**Food and flavor : a gastronomic guide to health and good living / by Henry T. Finck ; illustrated by Charles S. Chapman.**


### Contributors

Finck, Henry Theophilus, 1854-1926.
Chapman, Charles S.
University of Leeds. Library

### Publication/Creation

London : John Lane, the Bodley Head, 1914.

### Persistent URL

https://wellcomecollection.org/works/d3w572mf

### Provider

Leeds University Archive

### License and attribution

This material has been provided by This material has been provided by The University of Leeds Library. The original may be consulted at The University of Leeds Library. where the originals may be consulted.
Conditions of use: it is possible this item is protected by copyright and/or related rights. You are free to use this item in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s).

wellcome collection

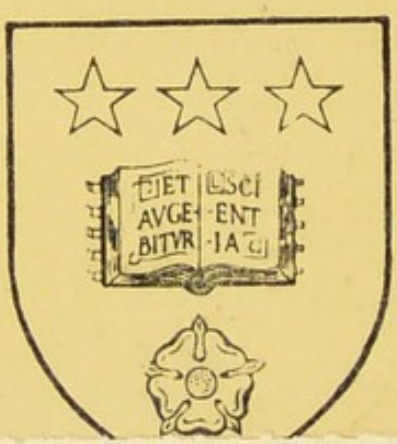
Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

# FOOD AND FLAVOUR

## A GASTRONOMIC GVIDE TO HEALTH AND GOOD LIVING

BY HENRY T. FINCK

*The University Library*
*Leeds*




**LEEDS UNIVERSITY LIBRARY**

Classmark:

COOKERY

A FIN

COOKERY

K-H 1914

Digitized by the Internet Archive
in 2015

https://archive.org/details/b21530075

FOOD AND FLAVOR

# FOOD AND FLAVOR

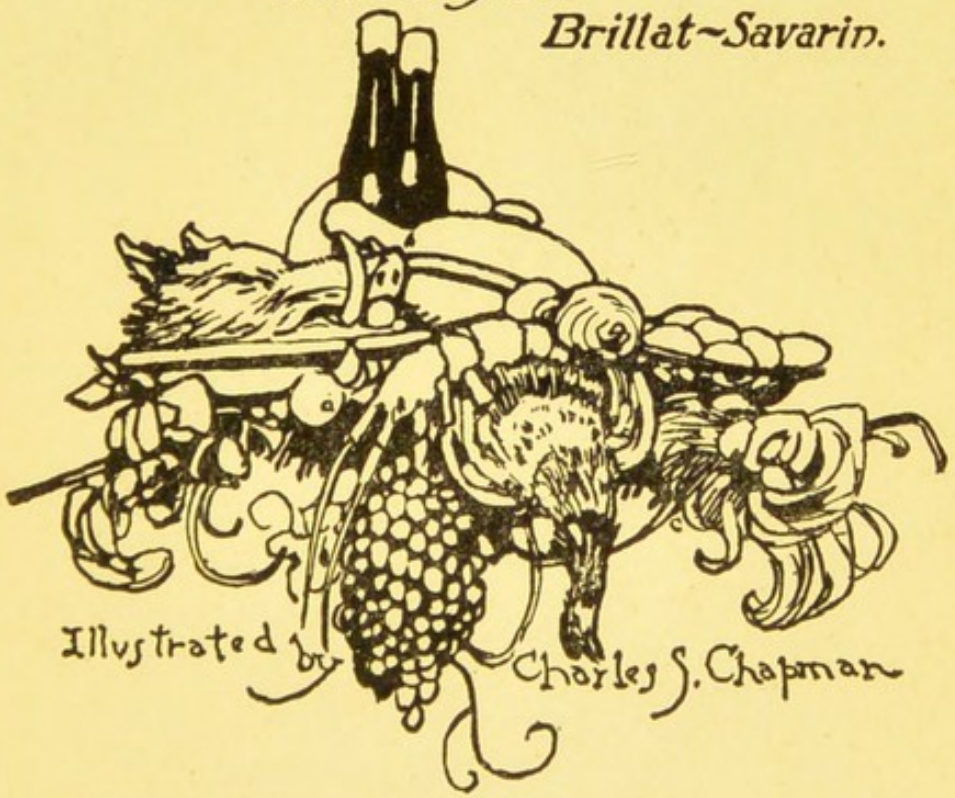
## A GASTRONOMIC GUIDE TO HEALTH AND GOOD LIVING

BY

# HENRY T. FINCK

*"The destiny of nations depends upon what and how they eat"*

*Brillat-Savarin.*




LONDON

JOHN LANE, THE BODLEY HEAD

1914

S. 14492.

TO

LUTHER BURBANK

AND

HARVEY W. WILEY

THE TWO MEN

WHO HAVE DONE MOST

TO MAKE OUR DAILY FOOD

PALATABLE AND HONEST

# CONTENTS

PAGE

I UNGASTRONOMIC AMERICA . . . . . 3

Mark Twain's Patriotic Palate—Food Missionaries in the Far West—Are Women to Blame?—The Danger in our Food—Why the Candy was not Eaten—Dr. Wiley's Poison Squad—Condiments versus Chemical Preservatives—Scotched, not Killed.

II VITAL IMPORTANCE OF FLAVOR . . . . . 40

Sensual indulgence as a duty—Gladstone and Fletcher—The harm done by soft Foods—Epicurean delights from plain Food—How flavor helps the Stomach—An Amazing Blunder—A new Psychology of Eating.

III OUR DENATURED FOODS . . . . . 65

Foul Fowl—The French way versus the American—Why do we Eat Poultry?—Is cold storage a Blessing?—Spoiling the American Oyster—"Smoked" ham, bacon and fish—Flavor in Butter—Sweet Butter versus Salt.

IV THE SCIENCE OF SAVORY COOKING . . . . . 117

Desirable raw foods—Flavor as the guiding principle—The Philosophy of soup-making and eating—Wherein lies the value of vegetables?—Broiling, roasting, baking, frying—Combining the flavors of meats and vegetables—Savory food for everybody—Meat-eating of the future—The folly of vegetarianism—When to use condiments and sauces—Cook books.

V A NOBLE ART . . . . . 152

The social caste of cooks—Royalty in the kitchen—Rossini, Carême and Paderewski—Looking down on others—Does cooking Pay?

# CONTENTS

PAGE

VI THE FUTURE OF COOKING . . . . . 171

School girls like it—Boys and soldiers as cooks—Traveling cooking schools—English school dinners—Progress in America—Teaching the art of eating—Real epicurism is economical—Fireless cookers—Private versus community kitchens—Scientific electric cooking—Importance of variety in foods.

VII FRENCH SUPREMACY . . . . . 210

Kitchen alchemy—Seven hundred soups—Savory sauces—Profitable poules de Brese—Digestive value of sour salads—Escarole, tomatoes, artichokes, alligator pears—Vegetables as a separate course—Paris restaurants—Russian and American influences—Provincial local flavors—The world's greatest market places—Model market gardens—Mushrooms and truffles—Training trees for fancy fruits—Bread crust versus crumb—How the best butter is made—Cheese as an appetizer.

VIII EPICUREAN ITALY . . . . . 309

The cradle of modern cookery—Olive oil and Sardines—Fried fish and fritta mista—Macaroni, the real staff of life—Cooked cheese in place of meat—Birds, tomato paste and garlic.

IX GERMAN AND AUSTRIAN DELICACIES . . . . 339

A cosmopolitan cuisine—Delicatessen stores—Sausages and smoked ham—Live fish brought to the kitchen—Game and Geese—In a Berlin market—Vienna bread and Hungarian flour—German menus on sea and land—German, Swiss and Dutch cheeses.

X BRITISH SPECIALTIES . . . . . 394

Thackeray's little sermon—Dr. Johnson and Samuel Pepys—The Roast beef of old England—Southdown mutton—Wiltshire bacon—Fair play for pigs—Grouse and grilled sole—Covent Garden market scenes—Marmalades, jams and breakfasts—Restaurants, cakes, and plum pudding.

# CONTENTS

PAGE

XI GASTRONOMIC AMERICA . . . . . 452

Sweet corn and corn bread—Griddle cakes and maple syrup—Apple pie and cranberries—Turkeys, guinea fowl and game—Lobsters, scallops, crabs, and fishes—Vegetables steadily gaining ground—The fruit-eaters' paradise Governmental gastronomy—Burbank's new fruits and vegetables.

XII COMMERCIAL VALUE OF FLAVOR . . . . . 522

Palatability decides permanence—Eating with the eyes—School girls as pure food experts—Pennywise dealers and pineapples—Successful peach-growers—Fortunes from bananas and oranges—Melons, honey and flavoring extracts—Opportunities for women—Feeding flavor into food—Farmers, middlemen, and parcel post.

XIII GASTRONOMIC VALUE OF ODORS . . . . . 559

Sweet, sour, salt and bitter—A comedy of errors—How flavor differs from fragrance—Important functions of the nose—Educating the sense of smell—Coffee, tea and temperance.

INDEX . . . . . 583

# LIST OF ILLUSTRATIONS


PAGE

Fred Harvey . . . . . 6
A Matter for the Health Department . . . . . 20
Harvey W. Wiley . . . . . 26
The Old-fashioned Way . . . . . 29
Horace Fletcher . . . . . 46
A French Chef's Culinary Alchemy . . . . . 54
An American Quick-Lunch . . . . . 57
How they do it in France . . . . . 75
Where Smoked Hams were Suspended from the Rafters . . . 98
Before Breakfast in the Garden . . . . . 119
Chafing Dish Cooking . . . . . 149
A fifteenth-century Kitchen in France . . . . . 162
Cooking Class at the Wadleigh High School . . . . . 172
Fireless Cooking in Hawaii . . . . . 193
The Tour d'Argent and Frederic Delair . . . . . 217
Carême . . . . . 218
Boeuf à la Mode . . . . . 246
Coming to Market, Brittany . . . . . 263
The World's Greatest Market Place . . . . . 268
Paris Market Porters . . . . . 271
Halles Centrales . . . . . 273
A bit of the great Paris market . . . . . 276
Macaroni Drying . . . . . 322
Deer in German Forest . . . . . 369
Menus on a German Steamer . . . . . 382-384
The Boar . . . . . 420
"Ye Olde Cheshire Cheese" . . . . . 446
London Bill of Fare . . . . . 448-449
The Sugar Bush . . . . . 465
Brillat-Savarin . . . . . 474
New York down town Lunch Menu . . . . . 484-485
Luther Burbank . . . . . 510
Burbank's Spineless Cactus . . . . . 518
Chinese Canal . . . . . 556
Javanese Tea-Picker and Porter . . . . . 578

# PREFACE: A BOOK FOR EVERYBODY

IT is not often that an author is so fortunate as to have a subject which is of vital importance to everybody, without exception. Everybody eats, and everybody wants to enjoy his meals; yet few know how to get the most benefit and pleasure out of them. The French are far ahead of us in this respect; they are a nation of gastronomers, understanding fully the importance to health and happiness of raising only the best foodstuffs, cooking them in savory ways and eating them with intelligence and pleasure. One of the main objects of the present volume is to show that we have the material for the making of an even more gastronomic nation than the French are, and that Americans, especially if caught young, can be taught to eat in a leisurely way and to refuse to accept anything that lacks appetizing flavor.

Flavor! In that word lies the key to the whole food problem. Undoubtedly the nourishing property of food is also of importance; without it we could not live. Yet, as Luther Burbank has keenly remarked, if we eliminate palatability (that is, flavor) from food, it is no more than a medicine, "to be taken because it produces certain necessary results." Moreover, a little

of this medicine goes a great way. Horace Fletcher lived for years on eleven cents a day; and two university professors—Dr. J. L. Henderson of Harvard and Dr. Graham Lusk of Cornell—have demonstrated, independently, that a dime a day, intelligently expended, is enough to keep body and soul together. What more we spend on food—and we probably average five times that amount—goes chiefly for flavor. It is the flavor that makes us willing to pay more for good butter than for good oleomargarine, for fresh chicken than for cold storage fowl, for Virginia ham than for ordinary ham, and so on throughout the list of foods; for there is no difference in nutritive value in any of these cases.

This being so, it seems passing strange that while so many good books have been written on the nutritive aspects of foods, mine is the first volume in any language treating specially of this same flavor, on which we spend so much of our income, and which is so important to our health. The explanation lies in the fact that flavor is generally looked upon as something merely agreeable—like the fragrance of strawberries, or the vanilla extract we put into ice cream—but of no vital importance. It was this misunderstanding that prevented me from keeping the title "Flavor in Food" which I had intended to use. At a conference with the publishers we decided that (since, after all, the book also discusses many other aspects of the food question), it would be wiser to use the title "Food and Flavor."

Nevertheless, Flavor (with a big "F" to emphasize its importance) is the principal theme, and the most important chapters are the second and the last in which I discuss its superlative value, not only as the source of countless wholesome pleasures of the table, but as a guide to health. The gist of the book lies in the sections "An Amazing Blunder" and "A New Psychology of Eating," in which I have shown that we need flavor as much as we need food if we wish to be well; for food without flavor is not appetizing; and when food is not appetizing it lies in the stomach like lead and causes dyspepsia, the national American plague. The final chapter considers the important difference between appetizing flavor and mere fragrance, the neglect of which has created no end of confusion and done so much harm.

In the pages concerned with "Ungastronomic America" and "Our Denatured Foods," I have dwelt on some of the evils which have resulted from the giving up of the old-fashioned condiments (especially woodsmoke) in favor of the much cheaper chemical preservatives which denature our food, that is, destroy its appetizing flavor, and give rise to countless adulterations and deceptions. It was not with any "muckraking" intentions that these pages were written, but merely to increase the present wholesome discontent and pave the way for better things by making it clear to all what those better things are, and indicating ways

of thwarting the unscrupulous adulterators and dealers. There is need of a good deal of hard fighting, for there are in many towns health officers who thrive on "graft" as well as wealthy manufacturers of undesirable preservatives who prevent the passage or enforcement of pure food laws; yet I believe the time is not very far distant when these two chapters will have little more than a historic interest. Pending that time, *caveat emptor*—let the buyer beware.

The rest of the book is mainly constructive, and under the head of "Gastronomic America" I have tried to paint a glowing picture not only of present pleasures of the palate but of keener ones to come, thanks to Luther Burbank and other educators of fruits and vegetables. Among these educators are the specialists of the Department of Agriculture. The Government of the United States has done more than that of any other country to give useful advice to the growers of food products—and to cooks, too! Throughout this volume I have missed no chance to call attention to its many helpful publications, besides summing up the matter under the head of "Governmental Gastronomy." It is a topic of tremendous importance to farmers, vegetable gardeners, dairymen, and all who are concerned with the growing or distributing of food stuffs. Farming is defined as "cultivating the ground in order to raise food"; and why farmers, quite as much as epicures, should be interested in the *best foods*, I

have explained in the section headed "Commercial Value of Flavor," with illustrations showing how a tiller of the soil can double or quintuple his income or even make a big fortune by taking the demand for appetizing flavor as a guide.

Knowing that they do many of these things much better in Europe, I made a special gastronomic trip in 1912 to gather first hand information in the market places, gardens and restaurants of France, Italy, Germany and England. I have dwelt on the good things raised and prepared in those countries, such as the salads, the poultry, the bread, the butter, the cheeses, the wonderful cuisine of France; the olive oil, the economical substitutes for meat, and the macaroni (the *real* staff of life) of Italy; the diverse delicatessen of Germany (including live fish brought to the kitchen and genuinely smoked meats and fish); the Wiltshire bacon, the Southdown mutton, the cakes and marmalades of Great Britain. Information on many things like those, concerning which there is a widespread curiosity, has not before been brought conveniently between two covers, and I am sure I need not apologize for having followed the example of the gossiping Brillat-Savarin, in presenting this information largely in the form of a narrative of personal experiences, and with pertinent anecdotes.

