, cold, and moist air, ought carefully to be avoided. If it can be done, a warm climate should be resorted to.

Where the appetite fails, and the person sinks into a state of debility, bark, with stomachic bitters, ought to be taken.

PERIPNEUMONY, SPURIOUS. (Peripneumonia Notha.) This complaint commonly makes its attack on those who are already advanced in life, are of a phlegmatic habit, and often subject to a cold.

Symptoms.—It comes usually on with chills and heats alternately, a flushing in the face, pains and giddiness in the head, difficulty of breathing, together with a cough, accompanied by some degree of expectoration, sometimes with the throwing out a great quantity of mucus; and, lastly, with a sense of great lassitude over the whole body.

Causes.—It is occasioned by a cold; and it is most prevalent in the autumn and spring, or when the weather changes frequently from hot to cold.

Treatment.—If there is great difficulty of breathing, with much pain, taking blood from the arm will be proper, that the circulation of the blood in the lungs

might be facilitated by it; but where these symptoms do not prevail, bleeding would be injurious, as it might bring on a considerable degree of debility in people already of a weak habit. In order to relieve the difficulty of breathing and oppression at the chest, it will be necessary to apply a large blister over the affected part of the chest; and if there is any nausea present, a gentle emetic should be taken; but if not, small doses of antimonials will be sufficient, in order to promote a perspiration, the patient drinking at the same time plentifully of tepid liquors. Medicines for inducing expectoration should, after these, be given in the manner ordered under the head of INFLAMMATION OF THE LUNGS.

If costiveness prevails during the disease, it should be removed by manna, Epsom salt, and the like, but not by strong purgatives.

The diet should, throughout the whole course of the complaint, be slight and cooling; where great debility prevails, however, the patient may take a small quantity of wine.

PILES. (HÆMORRHOIDS.) These consist of small tumours situated on the verge of the anus, which are sometimes separate, round, and prominent, but at other times the tumour consists only of one tumid or varicose ring surrounding it.

Symptoms.—The piles are sometimes accompanied by a sense of weight in the back, loins, and bottom of the belly, together with pain in the head, sickness at the stomach, and flatulency in the bowels. If the tumours break, a quantity of blood is then voided, and a considerable relief from pain is obtained; but if they continue unbroken, the patient experiences great pain when going to stool, or even when sitting down on a hard chair.

Causes.—This complaint may be occasioned by habitual costiveness, phlethora, or excesses of various kinds; by a use of strong aloetic purges, and by a sedentary life in those of a robust habit.

Treatment.—As costiveness is one of the most frequent causes of piles, the bowels ought to be kept open by the following medicines:—Take

Confection of senna, two ounces;
Powdered jalap, two drachms;
Nitrate of potass, one drachm and a half;
Syrup of buckthorn, a sufficiency to form an electuary, of which take the bulk of a walnut occasionally.

Or, take

Washed sulphur, one ounce;
Confection of senna, two ounces:
Supertartrate of potass, three drachms;
Syrup of roses, a sufficiency to make the whole into an electuary.

Should no motion be procured by the aid of these medicines, clysters of tepid water, with soap and oil, should be administered.

When the piles are attended with much pain, and a considerable degree of inflammation, it would be well to apply a few leeches, after which, pledgets wetted in a solution of the acetate of lead, or sulphate of zinc, should be laid on. The patient is also to anoint the parts after each stool with the following ointment:—Take

Spermaceti ointment, two ounces:
Opium, reduced to powder, one drachm.

Mix them well, and use the ointment. Or, take

Cerate of acetate of lead, two ounces;
Opium, two drachms.

Mix them.

Hæmorrhoids are always to be regarded as a salutary evacuation, and therefore they should never be stopped, but only moderated, which is to be effected by the patient lying in a horizontal posture, with perfect quietude, by the application of pressure, made by introducing up the rectum a piece of sheep's or pig's gut, tied at one end, and by filling it at the other extremity with some cold liquid, such as vinegar and water, and to force up the liquid so as to increase the degree of pressure, and then securing it with a proper bandage. When, however, the bleeding proceeds from tumours seated high up, and is so severe as to induce great debility, the following clyster should be administered:—Take

Decoction of oak bark, one pint;
Alum, two drachms;
Tincture of opium, one drachm.

Mix them for an injection. Or, take

Sulphate of zinc, one drachm;
Rose water, one pint.

Mix them.

During the continuance of the piles, the diet should be cool and nutritious, and should consist chiefly of vegetables, ripe fruit, jellies, broths, &c. Fermented and spirituous liquors should be avoided, and the patient had better drink acidulated liquors, or toast and water.

When, in the course of this complaint, the rectum becomes so much affected as to be threatened with a fistula, the fol-

lowing paste should be made use of:—Take

Elecampane root, in powder,
Black pepper, of each half a pound;
Fennel seed, powdered, one pound and a half;
Clarified honey,
White sugar, of each one pound.

Make them into a paste, of which let the bulk of a nut be taken twice or thrice daily.

This paste is to be prepared thus:—The first three ingredients are to be finely powdered and well mixed; after which, the honey and the sugar are to be melted together over the fire, and, being formed into a clear syrup, are to be added, and the whole be beaten together into a mass.

PLEURISY. (Pleuritis.) This is an inflammation of the membrane which lines and envelopes the lungs, and is attended with a strong pain in the side, and fever.

Symptoms.—The complaint comes on with an acute pain in the side, which is still stronger on making a full inspiration of the breath. It is accompanied by flushing of the face, heat over the whole body, difficulty of lying on the side affected, together with a cough and sickness, and a hard, strong, and frequent pulse.

Causes.—This disorder is occasioned by exposure to cold, the same as all other inflammatory complaints are.

Treatment.—Copious bleeding from the system is to be effected at an early period of the disease, and this operation should be so long repeated as the pulse remains full and hard, and the pain in the side is much felt, the breathing difficult, and the drawn off blood continues, when cooled to exhibit a sizy crust on its surface; but as soon as a free expectoration has commenced, it must be discontinued. In order to allay the pain in the side, and to take off the inflammation internally, it will be advisable, also, to apply a large blister immediately over the affected part. The patient should at the same time drink plentifully of barley water, in which has been discovered a small quantity of gum acacia. When it is necessary to remove costiveness, it should be done by means of Epsom salt and manna, in an infusion of senna, or by clysters.

Antimonials, in small doses, so as to promote perspiration, will be beneficial; and in order to assist their operation, the patient should take frequent small draughts of some tepid liquor—such as barley water, or herb tea. A free expectoration ought to be encouraged, by a use of the following remedies:—Take

Mucilage of gum acacia, four ounces;
Pure water, two ounces;
Nitrate of potass, one drachm;
Wine of tartarized antimony, thirty drops.
Syrup of lemons, one ounce.

Of this mixture, when shaken, take a little from time to time, or when the cough is troublesome.

If the patient feels exhausted from want of sleep, opiates may then be given, under the following form:—Take

Solution of acetate of ammonia, half an ounce;
Mint water, one ounce;
Wine of tartarized antimony, twenty drops;
Spirit of nitric æther, thirty drops;
Tincture of opium, forty drops;
Common syrup, two drachms.

Mix them for a draught, to be taken on going to bed.

Throughout the whole course of the complaint, the patient is to abstain from animal food, and from all kinds of fermented and spirituous liquors, and to support his strength only with gruel, sago, barley, and such like preparations of vegetables. He is likewise to guard against any fresh exposures to cold, when he recovers, as a relapse might be dangerous.

POISONS IN GENERAL. These are of four kinds—mineral, vegetable, atmospheric, and animal. Mineral poisons have that in particular, that they corrode, stimulate, or inflame the part to which they are applied; whilst vegetable poisons stupify, but leave no marks of inflammation. None of the mineral poisons put an end to life till after most excruciating pains of some hours; whereas vegetable poisons, at least some of them, destroy life in a few minutes. Animal poison never produces any local disease of the stomach; and the atmospheric poison has this peculiarity, that it affects the respiration, and can therefore never be mistaken. Its action is also very quick.

PREGNANCY, THE DISEASE OF. Pregnancy may be divided into three different stages, each of which is distinguished by some peculiar symptoms.

The first stage of pregnancy is usually acompanied with nausea and vomiting, heartburn, indigestion, peculiar longings,

headache, toothache, and sometimes a slight cough. There often occur a feverish disposition, with debility, emaciation, irritability, and peevishness of temper, and a total alteration of the countenance, the features of which become sharpened.

Sometimes the vomiting continues during the greater part of the second stage of pregnancy; but this is an unusual occurrence. Partial suppression of urine, with a frequent inclination to void it, costiveness, and the piles, are the complaints which chiefly occur at this, the second period of pregnancy.

During the last three months, or the third stage of pregnancy, restlessness, particularly at night, costiveness, swellings of the feet and ancles, and cramps in the legs and thighs, are the affections which prove most troublesome.

Nausea and Vomiting. If this becomes violent, so as to bring on a state of debility, it will be advisable never to get out of bed in the morning before taking a dish of tea, coffee, or whatever, else the person has been in the habit of taking in the morning, as it is particularly at that time when the vomiting mostly comes. Saline medicine should also be taken, now and then, in a mode so as to let the effervescence take place after it has been swallowed; besides which, the body should be kept open with gentle purgatives. Local applications, such as a piece of folded linen cloth, moistened with the tincture of opium, applied to the stomach may prove advantageous; and a small addition of æther will increase its good effects.

Headache, with Plethora. When this becomes very troublesome, the taking of a few ounces of blood will be likely to produce a good effect. In those of a weak and irritable habit, the application of one or two leeches to the temple will be preferable to bleeding from the arm. The bowels are likewise to be kept open by gentle purgatives.

Toothache. For the alleviation of this complaint, a few drops of the oil of cloves, cajeput, juniper, or any other essential oil, applied externally, as well as internally, will be useful.

Heartburn. This, which usually proceeds from acidity in the stomach, may be relieved by half a drachm of magnesia being taken, morning and evening; or, if this does not afford relief, the following should be made use of:—Take

Magnesia, one drachm;
Pure water, five ounces and a half;
Spirits of cinnamon, three drachms;
Solution of subcarbonate of ammonia, one drachm.

Mix them, and take two or three tablespoonfuls for a dose, as the occasion may require.

Longings. These should always be gratified, if possible, as women are apt to miscarry from the anxiety, when not indulged in their wishes.

Hysteria. If any hysterical affection, or sudden fainting, arise during pregnancy, it will generally be sufficient to expose the patient to a free open air, and to place her in a horizontal position, as well as to give her a glass of cold water, with a few drops of the liquor ammoniæ subcarbonatis dissolved in it, or a little wine in water.

Costiveness. This, which attends generally on the second stage of pregnancy, would be removed by the following:—Take

Confection of senna, two ounces;
Supertartrate of potass, two drachms;
Powder of jalap, half a drachm;
Syrup of roses, a sufficiency.

Mix them, and of this electuary the patient may take the bulk of a nutmeg at bed time, or occasionally.

Pills, composed chiefly of aloes, which are much used by pregnant women, are very apt to occasion hæmorrhage. Troublesome piles, when externally seated, will be best treated with leeches, and by some preparation of the plumbi acetatis. Looseness, if it occurs, should be treated as indicated under the head of this complaint.

Swellings of the Feet and Ancles will be generally removed by the patient keeping her feet in a horizontal position; but if not, flannels wrung out in a warm infusion of emollient herbs will, when applied to the affected parts, prove beneficial.

Cramps of the Thighs and Legs will be relieved by rubbing the parts with cold vinegar, with camphor dissolved in oil, or with the following liniment:—Take

Camphorated spirit one ounce;
Spirit of sulphuric æther,
Tincture of opium, of each half an ounce.

Mix them for a liniment.

In cases where the stomach is affected with spasms, some doses of æther and the tincure of opium will afford much relief. The patient should at the same time avoid

every kind of food that is either hard of digestion, or is apt to prove flatulent. The body is also to be kept perfectly open.

PULMONARY CONSUMPTION. (Phthisis.) This disease manifests itself by pain in the side of the chest, shortness of breath after walking or speaking, a cough, which generally proves most troublesome towards morning; general emaciation and debility, and lastly, by hectic fever.

Symptoms.—When it arises in consequence of tubercles, it begins with a short dry cough, from which nothing is spit up at first except a frothy mucus. The breathing is at the same time somewhat impeded, and upon the least bodily motion is much hurried; a sense of oppression at the chest is felt; the body becomes gradually leaner, and great languor, with indolence, dejection of spirits, and loss of appetite prevail.

In this state the patient frequently continues a considerable time, during which he is, however, more readily affected than usual by slight colds, the cough becomes more troublesome and severe, particularly by night, and it is at length attended with an expectoration, which, towards morning is free and copious. By degrees, the matter which is expectorated becomes viscid and opaque, and assumes a greenish colour and purulent appearance; on many occasions it is also streaked with blood. The breathing at length becomes more difficult, and the emaciation and weakness go on increasing. In the more advanced state of the disease, a pain is sometimes felt on one side, in so high a degree as to prevent the person from lying easily on that side. But even where no pain is felt, it often happens that persons labouring under phthisis cannot lie easily on one or other of their sides, without a fit of coughing being excited, or the difficulty of breathing being much increased. At the commencement of the disease, the pulse is only a little quicker than usual, but when the complaint has been going on for some time the pulse becomes full, hard, and frequent; the face begins to flush, particularly after eating, the palms of the hands and soles of the feet are affected with burning heat, the respiration is laborious and difficult, and the hectic fever is established by degrees. From the first appearance of this fever, the urine becomes high-coloured, and deposits a copious branny red sediment. During the paroxysms, a florid circumscribed redness appears on each cheek, but at the same time the face is pale, and the countenance dejected. At the commencement of the hectic fever, the bowels are usually costive, but in the more advanced stages of it, looseness often comes on, and continues to recur frequently during the remainder of the disease. Colliquative sweats also break out, and produce great debility.

Causes.—Of these the most essential are hereditary disposition, particular formation of the body, as a long neck, prominent shoulders, and narrow chest; certain diseases, such as catarrh, scrofula; particular employments, such as stone-cutters; violent passions, affections of the mind, drinking freely of strong liquors, great evacuations, and lastly, the application of cold. The nearest cause of pulmonary consumption is supposed to be an ulcer in the lungs.

Treatment.—In the first stage of the disease, where the patient complains of a difficulty of breathing with a pain in his breast or side, has restless nights, with a hard pulse and a cough, some bleeding, in proportion to his strength and habit, may be of service. Besides this, he should follow a moderate regimen, and take some gentle purgative, if the bowels are costive.

Where there is any febrile heat, with a cough or pain in the chest, small doses of tartarized antimony, or the pulvis antimonialis, may be repeated three or four times a-day, together with a saline mixture.

The diet should consist of such things as are nutritive and easy of digestion, as dishes made of flour and milk, most kinds of vegetables and fruits, poached eggs, light puddings, custards, jellies, and animal broths. The various kinds of shell fish, and particularly oysters, lobsters, crabs, prawns, and cray fish, will also be good. All fermented liquors, but more particularly spirituous ones, are to be avoided.

Milk is a very good thing in this disease, that of the ass is, however, usually preferred to any other; but it ought to be taken several times a day, and in a considerable quantity, and with a little bread, so as to make a meal of it. The milk of cows, although not so digestible as that of asses, may be made lighter by allowing it to stand for some time, and then taking the cream off. Should either of these produce looseness of the bowels, a small quantity of the confectio rosæ Gallicæ may be taken with it.

At the commencement of pulmonary consumption, a free use of buttermilk has frequently been of advantage. The quantity should be gradually increased.

The patient is at all times to avoid any irritation of the lungs, which may arise from violent exercise of respiration, as in singing, playing on wind instruments, or making long and loud declamations. He should likewise avoid going into crowded rooms, the air of which becomes at length unfit for respiration for those whose lungs are weak and irritable. He should not place his body in a stooping position, as it is important that the capacity of his chest should be least straitened by pressure against it. In the same way should all kinds of bodily exercise be avoided which require much exertion, and still more so all exposure to cold. A flannel waistcoat is therefore to be worn next to the skin, together with sliders of the same, and stockings of cotton or worsted. If the patient cannot bear flannel next to the skin, he may try calico. Warmth and equability of temperature, especially in the winter months, are the most essential points for an invalid in pulmonary complaints.

As an internal remedy, the foxglove, in the following combination, is much recommended:—Take

Fresh leaves of purple foxglove, two ounces;
Pure water, one pint.

Boil it down to seven ounces and a half; strain off the liquor, and add

Tincture of cardamoms, half an ounce.

Mix them. Or, take

Dry foxglove leaves, one drachm;
Boiling water, eight ounces.

Infuse them for an hour, then strain off the liquor. The dose of this may be from half an ounce to six drachms.

Hemlock, in the following combination, has also been much recommended—as, take

Extract of Hemlock,
Gum myrrh, in powder, of each half a drachm;
Mucilage of gum acacia, a sufficiency to form a mass, to be divided into twenty pills, of which take two twice or thrice a day.

The cough proving often troublesome during the course of this complaint, it may be found necessary to make use of the following pectoral remedies:—Take

Mixture of ammoniac, six ounces and a half;
Vinegar of squill, two drachms:
Syrup of tolu, three drachms;
Compound tincture of camphor, two drachms.

Of this mixture, let the patient take a large spoonful, whenever the cough is troublesome. Or, take

Almond mixture, six ounces;
Oxymel of squill, three drachms;
Compound tincture of camphor, two drachms;
Tincture of foxglove, thirty drops.

Mix them, and take a mouthful from time to time.

Besides these remedies, which the patient is to make use of as the occasion may render necessary, he should take for his ordinary drink the following:—Take

Decoction of barley, two pints;
Gum acacia, three drachms;
Syrup of lemons, one ounce and a half.

Mix them for ordinary drink.

The prussic acid in the following combination, may also be made use of in the first stages of the complaint:—Take

Almond mixture, nine drachms;
Prussic acid, two drops;
Syrup of tolu, one drachm.

Mix them for a draught. Or, take

Distilled water, or infusion of roses, ten drachms;
Prussic acid, two drops;
Syrup of poppies, one drachm.
Mix them.

Lichen Islandicus, boiled in either milk or water, is also recommended, chiefly in those instances where the cough is attended with purulent expectoration.

In the more advanced state of the disease, the chief object must be to mitigate the cough, the looseness of the bowels, and the colliquative sweats, and also to put the body into as good general health as possible, by pure air, moderate exercise, and a proper course of mild nutritive food.

Different balsams have been much used in this stage of the disease, and when ulceration is going on, as, for instance,

Dissolve of myrrh, one drachm, in a mortar, with
Spirit of pimento, six drachms;
Distilled water, six ounces and a half.

Then add,

Subcarbonate of potass, half a drachm;
Sulphate of iron, twelve grains;
Syrup, two drachms.

Mix them, and divide the whole into four draughts, of which one is to be taken every morning, another at five in the evening, and one at bed time.

Should the mixture not sit easy on the stomach, on account of its nauseous taste, it may be given in the following way:—Take

Myrrh in powder, two drachms;
Sulphate of iron, one scruple;
Subcarbonate of potass, one drachm;
Extract of gentian, one drachm and a half;

Syrup, a sufficiency to form the mass, which is to be divided into seventy pills, whereof three or four are to be taken thrice a day.

Vegetable acids, such as oranges and other fruits yielding an acid juice, will be beneficial, when taken with the powder of sarsaparilla.

Seltzer water will often serve to check the violence of perspiration, diminish the discharge from the lungs, and correct its fetor, and often enable the patient to gain quiet nights, and a better appetite. It would be still better to mix it with milk or even water.

The infusum rosæ compos., with a sufficient quantity of diluted sulphuric acid, will prove a good remedy to check profuse perspiration.

The strength is to be supported by food of a light, nutritive nature; exercise, particularly riding in a carriage, should be taken daily, if possible, when the weather is fine.

RHEUMATISM. (Rheumatismus.) The characteristic signs of this complaint are, pains in the large articulations, following the tree of the muscles, and which are increased by external heat, together with fever.

Symptoms.—It usually comes on with lassitude and rigors, succeeded by heat, thirst, anxiety, restlessness, and a hard, full, and quick pulse; the tongue preserving a steady whiteness. After a short time, some excruciating pains are felt in different parts of the body, but more especially in the shoulders, wrists, knees, and hips, and these pains are shifting from one joint to another, leaving a redness and swelling in every part they have occupied, as also great tenderness to the touch. Towards evening, there is usually an increase of fever, and during the night the pains become more severe.

Chronic Rheumatism is attended with pains in the head, shoulders, knees, and other large joints, without any inflammation or fever. The complaint is either confined to one particular part, or shifting about. It continues for some length of time, and then goes off, leaving the parts which have been affected in a state of debility, and very liable to fresh attacks on the approach of moist, damp weather.

Causes. — These generally are, obstructed perspiration, occasioned by wearing wet clothes, sleeping on the ground, or in damp rooms, or by being exposed to cold air when the body has been much heated.

Treatment.—The principal thing to be attended to in acute rheumatism is to alleviate the general inflammation which prevails, by a strict cooling diet, and by blood-letting, where the constitution is robust and the heat considerable. The quantity of blood to be taken is to be proportionate to the violence of the symptoms, and the age, strength, and the habit of the patient.

In weak and irritable habits, and where the inflammation is chiefly local, and the pain not violent, topical bleeding, by means of several leeches applied to the parts affected, may be sufficient. When leeches cannot be procured, scarifying and cupping may be employed in their stead.

Where costiveness prevails, one or two evacuations daily should be tried to be procured by some cooling purgative—as Epsom salts, or by administering laxative clysters, which are preferable, when the complaint is violent, as the motion occasioned by going frequently to stool proves painful to the patient.

When the pain is chiefly confined to one part, the application of a blister may be of use, or the part should be rubbed with the following liniment:—Take

Camphorated spirits, two ounces;
Solution of ammonia, half an ounce;
Oil of rosemary, fifteen drops.

Mix them for a liniment. Or, take

Olive oil, three ounces;
Oil of turpentine, one ounce;
Sulphuric acid, fifteen drops.

Mix them for a liniment.

But where the pains are wandering, neither of these remedies will be of use. Warm fomentations ought never to be employed in acute rheumatism.

Where any of the joints of the extremities are much swollen, and very painful, besides leeches the following cataplasm will prove beneficial:—Take

Rye flour, one pound;
Stale vinegar, or beer, four ounces;
Muriated natron, two ounces.

Mix them for a cataplasm.

These ingredients, being wrought into a paste with hot water, are to be wrapped round the affected part, and to be renewed morning and evening. Linen cloth, wetted in a solution of muriated ammonia, with the nitrate of potass, and constantly

applied to the inflamed parts, may also be made use of.

After the necessary evacuations have been promoted, remedies producing perspiration, as the following, should be used:—Take

Compound powder of ipecacuanha, ten grains;
Confection of roses, twelve grains;
Syrup, a sufficiency to form a bolus:

Which may be taken every three or four hours, washing it down with three large spoonfuls of the following mixture:—Take

Lemon juice, one ounce and a half;
Subcarbonate of ammonia, one drachm;
Pure water, four ounces and a half;
Nitrate of potass, half a drachm;
Syrup, half an ounce.

Mix them. Or, take

Subcarbonate of ammonia, ten grains;
Antimonial powder, two grains;
Confection of roses, a sufficiency to form a bolus:

Which may be taken every four hours.

In order to increase the effect of all these medicines, the patient should be enveloped in flannel, every article of linen being put aside; and as soon as he begins to sweat, he ought to drink freely of diluents—such as herb tea, barley water, and wine whey. If, however, obvious benefit should not be derived from forty-eight hours' sweating, the foregoing remedies should be discontinued, the same as every local means for increasing perspiration.

When the pain is very considerable, opium, in the following combination, might prove advantageous:—Take

Antimonial powder, from two to three grains;
Opium, half a grain;
Confection of roses, a sufficiency to form these into a pill:

Which is to be taken every six hours, washing it down with the common saline draught. Or, take

Solution of the acetate of ammonia, three drachms;
Mint water, one ounce;
Wine of tartarized antimony, twenty-two drops;
Tincture of opium, twenty to thirty drops;
Common syrup, two drachms.

Mix them, and give the draught at bedtime.

After the inflammatory symptoms have been subdued, the cinchona bark, combined with nitre in the following form, may be given with advantage:—Take

Powder of Peruvian bark, half a drachm to one drachm;
Nitrate of potass, ten grains.

Mix them, and repeat this powder every four hours. Or, take

Decoction of Peruvian bark, one ounce and a half;
Nitrate of potass, ten grains.

Mix them for a draught, to be taken as frequently as the former.

If there be intermission of pain, a clean and moist tongue, the skin in perspiration, and a sediment in the urine, the following might also prove beneficial:—Take

Decoction of Peruvian bark, one ounce and a half;
Powder of the same, one scruple;
Oil of turpentine, twenty-five drops.

Mix them, and give the draught every six hours.

In acute rheumatism, the patient must be kept on a cool spare diet—as milk, whey, buttermilk, light vegetable matters, panada, ripe fruits, &c.; animal food and fermented liquors should be avoided.

In chronic rheumatism, a different mode of treatment must be adopted. Bleeding is not at all advisable. In young and vigorous subjects, however, it will be well to apply leeches, if an enlargement of the bones of the extremities has taken place.

Rub the parts which are affected by the disease with the same liniment as prescribed for acute rheumatism, and then envelope them in flannel. The flesh brush, with electricity or galvanism, is useful in cases of long standing. Exercise, particularly of the affected limb, is very useful. For the arms, the dumb bells are very suitable; but for the lower extremities, walking is the most efficacious, although it may prove somewhat painful at first. Want of exercise may bring on stiffness of the limb.

Camphor dissolved in æther, and applied externally, has afforded much relief in several instances of painful affections of the joints. Immersing the body several times a day, for a quarter of an hour, in a warm bath, or pouring warm water from a kettle upon the limb, has, in many instances, proved very useful. The temperature of the bath may be from ninety to one hundred and fourteen degrees. The vapour of hot water, locally applied, will seldom fail to prove beneficial. A large boiler, with a pipe affixed to it, forms a simple apparatus, with which the affected

parts may be steamed for about half an hour two or three times a day.

When any joint becomes enlarged from effusion, it ought to be frequently rubbed with an ounce of the muriate of ammonia dissolved in twelve ounces of common vinegar.

As internal remedies, the following may be made use of in chronic rheumatism, as, take

Oil of turpentine, one drachm and a half;
Compound juniper spirit, one ounce;
Decoction of bark, five ounces;
Yolk of egg, a sufficiency to mix them.

Of this mixture, two table spoonfuls may be taken every fourth hour. Or, take

Ammoniated tincture of guiac, two drachms;
Spirit of cinnamon, half an ounce;
Decoction of bark, one ounce;
Wine of tartarized antimony, fourteen drops.

Mix them for a draught, to be taken twice or thrice a day.

Whatever medicines may be employed, it is necessary to persevere with them for a time, in chronic rheumatism; as, otherwise, but very little benefit can be derived.

Persons that are subject to rheumatic complaints ought to avoid exposing themselves to cold and wet, and should be warmly clothed, and wear flannel next the skin.

RICKETS. (Rhachitis.) This disease produces uncommon size of the head, incurvation of the spine, protuberance of the belly, and general emaciation.

Symptoms.—It usually comes on slowly; and the first symptoms of it are, flaccidity of the flesh, emaciation of the body, and a slight degree of tumefaction of the face.

Causes.—Debility, produced by a damp and cold residence, impure air, inattention to cleanliness, bad nursing, want of due exercise, and a deficiency of food.

Treatment.—Endeavour to invigorate the system through the means of tonic remedies.—Take

Myrrh,
Powder of Columba, of each from five to ten grains;
Sulphate of iron, one grain and a half.

This powder should be taken twice a day, mixed in a little syrup. Or, take

Wine of iron, from one to three drachms twice a day, with two table-spoonfuls of a decoction of Peruvian bark.

To assist the effect of these remedies, a gentle emetic should be given occasionally, particularly where the appetite and digestion are much impaired.

The little patient should be removed to the country, or to an elevated and dry situation, and be supplied with nourishing diet and a moderate quantity of wine. The patient should lie on a hair or oaten chaff mattress, or it might be made of dried fern leaves, among which some aromatic herbs should be mixed. If the patient is very young, he should be placed on his back. His seat should be firm, with a high straight back, and without arms.

RING-WORM. (Impetigo.) This disorder is generally confined to the scalp of the head, but sometimes it is found on other parts of the body. It is most frequently met with in warm climates.

Symptoms.—It shews itself in small red pimples, breaking out in a circular form, and containing an acrid fluid. On the body being heated, these pimples become intolerable, and when scratched they discharge their contents. The original size of the circle formed by the pimples is inconsiderable; but in time it becomes as large as the palm of the hand. In some cases the disease spreads itself almost over the whole body, the skin assuming then a leprous appearance.

Causes.—It arises most frequently from using the comb, cap, or hat of some one already affected by it.

Treatment.—When the disease is not of long standing, it may be removed by the following lotion:—Take

Sulphate of zinc, half a drachm to a drachm;
Acetate of lead, fifteen grains;
Distilled water, six ounces.

Mix them for a wash.

With this lotion the affected parts are to be washed; and if this fails, then prussic acid, mixed with elder-flower water, may be used.

If the scalp is much affected, the head ought to be shaved every four or five days, and bathed twice or thrice a day with the lotion, and at night a little of the unguentum hydrargyri nitratis ought to be applied, and washed off again the next morning with warm soap and water and a bit of flannel. Calomel should be taken internally.

SARDONIC LAUGH. (Risus Sardonicus.) This disorder consists in a fit of laughing, which often continues in a violent degree for three or four nights, so as to deprive the patient of rest.

Symptoms.—If it continues for any length of time, it produces great debility, and all the symptoms of fever.

Treatment.—Musk, castor, assafœtida, camphor, and æther, are recommended against this malady. The fit, however, sometimes goes off by itself. Large doses of opium may also afford relief.

SCALLED HEAD. (Tinea.) This constitutes a contagious chronic inflammation of the skin of the head, causing a peculiar secretion of matter.

Symptoms.—At first the eruption is confined to only a small part of the scalp, but by degrees it extends itself till the whole of the head becomes covered with this scabby eruption.

Causes.—In many instances it is propagated by contagion, as by using a comb imbued with the matter from the head of a person labouring under this complaint, or by putting on his hat or cap. It arises also from uncleanliness, from bad nursing, and from a want of sufficient nourishment.

Treatment.—The head should be shaved close, and washed with either of the following lotions:—Take

Tar, half a pound;
Yellow wax, half an ounce;
Washed sulphur, two ounces.

Mix them over a fire. Or, take

Tobacco, two drachms;
Pure water, one pint.

Boil it down to half a pint, strain off the liquor, and add to it

Solution of subcarbonate of potass, one drachm.

Mix them for a lotion.

After this, apply ointment made of sulphur and pitch. An oiled silk cap should be used as a covering for the head. General attention should be paid to the health. For children troubled with a scurfy eruption of the head, caused by a thin ichor pervading the cuticle and excoriating the parts, the following ointments may be made use of:—Take

White precipitate of mercury, one scruple;
Acetate of lead, half a drachm;
Ointment of the nitrate of mercury, two drachms;
Tar ointment, three ounces.

Mix them. Or, take

Prepared lard, one ounce;
Subacetate of copper,
White precipitate of mercury, of each one scruple.

Mix them.

Either of these ointments should be applied at night, the head being then covered with a bladder or linen, and be washed off in the morning with soap and water. It may, however, sometimes be necessary to administer some opening medicines:—Take

Subcarbonate of magnesia, twelve grains;
Submuriate of mercury, half a grain;

Mix them, and let this powder be taken every night at bed time. Or, take

Precipitated sulphur of antimony, one grain:
Submuriate of mercury, half a grain;
Prepared chalk, five grains.

Mix them.

This powder is to be taken morning and night. The dose must, however, always be proportionate to the age and constitution of the patient. If acidity prevails, some magnesia carbonas should at the same time be given. A tepid bath used occasionally would also be of service. The bowels should be kept open. The diet ought to be nutritious, avoiding salt meat and fish.