To the chapters on the "Science of Savory Cooking" and "A Noble Art" I wish to call special atten-

tion because in them lies, I am convinced, the ultimate solution of the urgent problem of domestic help, as well as the problem of improving the average American cuisine, which is a still larger one, because in eleven out of every twelve families the women have to do their own cooking. Too many women, not to speak of men, do not know that cooking really *is* a science, (which electricity will soon make an exact science), and the practice of it a fine art, experts in which may well look down proudly on the mere factory and shop girls who foolishly think they are above them. Schools, women's societies, and society women have taken up the matter in England as well as in America, and great changes are impending—changes which, it is hoped, this volume, coming at the "psychological moment," will help to accelerate.

FOOD AND FLAVOR

# FOOD AND FLAVOR

## I

## UNGASTRONOMIC AMERICA

### MARK TWAIN'S PATRIOTIC PALATE

MARK TWAIN swore by American food as he did by the American flag. When he got as far as Italy, on the trip which resulted in "A Tramp Abroad," he became discouraged, wrote a homesick panegyric on the good things he could not get in Europe, and made a list of viands to be ordered by the steamer preceding his, to await him on his return. Among these dishes were fried chicken Southern style, Saratoga potatoes, baked apples and cream, hot biscuits, buckwheat cakes with maple syrup, toast, oysters in various styles, softshell crabs, terrapin soup, wild tur-

key, cranberry sauce, canvasback duck, prairie hens, bacon and greens, catsup, green corn, hot corn-pone, stewed tomatoes and pumpkin pie. As he lived for years thereafter, it is not likely that he carried out his program.

These gastronomic specialties certainly are not to be sneered at; European epicures envy us most of them. It must be admitted, also, that American cookery has made considerable progress in the last decades, and that there has been an improvement in eating habits since Dickens, in "Martin Chuzzlewit" (1843), described the "violent bell ringing"; the "mad rush for the dining-room"; the "great heaps of indigestible matter" which "melted away as ice before the sun"; the "dyspeptic individuals" who "bolted their food in wedges, feeding not themselves, but broods of nightmares."

Such scenes still occur, but they are no longer typical. Nor, perhaps, would Emily Faithful have occasion today, as she had in 1884, to comment on the "joyless American face," due to chronic dyspepsia. We are still made unhappy, however, by the "indigestible hot bread" and "tough beefsteaks hardly warmed through" to which she referred, and by other gastronomic atrocities.

We must not overlook the fine cooking done in many American private families, hotels, clubs, and restaurants, and we have some good old Maryland, Virginia, New England, and San Franciscan traditions to boast

of. Moreover, there are not a few who have reason to think that the culinary low-water mark is to be found on English steamships and in English inns. On the whole, however, what Pierre Blot wrote forty years ago is still true: "American cookery is worse than that of any other civilized nation." Our great national food expert and reformer, Dr. Harvey W. Wiley, put the matter in a nutshell when he said in a lecture before the General Federation of Women's Clubs, that "there is no country in the world where food is so plentiful, and no country in the world where it is so badly cooked, as right here in the United States."

### FOOD MISSIONARIES IN THE FAR WEST.

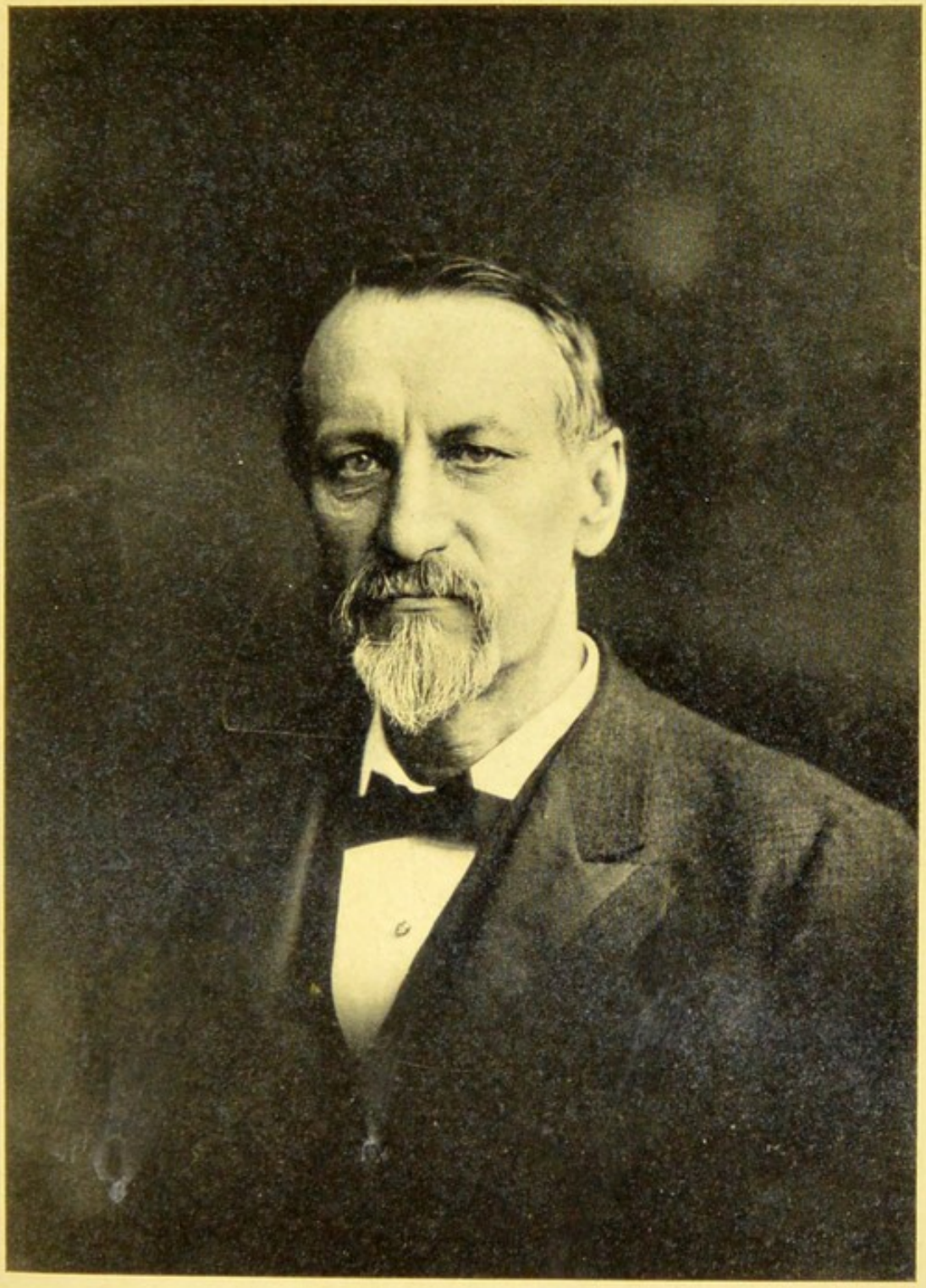
One need not go to France or Austria for a humiliating contrast. In one of his books of travel Charles Dudley Warner declared that after leaving Philadelphia the tourist "will not find one good meal decently served" until he reaches Mexico. In a southwestern railway restaurant a miner once said to me he had not eaten such an abominable meal in all the years he had spent in the wilderness. To tell the unvarnished truth, he used a stronger word than abominable. One of the details I remember was that the tough steak had apparently been fried in the drippings from a tallow candle.

In the same part of the country a great change has been brought about by the culinary and executive

genius of one man—Fred Harvey. He came to this country from England—score one for England!—when he was a boy of fourteen, with two pounds in his pocket. He got a job on a railway. There were no dining cars in those days and although in England he had not lived the life of a gourmet he was amazed by the wretchedness of the eating houses with their canned meats and vegetables, rancid bacon, oilclothed tables without napkins and incompetent service. Convinced that good eating-houses would advertise the railway and attract travel, he ventured to say so to the manager of the Santa Fé Railway, who, fortunately, not only approved the suggestion but gave him the opportunity to show what he could do. One historian relates that the manager "threw his arms around the youthful promoter and wept with joy." He had just dined at a railway station!

It was in the year 1876 that Harvey opened his first eating-house in Topeka. It made a sensation. Others soon were built along the line of the road from the Middle West to the Pacific Coast until, in 1912, there were a dozen large hotels, sixty-five railway restaurants and sixty dining-cars under the same management.

That Harvey was a born epicure is evident from the fact that when he opened the Montezuma Hotel in 1882, he would not allow, as the Kansas City "Star" tells us, any canned goods to go on the table. He sent



FRED HARVEY

a man to Guaymas and Hermosillo in Old Mexico to get fruit, green vegetables, shell fish and other kinds of food. A contract was made with the chief of a tribe of Yaqui Indians to supply the hostelry with green turtles and sea celery. These turtles, which were secured for $1.50 each, weighed two hundred pounds and were full of eggs. Mr. Harvey selected a little pool near the hotel where he fattened the turtles. A feature of the bill of fare every day was genuine green turtle soup and turtle steak. The sea celery used is a spicy weed which makes a fine salad.

Naturally, such delicacies could not be served at the ordinary railway restaurants; yet these, too, had their pleasant surprises, and were unspeakably superior to what the travelers had been obliged to put up with in pre-Harvey days. On ordering tea, for example, you would get a separate little Japanese pot with the steaming infusion freshly made for you. This was as far as Harvey could go in these places in carrying out the perfect host's maxim that every diner should feel as if the meal he eats had been specially prepared for him. But there were other details that betrayed special intelligence and thought. Thus, in stopping one day for supper in one of the Harvey restaurants in the sizzling Arizona desert, I was delighted to find the table loaded down with the sour things that one craves on hot days—diverse vegetable and meat salads.

One of the amusing details in connection with the

Harvey organization was that it became known as a marriage agency, because the neat and well-trained waitresses got married one after another, some of them to wealthy ranchmen.

Of greater importance was the fact that the Harvey eating-houses served as schools to all the Southwest, bringing about a general reform. The rival railway systems, naturally, could not persevere in their barbarian ways.

Fred Harvey is no more, but his influence survives and his name is one to conjure with throughout the Pacific slope.

In the East, also, one comes across a good meal now and then in a dining-car or a railroad station. There is one, says Edward Hungerford, up in the northern part of New York State that has never yielded its supremacy to any circuit-riding café on wheels. When a certain high officer of the busy road that spreads itself apart at that junction goes up there, he orders the cook of his private car to shut up the kitchen. "Do you suppose that I would pass by that town," he says, "and the best square meal in the whole State?"

Those things, alas, are exceptional. Taken the country through, railway restaurants and diners are to this day even worse than the average hotels and boarding houses. Flavorless, unappetizing meats, insipid vegetables, doughy pies and soggy cakes are the rule at our eating places everywhere.

The most astonishing thing about this is that the average American enjoys a good meal, if he can get it, not a bit less than the average European, as I have observed hundreds of times in our own best eating houses and in foreign hotels and restaurants during ten trips to Europe. And that the capacity to enjoy a civilized meal is inherent not only in those who can cross the ocean and pay for Parisian dainties, but in the humblest tiller of the soil or railway employee, was amusingly made manifest to me many years ago in the wild and woolly West. I was brought up in the village of Aurora, Oregon, which was inhabited chiefly by members of a German colony, who differed in nowise from millions of poor but honest men and women in the Fatherland. One of the most precious things they had brought from the old country was the skill to cook a savory meal—a meal that one could enjoy to the full without feeling the pangs of dyspeptic remorse for hours afterwards.

The Aurora hotel soon became far-famed; and when the first railway was built from San Francisco to Portland, the astute makers of the time-table somehow managed it so that most of the trains stopped at Aurora, though it is but twenty-eight miles from the terminal, Portland.

Nor was that all. The popularity of the Aurora cookery suggested the idea that it might be profitable to erect a restaurant tent in Salem during the annual

State Fair. The result was astonishing. All the other eating-places were soon completely deserted; the Aurora tent had to be enlarged, and there was such a mad rush for seats at the tables that in a few days nearly every man and woman and boy and girl in the village had been drafted to serve as cooks or waiters.

It was plain German *bourgeois* cooking; but the sausages were made of honest pork and the hams had the appetizing flavor which the old-fashioned smoke-house gives them; the bread was soft yet baked thoroughly, the butter was fresh and fragrant and the pancakes melted in the mouth. As for the supreme effort of Aurora cookery—noodle soup made with the boiled chicken (*not* cold-storage chicken) served in the plate—the mere memory of it makes my mouth water, four decades after eating it.

In justice to Portland, which in those days was in a benighted condition fully warranting the action of the railway men in making Aurora their culinary terminus, let me hasten to add that at present, with its Chinook salmon and Columbia River smelt, its hard-shell crabs and razor clams, its delicious Willamette crawfish—rivaling the best French *écrevisses*—its fragrant mammoth strawberries, its juicy cherries, and its world-famed Hood River apples, it is hardly second to San Francisco as a gastronomic center. In Oregon, as in Washington and California, the epicure fares particularly well because the luxuries of life are as

cheap as the staples and quite as abundant, if not more so.

### ARE WOMEN TO BLAME?

Inasmuch as an American is quite as capable of enjoying a good meal as any one else, why is it that we are so conspicuously ungastronomic as a nation?

It is obvious that the cooks are largely to blame. It is so difficult to procure a good cook that most of us give up the search in despair and resignedly eat what is placed before us.

In Europe it is still comparatively easy to find a young woman or a man who, by domestic training, has learned to prepare a savory meal and is willing to take the trouble necessary to get satisfactory results. In the United States few of the helpers available have any domestic traditions to fall back on. As a rule, they frankly admit, on applying for a place, that they know only "plain cooking." As a matter of fact, few of them can even boil an egg or a potato without spoiling it. They are not interested in their work, *as they would be if they were experts*, and their main object is to get as much money as they can for as little work as possible. To be sure, a cook's hours are long, but many of them are spent in dawdling.

It is unfortunate that most of our hired cooks are Irish. There are and have been excellent cooks of this nation, but as a rule the Irish are not so interested in

this art as the French, Germans, Italians and Swedes, and the results are deplorable, especially when, as is usually the case, the mistress is herself so ignorant that she cannot tell the cook why the food is wrong and how it could be improved.

The worst of it is that if the mistress of the house does know enough herself to teach the new cook some tricks, the latter is likely to leave because, on account of this newly acquired knowledge, she can get higher wages elsewhere! Which reminds me of what happened to my wife's grandmother. She once had a cook who was absolutely green, but who wanted the highest wages. When asked how she could demand so much when she admitted her ignorance, she retorted:

"Ah, Mrs. Black, the larnin' is the sevarest part of it."

It will not do, however, to put all the blame on the domestic helpers. Only one family in twelve, even in our wealthy country, can afford to hire a cook. In the other eleven families the women of the house are personally responsible for the meals. Why are these generally so unsatisfactory?

Visitors from abroad who have asked themselves this question, usually answer it by saying that Americans have idolized and spoiled their women and are now paying the penalty.

"The European," says one of them, "takes it as a matter of course that the woman he marries will be his home-maker and housekeeper, able and willing, if

necessary, to do the careful cooking on which his health and his enjoyment of life depend so largely. In America the main object of the women seems to be to throw off all the responsibilities of housekeeping so that they may either gad about socially or engage in outside employment. The necessary meals are hastily cooked, marketing is done by telephone, the grocer and butcher are foolishly trusted as to the quality of the raw material, and the results are such as we see—monotonous, unwholesome, insipid meals, followed by indigestion."

There is no doubt some truth in this foreigner's observations, though he takes no account of the many thousands of American wives who work as hard to make their homes abodes of comfort, health and happiness as their husbands do to supply the necessary cash.

On the American men falls a large share of the blame for existing conditions. Completely absorbed in their private and particular business they labored too long under the delusion that their whole duty consisted in supplying the cash needed for housekeeping. Their indifference to the sources and the quality of the raw material of the food they ate, brought into existence a horde of adulterators and poisoners on a scale never before witnessed anywhere—and that is another important reason why we are not a gastronomic nation. With such sophisticated material the best cooks in the world could not prepare appetizing, wholesome meals;

and when meals are not appetizing, men lose interest in them, bolting their food, and passing on to things that seem more important and agreeable.

Adulterators and spoilers of food have existed since the days of the ancient Greeks and Romans and probably they flourished long before them; but never before had the far-famed "Yankee ingenuity" been brought to bear on the ignoble task of deceiving people as to what they were eating and drinking.

Of this ingenuity a striking illustration was given at Washington when the pure food agitators, headed by Dr. Wiley of the Department of Agriculture, gave an exhibit before Congress. On a table had been placed —along with other similarly fraudulent articles—a bottle of "honey." On the surface of it floated a bee. Now, the man who put that bee in the bottle had said to himself: "Nine persons out of ten will, on seeing it, conclude instantly that it got in accidentally and that it proves the honey to be genuine." But that bottle never contained any honey; it was filled with a sticky, sweet substance resembling honey in appearance, but instead of being made up of the products of the bee's beneficent floral industry, it contained ingredients some of which were injurious to health.

### THE DANGER IN OUR FOOD.

That bottle was a sample of thousands of adulterated or entirely spurious "foods" for which American

men and women had been for a long time spending good money in the belief that they were getting what they paid for.

A quarter of a century ago the food poisoners and adulterators spread a net of fraud across the United States, the like of which the world had never seen; and for a long time the American public, with the meekness (up to a certain point!) for which it has become notorious, submitted to this abuse, eating the drugged food and suffering the daily pangs of indigestion, wondering vaguely what was the matter—why Europeans found us a nation of dyspeptics—and paying fortunes to doctors, and to vendors of patent medicines, without being able to avert the final general breakdown.

Then something occurred which made the worm turn on its tormentors—the "embalmed beef" incident.

Major-General Miles, backed up by other officers, declared positively that most of the canned beef supplied to our soldiers during the war with Spain was unfit for human food, and that he was convinced that the refrigerated beef supplied was highly deleterious because of the introduction of chemicals for preservative purposes. The court which investigated these charges, while admitting some of the alleged evils, indulged, many people thought, in whitewashing; so the public at last made up its mind that "something was rotten in the state of Denmark."

Particularly was it impressed by the statement that

the food supplied to the army was "not different from that generally sold to the public." That admission made people ask themselves: "What, then, are *we* eating?"

The result was a general awakening and investigation, a country-wide search which revealed the shocking fact that the community was harboring thousands of seemingly respectable citizens who were piling up fortunes by plying the deadly trade of modern Borgias, slaughtering infants and invalids and making even the robust feel uncomfortable most of the time.

The chemicals used were formalin, boric and salicylic acid, fluo-sylicate of ammonium, aniline dyes, and a number of secret compounds that were sold to packers and dealers, enabling them to doctor spoiled meats and other foods in such a way as to deceive the purchaser and consumer into thinking them fresh and wholesome.

To realize the full extent of this nefarious traffic one has to go back to the newspaper reports of the investigations and food tests, especially in the year 1899, after the "embalmed beef" inquiry. I have before me clippings that would fill fifty pages with gruesome details; but a mere peep into this culinary chamber of horrors must suffice.

"The use of antiseptics as preservatives is becoming alarmingly great," declared Prof. A. S. Mitchell, analytical chemist of the Wisconsin Dairy and Food

Commission, before the Senatorial Committee on Pure Food Investigation. Among the preservatives he named was a liquid called "freezene," which he said, was almost pure formic-aldehyde, the substance that several chemists at the military inquiry had claimed to have found in the beef furnished the army. It acts disastrously upon the tissues of the stomach, but was often put into the milk and butter supplied to families. Butchers employed freely, especially in "Hamburger steaks," sulphite of soda, which not merely arrests digestion, but is, as another Government expert remarked, practically the same he had used as a medical student to preserve corpses, and later to disinfect houses where smallpox patients had lived.

The New York "Herald" of June 4, 1899, contained a page and a half of exposures, with these headlines:

POISON AND ADULTERATION FOUND IN ALL FOOD PURCHASED BY THE "HERALD." FORTY SAMPLES ANALYZED AND NOT ONE OF THEM WHAT IT PURPORTED TO BE. TEA THAT CONTAINED ALMOST EVERYTHING BUT TEA LEAVES. SOME FACTS THAT EVERY HOUSEKEEPER SHOULD KNOW. THE CITY AUTHORITIES DO LITTLE.

One of the samples of what was sold as "tea" was "composed of refuse of many kinds—hair, mouldy leaves from everything that grows but the tea plant." Another sample contained "dust, seed-pods, foreign woody stems, and unidentified refuse."

To cite one more of the two-score analyses made by the "Herald's" expert (James C. Duff, consulting chemist to the New York Produce Exchange): "The sample of American macaroni contains artificial yellow coloring matter, egg-yolk color, composed of flour and the coloring matter. This coloring matter has as its base chrome colors—substances very poisonous. The genuine Italian macaroni contains nothing injurious to health."

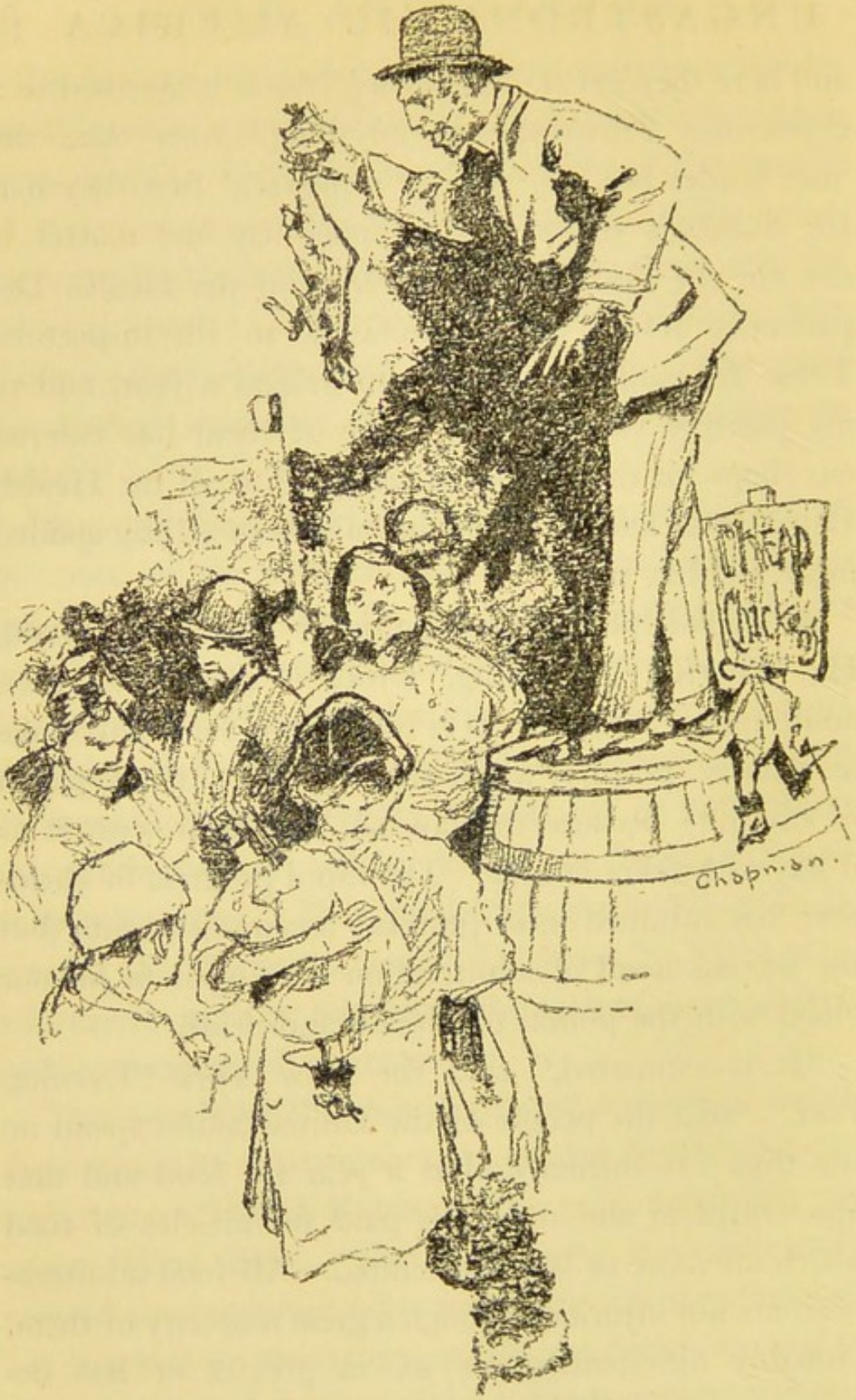
"Reports from analysts in other cities show that 92 per cent. of the allspice examined is adulterated, 50 per cent. of cinnamon, 60 per cent. of ginger, 100 per cent. of mustard, and 70 per cent of pepper. . . . It is a matter of record that the demand for the materials for adulteration has called into existence a branch of manufacturing industry having for its sole object the production of articles known as 'spice mixtures' or 'pepper dust.' They are sold by the barrel as 'P. D. ginger,' 'P. D. pepper,' or 'P. D. cloves.' These manufacturers openly advertise themselves as 'assorters and renovators of merchandise. . . .'"

The New York "Tribune" printed a report of an address made by a representative of the Benchmen's Association of Retail Butchers who said, regarding the upper West Side: "Decayed meats are chemically treated to counteract odor and outer discoloration and are hawked on the street corners on Saturday nights. The shoppers of that locality are after something cheap,

and here they get it. Resulting illness is ascribed to a mysterious Providence or anything rather than the 'nice tender broilers, two for a quarter,' that they had for Sunday's dinner. The police say the matter is one for the Health Department, and the Health Department refers your complaints to its inspectors. These are paid from $1,200 to $1,400 a year, and to my positive knowledge not one of them has entered our shops for the last seven years. For all the Health Department knows, we might have been selling spoiled meat all that time."

A Philadelphian investigator of adulterated food, H. Wharton Amberling, wrote: "There has been adulteration for ages. It is born of the same parentage as robbery, perjury, arson and murder. It has grown in enormity because the law has not dealt with it as it has with other crimes. The rapid progress of chemistry has attained most grateful accomplishments, but the leprous hand of adulteration is using it to fill our blood with the poison of disease and death."

"It is estimated," said the New York "Evening Post," "that the people of the United States spend no less than five billion dollars a year for food and that nine-tenths of this money is paid for articles of food which are more or less adulterated. All food adulterations are not injurious, though a great majority of them, probably nine-tenths, are so, in greater or less degree. . . . The art of adulterating food has been




A matter for the Health Department

carried to a very fine point by American ingenuity and has proved immensely profitable to those who practise it, while it has undoubtedly worked great damage to the general health. . . . It is a wise man who knows what he is eating nowadays."

A report of the Connecticut Agricultural Experiment Station called attention to the fact that eighty-nine samples of tea were all found pure as a result of the federal law of 1897, which established a board of seven experts to enforce the statute and forbade importation of the adulterated article.

The American products were on the other hand in a woeful condition. Sixty-three samples of fruit jelly examined showed adulteration in two-thirds of the cases by starch, glucose, aniline dyes, and salicylic acid. Pure jellies cost 25 cents a pound while these artificial jellies cost but five cents. Out of 40 samples of marmalades and jams only three were pure. Examination of nineteen samples of sausages and oysters showed "embalming" by boric acid.

### WHY THE CANDY WAS NOT EATEN.

Miss Alice Lakey, chairman of the food investigating committee of the Food Consumers' League, made a collection, as the New York "Sun" reported, of squares of flannel, a dozen of them, in brilliant hues of green, red, pink, and other colors—all colored with the coal tar dyes that came out of eatables and drinkables, she

explained, adding: "It's a wonder that our insides are not dyed all the colors of the rainbow.

"One of the meanest forms of adulteration I know," she further remarked, "is the blackberry brandy, because that is bought for invalids, aged and delicate persons, who hope to get a little strength and appetite from it. Out of 600 samples examined, 460 contained no trace of blackberries. They were made of crude spirits colored with coal tar dyes.

"Did you ever hear the story," she continued, "of the kind-hearted New York woman who invited a company of Italian girls who worked in a candy factory to a Christmas party? She had an entertainment and Christmas tree for them, and among other things was a box of fine chocolate creams for each one. When they went away every child left her box of candy on the chair behind her.

" 'Why, aren't you going to take your chocolates?' said the surprised hostess.

" 'Oh, no,' they said in chorus; 'we make those!' "

That tells the whole story. The slaughter of the innocents and the ruining of health of children by means of adulterated and poisoned candies was for decades a national crime that would have justified thousands of lynchings, if anything ever does justify such summary meting out of punishment.

Dr. Shepard, State chemist of South Dakota, framed a series of menus, on the plan of those published by the

women's magazines, to assist housewives in catering for families. Here are three, which show how any family in the United States might have reasonably taken *forty doses of chemical preservatives and coal tar dyes in one day:*

BREAKFAST

Sausages containing coal tar dye and borax
Baker's Bread containing alum
Butter containing coal tar dye
Canned Cherries containing coal tar dye and salicylic acid
Pancakes containing alum
Syrup containing sodium sulphate

DINNER

Tomato Soup with coal tar dye and benzoic acid
Cabbage and Corned Beef with saltpeter
Corn Scallops with sulphurous acid and formaldehyde
Canned Peas with salicylic acid
Catsup with coal tar dye and benzoic acid
Vinegar with coal tar dye
Mince Pie with boracic acid
Pickles with copperas, sodium sulphate and salicylic acid
Lemon Ice Cream with methyl alcohol

SUPPER

Bread and Butter with alum and coal tar dye
Canned Beef with borax
Canned Peaches with sodium sulphite, coal tar dye and salicylic acid
Pickles with copperas, sodium sulphate and formaldehyde
Catsup with coal tar dye and benzoic acid
Lemon Cake with alum
Baked Pork and Beans with formaldehyde
Vinegar, coal tar dye
Currant Jelly, coal tar dye and salicylic acid
Cheese, coal tar dye

Physicians sometimes prescribe such chemicals, when they are indicated, in very small doses. The Food Commissioner of North Dakota, Dr. Ladd, reported in a bulletin that he found from five to fifteen grains of boric acid to every pound of ham, dried beef, etc., examined; while in hamburger steaks, sausages, etc., the amount ranged from twenty to fifty grains a pound. The maximum dose of boric acid prescribed by a physician is said not to exceed ten grains daily.

### DR. WILEY'S POISON SQUAD.

Napoleon Bonaparte said that "soldiers march and fight on their stomachs." If our soldiers, fed on "embalmed" beef and other chemically treated food, had had much marching and fighting to do, Spain might have won. As it was, the American soldiers who were killed or invalided during that war, were martyrs to a nobler cause than that of humiliating poor Spain. It was their sufferings that, as already intimated, led to the national revolt against the wholesale poisoners and adulterators for commercial profit.