SCARLET FEVER. (Scarlatina.) This eruption is so called from the colour of the patient's skin, which assumes a florid redness, in large spots; which latter afterwards coalesce, and at last go off in scales. This complaint is sometimes accompanied with ulceration of the throat, and other malignant symptoms.

Symptoms.—In the mild form of scarlatine fever, the disorder begins with languor, lassitude, confusion of ideas, chills, and shiverings, alternated by fits of heat. After a little time, the thirst becomes considerable, the skin dry, and the patient is often incommoded with anxiety, nausea, and vomiting. On the second or third day, the scarlet efflorescences appear on the skin, and after three or four days they disappear, and are succeeded by a gentle perspiration; the fever then subsides, and the outer skin falls off in small scales.

In the malignant scarlet fever, the patient is not only seized with coldness and shivering, but likewise with great languor, debility, and sickness, followed by heat, vomiting of bilious matter, soreness of the throat, short and laborious breathing, and a quick, small, and depressed pulse.

In the progress of the disease, a general redness pervades the face, body, and limbs, which appear somewhat swollen. The eyes and nostrils are likewise red; and from the latter there is an acrid discharge. A tendency to delirium prevails.

In the malignant form of this disease, the symptoms undergo no change on the

first day; but on the following the pulse becomes small and irregular; the tongue, teeth, and lips are covered with a brown or black crustation. The breath is extremely fetid, the respiration laborious, the deglutition painful, the head becomes retracted, an acrid discharge flows from the nostrils, the tonsils and the adjoining parts are covered with dark sloughs, and deafness and delirium comes on. The rash is usually pale, and changes soon to a dark or livid red colour.

Treatment.—In its very mild form, and when entirely unattended by any inflammation or ulceration, nothing further will be requisite than to keep the apartment clean and open, to follow a light diet, without animal food, to use acidulated liquors for drink, and to take some gentle opening medicine.

In the more severe forms of the disease, it would be advisable to administer an emetic on the first coming on of the fever. After vomiting, the following gentle opening medicine should be given:—Take

Submuriate of mercury, three grains;
Powdered rhubarb, or jalap, from six to twelve grains.

Mix them in a little honey.

Should costiveness prevail during the course of the disease, it should be obviated by clysters, administered from time to time. Purgatives should be avoided.

In order to promote a gentle perspiration, it is advisable to give the following medicine:—Take

Saline draught,
Camphor mixture, of each six drachms;
Tartarized antimony, sixth of a grain;
Syrup of orange peel, one drachm.

Mix them as a draught, to be taken every four hours.

Æther, as the spiritus ætheris compos., or Hoffman's liquor, will be preferable to opium in cases where there is restlessness. If there is a tendency in the disease to assume a malignant form, it will be best to give the bark in powder, or in decoction, if the stomach cannot bear the former, together with the muriatic acid and wine.

Potassæ subcarbonas and lemon juice, taken in separate draughts immediately after each other, would also be beneficial.

The following gargle may be made use of:—Take

Barley water, seven ounces;
Honey of roses, one ounce;
Oxygenated muriatic acid, one drachm;
Tincture of myrrh, half an ounce.

Mix them, and use them as a gargle.

Or take

Cayenne pepper, two scruples;
Hot water, five ounces.

Let them infuse, and to the strained liquor add

Decoction of Peruvian bark, three ounces;
Oxygenated muriatic acid, one drachm.

Mix them for a gargle.

Where the efflorescence disappears suddenly, and the pulse is very low, camphor, ammonia, aromatic confection, warm bathing, and wine, will be beneficial. If purging should arise, it ought to be suppressed as soon as possible by the remedies indicated under looseness. After the fever has subsided, the cinchona bark, stomachic bitters, the mineral acids, a nourishing diet, pure air, and gentle exercise, will much assist the recovery of health.

To prevent contagion, fumigations with manganese, salt, and sulphuric acid, should be used. The diet should at the same time be improved in those that live low, moderate exercise in the open air, cold bathing, and great attention to cleanliness, are necessary.

SCIATICA. This complaint is a sort of chronic rheumatism, affecting the hips, so that the patient cannot stand upright without suffering great pain, nor be at rest when in bed. This complaint is also known by the name of lumbago, though the seat of that disease is different. However, they may both be treated alike. When the patient is tolerably strong, and the symptoms moderate, he should take a hot bath, and continue in it from fifteen to twenty minutes; to be repeated two or three times a week. After having taken a few baths, the affected part should be pumped upon without bathing, by which the pain and the swelling are likely to abate. Should this not be the result after several repetitions, a blister may be applied to the painful part. When the blister is healed, the bathing or pumping may be resumed. If the nerves are much excited by the bath, or a profuse sweating is excited by it, cinchona bark, with aromatics, will be advisable; but fever should most particularly be prevented.

SCURVY. (Scorbutus.) This complaint manifests itself by a bleeding of the gums, and spots of different colours on the skin, for the most part livid.

Symptoms.—The scurvy comes on gradually, with heaviness, weariness, depression of the spirits, anxiety, and considerable debility. In the progress of the

disease, the countenance becomes sallow and bloated, and the respiration hurried, the teeth become loose, and the gums spongy and swollen, and bleed on the slightest touch; the breath is very offensive, and livid spots appear on different parts of the body. Severe wandering pains are felt, particularly at night. The urine is scanty, and the pulse small and frequent, and at last the joints become swollen and stiff.

Causes.—Indolence, confinement, want of exercise, neglect of cleanliness, sadness, salt or putrified food, and foul water, or the prevalence of cold and moisture. It is sometimes produced by over-fatigue.

Treatment.—Two ounces of nitre dissolved in one quart of vinegar: half an ounce of the solution taken two or three times a day, is a remedy much recommended. This medicine keeps the bowels open, and increases the discharge of urine, whereby the skin becomes more agreeable to the touch, the chilliness is changed to an agreeable warmth, and the pulse acquires steadiness and strength, and the sallowness and gloom of the countenance gradually changes, and becomes clear and cheerful. By degrees the inflammation of the mouth and nose subsides, the gums heal and get firm, and the lower extremities lose their livid hue, and become less painful and more flexible, and at last health returns.

However, in the course of this treatment, should any peculiar symptoms arise, they will require additional remedies. Thus, pains in the abdomen will be best allayed by opiates; oppression at the chest by blisters; contractions of the hams and calves of the legs, by the parts being fomented with warm vinegar and water, and by poultices and frictions. The sponginess of the gums, and looseness of the teeth may be remedied by washing the mouth frequently with the following gargle:—Take

Compound infusion of roses, six ounces;
Alum, one drachm and a half;
Honey, two drachms.

Mix them for a gargle. Or, take

Decoction of Peruvian bark, six ounces;
Tincture of myrrh, one ounce and a half;
Muriatic acid, from twelve to twenty drops.

Mix them for a gargle.

Foul ulcers are to be healed by being washed either with lemon juice, or a tincture consisting of equal parts of myrrh and cinchona bark.

If costiveness should prevail during the course of the disease, it could be removed by the use of a decoction of tamarinds, with a little of the potassæ supertartras.

In order fully to strengthen the system, the patient should put himself under a course of cinchona bark, mineral acids, and other tonics, as directed under the head of INDIGESTION; he should breathe a pure, temperate, and dry air, take daily exercise, use a nutritive diet of fresh animal and vegetable food, and lead a life of great regularity and temperance.

SMALL-POX (VARIOLA.) This eruption consists of red pimples on different parts of the body, attended with fever, and is very contagious. It consists of three different stages, the eruptive, the maturative, and the scabbing.

Symptoms. — The eruption generally makes its appearance about the third or fourth day after the first seizure; it shews itself first in little red spots on the face, neck, and breast, which continue to increase in number and size for three or four days. The eruption is commonly preceded by a redness in the eyes, a soreness in the throat, pains in the head, back, and loins; weariness and faintness, and alternate fits of chilliness and heat, together with thirst, nausea, and a quick pulse

In the small-pox which assumes a confluent form, the fever which precedes the eruption is much more violent than in that where the pustules are distinct; being usually attended with great anxiety, thirst, vomiting, a frequent and contracted pulse, and often with delirium. In infants, convulsive fits are also likely to occur, which are then the forerunners of great danger.

Where the pustules are perfectly distinct and separate from each other, the suppuration may take place about the eighth or ninth day; but when they run much into each other, the suppuration is not completed till some days after.

As the eruption advances, the face becomes very much swelled, and in the confluent form of the disease the eyelids are closed up; and in children, looseness prevails in this stage of the disease. The pimples in this latter form never rise to an eminence, being usually flattened in, and the fluid contained in them, instead of being, as in the other, of a yellow, inclines to a brown colour.

About the tenth or eleventh day, the swelling of the face begins to subside; the hands and feet then begin to swell, and about the same time the vesicles break, and pour out a liquor that forms into

brown or black crusts, which, when they fall off, leave deep pits behind them; and when the pustules have flown much into each other, they scar the face very considerably.

Treatment.—When a person who has never had the small-pox is attacked with symptoms of fever, in consequence of the disease prevailing as an epidemic, he ought to be immediately debarred from animal food, impregnate his drink with cooling acids, keep his body open with gentle laxatives, and more particularly be exposed to a cool air. It is inconceivable how refreshing it proves to the patient, and how suddenly all the symptoms become moderated, if there is a free ventilation of air. The temperature of the patient's chamber should be such, that he may always feel rather a sensation of cold, though not actually chilly. He ought to lie upon a mattress, covered only with a few bed clothes, a feather bed being apt to occasion too much heat.

When the fever first comes on, the stomach is in some cases disordered, and nausea or vomiting is apt to arise; in order to obviate this, it will be proper to give a gentle emetic, and a little chamomile tea after it. Where costiveness prevails, a little Epsom salts, or a clyster, is to be employed. When convulsive fits attack children a short time previous to the eruption, cool air should be freely admitted to the child, but if the fits are frequently repeated, with some violence, opium ought to be given in proportion to the age of the child. About five drops of the tinctura opii will be the dose for a child of a year old, eight drops for one of two years, and so forth.

When a degree of sore throat is present, gargles, and the inhalation of warm steam, are to be used.

Where the pustules contain a thin watery fluid, and when there is at the same time great soreness, loss of strength, and lowness of pulse, the cinchona bark should be given in great doses, frequently repeated. In order to assist the effects of the bark, a liberal use of the wine whey ought to be had recourse to.

If in the confluent small-pox the pustules are filled with a bloody water, the cinchona bark must be taken, joined with wine and acids, particularly the sulphuric and the muriatic.

If the eruptions, after having made their appearance, disappear suddenly, then, besides a free use of wine whey, cataplasms are to be applied to the soles of the feet, and blisters to different parts of the body; camphor, ammonia, musk, and aromatics, will prove useful remedies, as will also the warm bath.

The secretion of the glands of the mouth and throat will be assisted, and the parts be defended, by giving barley water, or linseed tea, as a drink; but should the secretion become thick and viscid, the following emetic might be given:—Take

Tartarized antimony, one grain and a half;
Pure water, one ounce;
Oxymel of squill, half an ounce.

Mix them for a draught.

Added to this, the following gargle should also be used:—Take

Compound infusion of roses, seven ounces;
Honey, half an ounce.

Mix them for a gargle.

Determination to the head or chest requires blisters, foot-bathing, and sinapisms to the feet.

If, as it sometimes happens, there should be a suppression of urine, it may be relieved by making the patient walk barefooted several times across the floor, and by dashing cold water on the legs. Should these means fail, those remedies must be applied which have been indicated under the peculiar head of this disease.

Obstinate vomiting, which may prove very dangerous, will be removed by the following remedies:—Take

Aerated potass, one scruple;
Cinnamon water, ten drachms;
Tincture of opium, eight drops;
Syrup of orange peel, one drachm.

Mix them, and let this draught be given every fourth hour, with a table-spoonful of lemon juice, during the effervescence.

Where there is a propensity to sweating, a cool regimen will be necessary.

In order to prevent the face from being marked, it may be useful to bathe it, three or four times a day, with warm milk and water, and, on the seventh day, to apply over its whole surface a mask, made of fine cambric, thinly spread with a soft liniment composed of olive oil, white wax, and prepared lard, so as to exclude the external air; the application to be renewed two or three times a day.

In both sorts of small-pox, the patient's strength must be supported by food of a light, nutritive nature, such as panada, bread-pudding, preparations of sago, arrow-root, roasted apples, &c. For common drink he may take thin gruel, or barley-water, slightly acidulated, and now and

then a little wine whey. If the fever which accompanies the disease is of a typhoid nature, a liberal use of wine, with other stimulants, and tonics, will be necessary.

SORE THROAT. (Cynanche Tonsillaris.) In this disorder the inflammation principally occupies the glands, but it often extends through the whole throat, so as to interrupt the speech, respiration, and deglutition of the patient.

Symptoms.—These manifest themselves by a difficulty of swallowing and breathing, accompanied by a redness and tumour in one or both of the glands; dryness of the throat, foulness of the tongue, great pains in the affected parts, hoarseness of the voice, a frequent, but difficult, excretion of mucus, and some slight degree of fever. However, as the disease advances, the difficulty of swallowing and breathing becomes greater, the speech is very indistinct, the dryness of the throat and the thirst increase, the tongue swells and is covered with a dark fur, and the pulse is full, hard, and frequent. When the symptoms are very considerable, the eyes are inflamed, and the cheeks red and swollen.

Causes.—These are usually exposure to cold, wearing damp clothes, sitting in wet rooms, or getting wet in the feet, or coming suddenly out of a heated and crowded room into the open air. It may also be brought on by violent exertions of the voice, blowing wind instruments, or, lastly, by the suppression of accustomed evacuations.

Treatment.—If the inflammation is considerable, several leeches should be applied under the ears. The taking of an emetic at the beginning of the disease often proves very useful.

In order to assist in removing the inflammation, gentle evacuations from the intestines, by means of opening medicines, should be taken occasionally. Saline purgatives, such as sulphate of soda, or calomel with jalap, will be beneficial.

If the inflammation is considerable, a blister, or cataplasm of mustard, round the throat, or to the back of the neck, will most probably be attended with a good effect. In slight cases it will be sufficient to rub the affected parts, twice or thrice a day, with the camphor liniment, putting a piece of flannel around them after it.

It will be found serviceable to wash the mouth and throat frequently with the following gargles:—Take

Confection of the red rose, one ounce;
Boiling water, half a pint;
Diluted sulphuric acid, one drachm.
Mix them for a gargle. Or, take
Barley-water, six ounces;
Honey of roses, one ounce;
Diluted sulphuric acid, forty-five drops.
Mix them.

Frequently inhaling the vapour arising from warm water, mixed with some vinegar, will much assist the effect of the gargles.

Putrid Sore Throat. (Cynanche Maligna.) This sort of sore throat manifests itself by white specks covering ulcers, appearing in the throat, together with great debility of the system, and an eruption on the skin.

Symptoms.—The putrid sore throat usually comes on with cold shiverings, anxiety, nausea, and vomiting, succeeded by heat, restlessness, thirst, debility, and oppression at the chest; the face looks flushed, the eyes are red, a stiffness is perceived in the neck, with a hurried respiration, hoarseness of voice, and soreness in the throat. After a short time the breath becomes offensive, the tongue is covered with a thick brown fur, and the inside of the lips is beset with vesicles, containing an acrid matter. Upon inspection into the throat, a number of sloughs, between a light ash and a dark brown colour, are to be observed. From the first attack of the complaint, there is a considerable degree of fever, with a small irregular pulse, and the fever increases in the evening. About the second or third day large patches, of a dark red colour, make their appearance about the face and neck, which by degrees become dispersed over every part of the body. As the sloughs in the throat spread, they generally become of a darker colour, and the whole throat is soon covered with thick sloughs, which, when they fall off, discover deeply seated ulcers.

Causes.—The putrid sore throat often arises in consequence of a peculiar or humid state of the atmosphere, and so becomes epidemical, attacking chiefly children, and those of a weak habit. It is produced also by contagion, as it is found to run through a family.

Treatment.—At the beginning of the disease it has been found useful to take an emetic, which always brings off a quantity of acrid matter. As the disorder advances, it will be proper to take an infusion of chamomile flowers, instead of an emetic.

In order to remove the acrid matter from the throat, the following gargles may be used:—Take

Honey of roses, one ounce;
Decoction of barley, ten ounces;
Tincture of myrrh, half an ounce;
Vinegar, one ounce.