As a matter of course, the parties accused showed fight. One of the earliest battles was fought over borax, and it was in this battle that Dr. Wiley first came before the general public prominently. During the months from December, 1902, to July 1, 1903, he made a series of experiments on twelve young men in Washington as to the influence on the health of food

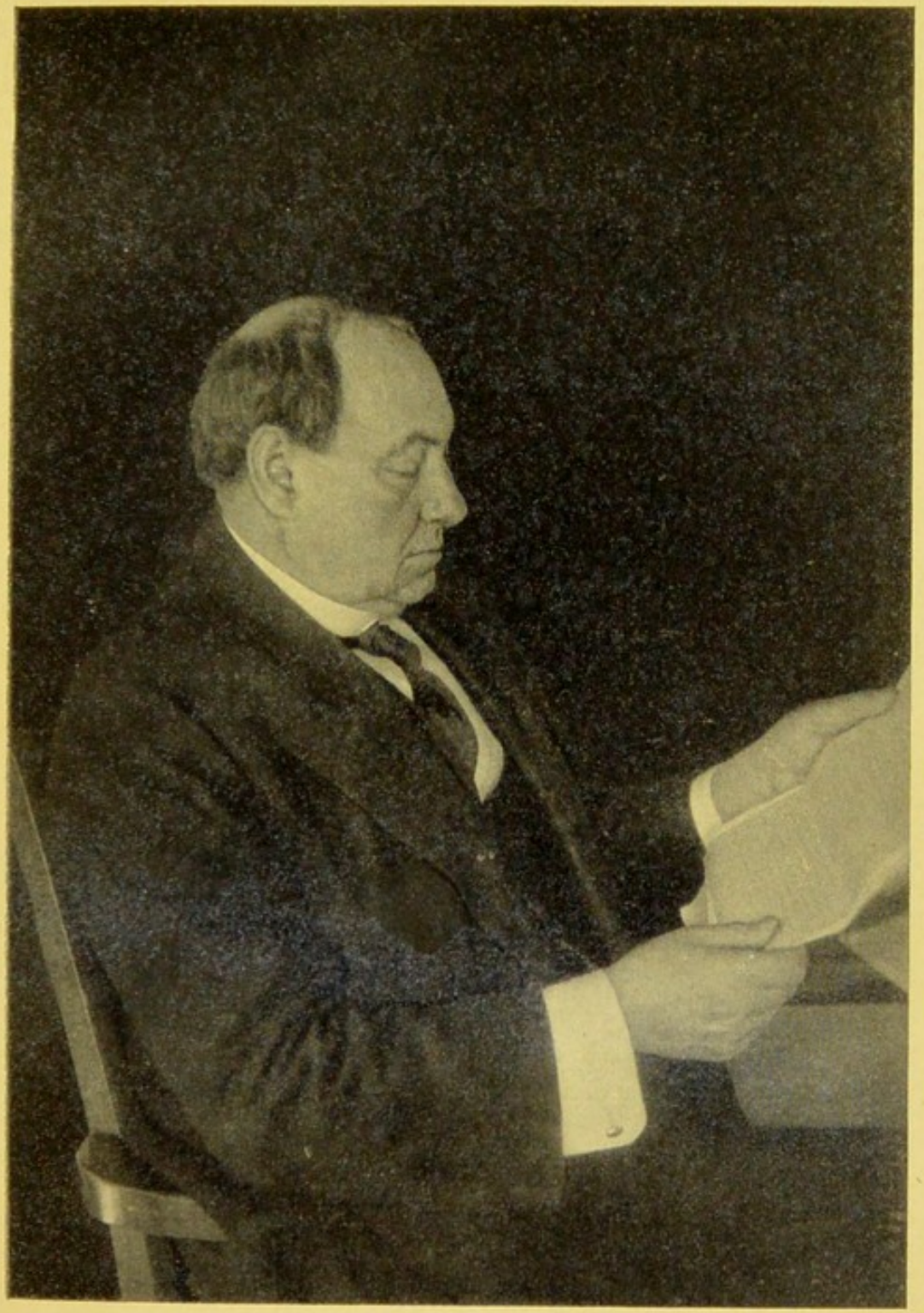
containing boric acid or borax. Some of the conclusions reached were thus summed up briefly:

When boric acid or its equivalent in borax is taken in food in quantities not exceeding a half gram daily, no immediate effects are observed; after a time there occur occasional loss of appetite, a feeling of fullness in the head, gastric discomfort, and general ill-feeling. Only the more sensitive persons develop symptoms from the amounts named. When the drug is given in larger and increasing doses, these symptoms in accentuated form develop more rapidly; most common is persistent headache with slight clouding of the mental processes. The quantity of boric acid required to produce definite symptoms varies greatly with different individuals. In some, one to two grams daily produce decided distress; in others, three grams cause little if any discomfort. Conclusions regarding the use of less than half a gram daily were not reached, but from the effect of the larger quantities taken for a short time, it is reasonable to infer that smaller doses during an extended period would also prove injurious. The results in general indicate that it is not advisable to use borax in articles of food intended for common and continuous use. When placed in foods used only occasionally and in small amounts, the quantity of the contained preservative should be stated plainly, that the consumer may know what he is eating.

One of the most interesting facts, and one known to few, in connection with these experiments, is that Dr. Wiley actually began them with a bias in favor of borax. He did not believe, he said, that borax was a harmful preservative, but he was going to find out. This statement aroused my suspicion. Knowing how much "graft" and "politics" there are apt to be in such

investigations, I made up my mind that Dr. Wiley was a fraud and that he would undoubtedly give a verdict in favor of borax. While in this frame of mind I wrote the following editorial for the New York "Evening Post" (April 8, 1903):

Dr. Wiley, of the Department of Agriculture, seems to require a long time to decide whether his "brigade of poison eaters," as the Washington wits have dubbed his free boarders, are really eating poison or only harmless food preservatives unjustly suspected of being injurious. It needed no elaborate experiments to prove that drugged food may be eaten without serious harm. Many of us are probably eating more or less of drugged food all the time without actually having to be taken to the hospital; but many others do suffer in health, vitality and capacity for work from eating it. In regard to salicylic acid and formaldehyde, Dr. Wiley himself wrote in "Leslie's Weekly" two years ago that there is no doubt of the pernicious influence of these preservatives in some cases. He also said, truly, that "the public supervision should look after the weak and diseased digestive systems rather than the strong and vigorous." Why, nevertheless, he chose to make his Washington experiments on the strongest young men he could find is a mystery he has not explained. In the "Lancet" of Nov. 30, 1901, an account was given of a series of experiments with boric acid made by Dr. Rinehart, in which the symptoms of poisoning disappeared as soon as the use of the drug was given up. Further evidence is furnished in the "Münchener Medicinische Wochenschrift" of Jan. 26. Dr. G. Merkel, of Nuremberg, experimented with boric acid on eleven patients, seven of whom promptly showed disturbance of the gastro-intestinal tract. The inevitable inference from such facts is either that the use of boric acid as a preservative of food should be prohibited by law, or, at least, that the law should require mention of its use on the label of



HARVEY W. WILEY

canned goods, and in butter, cream, milk and meat, in order that those whose digestion is not as robust as that of Dr. Wiley's select boarders may take warning.

The fact that these remarks were widely copied showed that many other editors shared my suspicions. Then came Dr. Wiley's verdict, which proclaimed him the honest, bold, incorruptible champion of truth who was soon to become respected, admired, and idolized by the whole American public, with the exception of those who had commercial reasons for disliking him.

Perhaps I may be pardoned for inserting here a reference to an amusing incident that occurred during this controversy. Another article of mine, in which I had spoken disrespectfully of borax, resulted the following day in a visit to the office of the "Evening Post" by a man who wanted to see the "borax editor." He was shown to my room, and promptly proceeded to inform me that I was entirely mistaken in thinking borax harmful. I replied that I considered borax one of the most useful things in the world, the greatest of "dirt-chasers," indispensable on the wash stand and in the wash house; but as for internal use, I had had days of discomfort which made me look on it with feelings of genuine alarm.

"I 'll tell you what I 'll do!" retorted the man, who represented one of the large borax companies. "I am willing to take a glass of water, put in a tablespoonful of borax and drink it right before you." "That 's

nothing," I replied; "I would n't hesitate to do the same thing. Borax is not a deadly drug like arsenic or strychnine, it is a chemical which, taken into the stomach in small doses day after day, week after week, and month after month, acts as a cumulative poison, gradually weakening even the strongest stomach; and, inasmuch as the stomach is the source of most diseases, thus paving the way for all sorts of troubles."[1]

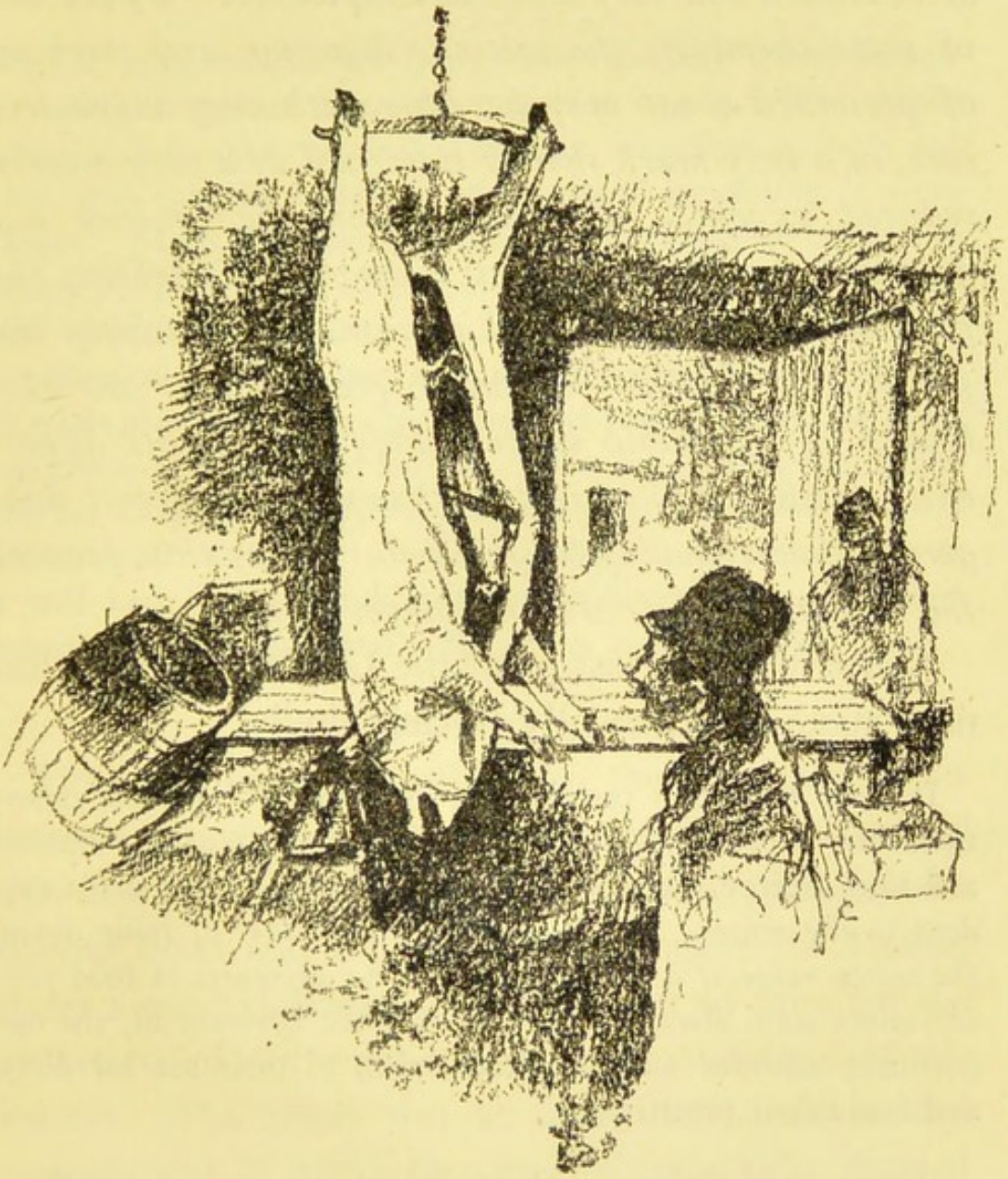
### CONDIMENTS VERSUS CHEMICAL PRESERVATIVES.

Until about three decades ago it was customary the world over to cure meats with condimental substances, particularly salt, vinegar, sugar, and wood smoke. These not only preserved the meats but developed their inherent flavors, while adding others that were equally relished by consumers, thus enabling them to enjoy their meals without disagreeable and depressing after-effects.

All at once, like a devastating avalanche, the wholesale use of non-condimental chemicals tumbled upon the country. Why the avalanche grew so fast may be gathered from a few lines on page 37 of the second edition of Dr. Wiley's admirable book, just referred to in a footnote; lines which deserve to be printed

[1] The argument that small doses of chemicals can do no harm has been demolished with merciless logic by Dr. Wiley in his "Foods and Their Adulteration" (second edition, pp.38-40). This admirable book should be in every home, for daily reference. It gives, in untechnical language a vast amount of information regarding all our important foods, with hints as to the detection of dangerous or objectionable impurities.

in italics, and which every reader should engrave on his memory:



The old-fashioned way

*The chemicals employed are those known as germicides. In the quantities used they neither impart a taste nor odor to a preserved meat, but by their germi-*

*cidal properties prevent the development of organic ferments and thus make the preservation of meat far more certain and very much less expensive. By the use of some chemicals the salting, sugaring, and smoking of preserved meat may be done with very much less care, in a very much shorter time, and at a very greatly reduced expense. For this reason the practice has gained a great vogue, not as a means of benefiting the consumers, but rather as a means of enriching the packer and dealer. Chemical preservatives are also highly objectionable because they keep meats apparently fresh, while in reality changes of the most dangerous character may be going on. They thus prevent the display of the red light danger signal.*

Concerning this last point the London "Lancet" has used another and equally forcible simile:

> It is by no means certain that preservatives in small quantities can prevent decomposition. They do stop putrefaction and thus destroy the signs by which decomposition is made evident to the senses. Their effect *resembles that of tying down the safety valve of a steam engine.* The advocates of food preservatives seem always to ignore, or to be ignorant of, the opportunity afforded and advantage taken of their use for dirty and fraudulent practices.

These remarks are of the utmost importance, for they call attention to the fact that even if the chemical, non-condimental preservatives were not slow poisons, it would be necessary to forbid their use because they en-

able unscrupulous persons to make foods of the most nauseating substances. Let me quote another expert, who states the case vividly:

> Milk, eggs and fish are three foods especially which become extremely dangerous when decomposition sets in. The chemicals placed in them by dealers destroy the offensive taste and odor, thus robbing nature of her means of protecting us from danger. Many little children killed from eating ice cream and bakery products never would have tasted them if the smell and taste of the rotten eggs and putrid milk had not been hidden by the chemicals. The vilest, most malodorous factory refuse may be made pleasant to the sight, taste and smell through the magical effects of benzoate of soda, saccharin and coal tar dye. The coal tar dye gives a clear, translucent appearance to the product; the saccharin sweetens it and benzoate of soda embalms it so it will keep for a decade without spoiling. These disguised putrid foods are additionally dangerous in hot weather.

### SCOTCHED, NOT KILLED.

The great outcry raised by all these startling revelations concerning the unscrupulous methods of the food poisoners resulted in the passage, in 1906, of the epoch-making Food and Drugs Act, which gave the United States a most elaborate and minute set of laws for the protection of the public and the punishment of offenders. The result was an immediate and decided improvement in many departments, especially that of canned fruits, concerning which Dr. Wiley wrote in 1911 that "the time is now rapidly approaching when all such goods will be free of any imitation or adultera-

tion, and this will add greatly to their value in the markets of the country."

In many other directions, however, the drugging of foods with slow poisons continued. The snake was only scotched, not killed.

"If you took all the food in New York City to-day and put it in a big tent down in Texas, I would throw away 40 per cent. of it," said Gaston G. Netter of the Geneva White Cross Society (which is the International Pure Food Association), in October, 1911. "The people here in New York City are being hourly poisoned by food labeled as absolutely pure. I buy it and test it every day and I know. I saw some sardines marked 'pure sardines in olive oil.' They were a disintegrated mass of decayed, poisonous fish, and the oil had never known an olive. A large percentage of the vinegar used for preserving such things as prunes is an acidulated preparation fatal to the lining of the stomach."

The vinegar sold by many grocers in defiance of the law is made with acetic acid, which is prepared by the destructive distillation of wood. So little of this is needed that the adulterator can make a gallon of "vinegar" at a cost of two cents, or a barrel for a dollar. This, sold in bottles, yields a profit of over $20 a barrel. Sometimes a trace of malic acid or concentrated apple juice is added to give a reaction which may *fool the analyst.* It is this poisonous stuff that

is used in American homes to dress salads and is put into bottles of chow chow, chili sauce, and the pickles so dear to school children.

Concerning the cheap candies that are still dearer to the children, Harry P. Cassidy in an address before the wholesale candy dealers (reported in the New York "Sun" of March 10, 1912), said:

"We have found burnt umber in candy which is sold and guaranteed as pure to the small shopkeepers. We have found stearin in it which melts only at a temperature of 135 degrees Fahrenheit, whereas the temperature of the human body is only 98.6 degrees. We have found furniture glue and dangerous ether flavoring matter and paraffin and shellac and many other injurious substances which the members of this association handle."

Another speaker at this meeting, Prof. Charles La Wall, spoke of lampblack as being used to color so-called licorice and of marshmallows that had been blued with ultramarine, just as bluing is used in washing clothes. Poisonous sulphuric acid may be contained in molasses, glucose, shredded cocoanut and many other things. "As candies are often composed chiefly of these four products, a child in buying a penny's worth of candy may get four doses in one of the deadly sulphites such as the cleaner uses in whitening our straw hats."

America is specially noted, as Rutledge Rutherford

remarks in the "National Food Magazine" (1912), for two things—its chemicalized food and its infantile mortality. According to the estimate of the New York food expert, Alfred W. McCann, three million persons in the United States were made ill by adulterated foods in 1911.

That was five years after the passing of the Pure Food Law. The trouble with that law is that it is not interstate. A dishonest man in one State can do all the food "doping" he pleases as long as he does not sell any of it in another State. Most of the States now have laws of their own on this matter, but often they leave much to be desired.

What is worse, these laws are not enforced; or, if the criminals are brought to bay, the punishment is so mild that it does not prevent a repetition of the offense. "If a grocer knew that a can of tomatoes or a can of sardines sold by him could be taken to the corner and analyzed and if found bad that he would be prosecuted, the pure food law would be a real thing," says Gaston G. Netter, who asserts that if New York City would bring about such a reform—at a cost of perhaps $150,000 a year—it would "do away with half the medical clinics."

Fines alone will not suffice to bring about a reform. We can hardly follow the example of the Turks who, if a baker gives false weight or adulterates his bread, cut off one of his ears and nail it to the

door post. But we could follow the example of the wise municipal officials who compelled the Munich brewers to make honest beer, out of malt and hops alone. At first, fines were imposed for using other materials, and these fines were made larger and larger; but the brewers found they could pay the highest fines and still save money by using chemicals. Then the lawmakers changed their tactics; the "man highest up" was threatened with imprisonment. The millionaire brewers had a pardonable aversion to jail—and from that time on Munich beer became the best in the world. Ere long, whole trainloads of it began to be sent daily in all directions—to North Germany and Russia, to Paris and London, to Vienna, and to the cities of Italy. The brewers had been compelled, at pistol's point, to acknowledge the truth that, after all, in the long run, honesty is the best policy.

Some of the largest American manufacturing firms have followed this policy voluntarily, though the prices they have to pay for good fresh material places them at a great disadvantage to the adulterators who buy any rotten old thing and "renovate" it, or else make the article entirely of chemicals.

"In four years," said Alfred W. McCann (in March, 1912), "the Government has caught nearly fifty wholesale adulterators in the act of shipping bogus vinegar from one State into another. In every instance the Government won its case, but in every

instance petty fines were inflicted by the courts and the same offenders were caught again and again. . . . Small fines have no deterrent effect on food frauds. The game is too profitable to suffer extinction under any other influence than jail sentences, and jail sentences have not been imposed in a single case brought by the Government against food or drug adulterators."

Food and drug adulterators are wealthy men, but they are not stingy. They gladly share their sordid earnings with the politicians who protect them. "Why do the States delay in enacting uniform laws patterned after the excellent national laws?" asks Mr. McCann; and his answer tells the plain truth: "Each State has some powerful pet food industry to protect and some weak legislators willing to do the bidding of the fakers."

Every reader of this book perused in the newspapers the story of the disgraceful conspiracy in Washington against Dr. Wiley, and remembers vividly the nation-wide outburst of indignation which came to the rescue of the courageous chemist and made him a national hero. He remained for the time being, but his enemies were not punished, although the President promised to reform the Department of Agriculture. His failure to do so is one of the principal reasons why he was not re-elected. Dr. Wiley, seeing that his efforts to secure the enforcement of the Pure Food Laws were useless, at last resigned, and in "Good

Housekeeping" for October, 1912, he gave some of the reasons for this step.

The Remsen Board was created for the express purpose of reviewing his decisions against food manipulators. It never missed a chance to reverse them, to the huge delight of certain manufacturers and dealers. Although the Moss investigating committee unanimously pronounced the Remsen Board as wholly without authority, its decisions were followed by officials of the Government; important matters referred to it were held in abeyance. For instance, an exhaustive report of the experiments made in the Bureau of Chemistry, which showed, in Dr. Wiley's opinion, "the injuriousness of copper sulphate when added to foods, has been hibernating in the Department of Archives for the past four years and its use permitted in the interim."

The opposition to Dr. Wiley's decisions brought about "practical paralysis in all matters pertaining to the addition of benzoic acid, sulphurous acid, saccharine, sulphate of copper, and alum to food products. As it was the addition of these bodies which constituted 95 per cent. of the total adulteration practised, it is easy to see that, so far as adulteration was concerned, the food law became practically a dead letter."

The physicians of the country, who, better than others, know the danger of using drugs indiscriminately, sided with Dr. Wiley. At a meeting in Pitts-

burg of the American Medical Association, representing 25,000 physicians and surgeons, that body "in spite of the decision of the referee board, pledged itself uncompromisingly against benzoate of soda and all other chemical forms of food preservatives."

How bitterly the war against Dr. Wiley and pure-food legislation was carried on, not only at Washington but in various States with aid from Washington, is illustrated by the following extract from a letter written to Dr. Wiley by the Health Commissioner of Indiana:

> It is not necessary to recall to you the tremendous difficulties under which the State labored when it endeavored to prevent the overthrow of its pure food law because of the activities of the Department of Agriculture in behalf of the firms who were seeking that end; how we were refused the assistance of yourself and your chemists; how we had to compel the getting of testimony by an order of the court of the District of Columbia, and how, on the other hand, employees of the Government known to be in sympathy with the firms bringing suit against us were sent to Indianapolis to testify against the State at the expense of the Department of Agriculture.

Another illustration of the war on the Pure Food Laws was given in the New York "Globe" of Oct. 24, 1912, by Alfred W. McCann. After pointing out that "there has been no let-up in attempts to deceive," and that "food ideals depend absolutely on the integrity and zeal of a few so-called fanatics like Dr. Wiley, who are thus far responsible for all the advance we have made," he goes on to say:

In the State of Pennsylvania one of the most active pure food workers, who has contributed energy and zeal to the cause of the people, H. P. Cassidy, special agent of the Pennsylvania Dairy and Food Department, after ten years of remarkable service has been removed from office by the same kind of pressure which finally disposed of Dr. Wiley.

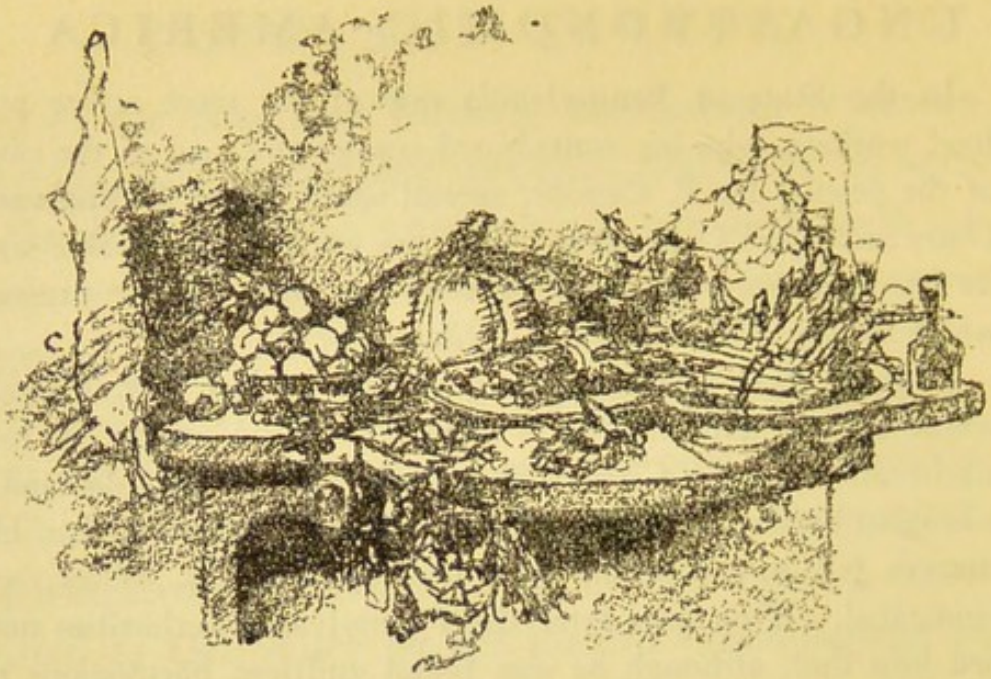
Charges were made a few days ago against Mr. Cassidy, whose activity had resulted in more than 8,000 arrests for food adulterations in the City of Philadelphia alone. He demanded a hearing before the governor. The hearing was granted. The charges fell to pieces and Mr. Cassidy, like Dr. Wiley, was vindicated. Two days later the Pennsylvania authorities notified him that, although he was found guiltless, harmonious relations between him and his chiefs had been strained, and therefore for the good of the service it was decided that he should be dismissed.

If the pure food movement were making the kind of progress which it is thought to be making, such backward steps would not be tolerated by the people, for the dismissal from office of such a man as Cassidy will serve as a warning to other pure food officials not to be too zealous in the discharge of their duties.

The direct result of Cassidy's dismissal will show itself in the State of Pennsylvania by a long line of cowardice in applying the law. I make this prophecy and guarantee its fulfilment.

It is needless to dwell further on these disgraceful efforts to thwart the Pure Food Laws. Dr. Wiley did not exaggerate when in summing up the situation he printed the following, in italics:

*No further blot upon the administration of law can, in my opinion, be found in the history of the United States than this effort of the United States Government to paralyze, belittle, and destroy a law passed in the interests of the people of the country.*



## II

## VITAL IMPORTANCE OF FLAVOR

STARTLING as are the facts in the foregoing chapter, they do not tell the whole story. We have seen that the non-condimental chemical preservatives used by the food poisoners are highly objectionable on two grounds: (1) because they are usually injurious and often deadly; and (2) because they enable unscrupulous persons to use the filthiest, rottenest material and so doctor it as to deceive the consumer into believing it to be wholesome food, whereas it may, and often does, result in ptomaine poisoning.

But there is a third indictment against the food sophisticators. The chemicals they use, not only make

the food they manipulate dangerous to eat, but they also *diminish and often completely destroy its Flavor.*

This destruction of the food Flavors may seem to those who have given no special attention to this matter a thing to be regretted, indeed, but not an actual crime. That it is a real crime, because it helps to undermine the consumers' health, I shall demonstrate in this chapter. It is necessary to know the facts now to be set forth in order to realize the full significance of the deplorable state of affairs to be revealed in the next chapter, entitled Our Denatured Foods. That chapter will continue the subject of Ungastronomic America, wherefore Chapter II may be regarded as an Intermezzo—but a most important one, for it contains truths that are of vital importance to everybody. Indeed, it is chiefly for the sake of impressing these truths on as many intelligent persons as possible that I am writing this book.

### SENSUAL INDULGENCE AS A DUTY.

Too long we have been allowing covetous manufacturers and dealers and incompetent or indolent cooks to spoil our naturally good food. We have done this because we have not as a nation understood that there is nothing in the world on which our health and hourly comfort, our happiness and our capacity for hard work, depend so much as on the Flavor of food—those savory qualities which make it appetizing

and enjoyable and therefore digestible and helpful.

It is not too much to say that *the most important problem now before the American public is to learn to enjoy the pleasures of the table and to insist on having savory food at every meal.*

There was a time when it would have been considered rank heresy to express such an opinion, and even to-day there are millions of honest folk who hold that the enjoyment of a good meal is merely a form of sybaritic indulgence.

When Ruskin wrote his "Modern Painters" he referred to the indulgence of taste as an "ignoble source of pleasure." He lived to realize the foolishness of this sneer; in one of those amusing footnotes which he contributed to the final edition of that great work, and in which he often assails his own former opinions with merciless severity, he denounces the "cruelty and absurdity" of his failing to learn to appreciate the dainties provided by his father. But his earlier opinion reflected the general attitude of the time toward the pleasures of the table.

Fortunately, in our efforts to fight the great American plague—dyspepsia—we are no longer seriously hampered by that Puritan severity which caused the father of Walter Scott, when young Walter one day expressed his enjoyment of the soup, to promptly mix with it a pint of water to take the devil out of it.

America's leading educator, Ex-President Eliot of

Harvard, has expressed the more rational view of our time in these words: "Sensuous pleasures, like eating and drinking, are sometimes described as animal, and therefore unworthy, but men are animals and have a right to enjoy without reproach those pleasures of animal existence which maintain health, strength, and life itself."

We may go farther than that, asserting that not only have we a right to enjoy the pleasures of the table, but it is our moral duty to do so. *The highest laws of health demand of us that we get as much pleasure out of our meals as possible.* To prove this statement is the main object of the present volume, nearly every page of which bears witness to its truth, directly or indirectly.

### GLADSTONE AND FLETCHER.

There is an old German proverb to the effect that if food is properly chewed it is half digested: *Gut gekaut ist halb verdaut.*

This is literally true, but in England and America, although physicians and others have long known it to be so, it was not impressed on the general public's attention until the newspapers began to comment —some seriously, others facetiously—on the statement that Gladstone, in 1848, adopted certain rules for chewing food to which he ever after adhered and to which some observers attributed his remarkable phys-

ical vigor. "Previous to that," said the "Pall Mall Gazette," "he had always paid great attention to the requirements of nature, but at that date he laid down as a rule for his children that thirty-two bites should be given to each mouthful of meat and a somewhat lesser number to bread, fish, etc."

Now Gladstone was wrong in suggesting that meat needed more munching than bread. The stomach takes care of meat if it is not swallowed in *too* large chunks; whereas bread, as well as potatoes, together with oatmeal and other cereals, no matter how soft, should be kept in the mouth some time to enable the saliva to partly digest them and prepare them for the lower viscera.

This error, however, did not detract seriously from the value of Gladstone's directions. The main thing was that his "home rule" called the attention of two nations to the unwisdom of bolting food and the advantage to health resulting from keeping it for some time in the mouth. In its far-reaching effect on millions in two worlds it was perhaps of greater and more lasting value than any of his acts as a statesman.

This assertion gains strength from the fact that it was Gladstone's example that started Horace Fletcher on his road as a reformer of the foolish eating habits of Americans, and others, but Americans in particular.

He has himself related (in the "Ladies' Home Jour-

nal" for September, 1909) how it was that his thoughts were first directed into this channel through an epicurean friend who had a snipe estate among the marshlands of Louisiana and a truffle preserve in France, and who faithfully followed Gladstone's rules in regard to the thorough chewing of food. In 1898 Mr. Fletcher began to work out the problem for himself, to the great advantage of his health.

At the age of forty he was an old man, on the way to a rapid decline. His hair was white, he weighed 217 pounds, he was harrowed by indigestion, and had "that tired feeling." At the age of sixty, after eleven years of experiment, he had reduced his weight to 170 pounds, felt strong and well, and had forgotten what it was to have the tired feeling.