Mix these for a gargle. Or, take

Decoction of Peruvian bark, six ounces;
Muriatic acid, one drachm;
Compound tincture of cinnamon, half an ounce;
Tincture of myrrh, one ounce.

Mix them.

After washing the parts in this manner, the steams from warm vinegar and water may be received into the throat.

If there is any considerable degree of fever, the following remedies should be administered:—Take

Antimonial powder, one to two grains;
Aromatic confection, half a scruple.

Make them into a bolus, to be taken every three hours. Or, take

Camphorated mixture, two ounces;
Aromatic confection, half a drachm;
Wine of tartarized antimony, forty drops;
Cinnamon water, three ounces.

Of this mixture take a large spoonful every third hour.

Should a looseness arise in the course of the complaint, the following remedies ought to be taken without delay:—Take

Aromatic confection, one drachm;
Chalk mixture, two ounces;
Cinnamon water, two ounces and a half;
Tincture of opium, from twenty to thirty drops;
Tincture of catechu, one drachm.

Shake them, and of the mixture give two large spoonfuls every four hours.

It sometimes happens that in the last stage of this disease, bleedings from the nose, mouth, or ears take place; they ought to be put a stop to as soon as possible; the following will be of use, by having tents dipped into it, and applying it externally:—Take

Sulphate of copper, one drachm and a half;
Alum, half a drachm;
Pure water, seven ounces;
Alcohol, one ounce.

Mix them for a wash.

Through the whole of the illness, the strength of the patient ought to be supported with liquid nourishment, made of vegetables, such as gruel, barley-water, and preparations of tapioca, Indian arrow-root, rice, sago, and panada. The drink ought to consist of wine-whey, or port wine negus, acidulated with orange juice, or some other acid, either vegetable or mineral.

The quantity of wine taken ought to be in proportion to the age of the patient, and the degree of debility that exists, and also to the state of the fever.

The room should be kept sufficiently ventilated, and of a proper temperature, so as not to be too hot nor too cool; and it should be sprinkled several times a day with warm vinegar, in which some aromatic herb has been infused. Great cleanliness is to be observed; the bed ought frequently to be changed, and the mouth and throat to be washed and kept clean. It will be prudent to separate the sick from the rest of the family, in order to avoid the contagion. It may also be advisable to fumigate with muriatic acid gas.

SPITTING OF BLOOD. (Hæmoptysis.) In this complaint there is a discharge of blood of a florid colour, often also frothy, from the mouth, brought up with coughing, and preceded by a saltish taste in the saliva.

Symptoms.—Sometimes the spitting of blood is preceded by a sense of weight, or oppression, at the chest, a dry, tickling cough, and a hard, jerking pulse. At other times the complaint is ushered in with shiverings, coldness of the extremities, pains in the back and loins, flatulency, and costiveness. The blood which is spit up is sometimes thin, and of a florid red colour; and at other times it is thick, and of a dark, or a blackish cast.

Causes.—It may be occasioned by any violent exertion, as running, jumping, wrestling, singing, speaking loud, or blowing wind instruments; as also by wounds, plethora, coughs, irregular living, excessive drinking, or the suppression of some accustomed discharge. It may also be occasioned by breathing air which is too much rarified to expand the lungs.

Treatment.—The spitting of the blood is to be moderated by living very abstemiously, by avoiding heat, and every kind of bodily exertion, and by employing the following purgatives:—Take

Compound infusion of roses, one ounce and a half;
Sulphate of magnesia, three drachms.

Mix them, and take this draught twice in the day.

Besides this, a vegetable diet, with ice,

and the following cooling remedies, ought to be used:—Take

Compound infusion of roses, one ounce and a half;
Nitrate of potass, fifteen grains;
Tincture of opium, fifteen drops.

Mix them for a draught, to be taken every four hours. Or, take

Supertartrate of potass, three drachms;
Nitrate of potass, two drachms.

Mix them, and let the patient take half a drachm of the powder for a dose, dissolved in a tea-cupful of barley-water, or cold water.

Where the patient is of a plethoric habit, and has a hard, jerking pulse, bleeding from the arm will be useful, but where there are marks of debility, and the blood is of a dark colour, blood letting will be improper.

When the blood spitting is very considerable, the following remedies should, in addition to the preceding, be made use of:—Take

Powdered alum, eight grains;
Catechu, ten grains;
Confection of roses, a sufficiency to form a bolus which may be taken every four hours, together with three table-spoonfuls of the
Compound infusion of roses.

Or, take

Tincture of kino,
Tincture of catechu, of each half an ounce;
Tincture of opium, two drachms.

Mix them well, and take from thirty to forty-five drops for a dose, three or four times a day.

If these mild remedies should fail, we must then employ others more powerful:—Take

Sulphate of zinc, from half a grain to two grains;
Gum kino, eight grains;
Opium, half a grain;
Confection of roses, ten grains.

Mix them into a bolus, to be given three times a day. Or, take

Sulphate of copper, five grains;
Dissolve it in rose water, eight ounces; and add
Tincture of opium, sixty drops.

Of this mixture let the patient take a large spoonful every four hours.

Digitalis, as retarding the pulse, may be given in the following manner, with probable advantage:—Take

Powdered purple foxglove, six drachms;
Acetate of lead, two grains;
Tincture of opium, eight drops.

Mix them for a draught, to be taken every six hours. Or, take

Compound infusion of roses, one ounce and a half;
Tincture of foxglove, fifteen drops;
Tincture of opium, twelve drops.

Mix them for a draught, to be taken every six hours.

If the blood spitting resists all these means, it will be proper to apply a blister to the chest.

After the complaint has been removed, every possible means ought to be used to prevent its return. Cooling purgatives should be employed occasionally; the patient ought to adhere to a moderate diet, and to avoid all violent exertions of the body, agitations of the mind, and all other exciting causes.

Sailing, travelling in an easy carriage, swinging, and riding gently on horseback, will be advantageous. Whenever there is a fixed pain in the chest, a blister may be applied over it.

SPLEEN, INFLAMMATION OF THE, (Splenitis.) In this disorder there is an anxiety and straitness in the chest, and tension and pains on the left side, sometimes extending over the whole abdomen, and into the left shoulder.

Symptoms.—There is lassitude and loss of strength, watchfulness, and sometimes delirium; indigestion, vomiting of green bilious matter, and sometimes difficulty of urine, faintings, and bleedings from the nose; but bloody vomiting is a peculiar symptom.

Causes.—These are more generally the same as of other inflammations of the internal organs; but the particular ones are long continued agues.

Treatment.—At the commencement of the disease, blood letting from the arm, purging frequently with the submuriate of mercury, combined with jalap, and the application of a blister over or near the affected part, will be advisable. If an abscess should form itself, fomentation and poultices are to be applied, in order to encourage its discharge externally.

When the disease terminates either in enlargement or induration, mercury, both externally and internally, as advised under the head of Chronic Inflammation of the Liver, must be had recourse to.

SPRAINS. These happen most frequently in the wrists, knees, and ancles, and are commonly occasioned by a slip, or some violent exertion.

Symptoms.—Sprains are generally productive of an immediate and painful swell-

ing. In severe sprains, there is often an instantaneous effusion, from the rupture of some of the small vessels.

Treatment.—In this two objects are to be attained; the first, to prevent the swelling from arriving at any considerable magnitude; the second, to remove the inflammation. In order to answer the first intention, applications, such as vinegar, ardent spirits, and the lees of red wine, may be made use of. The sprained limb may also be plunged into very cold water, immediately after the accident, and before any of these means can be procured.

In order to remove inflammation, several leeches may be applied to the tumid part, and if the pain and inflammation do not subside, they should be applied again the next day. After blood has been drawn off, or where the accident is not considerable, a solution of the plumbi acetatis might be applied, by keeping linen cloths dipped in it, and applied to the sprained limb, constantly through the day. At night, a poultice, consisting of oatmeal and linseed meal mixed up with vinegar, may be put on.

The following will also prove advantageous:—Take

Solution of acetate of ammonia,
Soap liniment, of each one ounce.

Mix them. Or, take

Camphor liniment,
Solution of acetate of ammonia, of each one ounce;
Tincture of opium, half an ounce.

Mix them.

Should a weakness remain in consequence of the sprain, the pumping of cold water upon the part every morning, and the wearing of a calico bandage for a considerable length of time, will be useful.

STOMACH, INFLAMMATION OF THE, (Gastritis.) This complaint makes itself known by a burning pain, heat, and tension in the region of the stomach, and by the increase of pain when anything is swallowed.

Symptoms.—These are, a violent burning pain in the region of the stomach, great distention and flatulency, severe vomiting, especially after anything is taken, whether liquid or solid; great thirst, anxiety, continual tossing of the body, delirium, and a quick, hard, and contracted pulse.

Causes.—These are, acrid substances of various kinds, food of an improper nature, the taking of large draughts of any cold liquor when the body is much heated by exercise; by strong potations of spirituous liquors, by external violence, and by repelled exanthemeta, and gout.

Treatment.—This consists in copious and repeated bleedings, at an early period of the disease, without any regard to the smallness of the pulse, or the state of debility. After general and local bleeding, by applying several leeches over the stomach, a large blister should be applied to the region of the stomach, assisted by fomentations of the whole abdomen, as well as by the frequent administration of laxative clysters.

In those cases where the inflammation has been produced in consequence of some acrid matter having been received into the stomach, the patient should take frequent small draughts of some mild diluent drink, such as chicken broth, linseed tea, or barley-water, in which may be dissolved a small quantity of gum acacia.

The greatest strictness should be observed respecting diet during the disease, and for a considerable time afterwards. When the patient becomes able to retain any food, he ought to take care not to eat anything but what is of the slightest nature; and this also but in a very small quantity; everything hard or acrid ought to be avoided. The legs and feet are to be kept warm, as the application of cold to them is apt to effect the stomach.

Stomach, Pain in the, (Gastrodynia.) Those who are afflicted with indigestion often suffer this pain, and it originates from an inactivity of the stomach, in consequence of which the aliment runs into fermentation, and produces acid. To obtain a temporary relief, antiacids, alkaline salts, or Seltzer water, may be taken. But in order to procure permanent relief, the digestion should be strengthened by the application of a blister externally, and by aromatic bitters and chalybeates internally.

The diet should consist of such things as do not easily ferment, such as animal food, shell-fish, and biscuit. Such persons should be particularly careful in well masticating what they eat.

Flatulency is to be obviated by carminatives, and by a due observance of the suggestions just given. A waistcoat made so tight as slightly to compress the stomach and bowels, might prove serviceable.

If there is felt any acute pain in the stomach, we must have recourse to antispasmodics, as ether and opium, in conjunction with stomachic bitters. About three grains of the oxyde of bismuth, with about twenty-five grains of gum tragacanth, repeated three times a day, may be used with advantago

TEETHING. This commences, in the majority of children, between the fifth and the eighth month, and continues to the sixteenth, at the least, but often much longer. The two fore teeth of the under jaw are those which usually appear first, and shortly after these have appeared, two others come out in the upper one, exactly opposite to the two former.

In healthy and strong children, the teeth are cut soon and easily; but in unhealthy and weak infants, the process is both slow and uncertain.

At six or seven years of age, all children shed their teeth, in a gradual manner, and get a fresh set; and about the age of one and twenty, four more come out.

Teething is usually preceded by, and is accompanied with, various symptoms: the child drivels; the gums swell, spread, and become hot; there is often a circumscribed redness in the cheeks, with eruptions on the skin; a looseness follows, with gripings, stools of a green, pale, or leaden blue colour, sometimes mucus, and often thick. The child is peevish, starts during sleep, and seems convulsed in particular parts of its body. The child also shrieks often, and thrusts its fingers into its mouth. The symptoms are sometimes followed by a cough, difficulty of breathing, much fever, thirst, and convulsions.

When the child's body continues open, and none of the violent symptoms ensue, no bad consequences need be apprehended.

It has been observed that those children in whom there is a copious flow of saliva suffer the least inconvenience during teething, and that such infants cut their teeth more readily in winter than in summer. Further, that such children as are inclined to be lean cut their teeth more easily than those that are fat; and those whose bowels are regularly open cut them the most safely of all.

The symptoms arising in dentition are often alleviated by looseness; it will therefore be proper to encourage it, unless it runs to excess; but where none arises, gentle purgatives ought to be given—such as the sulphate of potass, in such doses as to procure two or three loose evacuations in the twenty-four hours. Fomenting the side of the face with a solution of the extract of poppies in a decoction of chamomile, by means of a piece of sponge, may be beneficial. About a tea-spoonful of the syrupus papaveris is the safest opiate, in case of necessity.

If the gums have become tumid and swelled, so as to create a high degree of pain, an incision should be made, carried down to the tooth.

The giving children coral, or other hard substances, to put into their mouth during the period of teething, is improper. A piece of crust of bread, or of a small wax candle, may be serviceable.

If acidity prevails during teething, it is to be obviated by magnesia; and if accompanied by flatulency and griping pains, carraway seeds, or a drop or two of the oleum anisi, may be mixed with the food. Pure air, proper exercise, wholesome food, and everything that has a tendency to promote general health, and to guard against fever, will greatly contribute to the child's passing safely through teething.

THRUSH, CHRONIC, (Cachexia Aphthosa.) This disease occurs frequently among the inhabitants of the West India colonies; it also prevails in those northern countries where the cold is combined with a considerable degree of moisture, or where the soil is of a very marshy nature.

Symptoms.—The complaint shews itself first by an uneasy sensation or burning heat in the stomach, which comes on by slow degrees, and increases gradually in violence. After some time, small pimples, of about the size of a pin's head, appear on the tip and edges of the tongue; and these at length spread over the whole inside of the mouth, and occasion such a tenderness and rawness of the parts, that the patient cannot take any food of a solid nature, nor can he receive any spirituous or vinous liquor into his mouth without pain being excited.

Little fever attends at first; only there is some thirst; the skin is always dry and rough, without the least moisture on it; the countenance is of a pale olive colour, the pulse is languid, coldness is felt over the whole body, and the urine is small in quantity. The stools indicate a defective biliary secretion. After a little time the symptoms cease; but sooner or later the acrid matter shews itself once more in the mouth, with greater violence than before.

Causes.—These are, general relaxation of the system, exposure to cold, combined with great moisture, obstructed perspiration, and an acrimony of the humours. Elderly people, and persons with a shattered constitution, are most liable to it.

Treatment.—It is advisable to begin with taking an emetic; and if any acidity

prevails afterwards, a little magnesia, or the following mixture, may be taken with advantage :—Take

Magnesia, one drachm ;
Pure water, five ounces and a half ;
Spirit of cinnamon, three drachms ;
Solution of ammonia, one drachm.

Of this mixture take two table-spoonfuls occasionally.

Should a looseness arise, the following remedies might be employed :—Take

Confection of catechu, two drachms ;
Cinnamon water, two ounces ;
Tincture of kino, two drachms ;
Tincture of opium, forty drops.

Of this mixture let two or three table-spoonfuls be taken thrice a day. Or, take

Chalk mixture, four ounces ;
Spirit of cinnamon one ounce ;
Tincture of catechu, two drachms ;
Tincture of opium, forty drops.

Mix them. The dose may be the same as the former.

Besides taking these medicines, the patient should drink about a pint a day of lime water, with an equal proportion of milk.

In order to mitigate the pain, the exhaustion, and despondency, opium may best be made use of. To remove the soreness of the mouth and tongue, the following gargle should be used :—Take

Compound infusion of roses, six ounces ;
Alum, one drachm and a half ;
Honey, one ounce ;
Solution of subacetate of lead, fifteen drops.

Mix them for a gargle. Or, take

Sulphate of zinc, ten grains ;
Rose water, eight ounces ;
Tincture of myrrh, one ounce.

Mix them.

In mild cases, a decoction of cinchona bark, with subcarbonate of soda, taken internally, is often of much advantage.

The diet, in this complaint, should only consist of things which are light and nutritive—as milk, jellies, preparations of barley, sago, rice, Indian arrow-root, plantains, bananas, &c. Lime water, mixed with milk, may be used for ordinary drink. It may be better to abstain from wines, spirits, and fermented liquors. Bitters will serve to restore the health.