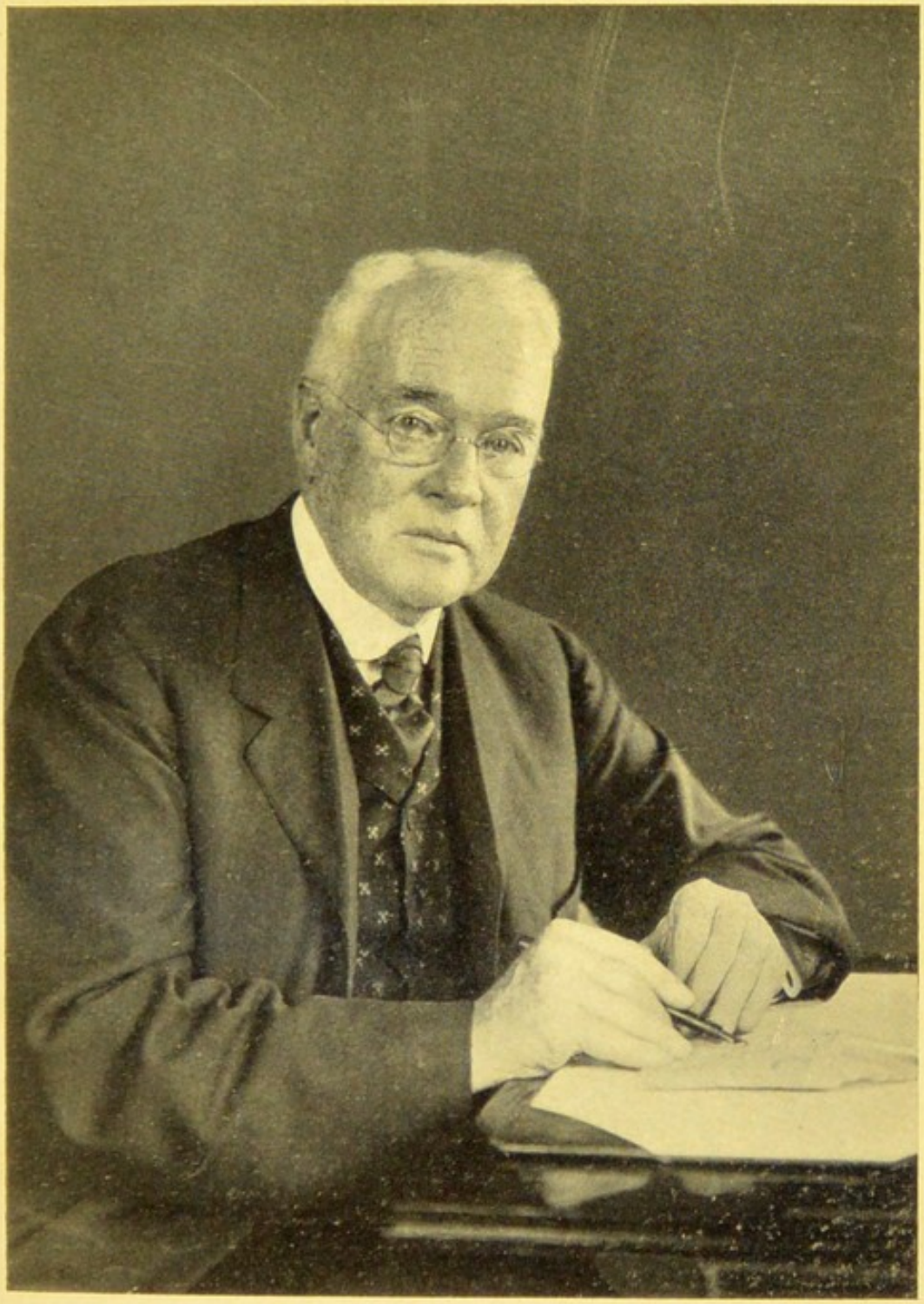
His experience thus was similar to that of the Italian nobleman, Luigi Cornaro (1467-1566), who was a dissipated wreck at the age of forty, but who by reforming his way of eating, regained his health and lived to be nearly a hundred. After his eighty-third year he wrote four treatises on diet and longevity; his autobiography has passed through more than forty English editions. His wisdom might be summed up in these words: "As you grow older eat less."

Horace Fletcher is the Cornaro of the ninteenth century. Everybody who ever "knows he has a stomach" should read one or both the books he has written on this subject: "The A B-Z of Our Own Nutrition," and

"The New Glutton or Epicure." The first named owes its value largely to the fact that it includes reprints of valuable papers by eminent men of science and physicians, the investigations of most of whom were in part prompted, or inspired, by Mr. Fletcher's writings. The most important of these are Dr. Harvey Campbell's Observations on Mastication, and Prof. Pawlow's articles on Psychic Influence in Digestion.

Most persons labor—or act as if they labored—under the delusion that the mouth was made chiefly for the *ingestion* of food and that the sole use of saliva is to lubricate it so that it can be easily and quickly swallowed. Mr. Fletcher did not discover the fact that the mouth is also a most important organ of *digestion*, with the aid of saliva; but he emphasized this important fact in his writings as no other writer had ever done, proclaiming it from the housetops till thousands began to listen and heed and learn and benefit by his preaching; and therein lies the importance of his name in the history of dietetic reform.

The gist of his doctrine may be given in a few words: keep all food (soft as well as hard, liquid as well as solid, moist as well as dry) in the mouth and chew it till it has become thoroughly mingled with the saliva, has lost all its flavor, and is ready to disappear down the throat without an effort at swallowing. Gladstone's directions in regard to thirty-two



HORACE FLETCHER

masticatory movements are all right for some foods, but others require no more than twenty, while for some (onions) seven hundred hardly suffice to remove the odor and make them digestible. *Unless the mouth thus does its work, the lower digestive tract has to do it at ten times the expenditure of vital force, and the result is dyspepsia.*

Never, surely, was preaching more needed than these sermons of Horace Fletcher to the victims of America's national scourge of chronic indigestion.

It cannot be denied that there is a considerable amount of questionable faddism and exaggeration in his doctrines. He, himself, frankly apologizes for such details in them as "may suggest the scrappiness and extravagance of an intemperate screed," on the ground that "so-called screeds sometimes attract attention where sober statement fails to be heard"; which is unfortunately true.

Many of Fletcher's followers accept his exaggerations along with the sound parts of his doctrines. They endorse the statements that he, "in inaugurating the chewing reform has done more to help suffering humanity than any other man of the present generation"; or, as another writer, a physician, put it in a letter to him: "What you have done to unfold physiologic mastication means more for human weal than all the mere medical prescribers have given the world from Adam to the present day."

It cannot be denied that medical and other scientific writers were culpable in not enlightening the public on these important matters, and it serves them right, therefore, if Fletcher has got the credit and the fame for doing this. It is estimated that there are already more than 200,000 "Fletcherites" in the United States. In the hope of increasing their number, in the rational sense of the word, let me dwell on a few of the things in which, in my opinion, Mr. Fletcher is right, and some of those beside which readers of his books will do well to place question marks. In particular, I wish to call further attention to his valuable remarks on the necessity of doing more "mouth work" than most of us do, and on the importance of agreeable Flavor in food as an aid to digestion.

Many thousands of otherwise healthy persons bewail the fact that they have to avoid some of their favorite dishes because they find them indigestible. To these individuals Fletcherism, as endorsed by Dr. Campbell, brings the cheering message that they can eat anything they please provided they give it the proper mouth treatment.

Inasmuch as individuals differ in regard to the supply of saliva, no general rules can be laid down as to how many bites any particular mouthful requires. One person may dispose of a morsel of bread in thirty mastications while another may need fifty before it has disappeared down the throat without an effort at swal-

lowing. Mr. Fletcher once had a tussle with a chal-lot, or young onion, which "required 722 mastications before disappearing through involuntary swallowing." But when it was down it left no odor upon the breath and created no disturbance whatever.

Could anything more triumphantly proclaim the wonders of Fletcherism?

Here is another miracle: "Abundant experiment has been made by those to whom 'Boston brown bread' was formerly little less than a poison, to prove the as-sertion that, sufficiently mixed with saliva, it is per-fectly digestible and that the delicious taste of the bread after forty or fifty bites—about one-half minute —gets sweeter and sweeter, and attains its greatest sweetness and most delicate taste at the very last, when it has dissolved into liquid form and most of it has es-caped into the stomach."

### THE HARM DONE BY SOFT FOODS.

Dr. Campbell, whose admirable articles on The Im-portance of Mastication cannot be too urgently brought to the reader's attention,[1] has pointed out a very important reason why at present, more than at any other time in the history of man, there is need of mouth digestion.

The art of cooking has had a beautifying effect on

[1] They first appeared in the London *Lancet,* in July and August, 1903, and are reprinted in Fletcher's A. B.-Z. of Nutrition, pp. 96-179.

the human face. The jaws and teeth have become smaller because they are no longer called upon to bite off and chew raw, tough, and fibrous foods, as they were in primitive days. One of the results of agricultural progress has been to diminish the fibrous, cellulosic food and make it more easy to masticate. The food of to-day is for the most part soft and pappy, of a kind which does not compel thorough mastication; so much so that Dr. Campbell thinks we may speak of this as "the age of pap."

Beginning with the babes, we pour into their stomachs all kinds of artificial saccharine foods in liquid or semi-liquid form, following this up, later on, with such viands as mashed potatoes and gravy, rusks soaked in milk, milk puddings, bread dipped in bacon fat, pounded mutton, thin bread and butter, and the like. Food of this kind does not invite mastication (nor have mothers been taught to teach their children to keep it in the mouth, the doctor might have added). "Hence the instinct to masticate has little opportunity of exercise and not being properly exercised, tends to die out. Small wonder that the child nourished on such pappy food acquires the habit of bolting it, and learns to reject hard, coarse foods in favor of the softer kinds; everything, nowadays, must be tender, pultaceous, or 'short.' "

The evils resulting from the bolting of this soft food by children and adults alike are of the gravest

and most alarming kind. Overeating and habitual indigestion are two of them. Morbid craving for food not needed is another. It is not improbable that the habitual bolting of food, by the prolonged irritation to which it gives rise, may predispose to cancer of the stomach. Napoleon was a notoriously fast eater and it is well known that he died from this disease.

Dr. Campbell also agrees with Sir Frederick Treves that the neglect of the mastication of food is a potent cause of appendicitis. Solid lumps, especially in the case of such articles as pineapple, preserved ginger, nuts, tough meat and lobster, are apt to pass beyond the pylorus and, escaping intestinal digestion, to lodge in the cœcum and precipitate an attack of that dreaded disease, the most common predisposing cause of which is a loaded cœcum, often preceded by constipation.

Summing up his extremely valuable paper on the Evils of Insufficient Mastication, Dr. Campbell comes to the conclusion that "an appalling amount of misery and suffering may be saved by the simple expedient of inculcating the habit of efficient mastication."

It is difficult to teach an old dog new tricks. I have noticed again and again how hard it is to teach adults to "Fletcherize." They begin it, find it irksome at first, and drop it. For thorough reform we must begin with infants; but adults cannot be urged too strongly to persevere till the habit—like that of breathing—becomes automatic. The rewards in increased

health and enjoyment of life and work are glorious.

### EPICUREAN DELIGHTS FROM PLAIN FOOD.

To return to Fletcher's own contributions to this subject. Next to his dwelling on the importance of "mouth-work" he deserves most praise for his remarks on the epicurean delights resulting from slow and rational eating. Herein again, it must be premised, he was far from being the original discoverer; but he probably did more to call the general public's attention to the matter than any one else had done, thanks largely to his habit of introducing vivid illustrations and details of personal experiences.

"My, but I never realized that potato is so good," exclaimed the young lady; and "Gracious! is n't this corn bully!" echoed the father.

These exclamations express the outcome of one of Mr. Fletcher's experiments in teaching others how to get delicious pleasure from the simplest and commonest foods if munched according to his directions.

If you bolt your food, he says, you get "none of the exquisite taste that Nature's way offers as an allurement for obeying her beneficent demands. The way of Nature is the epicurean way; the other way is nothing but piggish gluttony." It is the way of animals; and Fletcher named his book "The New Glutton or Epicure" to call attention to the two ways of taking food.

"An epicurean cannot be a glutton. There may be gluttons who are less gluttonous than other gluttons, but epicurism is like politeness and cleanliness, and is the certain mark of gentility." A remark worthy of the French epigrammatists!

Thackeray called attention to the exquisite enjoyment an epicure can derive from a slice of buttered brown bread. In the same spirit Fletcher writes: "For illustration, try a ship's biscuit—commonly called hardtack—and keep it in the mouth, tasting it as you would a piece of sugar, till it has disappeared entirely, and note what a treasure of delight there is in it."

Again: "The most nutritious food does not require sauces. It may seem dry and tasteless to the first impression, but, as the juices of the mouth get possession of it, warm it up, solve its life-giving qualities out of it and coax it into usefulness, the delight of a new-found delicacy will greet the discoverer."

### HOW FLAVOR HELPS THE STOMACH.

In all cases, be the food simple or the outcome of a French chef's culinary alchemy, it is its Flavor that makes it agreeable and by so doing stimulates the flow of the juices necessary for proper digestion.

In the case of the mouth and its salivary glands this is obvious to all. Everybody knows that the fragrance of good food "makes the mouth water."

In the case of the stomach, the connection is much

less obvious. Until a few years ago even the medical men were in the dark on this extremely important as-

A French chef's culinary alchemy

pect of the question, although French and German physiologists had made important discoveries.

It remained for Professor Pawlow of St. Petersburg to throw the bright light of scientific experiment on this subject.

He demonstrated in his St. Petersburg laboratory that the mere presence of food in a dog's stomach—which is like a man's in that respect—does not suffice to cause a flow of gastric juice, but that the psychic factor we call appetite—a keen desire for food—causes an abundant flow of that fluid, without which the digestion cannot proceed.

Now it might be said that there was really no need of laboratory experiments to tell us that food eaten without enjoyment lies like lead in the stomach and does more harm than good.

It is nevertheless a great advantage to have a scientific demonstration of the fact and an explanation of it, because it encourages us in the right way of eating.

Instinct showed that way long ago; it did its best to intimate that food should be eaten with interest and enjoyment.

Too often, unfortunately, no attention has been paid to this instinct. Among the Russians (who do not, in this respect, differ from other peoples) "an absolutely unphysiological indifference towards eating often exists," Professor Pawlow says. "In wider circles of the community a due conception of the importance of eating should be disseminated. How often do the

people who have charge of the commissariat pay attention solely to the nutritive value of the food, or place a higher value on everything else than taste!"

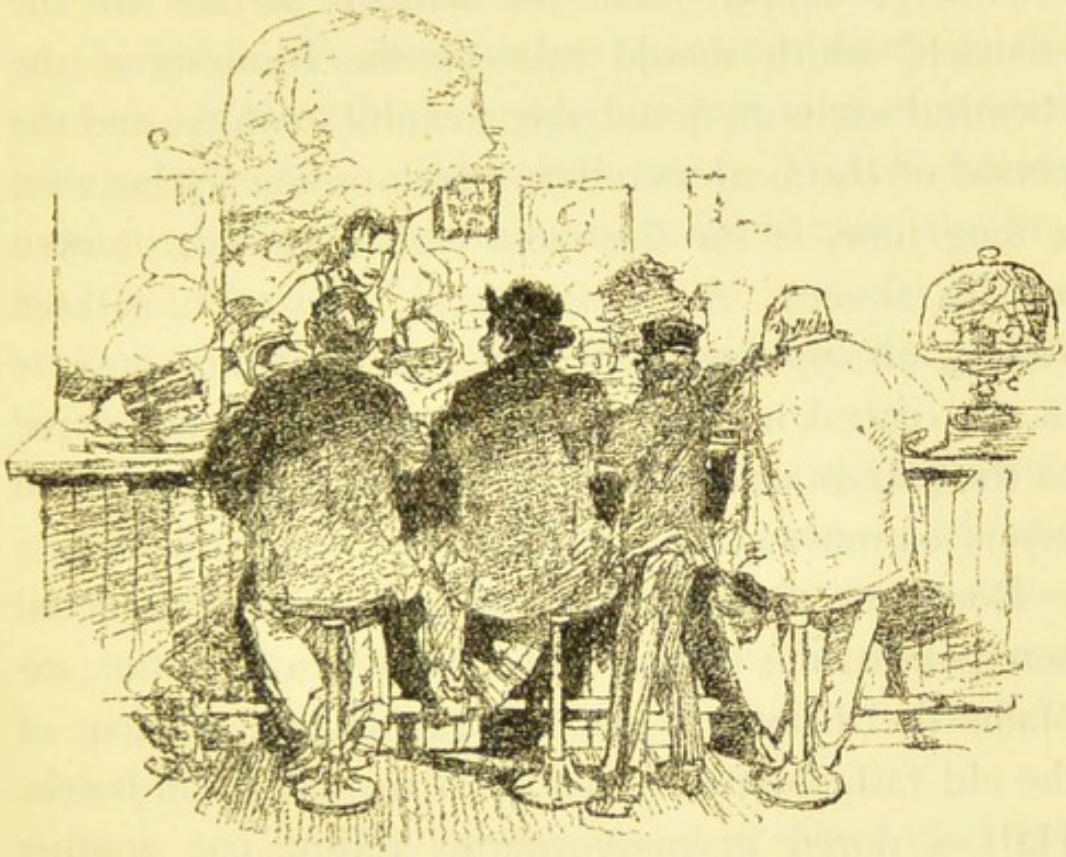
Yet it is the "taste" (Flavor) of food that arouses the appetite. As the French say, "the appetite comes while we are eating." Medical men of various countries in former times paid special attention to the restoration of a patient's appetite. In more recent text books less attention is paid to appetite as a symptom; but Prof. Pawlow's experiments have again, and for all time, demonstrated its importance.