TOOTHACHE, (Odontalgia.) This complaint consists in an acute pain in one or more of the teeth, generally in one, and from that it is diffused over the adjacent parts.

Causes.—These generally are, the application of cold when the tooth is heated, or the application of some acrid matter, rheumatic affection of the muscles and membranes of the jaws ; and, lastly, a caries of the tooth itself. In some instances the caries appears upon the enamel of the tooth ; in others, it commences in the internal surface, or bony part, and the external air getting into the cavity, stimulates the nerve, and thereby excites pain.

Treatment.—The most effectual cure is the extraction of the carious tooth, when this latter is diseased. In some instances the actual cautery has been employed to destroy the sensibility of the nerve.

Where there is an opening made into the substance of the tooth, the pain may be relieved by introducing cotton impregnated with essential oil of cloves, cajeput, nutmeg, sulphuric, or other mineral acids ; or a small pill composed of opium and camphor. The whole of the tooth should be further widened by a proper instrument, and then be closed up with leaf gold, or leaf lead ; and so it may be preserved for many years without inconvenience to the person.

When the neighbouring parts become affected, however, or where there is no access for an application to the nerve, in consequence of the tooth having no cavity in it, an irritation ought to be produced in the neighbouring parts, by means of blisters applied behind the ears, or by rubbing the jaws with the following liniments :—Take

Strong liniment of ammonia, one ounce.

Or, take

Camphorated spirits, one ounce ;
Solution of ammonia, three drachms ;
Essential oil of bergamot, fifteen drops.

Mix them.

The parts are afterwards to be kept warm with flannel.

In the rheumatic toothache, to which some persons are subject, under a particular state of the atmosphere, a piece of lint should be applied to the most painful part, dipped in the following tincture :—Take

Pellitory of Spain, powdered, ten drachms ;
Rectified spirit, one pint.

Let them infuse for ten days, then add

Camphor, one ounce ;
Oil of rosemary, half a drachm ;
Tincture of opium, two drachms.

Mix them.

This is to be renewed as often as the occasion may require.

One of the following pills held in the mouth till dissolved may prove beneficial:—Take

Powdered pellitory of Spain, one drachm;
Mucilage of gum acacia, a sufficiency.

Mix them, and form twelve pills therefrom.

The best means for preserving the teeth are, to wash them every morning with a soft brush, or a piece of sponge, dipped in clear water; also by making use of the following powder:—Take

Bole Armenic,
Burnt hartshorn, of each two drachms;

Mix them for tooth powder.

If the person is of a scorbutic habit, and the gums incline to softness, they are to be washed with the following:—Take

Tincture of Peruvian bark, two ounces;
Myrrh, half an ounce.

Mix them.

TYMPANY, (Tympanites.) This disease consists in a violent distention either of the intestines, or of the cavity of the abdomen, by wind.

Symptoms.—The disease comes on sometimes suddenly, sometimes it is preceded by great flatulency and a frequent expulsion of air upwards and downwards, attended with cholic pain. The urine is at first not altered either in quantity or quality, but in the advanced state of the disease a change takes place in both respects.

The body is usually very costive, the appetite is impaired, thirst, heat, and general emaciation follows.

Causes.—It sometimes arises from the sudden suppression of a looseness, or in consequence of fever; or, again, by the sudden drying up of long-continued discharges, from cutaneous eruptions, or the use of crude, vegetable aliment; lastly, also from an erosion of the intestines.

Treatment.—When the wind is confined within the intestines, the following remedies may be made use of with benefit:—Take

Compound powder of cinnamon,
Extract of gentian, of each ten grains;
Oil of aniseed, five drops;
Syrup of ginger, a sufficiency to form a bolus:

Which may be taken every four hours, with two table-spoonfuls of the following mixture:—Take

Peppermint water,
Camphor mixture, of each two ounces and a half;
Spirit of sulphur æther, one drachm and a half;
Compound tincture of cardamoms, half an ounce.

Mix them. The dose to be two table-spoonfuls. Or, take

Infusion of Peruvian bark, one ounce;
Compound tincture of cardamoms;
Spirit of pimento, of each two drachms;
Compound spirit of lavender, half a drachm.

Mix them, and take this draught three or four times a-day.

When costiveness prevails, the following clyster should be administered, and be frequently repeated:—Take

Aniseed, bruised, three drachms;
Chamomile flowers, half an ounce;
Pure water, one pint and a half.

Boil them until the liquor is reduced to twelve ounces, strain it, and add

Sulphate of soda, half an ounce;
Oil of turpentine, from two drachms to half an ounce;

Mix them for a clyster.

In case this fails in producing evacuations, the following more active purgatives must be taken:—Take

Compound tincture of senna, one ounce;
Tincture of jalap, two drachms.

Mix them as a purgative draught. Or, take

Compound extract of colocynth, fifteen grains;
Submuriate of mercury, five grains;
Oil of carraway, a sufficiency to form the mass:

Which is to be divided into four pills, to be taken at once.

In order to excite the action of the distended intestines, cold substances, such as iced water, or snow, might at the same time be applied to the belly; after which, the abdomen is to be tied round with a close bandage. It is also likely that frictions with turpentine oil, or the camphor liniment, might afford some relief; and the application of a blister may even be tried, if these means fail.

During the continuance of the complaint, only such aliments as are least apt to prove flatulent should be taken. Mineral acids, and small quantities of ardent spirit, will be beneficial.

ULCER, (Ulcus.) These generally proceed from some external injury, such

as a wound or bruise, or they arise in consequence of inflammation, or some other disease.

Treatment.—To sweeten fetid and foul ulcers, and to dispose them to granulation, a poultice, composed of half a pound of the common farinaceous cataplasm, and two ounces of wood charcoal, well mixed together, often proves beneficial. Carrots boiled a sufficient length of time, and then mashed into a pulp, so as to form a poultice of a proper consistence, are also used with similar efficacy. The power of these poultices will be much increased if the ulcerated parts are well washed or fomented with the liquor in which the carrots have been boiled.

When an ulcer is of recent appearance, it ought to be healed up as soon as possible. If the granulations arise above the level of the skin, sulphate of copper may be used to repress them, and to leave the surface more ready for granulation.

For such ulcers as are of long standing, and where the whole health is vitiated, it will be necessary to administer internal remedies in addition; such as the composed pilul. hydrarg. submur., a solution of the oxymuriate of mercury, and a decoction of the woods.

For the cure of foul ulcers of seamen, warm cataplasms and greasy applications are mostly serviceable; but diluted rum or brandy, weak solutions of the nitrate of silver, or the sulphate of copper, are preferable. Lemon juice is also strongly recommended against scorbutic ulcers. The dressings should be removed twice a-day; and a tight and well applied bandage of calico will much assist the cure.

The parts should be first cleared of that hair which is sometimes found in considerable quantities upon the legs, by means of a razor, that none of the discharges, by being retained, may become acrid and inflame the skin; and also that the dressing may be removed with ease at each time of its removal.

URINE, DIFFICULTY OF VOIDING IT, (Ischuria et Dysuria.) If there is a frequent desire of making water, attended with much difficulty in voiding it, it is called dysuria, or strangury; and when there is a total suppression of urine, it is known by the name of ischuria.

Symptoms.—In dysuria, there is a frequent inclination to make water, attended with a heating pain, together with a sense of fulness in the region of the bladder. If stones of the kidneys be the cause, it is accompanied with nausea, vomiting, and acute pains in the loins. When a stone in the bladder is the cause, the stream of water discharged will be divided into two.

Causes.—The causes which give rise to these diseases are, an inflammation of the urethra, sores or inflammations of the parts, considerable enlargements of the hæmorrhoidal veins, a lodgment of indurated fæces in the rectum, spasms at the neck of the bladder, exposure to cold, the absorption of cantharides, applied externally, or taken internally, excess in drinking either spirituous or vinous liquors, and, lastly, gout.

Treatment.—Where there is inflammation, accompanied by great irritation, all straining to expel urine should be avoided, and the organ should be voided every six hours, by introducing the elastic gum catheter, washing it out afterwards with some tepid water, injected through the catheter by means of a gum bottle properly fitted thereto.

Whatever may have been the cause of the suppression of the urine, opiates, in combination with the following remedies, will be useful:—Take

Mucilage of gum acacia, one ounce;
Olive oil, two drachms.

Let them be well mixed in a marble mortar, and then add

Spirit of nitric æther, one drachm;
Tincture of opium, fifteen drops;
Fennel water, half an ounce.

Mix them for a draught. Or, take

Acetate of potass, one scruple;
Fennel water, eleven drachms;
Tincture of opium, fifteen drops;
Syrup of marshmallow, two drachms.

Mix them for a draught.

Besides these remedies, the following clysters should be frequently administered:—Take

Balsam of copaiba, two drachms;
Yolk of egg, a sufficiency.

Then add

Compound decoction of marshmallows, eleven ounces;
Castor oil, half an ounce;
Tincture of opium, from fifty to eighty drops.

Mix them for a clyster. Or, take

Thin decoction of starch, six ounces;
Olive oil, half an ounce;
Wine of opium, fifty drops.

Mix them for a clyster.

Injecting tepid water into the bladder itself, in similar cases, by the apparatus before mentioned, will also afford great relief in such cases. Throwing a little

cold water on the thighs has sometimes enabled the person to pass urine in a tolerable stream, after it has been suppressed.

In case the foregoing remedies should prove unsuccessful, the following clyster should be had recourse to:—Take

Common tobacco, from half a drachm to one drachm;
Warm water, ten ounces.

After half an hour's infusion, strain off the liquor for a clyster.

Due caution, however, must be observed in repeating this clyster, on account of the great depressions of the powers of life which tobacco clysters are apt to produce.

Should even the tobacco clyster fail in procuring the desired effect, the tinctura ferri muriatici should be taken in doses of ten drops, and be repeated every ten minutes, till some effect is obtained.

If the disease is of a chronic nature, camphor, taken in the following combination, has been found advantageous:—Take

Camphor, five grains;
Submuriate of mercury, from half a grain to one grain;
Opium, one grain;
Confection of orange, a sufficiency to form a bolus:

Which is to be taken twice a-day. Or, take

Camphor, from six to ten grains.

Dissolve it in

Fresh cow's milk, one ounce and a half;

And add,

Tincture of opium, fifteen drops.

Mix them. This draught is to be taken every three hours.

When the disease is already advanced, watery mucilaginous drinks should be taken; and the bladder should be washed out once or twice a-day, with about half a pint of tepid water, thrown in through an elastic gum catheter, having a bottle of the same composition affixed to it, the bowels being at the same time kept open. The following pill should also be made use of:—Take

Opium, three grains;
Extract of hemlock, four grains.

Make them into a pill, and insert it up the anus, together with clysters of warm water.

URINE, INCONTINENCY OF, (ENURESIS.) This disorder is generally produced, either by a relaxation or a paralytic affection of the sphincter of the bladder, or from some irritating substance contained in its cavity.

Some assert that the reason why children pass their urine in bed is owing to their sleeping on their backs. However, it is generally removed with difficulty in young persons. The application of a blister to the loins, and if this fail, a few drops of the tinctura cantharidis, taken morning and night, will prove useful. Topical cold bathing and electricity will assist in the cure.

VOMITING OF BLOOD, (HÆMATEMESIS.) This complaint manifests itself by a sense of weight, pain, or anxiety, in the region of the stomach. It is not accompanied by any cough, and is discharged in a great quantity, and of a dark colour, and sometimes mixed with the other contents of the stomach.

Causes.—Vomiting of blood may be occasioned by anything received into the stomach, which either stimulates it violently, or wounds it. It may also be caused by blows, bruises, or any other thing which is able to make the blood flow much into this organ; or, lastly, by obstructions in the liver and spleen.

Treatment.—Some oleum ricini should be given, now and then, in order to obviate costiveness. The following remedies are also much recommended:—Take

Spermaceti, half an ounce;
Yolk of egg, a sufficiency.

Let them be mixed in a marble mortar, and then add,

Pennyroyal water, one ounce;
Pure water, five ounces;
Nitrate of potass, one drachm;
Tincture of opium, sixty drops.

Of this mixture let three large spoonfuls be taken every three or four hours.

The application of a blister to the abdomen is also sometimes attended with a good effect.

When the disease is but moderate, small doses of opium should be repeated two or three times a-day; and the patient should at the same time be confined to food of a light nutritive nature, as also take some cool acidulated beverage for his ordinary drink.

If obstruction in the liver or spleen is the cause of the disease, then the remedies indicated under these heads must be resorted to.

WATER BRASH, (PYROSIS.) This disorder consists of a thin, watery, or glairy fluid being discharged from the stomach, and a burning heat being at the same time felt at the pit of the stomach.

Symptoms.—The fits of the water-brash usually come on in the morning and forenoon, when the stomach is yet empty. The person first perceives a pain at the pit of the stomach, with a sense of constriction, which is usually much increased when in an erect posture. The pain is afterwards followed by eructations, and the discharge of a considerable quantity of a thin watery fluid, which has sometimes an acid taste, but is sometimes also quite insipid.

Causes.—These are not much known; but a low diet is supposed to give rise to it.

Treatment. — The following remedies may be employed with advantage:— Take

Submuriate of mercury, two grains;
Antimonial powder, one grain;
Extract of colocynth, ten grains;
Syrup of buckthorn, a sufficiency to form the mass:

Which is to be made into three pills, and be taken at once.

These pills may be repeated about twice a week, and at the same time some magnesia may be taken. The oxyde of bismuth may likewise be tried, in the proportion of three grains to a scruple of gum tragacanth, three times a-day. Before commencing to take the bismuth, the bowels should be emptied by castor oil.

The cinchona bark and the diluted sulphuric acid will serve to complete the cure after the bismuth has been continued for some time.

WEANING BRASH, (Atrophia Ablactatorum.) This disease occurs in children that are weaned too early, or in such as are reared without the breast; and also when improper food is given to the child, with or without sucking.

Symptoms.—It makes its first appearance with frequent griping and purging, the stools being usually of a green colour; sometimes there is also bilious vomiting. When the disease has continued for some time, the stools are ash-coloured.

Treatment.—This consists, first, in a proper attention to diet, and a return to the mother's milk, if possible. If not, then animal food, in the form of broth or jelly, should be principally employed. Pure air, exercise, gentle frictions, and frequent washing of the body with tepid or cold water, will do the rest.

Should these means fail, then the following remedies should be administered:— Take

Powder of ipecacuanha, one grain or two grains;
Powder of ginger, three grains;
Submuriate of mercury, half a grain to two grains.

Mix them, and divide them into four doses, of which let the child take one each night, or every other night.

Flannel worn next to the skin, worsted stockings, and every precaution against cold, must be employed.

WHOOPING COUGH, (Pertussis.) This disease is a convulsive cough, interrupted by a full and sonorous inspiration, usually terminated by a vomiting or expectoration.

Symptoms. — The whooping cough usually comes on with an oppression of breathing, some degree of thirst, with a quick pulse, and other symptoms of fever; to which are succeeded hoarseness, cough, and a difficulty of respiration. These symptoms continue for about a fortnight, when the cough becomes convulsive, and assumes the particular sound which is called a whoop.

After a sonorous inspiration, the cough is renewed, and continues till some mucus is brought up from the lungs, or vomiting takes place. On this the fit is terminated, and the patient is well for some time, and feels an inclination to eat; but when the attack has been severe, he feels much fatigued, and makes quick inspirations.

At the commencement of the disease, there is very little expectoration, and it consists only of thin mucus. As long as this takes place, the fits of coughing are frequent and of considerable duration; but as soon as the expectoration becomes free and copious, they are less frequent, and do not last so long. At the same time the violence of the cough is lessened, as well as the interruption of the blood in the lungs, or in its return from the head.

After the complaint has attained its height, it usually continues for some weeks, and then goes off gradually. In some cases it is, however, protracted for several months.

The whooping, though very fatiguing, and subject to a return of violence on any fresh exposure to cold, seldom proves dangerous, except when the patient is very young. The suffering, as well as the danger, seems in this disorder to be in proportion to the age of the sufferer, as also to the degree of fever which accompanies it, and to the state of debility which

takes place at the time. Sometimes, however, this disorder terminates in apoplexy and suffocation, or in asthma and phthisis of the lungs. Vomiting may be regarded as a favourable symptom when it terminates the fit; the same is a moderate expectoration, or a little blood from the nose or ears.

Causes. — Whooping cough is generally epidemic, and does not seem to depend upon any particular season of the year, though it is more severe during autumn and winter, than during spring and summer.

Children are most commonly the subjects of whooping cough, and it seems to affect them but once in their life; yet there are instances where persons have been attacked twice.

Treatment.—Where the cough is accompanied with a difficulty of breathing, a full pulse, much heat, together with other symptoms of fever, blood ought to be soon taken from the arm, especially if the child is of a full habit. The bleeding ought to be repeated, until the symptoms are somewhat lessened.

When the cough and difficulty of breathing are more moderate, leeches applied to the chest will be sufficient; and they should be repeated, if the shortness of breath and the determination to the head is not lessened. If there is no degree of fever, bleeding will not be necessary.

The lower part of the stomach may be frequently rubbed with the following:—Take

Tartarized antimony, one scruple;
Pure water, two ounces;
Tincture of Spanish fly, half an ounce.

Mix for an embrocation.

The parts are afterwards to be covered with flannel. It may also be advantageous to inhale the steam of warm water, with an addition of vinegar, or æther, two or three times a-day.

An emetic frequently given may render much service, and it would be best administered under the following form:—Take

Tartarized antimony, three grains;
Pure water, six ounces;
Common syrup, two drachms.

Mix them.

A table-spoonful is to be given of it, every quarter of an hour, till it takes effect.

If the patient is already of an adult state, antimonial wine, ipecacuanha, or oxymel of squills, may be used instead, as an emetic.

The following combination of remedies is also recommended to be given to children. It consists of one drop of the tincture of opium, five drops of ipecacuanha wine, and two grains of the carbonate of soda, to be made up into a small draught, with syrup and water, and to be taken every four hours, for several days. Costiveness should at the same time be removed by calomel and rhubarb.

Bathing the feet frequently in warm water has been found serviceable; the same is a tepid bath.

The following combination of remedies may also be used:—Take

Acetate of lead, two to five grains;
Rose water, two ounces;
Syrup of violets, two drachms.

Of this mixture, a tea-spoonful may be taken every fourth or fifth hour.

Or the following combination, which would have for its immediate effect to excite a small degree of difficulty in voiding the urine, may be taken:—Take

Compound tincture of camphor, one ounce;
Tincture of Spanish fly, two drachms.

Of this, from ten to fifteen drops are to be taken every three or four hours.

After the fatal tendency of the disorder has been removed by the preceding remedies, and the complaint only continues as from the power of habit, the following class of remedies must be had recourse to:—Take

Extract of hemlock, one or two grains;
Decoction of Peruvian bark, one ounce;
Tincture of opium, five drops.

Mix them, to be taken as a draught three times a day. Or, take

Extract of bark, thirty-six grains;
Extract of hemlock, twelve grains;
Syrup, a sufficiency to form the mass, which is to be divided into twelve pills, whereof one is to be taken twice or thrice a day. Or, take

Wine of tartarized antimony, one ounce;
Extract of henbane, two scruples.

Dissolve the latter by the former, and begin with four or five drops, repeated four times a day, increasing the dose gradually, till a slight degree of nausea takes place.

In order to remove the irritation from the mucous membrane, which is the chief seat of the disorder, and to strengthen the general health of the patient, the cinchona bark ought to be had recourse to, in the form of a decoction, or a strong infusion.

A frequent change of air, and a flannel waistcoat next to the skin, ought to be

had recourse to; the latter has the effect of preventing the vicissitudes of the atmosphere from acting upon the skin, and thus becoming an exciting cause of coughing.

Young children should lie with their heads raised, and be made to stand upon their feet, bending a little forward, when the fits begin, in order to guard against suffocation. The diet should be light, and of easy digestion: mucilaginous soups should be frequently taken.

WORMS, (Vermes.) These insects, which are so abundant in the human body, are of three kinds—viz., the ascarides, or small white worm; the teres, or round worm; and the tænia, or tape-worm, which is flat, and consists of many joints, and is usually found to be of a considerable length.

Symptoms.—These are, a variable appetite, fetid breath, acid eructations, pains in the stomach, grinding of the teeth during sleep, picking of the nose, paleness of the countenance, hardness and fulness of the belly, slimy stools, with griping pains now and then; heat and itching about the anus, short, dry cough, emaciation of the body, slow fever, and sometimes convulsive fits.

Causes.—These are, generally, unwholesome food, with a bad digestion; relaxed habits, and a more than natural quantity of mucus and slimy matter in the intestines.

Treatment.—The object is first to effect the destruction and discharge of the worms, and, next, to prevent their future generation.

To accomplish the first object, we may begin with the following remedies:—Take

Filings of tin,
Cassia confection, of each half an ounce;
Syrup, a sufficiency.

Mix them. Of this electuary the bulk of a nutmeg may be taken twice a day. Or, take

The down of cowhage, from six to ten grains;
Filings of tin, ten grains.

Mix them. This is to be taken night and morning, mixed with a little syrup, or honey.

These remedies have been found to act almost mechanically, and in a very powerful manner.

After they have been continued for two or three days, the following, which have also a purgative effect, may be tried:—Take

Submuriate of mercury, three to five grains;
Powdered rhubarb, ten grains.

Mix them. This purgative powder is to be taken on the fourth morning after any of the preceding vermifuge medicines. Or, take

Powder of jalap, ten grains;
Submuriate of mercury, three grains.

Mix them for a cathartic.

Both the preceding classes of remedies, after having been made use of for some time, are to be changed for the following:—Take of

Lime water, half a pint in the day.

To this is to be added the following bitter infusions:—Take

Gentian root, bruised,
Wormwood leaves,
Rue leaves,
Lemon peel, of each two drachms;
Warm water, one pint.

Infuse them for an hour, and then strain off the liquor. Of this infusion, three table-spoonfuls may be taken twice or thrice a day.

Should all these means prove ineffectual, then about ten grains of the Indian pink root may be given to a child of eight or ten years of age.

A decoction of the cabbage bark is another remedy much used in the West Indies for destroying worms.

Turpentine, in the form of a clyster, consisting of two drachms of the oil, blended with a decoction of oatmeal, may be administered at a time.

The leaves of tobacco, pounded with vinegar, and applied as a poultice to the region of the stomach or abdomen, is also said to be efficacious.

For the cure of the tape worm, which is the most difficult to expel from the body, the male fern has been much recommended. The dose for a grown up person is from one to two drachms. After two doses have been taken, a purge of submuriate of mercury and jalap is to be employed, in the proportion of five grains of the former to five and twenty of the latter.

The oil of turpentine taken internally, in about one ounce for a female, and one and a half for a robust male, is also used in cases of tape-worm, with good effect.

YAWS, (Frambœsia.) This disorder is very common among the negroes in the sugar plantations, and it may be soon propagated by coming in contact with such as are affected by it.

Symptoms.—The yaws are sometimes

preceded by pains in the limbs, resembling those of rheumatism, and which are particularly severe round the joints.

For the most part, the person complains of headache, loss of appetite, and pains in the back and loins, which increase towards the evening. After a few days' continuance of these symptoms, they are followed by an eruption of pustules, more or less numerous, which appear in various parts of the body, but more so upon the forehead, face, neck, arm-pits, groins, &c. The coming out of these pustules is not completed at one time over the whole body, nor do they shew themselves in a regular succession on the different parts, but while one group is falling off, a fresh one is making its appearance in another place. Every new eruption is usually preceded by a slight febrile paroxysm. On their first appearance they are not larger than a pin's head, but gradually increase. The pustules are filled with a whitish fluid, and when they burst, a thick viscid matter is discharged, which forms a foul and dense crust or scab upon the surface. In general the number and size of the pustules are in proportion to the degree of fever. Their duration is uncertain, and depends a good deal upon the habit of the body. In some instances they arrive at their full maturity and size in the space of four or five weeks.

Treatment.—During the eruption of the disease, the efforts of nature ought to be assisted in determining the noxious matter to the surface of the body, by the following remedies:—Take

Powder of contrajerva, ten grains;
Camphor, three grains;
Washed sulphur, from fifteen grains to half a drachm;
Syrup, a sufficiency.

This bolus to be taken morning and night. Or, take

Gum guaiacum, in powder, ten grains;
Antimonial powder, two grains;
Washed sulphur, from fifteen grains to half a drachm.

Mix them, and let this powder be taken morning and night.

This medicine ought to be taken together with half a pint of the decoction of sarsaparillæ composit., and the patient is at the same time to make use of a warm bath about twice a week, and to live upon a vegetable diet. He should also be comfortably and warmly lodged, though separated from all others. His health is to be invigorated by daily exercise proportioned to his strength.

When the eruption begins to fall off, the following medicines might be employed:—Dissolve

Oxymuriate of mercury, three grains, in Proof spirits, six ounces.

Take half an ounce morning and evening. Or, take

Oxymuriate of mercury, twenty grains; dissolve it in

Brandy, one ounce; and add
Wine of tartarized antimony,
Tincture of opium, of each half an ounce.

Mix them, and take from twenty to thirty drops every morning and night.

The decoction sarsaparillæ composit. should be used at the same time, until the scabs become perfectly dry, at which time these medicines are to be discontinued, and a dose of Epsom salts to be taken.

Usually there remains a large eruption after all the rest have died away, and this, by degenerating into an ulcer, discharges a fetid matter. The unguentum hydrargyri nitrico-oxydi is well adapted for application, as is also an ointment composed of the subcarbonate of iron, with citric acid and prepared lard.

Hard swellings, of a painful nature, sometimes appear on the soles of the feet, as a consequence of the yaws. To remove these, the patient should bathe his feet in warm water, until the swellings are somewhat softened; they should then be seared with a hot iron, in order to produce an ulcer, which is afterwards easily healed. If the skin of the feet breaks, a poultice of fresh cassava root is to be applied.

YELLOW FEVER. (Typhus Icterodes.) This fever takes its name from one of its symptoms, which, however, is not an essential one.

Symptoms.—The chief of these are, costiveness, a dull pain in the right side, defect of appetite, flatulency, perverted taste, heat in the stomach, giddiness or pain in the head, a dull, watery, brilliant yellow eye, dim and imperfect vision, a hoarseness, or slight sore throat, low spirits, a disposition to sweats at night. Bleedings from the nose, and other parts, generally take place during the disease. The effect produced by this fever upon the nervous system is different, according as it affects the brain, the muscles, or the mind. In a few instances apoplexy has been produced; delirium is a frequent symptom. The colour is not always pre-

sent; when it is it takes place on the third day, but seldom before. No disease has, however, a greater variety of symptoms. A sudden oppression of all the functions at once, great debility, a weak, irregular pulse, sighing, severe vomiting of dark matter, tremors of the body when moved, with a tendency to faint on the slightest exertion, pensive melancholy in the countenance, and a dilatation of the pupils of the eyes, with coma, are signs of great danger.

The favourable symptoms are a settled state of the stomach, little pain in the head, lively eyes, an appearance of an eruption on the skin, free perspiration, copious and high-coloured urine, and sound sleep.

Causes.—It is probable that marsh exhalations, and the effluvia arising from putrid vegetable, and animal substances, under a concurring vitiated state of the atmosphere, are the causes which generally give rise to this fever. Very hot and sultry weather will greatly contribute to the prevalence of it as an epidemic.

Treatment.—In order to remove any disposition to inflammation during the first stage of the disease, and to take off the determination from the head, as well as to free the bowels from acrid humours, the following purgative remedies should be given, so as to procure one or two evacuations in a day:—Take

Submuriate of mercury, four grains;
Powder of jalap, from eight to sixteen grains;
Syrup of ginger, a sufficiency to form a powder for a dose;

Or, take

Submuriate of mercury, six grains;
Compound extract of colocynth, ten grains.

Mix them together, and form the mass into three pills, to be taken for a dose.

If the first dose does not operate, it is to be repeated; and if the purgative is still not attended with the desired effect, it ought to be followed by clysters, and by about an ounce of Epsom salts, dissolved in a little mint water, given by the mouth. A warm bath, together with all other means calculated to produce some perspiration, should at the same time be had recourse to.

The unguentum hydrargyri is further to be rubbed into the thighs, hams, legs, and arms, every four hours, and calomel is at the same time to be given in the following form:—Take

Submuriate of mercury, from two to four grains;
Opium, half a grain;
Confection of roses, a sufficiency to form a pill:

Which is to be repeated every four hours.

When spitting begins, the use of mercury should be immediately omitted, and nourishment and wine be substituted for it.

In cases of great irritability of the stomach, and when excessive vomiting prevails, the timely application of a blister over the part may produce a good effect.

Cold water applied externally affords great relief to the feelings of the patient, who is suffering under the sensation of a burning heat. But this can only be done when the heat of the skin is actually above the natural standard. The frequency of its application must likewise be directed by the feelings of the patient, who should never be allowed to become chilled with it. Much benefit might probably be derived from drinking cold water in small quantities.

Should neither of the preceding remedies have been of use, the cinchona bark must be given, either in substance, decoction, or infusion; and if the stomach cannot bear either, in the form of a clyster. A pint of decoction, made by boiling an ounce of the powder in a quart of water, until one-half is evaporated, may be injected every three or four hours.

Towards the close of the fever, when debility is the chief symptom, the following infusion may be useful:—Take

Infusion of angustura bark, five ounces;
Tincture of Peruvian bark,
Tincture of Columba, of each half an ounce.

Mix them.

The dose is to be two spoonfuls three times a-day, adding to it about twenty-four drops of diluted sulphuric acid.

Throughout the whole course of this fever, the greatest attention ought to be paid to cleanliness, by immediately removing whatever comes from the patient, and likewise by sprinkling his chamber every now and then with warm vinegar, and having a free ventilation of air through it.

When the disease begins to yield, the cinchona bark, joined with sulphuric acid, may be taken with advantage; and it should be continued during the whole stage of convalescence.

The quassia, in a cold infusion, is very

beneficial during the convalescent state, when the cold bath may also be useful.

YELLOW GUM, (Icterus Infantum.) This disorder is a species of jaundice, which affects many children after their birth, and continues for some days.

Symptoms.—These are, languor, indolence, a yellow tinge of the skin, bilious urine, and a tendency to sleep, which, when the child is prevented from sucking, is sometimes fatal.

Causes.—It is generally supposed to arise from an obstruction in the organs of the bile.

Treatment.—It may be useful to give, first, a few drops of the tartarized solution of antimony, and on the succeeding day, four or five grains of rhubarb; should the yellowness continue, the emetic, as well as the opening medicine is to be repeated.

APPENDIX.

ALABASTER ORNAMENTS. When these have become discoloured, they may be cleaned by the fumes of chlorine, applied for a short time, and afterwards being bleached in the sun, and then being sprinkled over with a diluted solution of chlorinated soda, commonly called chloride of soda. Care must be taken not to expose the alabaster too long to the action of the chlorine, or its colour will be injured; and we scarcely need add, that care must also be taken by the person superintending the process not to inhale the fumes.

ALMOND PUDDING. Take half a pound of sweet almonds, and, having shelled them, pour scalding water over them, so as to make the skins peel off; as they cool, pour more boiling water upon them, until they become all blanched; next, take two ounces of bitter almonds, and blanch them in like manner, but as they are blanched, throw them into cold water; as you take them out of the cold water, wipe them singly in a dry clean towel, and lay them on a plate; after which, pound the shells of them, sweet and bitter, one at a time, to a fine paste, in a marble mortar, adding, during the process, a few drops of rose water, which will prevent them from oiling; take care that they are made quite smooth in paste, (if prepared the day before, it will be all the better;) next, take a quarter of a pound of butter, and the like quantity of powdered white sugar, which, being stirred to a cream, must have added to it a table-spoonful of mixed brandy, wine, and rose water; beat the whites of six eggs till they stand alone; stir the almonds and eggs alternately into the butter and sugar, and then stir the whole well together. Have ready a puff-paste sufficient for a pie dish, butter the dish, lay on the paste, trim and notch it, and then put in the mixture. Bake it about half an hour in a moderate oven, and grate loaf sugar over it.