Those young ladies who think it is "nice" and "feminine" to pretend to have no appetite should read the Pawlow papers, and have all that nonsense knocked out of their heads. A poor appetite is a danger signal—a thing to arouse pity and to be cured, just like a headache or a fever.

"Appetite juice" is one of the suggestive names Professor Pawlow gives to the fluid which digests food in the stomach. There is little or none of it for the man who eats without noticing his food, unable to distract his thoughts from his work, as so often happens to those who live in the midst of the incessant turmoil of large cities. This inattention to the act of eating (to the Flavor of the food) prepares the way for digestive disturbances with all the various diseases following them. No medical treatment can help such a patient—unless he reforms and eats rationally.

Thus, the studies of Dr. Pawlow fully bear out my contention as to the Vital Importance of Flavor in Food.

There is one more of his observations to which super-



An American quick-lunch

lative importance attaches. One of his experiments on dogs showed that if food was given gradually in small quantities, it led to the secretion of much stronger gastric juice than when the animal was allowed to eat the whole ration at once.

This was a laboratory demonstration of the wisdom of the best medical treatment of a weak stomach;

"and such a regulation of diet," continues the professor, "is all the more necessary, since, in the commonest disorders of the stomach, only the surface layers of the mucous membrane are affected. It may, consequently, happen that the sensory surface of the stomach, which should take up the stimulus of the chemical excitant, is not able to fulfil its duty, and the period of chemical secretion, which ordinarily lasts for a long time, is for the most part disturbed, or even wholly absent. A strong psychic excitation, a keen feeling of appetite, may evoke the secretory impulse in the central nervous system and send it unhindered to the glands which lie in the deeper as yet unaffected layers of mucous membrane."

Doubtless the very interesting physiological detail here pointed out by the eminent Russian professor, explains the dietetic as well as gastronomic wisdom of the old fashioned table d'hôte of the European hotels. Half a dozen or more courses follow one another leisurely in course of an hour or more during which the pleasant Flavor of one dish after another keeps the appetite on edge and gives plenty of time for the deeper as well as the surface layers of the glands to secrete their beneficent and comforting digestive juices.

From such a leisurely dinner, with courses skilfully made up of contrasting flavors to prevent the appetite from flagging, we rise cheerful and at peace with all the world, whereas an American quick-lunch, or a rail-

road dinner gulped down in ten minutes makes us feel like swearing off eating for all time.

### AN AMAZING BLUNDER.

How far we have traveled away from that foolish, nay, criminal Puritan notion that enjoyment of the pleasures of the table is a reprehensible form of sensual indulgence—the notion which made Walter Scott's father pour hot water into the soup because the boy liked it!

That attitude was a blunder, a huge blunder, as the preceding pages prove.

A still bigger blunder, and one equally deplorable and mischievous, now claims our attention—a blunder so amazing, so incomprehensible that it seems almost incredible: *the universal belief, among men of science as well as the laity, that the pleasures of the table come to us through the sense of taste.*

How I happened to discover that this notion is a blunder, I now beg the reader's permission to relate briefly.

In 1878 Harvard University rewarded me for my hard work in the philosophical department (under Professors Bowen and Palmer) by giving me the Harris Fellowship, which enabled me to continue my study of physiological and comparative psychology for three years at the universities of Germany.

I recall vividly my boyish delight in the pleasures of

the senses of sight, hearing, and smell. During my college course and afterwards I diligently studied the phenomena of these senses in man and animals in all the books and scientific papers I could find; and thus it came about that my first magazine articles were on the Æsthetic Value of Odors, and The Development of the Color Sense. The first of these was accepted by W. D. Howells, for the "Atlantic Monthly" (December, 1880); the second, by Alfred Russell Wallace, for "Macmillan's Magazine" (London, December, 1879). I mention these things to show that the senses of man and animals have been a subject of special interest with me for more than four decades, and that when I went to Germany, I took up the study of them not as an amateur but as one prepared (as well as eager) to make original researches.

My most ardent desire was to work in the laboratories of the University of Berlin under Professor Helmholtz, whose monumental books on the sensations of tone and on the phenomena of sight had revealed so many secrets to the world of science. Unfortunately he was not lecturing on those subjects at that time. Moreover, reperusal of his books made me feel as if he had covered all the most interesting ground. I therefore looked about for a region in which I could do some exploring on my own account, and soon found it in the functions of the senses of smell and taste.

Concerning these two senses, the most absurdly in-

correct notions were current at that time even among leaders in science. Grant Allen, known as "the St. Paul of Darwinism," voiced the current biological opinion when he wrote that with man "smell survives with difficulty as an almost functionless relic"; and Darwin himself wrote that this sense is "of extremely slight service" to man.

The king of German philosophers, Kant, who was an epicure, maintained that smell is the least important of our senses, and that it is not worth while to cultivate it. Nay, the king of epicures, Brillat-Savarin, wrote a famous book the very title of which, "Physiology of Taste," is a scientific blunder. Like everybody else, he believed in the existence of an infinite variety of tastes, and never suspected that, *with the exception of sweet, sour, salt and bitter, all our countless gastronomic delights come to us through the sense of smell.*

### A NEW PSYCHOLOGY OF EATING.

The French physiologist Longet and the German anatomist Henle were, so far as I could find, the only experts who had an inkling of the gastronomic importance of the sense of smell; but they did not go so far as to formulate the theory I have just expressed in italics. My experiments showed me that not only is it impossible, with the nose clasped (or closed by a cold), to tell the difference between various kinds of meats, or cheeses, or cakes, or vegetables, but also—

which no one had ever pointed out—that even in the case of sweet and sour substances which do gratify the palate, *the sense of smell is much more important than the sense of taste.*

Vinegar, for example, is absolutely uninteresting unless it has a "bouquet"—the aroma of the cider, wine, or malt of which it is made. And why is it that we are willing to pay from five to twenty times as much for candy as for plain sugar? Because the sugar appeals only to the taste, whereas the candy is usually perfumed with the aroma of sarsparilla, wintergreen, vanilla, chocolate, and a hundred other flavoring ingredients the fragrance of which we enjoy by *exhaling through the nose while eating it.*

The emphasis lies on the word *exhaling.* It is considered a breach of etiquette to smell of things at the table in the ordinary way, because it implies a doubt as to the freshness of the food. But there is a second way of smelling of which most persons are unconscious, although they practise it daily. Anatomy shows that only a small portion of the mucous membrane which lines the nostrils is the seat of the endings of the nerves of smell. In ordinary expiration the air does not touch this olfactory region. But when we eat in the right way we unconsciously guide the air impregnated with the Flavors of the food we are munching, into that region, and that is the way we enjoy our food. We do this unconsciously, I say; but now try

and do it consciously, guiding the expired air *very slowly* through the nose, and your enjoyment of a meal will be quintupled.

Obviously Kant made the mistake of his life when he said the sense of smell was not worth cultivating. It not only provides us with additional table pleasures, the hygienic and tonic value of which has been sufficiently dwelt upon, but it is a fact of unspeakable importance that the more we educate the nose, the more discriminating we make it, and the more stubbornly therefore we insist on having wholesome food only.

This new psychology of eating I set forth for the first time in the "Contemporary Review" (London, November, 1888), under the title of "The Gastronomic Value of Odors." It was commented on as a psychological curiosity, but otherwise attracted little attention. At that time there was not the same general interest that there is now in the food question. Even Gladstone's directions regarding eating were more frequently smiled at than followed.

Since his day many things have happened to give the food question an aspect of superlative importance, particularly the wholesale adulterations described in the preceding pages. That among those who have helped to awaken the public to a realizing sense of the importance of this subject no one deserves more credit than Mr. Fletcher—who has been immortalized in the dictionaries by the inclusion of the verb "to

Fletcherize"—has been stated before. So beneficent, on the whole, has been his influence that I hesitate to point out any of his mistakes; but as some of them obscure the truth, I will do so.

He first made public his views, in a crude form, eleven years after the appearance of my article on the gastronomic value of odors. That article anticipates some important details of his doctrines, but he evidently never saw it, because in his books he makes only one brief reference to the sense of smell and perpetuates all the old errors regarding that insolent pretender, the sense of taste. This is to be regretted, for it left his followers groping in the dark as to the best way of getting the most pleasure and benefit out of their food, at home and at their "munching parties."

There is one detail of Fletcherism which every epicure will fight with his last drop of ink. If we all followed his example, living on griddle cakes, butter, and syrup (at a cost of eleven cents a day), or some other equally simple menu, as he advises, what would become of that delectable variety which is the spice of gastronomy, and what of the farmers, and the hundreds of industries which supply this variety?

True gastronomic progress, I maintain, lies in the direction of multiplying the pleasures of the table—an important phase of our subject which will be discussed in a later chapter.

We must now turn the limelight once more on Ungastronomic America.

## III

### OUR DENATURED FOODS

BEARING in mind the superlative importance to our well-being of Flavor in the food we eat, the reader is now in a position to appreciate the full force of a third indictment to be brought against those who spoil our food. The first indictment was that they use chemical preservatives which arrest digestion and often act as cumulative poisons; the second, that they use chemicals which enable unscrupulous persons to sell foods made of nauseating and dangerous raw material, so disguised as to fool the buyer.

The culprits now to be arraigned are those who, from ignorance, indolence, or greed to get rich quick, adopt devices which spoil the Flavor of our food and thus destroy our appetite and undermine the health of the community.

Denatured is the word used for alcohol that has been made unfit to drink by the addition of chemi-

cals, and denatured is hardly too strong a word to apply to many if not most of the foods offered in the American markets and stores, the offense being aggravated by the fact that the prices usually asked for these are quite as high as those asked for foods preserved by the wholesome old condimental methods, although the cost to the maker is only a fraction of what it would be if those methods were followed.

Palatable, appetizing smoked bacon and hams are still to be found in our markets by those who know a thing or two, and sternly insist on getting what they ask for; but for the vast majority of consumers smoked meats have disappeared. Meats lose weight—up to 20 per cent.—during the process of smoking, and therefore bring the dealer less profit. What he offers is usually denatured—unappetizing and indigestible. The same holds true of smoked fish, which used to make an epicure's mouth water. Why it does so no longer is shown by the following paragraphs from Philadelphia, printed in the New York "Evening Post":

*Fish Was Dyed, not Smoked*

The dairy and food bureau of the State Agricultural Department has discovered that a large number of delicatessen and other stores of this city have been for a long time selling "dyed" fish as a substitute for smoked fish. When Harry P. Cassidy, the agent of the bureau told the retail store proprietors what they were doing, they were surprised, as they had purchased the stuff as genuine smoked fish.

Cassidy's attention to the food article was attracted by its rich red color. Purchasing some, he had it examined, and the expert reported that he could dye wool with the coloring matter extracted from it. In smoking fish there is a loss of fifteen pounds to every hundred, it is said, but in dyeing there is no loss at all. This permitted the violators of the law to undersell their competitors in the smoked fish industry.

Nor is our fresh fish usually more palatable. New York, for instance, ought to be a paradise of fish eaters, yet how seldom is it served in prime condition, even in leading restaurants! In Germany they have various ways of bringing fish to market alive, even in interior towns; over here they are kept in cold storage for weeks, months—indeed years, although fish deteriorates by this process much more rapidly than even poultry—of which more anon; and everybody knows that the poorest kind of fish just out of the water is better than the best kind after it has been out a day or two.

Were we a gastronomic nation we would rise in revolt against the wholesale denaturing of our food to be presently described in more detail. We should insist on always having real French or German-style bread, with crisp, tasty crust, refusing the soggy loaves made of bleached, bolted flour robbed of its nutritious phosphates and sources of Flavor; refusing also the machine-polished rice deprived of its nutritious outer parts, in which lies the delicate Flavor of this

cereal, leaving it pretty to look at, but, as one of the Government's agricultural experts, David Fairchild, has forcibly expressed it, "as tasteless as the paste that a paper-hanger brushes on his rolls of wall-paper."

We should exclude the chemically greened teas dumped into our groceries because they are not wanted in any other country. We should protest against the peaches and pears and other fruits formerly brought into our markets soft, sun-ripened, luscious, but now offered to us hard, unripe, flavorless.

The melancholy list of gastronomic misdeeds might be prolonged indefinitely.

In all these cases, let me emphasize this fact once more, that what is eliminated from the food is its very soul, its precious Flavor, which makes it appetizing and enjoyable and therefore digestible. We allow covetous or ignorant manufacturers as well as incompetent or indolent cooks to spoil our naturally good food because we do not as a nation, realize that on its pleasurableness depend our health and comfort, our happiness and capacity for hard work, more than perhaps on anything else—a point which cannot be emphasized too often.

Now for a few details, beginning with the treatment to which our poultry is subjected, which has long been a national calamity and a scandal of the first order.

### FOUL FOWL.

Perhaps more than anything else, what makes us stand before the world as a deplorably ungastronomic nation is our tolerance of the tainted, unpalatable, cold-storage poultry served in public eating places as well as in private houses in nine cases out of ten.

We spent the months of May to September, 1912, in Europe, traveling in France, Switzerland, Italy, Germany, and England. Nearly every day we ate chicken, or some other kind of poultry and not once did we have any that was in the least like our cold-storage fowls; everything was fresh, sweet, juicy, and appetizing. Again and again I said to my wife, or she to me: "I wish we could get such chicken in New York!"

An American lady of wealth said to me a few years ago that one of the reasons why she went to Europe every summer was that she liked good things to eat and could get them so much more easily and regularly abroad—particularly butter, and her favorite dish, chicken. She knew of the poulet de Bresse—that explained it all. I shall never forget, though I live another half-century, my first taste of that particular brand of fowl. I had arrived at one of the leading Paris hotels too late for the table d'hôte, and thinking I was not hungry, ordered nothing but a portion of chicken and a bowl of salad. The waiter brought an enormous portion, and I had hardly tasted it when

I found I was ravenously hungry. Not a shred of it was left.

The delicious taste of that sort of fancy poultry is due in part to the particular breed, but more still to the use of special kinds of food which give a rich and delicate flavor to the flesh, as the so-called wild celery of the Chesapeake Bay does in the case of our best ducks and turtles.

Nature provides our canvasback and redhead ducks and terrapin—not too bountifully, it is true—but when it comes to mortal man's treatment, in this country, of the poultry that has to take the place of the formerly abundant game, what do we see? A state of affairs that would not be tolerated one week on the European continent.

It is officially estimated that from 75 to 90 per cent. of all the poultry produced in the United States is preserved in cold storage for months, often for years. What is worse still, "only a very small percentage of the fowls which are placed in cold storage are drawn," the result being that by a physiological process known as osmosis the meat becomes tainted in a most offensive manner. The warehouse men and dealers have for years been fighting furiously against the health boards of various cities and states for the privilege of perpetuating this state of affairs, which greatly simplifies the poultry business and enables them to sell the entrails of a fowl at the same price per pound as the

meat; but the long-suffering public has at last become thoroughly aroused, convinced that many obscure disorders of the digestive tract are due to the consumption of undrawn and other cold-storage poultry, not to speak of the horror of eating such stuff.