BEETLES. To destroy these troublesome intruders into the house, take some small lumps of unslaked lime, and put them into the chinks or holes whence the beetles issue; or they may be scattered over the floor, if the number of beetles is great. A correspondent of the "Magazine of Domestic Economy," who states that she was annoyed by "hundreds of thousands of these insects," completely ridded herself of them by pouring boiling water, for some few nights successively, down every hole and crevice of their retreat. The same thing has been found to eradicate ants.

BEETROOT. The following is an excellent method for making a delicious dish of this very wholesome and nutritious vegetable. Let the beet (red) be washed and brushed, but not scraped; the head—that is, the short stalks which have borne the leaves, as also the small end and side rootlets, are all to be left on during the time of boiling, care being taken not to wound the skin till it is done, because the fine rich colour will escape, and leave the root pale

and unsightly. The time the beet takes to boil will depend on the size—from three-quarters of an hour to an hour and a half; when it is ready, let it be peeled and trimmed, and sent to table. All that may remain after dinner should be cut into slices, about a quarter of an inch in thickness, and be laid neatly in vegetable dishes, vinegar being poured over the whole; by the next day at dinner time, or even the same night, it will be ready, and if eaten at supper, either alone with pepper, salt, oil, and vinegar, or as an adjunct to cold, or even hot meat, it will be found admirable. It becomes a very mild kind of pickle, and is exceedingly salutary, if eaten with salted meat. In this state it will keep for a fortnight.

BLACKBERRY JAM. This homely but salubrious conserve, which will be particularly acceptable in families where there are many children, is made in the following manner:—To every pound of fruit add half a pound of coarse moist sugar, and boil it for three-quarters of an hour. If it be desired to produce a more delicate and finer flavoured jam, about one-fifth of the sugar used may be fine loaf sugar, instead of the whole being coarse brown; and a little grated lemon-peel, as also a dash of lemon-juice, may be added.

BRIDE CAKE. Take four pounds of fine flour well dried, four pounds of fresh butter, two pounds of loaf sugar, a quarter of an ounce of mace, the same of nutmegs well beat and sifted, and to every pound of flour put eight eggs, four pounds of currants well washed and picked, and dry them before the fire till they are plump; blanch a pound of sweet almonds, and cut them lengthwise very thin, a pound of candied citron, the same of candied orange, and the same of candied lemon-peel, cut in thin slips; and half a pint of brandy. First work your butter to a fine cream with your hand, then beat in your sugar for a quarter of an hour, and beat the whites of your eggs to a strong froth, and mix them with your sugar and butter; beat your yolks for half an hour, and mix them well with the rest; then, by degrees, put in your flour, mace, and nutmeg, and keep beating the whole till your oven is ready; put in the brandy, currants, and almonds lightly; tie three sheets of paper round the bottom of your hoop, to keep it from running out, and rub it well with butter; then put in your cake, and lay your sweetmeats in three layers, with some cake between every layer; as soon as it is risen and coloured, cover it with paper before your oven is closed up, and bake it three hours. It may be iced or not, as desired.

The CHRISTENING CAKE is the same as the BRIDE CAKE.

BUGS. In addition to the modes of destroying these noxious insects prescribed in the Dictionary, a correspondent mentions the following:—Take of the highest rectified spirits of wine, half a pint, spirits of turpentine half a pint; mix together, and break into it, in small bits, half an ounce of camphor. Apply the mixture to the bed or furniture, (the dust having been first brushed off them.) This will neither stain nor spoil anything. Where a brush or a sponge cannot reach, pour some of the mixture into the joints or holes, and it will destroy the knits. Shake the mixture well whenever it is used, which must never be done by candle light, lest it should catch the flame, and occasion serious damage.

CARROT MARMALADE. The editor of the "Magazine of Domestic Economy" gives the following directions for making this marmalade, which was invented by a celebrated English physician, as an excellent confection to be used at the breakfast table by persons of a scorbutic habit:—Take any quantity of carrots; those to be had in the months of September and October are the best; wash them thoroughly in cold water, and cut off the tops and tails; then scrape them well, wash them again, and dry them; cut them into pieces about two inches in length, dividing the whole circumference into four parts, if the carrots are large, and into three, or two, if they are small, taking care to throw away any part that is decayed; put these bits into a pan, with as much water only as will prevent the bottom of the pan from burning its contents; cover them close, and let them stew over a moderate fire, until they are very

tender and fit for the purpose we are now going to mention; mash them thoroughly, and pass them through a hair-sieve; then prepare and clarify a syrup, using, for every pound of pulp, a pound of sifted sugar and half a pint of water; clarify it, and boil it up until it adheres to the spoon; put in the pulp, boil it up according to rule, evaporating the moisture, until it forms a fitting marmalade; then put it into pots. This marmalade will keep any length of time.

CITRON. The directions given for candying lemon and orange peel may be adopted for candying the citron peel used in rich cakes.

CUCUMBERS, TO PRESERVE. Choose the greenest and most free from seeds; some small, to preserve whole, the others large, to cut into long slices; put them into strong salt and water, cover with a cabbage leaf, and set them in a warm place, till they are yellow; then wash and set them over the fire, in fresh water, with a little salt and a fresh cabbage leaf; cover the pan very close, but take care the fruit does not boil. If they are not of a fine green, change the water, and that will help to green them; cover as before, and make them hot; when they become of a good colour, take them off the fire, and let them stand till cold; then cut the large ones into quarters, take out the seeds and soft parts, and put them into cold water, and let them lie two days, but change the water twice every day, to take out the salt. Take one pound of loaf sugar, and half a pint of water, and when it has boiled, and is well skimmed, add the rind of a lemon and four ounces of scraped ginger; when the syrup is pretty thick, take it off the fire, and when it is cold, wipe the cucumbers dry, and put them into the syrup. The syrup should be boiled once in two or three days for a fortnight, and you may add more to it, if necessary. When you pour the syrup on to the cucumbers, be sure that it is cold. Cover close, and keep in a dry place.

CUCUMBERS PRESERVED IN IMITATION OF CHINA GINGER. We are indebted for the following delicious preparation to the "Magazine of Domestic Economy":—Cut the cucumbers into halves, by splitting them down their whole length; then put them into a brine of salt and water, in which they must soak during three days; take them out of this brine, wash them well in cold water, and set them over the fire in plenty of water; the moment they boil, take them off, drain off the water, put a good quantity of fresh water to them, and set them over the fire again; when ebullition appears the second time, remove the pan from the fire and change it once more, adding this time a small lump of bicarbonate of potass; let them now boil during half an hour, and cool in the liquor, standing in it all night; next morning put them on a sieve to drain; now bruise in a mortar, but do not break up, half a pound of the best and freshest ginger, or more if found necessary; put this into two quarts of water with an ounce of cloves, and a stick of cinnamon; set it on the fire, and let it boil until the water is as fully impregnated with the ginger as possible, and the liquid tastes as strong as the ginger would if chewed; strain this liquor through a jelly bag, return it to the pan, and to every pint put a pound and a quarter of pounded loaf sugar; clarify this syrup in the usual manner with white of egg; the moment it has boiled up and been well skimmed, lay the cucumbers into it, together with all the races of ginger which had been boiled, let the whole boil ten minutes; put it into a jar and let it stand two days; then drain off the syrup, boil it up again, and boil the cucumbers and ginger during ten minutes longer. On the third day after this second boiling, pour all the syrup into a pan, put the races of ginger with it, and boil it up until the syrup adheres to the spoon; then put in the cucumbers, let them boil a quarter of an hour, and return the whole to the jar, which must stand uncovered four-and-twenty hours, and then be covered with bladder and white paper tied over.

ENGLISH STEW. This is the name given, for want of a better, to the following admirable preparation of cold meat—cold meat of any description:—Cut the meat in slices, pepper, salt, and flour them, and lay them in a dish; take pickles of any or of every kind at discretion, sprinkle them over the meat;

then take a tea-cup half full of water, add to it a small quantity of the vinegar belonging to the pickles, a little mushroom katsup, if approved of, and any gravy that may be set by for use; stir all together, and pour it over the meat. Set it before the fire with a tin bonnet behind it, or put it in a Dutch oven, or in the oven of the kitchen range, as may be most convenient, for about half an hour before dinner time. We hazard nothing in saying that this English stew will find favour with all who may feel inclined to try it.

KISSES. To make these, beat the whites of four eggs till they stand alone, and then beat in, gradually, a pound of the best powdered and sifted white sugar; add twelve drops of essence of lemon, and beat the whole very hard; having laid a sheet of paper on the bottom of a square tin pan, drop on it, at equal distances, a small spoonful of stiff currant jelly, and then, with a large spoon, pile up some of the white of egg and sugar on each lump of jelly, so as to cover it over; let this be done as evenly as possible, so that the kisses may be round and smooth; they must then be placed in a cool oven, and as soon as they are coloured be taken out, and have the two bottoms placed together. Lay them lightly on a sieve, and dry them in a cool oven till they stick closely to each other, so as to form a ball.

LACE. The following directions, in addition to those given in the preceding pages, for washing blond-lace, cannot fail to be acceptable to many families:—Detach the blond from the caul, but not from the quilling of a cap. Fold it evenly in four lengths, if scalloped at the edge, and take care that the scallops lap over each other. Tack it evenly, first along the scalloped edge, next when it joins the quilling; wet it in cold soft water, soap it well with common soap, yellow or white, taking care that there is no gravelly roughness in the soap; lather it lightly, and do not rub too hard. If very dirty, use two or three waters, repeating the process of lathering. Rinse it, finally, in soft, cold water, and when quite free from soap, dip it in water very highly blued, with about a teaspoonful of made starch, to a quart of water. Squeeze it, then lay it between the folds of a cloth, pull the packing threads out, and unfold; then iron it before it is dry. The iron must not be plied lengthwise, but in short strokes, from the quilling to the scallop, or edge, if it is not scalloped. Next, detach the blond from the quilling, and finally pass the iron lightly *along* the blond, without straining it; roll it on a card ready for use. White gauze ribbon may be cleaned in the same manner. The points to be kept in view are, to use cold water, to iron before it is dry, and to purchase good material that will bear wearing.

LAMPREYS, (To Pot.) The following is given by Mrs. Rundell, in her "Domestic Cookery," as the mode of potting practised at Worcester, which is considered better than any other:—"Leave the skin on, but remove the cartilage, and a string on each side of it down the back; wash and clean the fish very nicely in several waters, and wipe them; to a dozen of tolerable size, use two ounces of white pepper, salt in proportion, six blades of mace, a dozen of cloves, all in fine powder, but do not season until the fish shall have drained all night; lay them in a stone pot, one by one, and curled round, the spices and salt being sprinkled in and about them; clarify two pounds of butter, and half a pound of the finest beef suet, pour it on the fish, and lay thick paper over to keep in the steam; bake three hours in a moderate oven; look often at them, and as the oil works up, take it clear off. They will thus in the stone pot keep till spring. Put into pots for serving as wanted, observing to take off the old butter, and, having warmed the fish in the oven, cover with fresh butter only." Lampreys may be dressed in the same way as eels. (See Fish.)

MACAROONS. Take half a pound of blanched sweet almonds, and a quarter of a pound of shelled bitter almonds; beat them each very smooth, and mix them together; if prepared the day before, it will be the better. Next take a large tea-spoonful of mixed spice, nutmeg, mace, and cinnamon, which must be well pounded and sifted; beat the whites of three eggs till they stand

alone; add to them, gradually, twenty-four large tea-spoonfuls of powdered loaf sugar, a spoonful at a time, beat it very hard, and put in, by degrees, the spice, and a table-spoonful of rose-water; after which stir in gradually the almonds. Should the almonds not prove sufficient to make the paste as thick as a good soft dough, prepare a few more, and stir them in. When all is well mixed, put some flour in the palm of your hand, and taking up a lump of the paste with the point of a knife, roll it with the flour into a small ball; have ready an iron or a tin pan, and lay the balls in it as they are made up, placing them about two inches apart, and then bake them for eight or ten minutes in a moderately heated oven, until they become of a pale brown colour. The top of the oven should be hotter than the bottom, so that they may crack on the surface.

MAGISTERES RESTAURANT, OR, SOVEREIGN RESTORATIVE. The *Physiologie du Gout* gives us two recipes for persons whose stomachs require strong restoratives. The first is as follows:—Take six large onions, three carrots, and a handful of parsley; chop them up, and put them into a saucepan with a little fresh butter; they are to remain until brown over the fire; when at this state, add six ounces of sugar candy, twenty grains of amber, a crust of bread, and two quarts of water; boil for three-quarters of an hour, and add water as the evaporation goes on, so as to keep up the quantity. In the meantime, have ready an old fowl, pounded in a mortar, bones and flesh, and two pounds of good beef, cut up into small pieces; put them into a saucepan with pepper and salt, and add from time to time a little fresh butter; let there be a sufficient quantity of water to cover the whole, and boil briskly. When the virtue of the meat appears to be well extracted, strain the first mixture, and add it by degrees to the second; boil briskly for three-quarters of an hour, and add water from time to time, so as to have always the same quantity of liquid. Of this preparation, when done, let the patient drink a large cupful every three hours. The author adds, that this restorative can only be used by debilitated persons whose stomachs still continue to perform the function of digestion. It is recommended to persons who have reduced their strength by excesses of a certain description.

The second recipe, which we are told may be used by a weaker stomach, is this:—Take two pounds of calves' feet, and boil them up with four sliced onions, a handful of water-cresses, and two quarts of water; boil for two hours, and add water as the evaporation goes on; when done, pepper and salt moderately; whilst this is going on, pound three pigeons, and twenty-five river craw-fish, bones and all, (a lobster will do where the river craw-fish cannot be had) and proceed as in the first recipe. Take a large cup of the mixture morning and evening; in the morning, two hours before breakfast.

METALLIC PENS. By the following means, these pens may be preserved from damage by the action of the ink upon them:—Throw into the bottle in which the ink is kept, a few nails, broken pieces of steel pens, if not varnished, or any piece of iron not rusted. The corrosive action of the acid which the ink contains is expended on the iron so introduced, and will not, therefore, affect the pen. Should it do so, it is because a sufficient quantity of iron has not been deposited in it.

MOTH. A correspondent reminds us that we have omitted to state in the preceding pages, how the ravages of this destructive insect are to be prevented. The inquiry is an important one, for very valuable furs and woollens are frequently destroyed by moths, when a simple precaution would have prevented such destruction. There are various modes of preserving furs &c. from the attack of the moth. Many housewives strew powdered pepper plentifully over the article to be preserved; some use camphor; and others a mixture of the essential oil of lavender in spirits of wine. Musk is also considered a good preservative, but it is little used, as few persons like the smell of it in the quantity which is requisite. The best, and it may perhaps be called an infallible, safeguard, is camphorated spirits of wine. A drachm of camphor is to be dissolved in two ounces of spirits of wine, and the article is to be plentifully

sprinkled with this mixture, which will not injure the most delicate colour; and the smell will go off after an hour's exposure to the air, when the article which has been so sprinkled is wanted for use. But if furs and woollen articles be, from time to time, exposed to the air for a few hours, there will be little danger of their being attacked by moths, even although nothing be done to them when they are first laid by for the summer; and the safety will be the greater, if, before laying them by, they be wrapped up in linen closely pinned or sewed. We are assured by a fair correspondent, that by adopting the precaution of pinning her furs and woollen dresses, &c., into a linen cover, such as a sheet or table-cloth, and pinning the edges closely, they have always escaped the attack of moths, although neither camphor nor pepper had been put to them.

ORANGE MARMALADE. This having been omitted in the Dictionary, by an oversight, the following receipts for making it are here introduced. Orange marmalade is usually prepared with Seville oranges, and the best period of the year for procuring them is from January to March; but it may be made with the common orange. The following directions may suffice for preparing it:—Let there be six pulps to every four rinds; the pulps must be scooped out into a hair sieve, with a pan placed beneath to receive the juice; the rinds must be cut into thin strips, somewhat in the form of thin orange chips; soak these during three days in spring water, with a little salt; then wash them in clear water; put them into a pan over the fire, in fresh water; the instant this boils, pour it off, substitute fresh water from a teakettle, which has been kept boiling on purpose, and boil the rinds until they are very tender; strain them now from the liquor, which must be passed through a jelly-bag, and put by for the purpose hereinafter directed. In the mean time, keep from dust and dirt the pulps and the juice that came from them. As soon as the rinds have been boiled and strained from the liquor, remove the pips from the pulps, and beat the latter until you can pass them through the sieve. Keep the juice separate. Put into a preserving-pan as many pounds of sugar as there are pounds of orange, and for each pound of sugar pour into the pan a pint of the liquor in which the rinds were boiled; beat up the white of an egg with a wine-glassful of cold water, and stir it into the syrup; let this now progress towards boiling, but the moment the ebullition begins, and the scum appears, take the pan off the fire, and let it stand during half an hour without being touched; the scum, during that time, will settle upon the surface of the liquor, and must be removed with a skimmer. Put the syrup again on the fire, and continue to skim it whilst any scum rises; the moment you have done skimming it, run it through a jelly-bag; set it again over the fire, and stir in the juice of the oranges. Boil up the syrup till it hangs to the spoon; then put in the pulp and the boiled rinds; let the whole boil together during ten minutes, stirring it all the while; if too thin, let it boil three or four minutes longer; take it off the fire, and put it into marmalade pots, which must stand uncovered during twenty-four hours; then sift a little loaf-sugar over the marmalade in each pot, and cover it with a paper dipped in brandy. Cover the pots with bladder.

The following is a new method of making the marmalade, and is said to be a very good one:—Stew the oranges till they become so tender that they may be pierced with a straw, changing the water two or three times. Drain them, take off the rind, weigh the pulps before you take out the pips; and supposing the quantity to be six pounds, add seven of sugar; boil it slowly till the syrup is clear, then add the peel, having first cut it into strips; boil the whole up again, and it is completed.

PANADA. Put a little water on the fire, with a glass of white wine, some sugar, and a little nutmeg, and lemon peel; in the meantime grate some crumbs of bread; as soon as the mixture boils, put in the crumbs, and boil as fast as possible, until of a sufficient thickness, but not too thick for drinking; or substitute a little rum and fresh butter for the wine.

POTTED BEEF. This may be prepared as follows:—Take cold boiled

beef, the lean part of the round is the preferable part, remove all the skinny parts; mince it fine, and pound it in a mortar, with a little fresh butter, until it becomes quite smooth, seasoning it with nutmeg, black pepper, cayenne, a little mace, and salt, if necessary; press it very closely into small flat pots; clarify some fresh butter, and pour over the top, and when cold, paper it over, as you would jams or jellies, but omitting the brandy.

POUND CAKE. Take a table-spoonful of mixed mace and cinnamon, twice as much of the latter as of the former, and having pounded and sifted it, add thereto a nutmeg grated; sift a pound of flour into a broad pan or a wooden bowl, and do the same with a pound of powdered white sugar, into a deep pan; into the latter, cut a pound of fresh butter, in small pieces, having warmed it in a slight degree before the fire, if the weather is very cold; stir the butter and sugar together, with a stick, until they are very light and white, and look like cream; next take ten eggs, and beat them in a broad, shallow pan, with a wooden egg beater, or a whisk, until they are smooth, and of the consistence of a boiled custard; then take the pan having the butter and sugar in it, and add half a glass of wine, half a glass of brandy, and half a glass of rose water, stirring all the time; after which put in, gradually, twelve drops of essence of lemon, and the sifted spice; this having been done, stir the egg and the flour alternately with the butter and sugar, a handful of flour and about two spoonfuls of the egg, beating all the time, and when all is in, stir very hard for about ten minutes; butter a large tin pan, or a cake mould with an open tube rising from the middle, and into this put the mixture, as evenly as possible; bake it in a moderately warm oven, for two, three, or four hours, in proportion to its thickness, and to the heat of the fire. When supposed to be nearly done, thrust a twig or a wooden skewer into it, down to the bottom. If it come out clean and dry, the cake is almost baked; and when quite done, it will shrink from the sides of the pan, and cease making a noise; the coals of the oven should then be withdrawn, and the cake be left in the oven to cool gradually. It may be iced when hot or cold.

SOUPS. Mrs. Rundell, in her "Domestic Cookery," a work of great merit, makes the following observations on soup-making:—

"The method of making good and economical soup is exceedingly essential; and as the stock may frequently be produced without the purchase of meat employed solely for the purpose, and not fit to be sent to table afterwards, housekeepers will do well to attend very closely to this branch of the culinary art.

"The water in which beef or pork has been boiled, is generally too salt to make good soup, and a third, or at most half, should be taken for the purpose; that in which a leg of mutton has been boiled will only require some small additions to be formed into excellent soup; the same may be said of a neck of mutton; and the liquor from a calf's head merely needs flavouring; since, if the bones be added when the meat is sufficiently done, they will produce a stiff jelly, and make quite sufficient soup for a small family, even when only half a head has been boiled.

"The English taste is in favour of strong, rich, and highly-flavoured soups, but these may be judiciously varied by others of a plainer description—broths, rather than soups, containing only the pure juices of the meat, seasoned merely with vegetables; and if thickened at all, using bread, or rice, or vermicelli.

"Soups of this description, for which several receipts will be given, if taken occasionally, will be found an excellent preventive against the ills contracted by what is called high living, and will prevent the appetite from becoming vitiated, and craving for constant excitement.

"A common camp kettle will be found an excellent utensil for making soup, as the lid is heavy, and will keep in the steam. An earthen pipkin, if of a long and narrow make, widening a little in the centre, is also a good, perhaps one of the best vessels for soups; and soup may be made in a jar covered with paste, or folds of brown paper, and sent to the oven. It is always desirable to prepare soup the day before it is wanted, as the fat is very easily taken off when cold.

"The liquor in which meat has been merely boiled, may be converted into good soup by frying vegetables in butter, and adding them. Soup is thickened, and the grease, should there be any, neutralized (that is, absorbed) by mixing from a tea-spoonful to a tea-cupful of flour, according to the quantity, with a little water, very smoothly, forming it at first into a paste, and then adding the soup by degrees in a basin until it becomes thin; the portion thus prepared must then be mixed with the whole, and boiled up, or otherwise there will be a raw taste from the flour. This operation requires skill and judgment, for the presence of the flour should never be detected; clear gravy soup must on no account have any flour put into it, as it would spoil the transparency. When soup is not rich enough, and is not to be served up with vegetables, mix a piece of butter with flour into a paste, using only as much flour as will prevent the butter from oiling, and taking care to incorporate it very completely; then put the butter into a small saucepan, adding gradually some of the soup, and then pour it into the soup-kettle, and boil it all together. Soup which has been made with vegetables will not keep so long as that which is composed solely of meat.

"Soup must not on any account be put by in metal of any kind, but poured into a freshly scalded earthen pan, and, if kept longer than a day, changed into a clean vessel, scalded for the purpose. If colouring should be necessary, the common browning may be used; fried onions will also materially assist in giving a fine brown colour to soup. The crust of a loaf of bread stewed in the soup, thickens and renders it more wholesome, and when taken out will be found light, palatable, and nourishing to an invalid. When wine is put into soup, it should not be added until nearly the last thing; thus a glass of wine will go as far in flavouring a soup, as a pint stewed down from the commencement.

Ketchups, sauces, such as soy, anchovy, &c., should only be put into weak soups which require to have some flavour imparted to them; there is, however, an agreeable acid, as well as a delicacy in Harvey's sauce, which renders it an exception, English cooks seldom giving to their dishes the advantage of a slight acid judiciously combined with other things. Soups also, like that made from calf's head, cow-heel, &c., which are rich, but flavourless, will bear the addition of sauces, when other relishing articles are not at hand; but, generally speaking, common English cooks are too much addicted to the indiscriminate use of ketchups and sauces. The castors are the proper places for these things, since they may be added by the parties fond of high flavours; a small quantity occasionally, however, will be found advantageous, but they should by no means preponderate.

"Meat for soup should never be drowned at first in water, but put into the kettle with a very small quantity and a piece of butter, merely to keep the meat from burning until the juices are extracted; by this means a single pound will afford better and richer soup than treble the quantity saturated with cold water. Bouilli beef is rendered very rich and palatable, though a considerable quantity of soup may be made from it, by being stewed at first in a little butter and its own juices. Soup may be cleared by putting the whites of one or two eggs in it while being warmed up, and as it begins to melt; then boil the whole gently together, and run the liquor through a jelly bag."

The following on soups and gravies, under the head of general directions, is from the same source:—

"When there is any fear of gravy meat being spoiled before it is wanted, season well, and fry it lightly, which will preserve it two days longer; but the gravy is best when the juices are fresh.

"When soups or gravies are to be put by, let them be changed every day into fresh scalded pans. Whatever has vegetables boiled in it is apt to turn sour sooner than the juices of meat. Never keep any gravy &c. in metal.

"When fat remains on any soup, a tea-cupful of flour and water mixed quite smooth, and boiled in it, will take it off.

"If richness or greater consistency be wanted, a good lump of butter mixed with flour, and boiled in the soup, will give either of these qualities.

"Long boiling is necessary to give the full flavour of the ingredients, there-

fore time should be allowed for soups and gravies; and they are best if made the day before they are wanted.

"Soups and gravies are far better when the meat is put at the bottom of the pan, and stewed, and the herbs, roots, &c. with butter, than when water is put to the meat at first; and the gravy that is drawn from the meat should be almost dried up before the water is put to it. Do not use the sediments of gravies &c. that have stood to be cold. When onions are strong, boil a turnip with them, if for sauce; this will make them mild.

"If soups or gravies are too weak, do not cover them in boiling, that the watery particles may evaporate."

On stock for soups, Mrs. Rundell says:—"Ox-cheek, shin or leg of beef, make an excellent stock for soups. Break the bone, and cut the meat in pieces; add to it a piece of lean bacon, or ham, or the bones of either; the proportion of the former should be a pound and a half to seven pounds of the beef. Place the meat in the bottom of a stewpan, with a piece of butter; draw out the gravy very gently, and allow it nearly to dry in again; then add the water poured boiling upon it, a bunch of sweet herbs, and an onion or two with a clove stuck in them; place the pan by the fire to simmer for about four hours; the time, however, must depend upon the quantity; twelve pounds of meat will take at least ten hours. The stock for white soups should be made of scrag, or of knuckle of veal, ox-heel, or calf's head, with any small quantity of dark meat, and ham bones; an old fowl will also be found a very desirable addition, and in making stock of any kind, the legs, heads of fowls, turkeys, and all sorts of trimmings, may be used with great advantage. A sheep's head will make excellent stock; have it beautifully cleaned, put it into a stewpan with a little water, and when it is heated through, fill up the pot; when it is sufficiently tender, take it up, remove the meat from the bones, and return the bones into the broth, adding onion, sweet herbs, &c., as before directed. Stew these bones for several hours longer; and when the liquor is cold, it will be found a jelly, and will form the basis of every kind of soup or sauce. When a large quantity of any butcher's meat is brought in for the use of the family, the joints will require trimming; take all the parings, adding a slice or two of bacon, beef, or mutton bones, onions, herbs, a few slices of carrot, pepper, salt, &c.; put a piece of butter at the bottom of the pan, cover it closely, and put it over a slow fire for a few minutes, shaking the saucepan occasionally; then pour in boiling water, covering the meat to the depth of some inches; and let it stew until it is rich; then put it aside; when cold, take off the fat. The weighing pieces, which butchers in the country send in with the superior joints of meat, answer admirably for stock. Put into a stewpan, a piece of beef, a piece of veal, or, what will be more economical, an old fowl, some slices of ham or bacon, and all the trimmings of meat that can be obtained; add to these materials, where such things are abundant, an old partridge, grouse, or other game, which may not be sufficiently young and tender for the spit; put a little warm (not boiling) water to it, just enough to cover half the meat, and stew very gently over a slow fire, or steam apparatus; when the top piece is done through, cover the meat with boiling water, or broth, should it be required to glaze, and season with a bundle of sweet herbs, parsley, and chives, a clove, a small bit of bay-leaf, a little salt, and some trimmings of mushrooms, if they are to be had; stew all together until the juices are drawn from the meat; skim off the fat, and strain the liquor through a tammy. This stock may be reduced to a glaze by boiling it down to the proper consistence, or it may be converted into fine white sauce, by adding a sufficient quantity of flour and cream thoroughly incorporated—for white sauce there must be no pepper in the stock—and a very small quantity of flour in proportion to the cream. This need not be an expensive preparation, if care be taken to make it at a time when the materials are at hand."

Or, according to the same authority, stock may be made as follows:—"Take any quantity of beef, mutton, and veal, or fowl, cut the meat into small pieces, and put it into a deep saucepan with a close cover, the beef at the bottom, the mutton upon it, a piece of lean bacon, a bundle of sweet herbs, some whole

pepper, black and white, and a large onion sliced, with the white meat at the top; cover the saucepan closely, and put it over the fire for a few minutes, shaking the pan; then pour in as much boiling water as will rather more than cover the meat; stew gently for eight hours; then put in two anchovies chopped, and seasoned with salt to the taste; strain off the liquor, and preserve it for use. If properly made, this gravy will become a rich jelly, a piece of which may be cut off when sauce is wanted. English private families do not make sufficient use of sheep's-heads, sheep's-trotters, and cow-heel; all these afford very strong jelly, and the proper flavour may be given by the judicious addition of beef, game, ham, &c. Some economical persons purchase bones of the butcher, and by stewing them many hours, procure an excellent stock; and families to whom expense is an object will do well to make the experiment. Scrag of veal will answer all the purpose of the knuckle."

TOMATA. In addition to the mode of preparing this fruit for a sauce, as described in the preceding pages, the following may be mentioned:—Place them in a Dutch oven, or an American reflecting oven, for a few minutes before the fire, adding a little vinegar. When they are warmed through, the rind is peeled off easily, if it be preferred to do so. In this way they may be eaten with every description of roast meat. Hundreds of persons would, no doubt, use the tomata, if they were made acquainted with this simple method of preparing them, and with their use as a purifier of the blood.

TRIFLE. To prepare this, take two ounces of blanched sweet almonds, and one ounce of blanched bitter almonds, and pound them to a smooth paste, adding, as you pound them, a little rose water; take two lemons, and grate the peels, and squeeze the juice into a saucer; four small sponge cakes, or Naples' biscuit, and eight or more macaroons, must next be broken into small pieces, and be mixed with the almonds, and the mixture be laid at the bottom of a glass bowl; grate a nutmeg over this, and throw in the peel and juice of the lemons; to the whole add half a pint of white wine, mixed with half a gill of brandy, and let the mixture remain until the cakes are dissolved, when it may be stirred a little; to a quart of cream, add a quarter of a pound of powdered loaf sugar, and a glass of noyeau, and head with a whisk till it stands alone; as the froth rises, take it off with a spoon, and lay it on a sieve, with a large dish under it, to drain; then take the cream that has drained into the dish, and pour it back into the pan with the rest, the whole being beaten over again; this being done, set the cream in a cool place; have now a pint of rich baked custard, made of the yolks of eggs, cold, and pour it into the bowl upon the dissolved cakes, and when the cream is cold, pour that in also, heaping it high in the centre; a layer of fruit, jelly, or of well preserved fruit, may be put in between the custard and the frothed cream, if that be preferred.

TWELFTH CAKE. To make this species of cake, take the following ingredients, and use them as directed:—Seven pounds of fine flour, two pounds and a half of fresh butter, seven pounds of currants, well washed, and rubbed dry in a clean cloth, two large nutmegs grated, half an ounce of mace, and a quarter of an ounce of cloves pounded to a fine powder, a pound of sifted lump sugar, the yolks of sixteen and the whites of twelve eggs, and a pint and a half of the very best distiller's yeast; warm as much cream as will wet this mass, and add as much sweet Malmsey, or mountain wine, as will give it the consistence of batter; beat, not too fine, a pound of sweet almonds bleached, rub them with some of the sweet wine and orange-flower water; then add, and beat also, half a pound each of candied lemon, citron, and orange peel; let the whole be well mixed, and put the cake into a hoop, with a thick paste of flour and water under it, in order to preserve the bottom from scorching. Ice it the moment it is drawn from the oven.

WOODCOCKS. A correspondent states that the Portuguese mode of roasting woodcocks, either larded, or with a thin slice of fat bacon skewered over the breast, adds much to their flavour, while it prevents the bird from being dried up.

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