A young woman informs me that one day she went into a butcher's shop (in a part of town where prosperous families live) and ordered a chicken. The butcher took one down, but when he cut it open such a stench came from it that she stepped back in horror. Yet the man tried to persuade her to take it, remarking: "That's all right! Just wash it in a solution of borax, or in vinegar and water and the odor will disappear."

This happened in New York City in the year 1912; it was not an exceptional case; thousands of such offensive carcasses are sold in American cities daily. Nor is it necessary to cut them open to know that they are unfit for food. Their greenish, mummified, rigid appearance reveals their unpalatable condition. Daily, for years, as I have walked along the streets of New York and seen these hideous bird corpses brazenly exposed for sale, I have wondered at a community which will tolerate such a thing. As the authors of Bulletin No. 115 of the Bureau of Chemistry [1] say, a care-

[1] "A Preliminary Study of the Effects of Cold Storage on Eggs, Quail, and Chickens," by H. W. Wiley, with the collaboration of M. E. Pennington, G. W. Styles, Jr., B. J. Howard, and F. C. Cook. Washington, 1908.

ful inspection of cold-storage fowls before cooking "would do much to destroy any appetite which might otherwise have been manifested for these birds when cooked."

On pages 100-101 of his monumental work on foods and their adulteration which should be read by all consumers as well as dealers because of its impartial statement of the case, Dr. Wiley remarks pertinently that "the keeping of chickens with the intestinal contents undisturbed does not appeal to the imagination of the consumer any more than would the freezing of the carcass of a beef or hog with the viscera remaining in it."

Elsewhere the great reformer put his finger on the most vulnerable and undeniable aspect of the storage business: "Palatability is one of the elements of wholesomeness, and we find in cold storage *a tremendous decrease in palatability*."

From this kind of tainted, unappetizing, unpalatable chicken to the poulet de Bresse, what a long road we have to travel. Under present conditions, as a matter of course, it makes no difference what we feed our fowls; all are foul alike, and will remain so as long as the American public remains content to fall so far below the European gastronomic level.

The packers and dealers, of course, laugh at Dr. Wiley's statement that, under the present scientific methods of production, poultry can be furnished in a

fresh state all the year round (as it is in Europe). They do not want it fresh; they want it in their refrigerators so they can regulate and artificially raise prices. The worst offenders are the men who speculate in storage fowls, making, say, $10,000 or $20,000 in one day. That enables them to cross the Atlantic and eat *edible* chicken in Paris.

The simplest way for the consumer to thwart the conspirators against his appetite and stomach is to buy of genuinely Kosher butchers, who by their tenets are not allowed to handle cold-storage fowls; or direct of the farmer, with whom an arrangement can be made to send the freshly killed and promptly cleaned poultry to one's home. In this way the total cost does not exceed regular city prices, and oh! the difference in the effect on our well-being, not to speak of getting even with the "icemen."

The introduction of parcel's post greatly reduced the cost of this method of securing fresh poultry. In European countries, particularly France and Germany, the parcel's post has done much to eliminate middlemen, and many thousands of consumers make use of this chance to get provisions fresh and direct from the producer.

There are reasons to believe that the present high prices of beef and mutton will never come down again, but will climb higher still because the former vast grazing-grounds of the West are being cut up into farms.

But to the raising of chickens there is no limit. By applying the methods of intensive farming the supply can be steadily increased and prices lowered. Chicken day is destined to become more and more frequent, and it is for the consumer to decide whether his chicken dinner shall be appetizing, enjoyable, and beneficial, or remain what it is now in most cases, a gastronomic calamity.

From the point of view of Flavor, which is the main theme of the present volume, this subject is of such importance that a few more pages must be devoted to it.

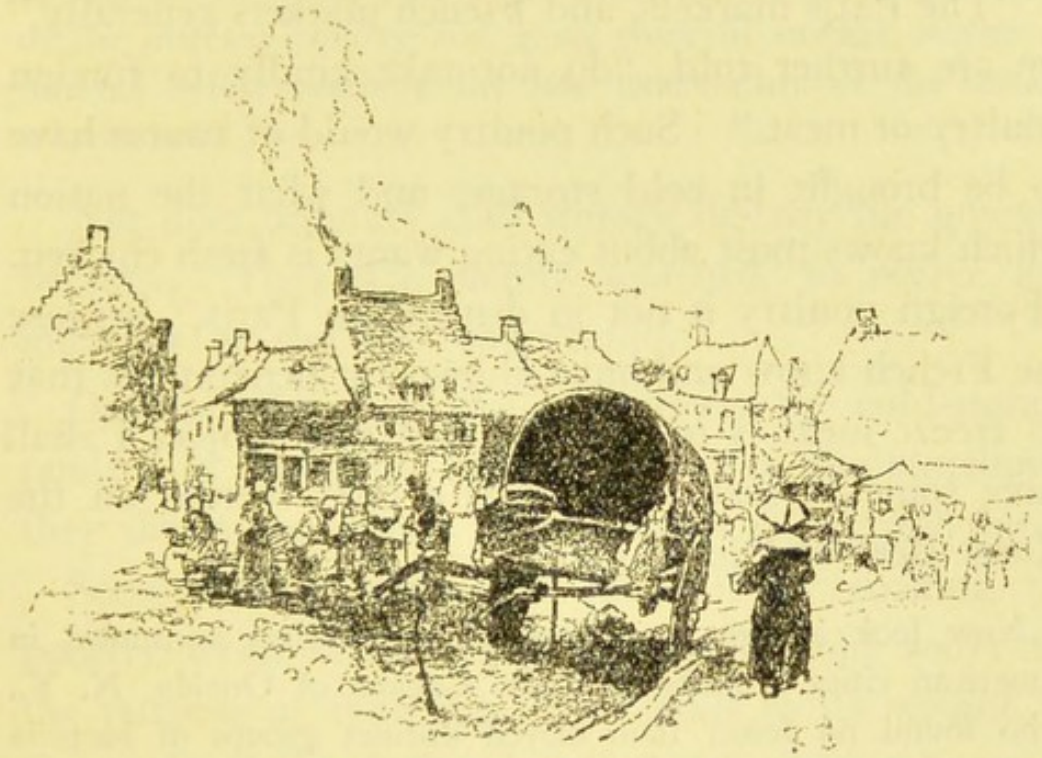
### THE FRENCH WAY VERSUS THE AMERICAN.

In Paris one eats the best chicken in the world; in New York, as a rule, the worst. How do they do it in France? The answer will be given in the chapter on French Gastronomic Supremacy; here let us anticipate only a few details as supplied to the Government of the United States by Newton B. Ashby, special agent of the Bureau of Animal Industry and published in its Sixteenth Annual Report (1899).

The French, he notes, "are economic people, and the system of sending young and immature chickens to market is not practised. The fowls sent to market are from 4 to 8 months old. They are carefully fed and grown for market instead of being allowed to scavenge. For instance, the chickens are given clean

water instead of being allowed the run of filthy pools and puddles."

The method of slaughter, he goes on to say, "seems to be chiefly by cutting the jugular vein. The fowl



How they do it in France?

is then dry plucked very carefully to prevent tearing the flesh, and is drawn through the vent."

Note those last six words. They show that *the French do not allow chickens to remain undrawn even one day;* for, as Mr. Ashby continues, "the fowls are packed the afternoon or evening of the day of slaughter, and despatched to Paris by special express train that night. They are due in Paris before five o'clock in the morning. They are delivered at once to the market, and are sold on the day of arrival, so

that French fowls are generally disposed of in the market within twenty to twenty-four hours after being killed. . . . In July and August many French fowls come to the market alive."

"The Paris markets, and French markets generally," we are further told, "do not take kindly to foreign poultry or meat." Such poultry would of course have to be brought in cold storage, and what the nation which knows most about eating wants is fresh chicken. "Foreign poultry is not in demand in Paris," because the French know and have known for generations that to freeze meat is to spoil it. On this subject I shall have some further remarks in a later section on the Roast Beef of Old England.

Now look at the way much of the poultry consumed in American cities is gathered. Dr. Cavana of Oneida, N. Y., who found no fewer than eleven distinct groups of bacteria in the flesh of a single undrawn fowl, remarked, in a lecture delivered in 1906, at the Annual Convention of Railway Surgeons, that poultry stocks are collected for eastern cities from all parts of the country. He goes on to say that after slaughter the feathers are removed and the carcasses packed in barrels, generally without further dressing. The head, feet, and legs, as well as the craw of partially digested food, therefore, is left in the sealed cavities of the fowls, forming conditions which force the general infection of the tissues by the flagellated, or rapidly swimming intestinal bacteria, which double their quantity and numbers every forty minutes, a single bacillus being capable of developing over forty-two billion germs in twenty-four hours. Their shipments are made by rail and

steamship, and cover transit periods of several days before reaching the cold atmospheres of the storage warehouses.

"To determine the activity of these germs and the period required for their permeation of the tissues in the slaughtered undrawn fowl, we caused to be made a series of experiments, the results of which justify the belief that a great percentage of the infected poultry and game stock in storage became so infected before reaching the low temperature of the storage warehouses."

Nor does ordinary cold storage destroy the noisome bacteria. They are merely scotched, to revive and multiply at the first opportunity.

One of the principal objections to cold-storage poultry is that after being taken from the storehouse they decompose much more quickly than fresh birds.

Some dealers aggravate the evil by soaking the poultry when taken out of storage in cold water for the purpose of thawing. This adds to its weight, to the profit of the dealer, but it "causes heavy bacterial infection," as Dr. Charles Harrington, secretary of the Massachusetts Board of Health, has pointed out. Dr. Pennington, in an article on Changes in Chickens in Cold Storage, to which we shall recur, refers to a case in which a frozen fowl, after being immersed in water, had increased in weight eleven per cent. (to the dealer's profit).

In Bulletin 144 of the United States Department of Agriculture we read:

"Under precisely the same conditions of temperature and humidity, drawn fowls will keep from twenty to thirty days longer than those not drawn. The presence of undigested food and of excrementitious substances in animals which have been killed most certainly favors the tainting of the flesh and general decomposition. The viscera are the first parts to show putrescence, and allowing these to remain within the body cannot do otherwise than favor infection of the flesh with bacteria and ptomaines, even if osmosis does not actually carry putrid juices to contiguous tissues. Hunters know the value of drawing birds as soon as possible after they have been shot, in order to keep them fresh and sweet and to prevent their having a strong intestinal flavor."

Read also the following weighty remarks reprinted from Senate Report No. 1991, March 22, 1906:

The process of decomposition and putrefaction begins at once after the death of the animal. Cold storage and freezing may limit the rotting process, but do not entirely stop it. When poultry or animals are taken from cold storage and are thawed out for exhibition and sale, the decomposition continues with marked energy, impregnating the flesh with poisons—and this decomposition is exceedingly rapid even when the poultry is kept in the market or grocery refrigerator, the temperature of which is much higher than that of the cold-storage warehouse. Flesh in which the blood has been permitted to remain is particularly susceptible to such decomposition, and this susceptibility is increased by the long period of freezing and thawing.

Even with poultry which is "freshly killed" there is frequently a period of several days between the time of slaughtering and sale. Not only is it dangerous, but it is repugnant to our sense of decency, that the flesh we are to eat shall lie for several days in close contact with putrefying animal matter.

Undoubtedly undrawn poultry, fish, and game have caused

many cases of poisoning which have been wrongfully attributed to other sources. The poisoning resulting often resembles that caused by other poisons administered by persons or taken with suicidal intent. Many sufferers from digestive troubles—headache, nausea, colic, and diarrhea after eating, owe their ailments to tainted foods.

We are advised that the reason for slaughtering poultry without thorough bleeding is the saving in the weight of the fowl, and this reason is doubtless also one for the storing of poultry and offering it for sale without removing the viscera. There is, however, no reason why the consumer should be compelled to purchase a large percentage of excreta, offal, and refuse with his poultry. We would not tolerate the addition of a certain percentage of weight in the form of entrails of the steer with each beefsteak we buy. The consumer purposes to buy edible food and not the disgusting waste which should be eliminated in the process of slaughtering and dressing. It is just as reasonable to ask the consumer to buy hogs, calves, and lambs without the intestines removed as to solicit his purchase of undrawn turkeys and chickens.

### WHY DO WE EAT POULTRY?

After the appearance, in "The Century Magazine" of November, 1911, of my article on Ungastronomic America, in which I denounced the practice of offering the public undrawn, cold-storage poultry, I was bombarded with abusive letters from packers and others, and a periodical, called "The Steward," fancied that it had completely demolished me by quoting the results obtained by Dr. Mary E. Pennington, in collaboration with Evelyn Witmer and H. C. Pierce, during a series of observations described in a circular entitled "The

Comparative Rate of Decomposition in Drawn and Undrawn Market Poultry" published in 1911 by the Department of Agriculture. This result of these observations was that "undrawn poultry decomposes more slowly than does poultry which has been either wholly or partially eviscerated."

This statement does not agree with the conclusion reached and printed in the Bulletin No. 144 to which I have already referred, that "under precisely the same conditions of temperature and humidity, drawn fowls will keep from twenty to thirty days longer than those not drawn."

This statement is doubtless correct—provided the fowls have been eviscerated in such a way as to keep the cavity absolutely free from contamination. If this is *not* done, the drawn fowl will, for obvious reasons, spoil even sooner than the undrawn. It is *not* usually done by the American packers; and the moral is, *not* that undrawn fowl is preferable to drawn fowl for packing, but that these packers should send their men to France or Germany to learn how properly to draw fowls.

The consumer, anyway, is not interested in "keeping qualities." What he wants is chicken that is good to eat, and the shorter a time it has been kept, the better for him, in every way.

Dr. Wiley refers to experiments which have "shown the advisability of packing drawn poultry in tin car-

tons, carefully closed"; adding that "fowls thus treated preserve to a remarkable degree their freshness and palatability."

If that degree of freshness and palatibilty is sufficient to satisfy the consumer, then cold storage has a future. If not, cold storage is doomed, for undrawn, frozen poultry will, I feel sure, *not* be eaten much longer by the American public.

Why do we eat poultry, anyway? Surely not merely because we want food. If that were the case, why waste money on expensive chicken or turkey, when we could get the same amount of nourishment from many other foods at a mere fraction of the cost? *The reason why we eat chicken in preference to those other foods is that we want to enjoy its flavor.* And we do *not* want frozen, undrawn poultry, not only because the freezing spoils the flavor but because the leaving of the entrails in the animal makes it unwholesome.

One of the main arguments of the packers in favor of leaving fowls undrawn is that they dry out sooner when drawn. A more deadly boomerang it would be difficult to throw. There is only one way in which the drying carcass of a fowl can get its moisture: from the contents of the entrails. That is what is meant by osmosis. Thus out of their own mouths the packers stand convicted of offering the public fowl which is disgustingly tainted.

The best part of the fowl—the second joint—gets

the taint soonest, because it lies nearest the intestines. The wings and drumsticks get it last. It is important to know this, because it explains why experts may differ as to the time it takes to spoil the flavor of a stored bird. Usually the process is quite rapid.

The whole question of the tainting of meat by osmosis deserves much more attention than it has received. A wild boar has to be eviscerated at once after being killed. If this is not done, none of the meat is fit to eat except the head—which explains why "wild boar's head," and the head alone—often figures on bills of fare in France and Germany. My wife, who was brought up in Southern France knew a wealthy silk merchant, a great hunter in his own domains, who always promptly removed the entrails of the boars he killed, before the carcass grew cold, the consequence being that all the meat was good to eat, as his friends were given many a chance to find out.

For several years some of the New York butchers have indulged in the custom of exhibiting in their windows the carcasses of lambs with their pelts still on. If a Paris butcher did that, the first of his customers coming along would ask him if he didn't know that unless the pelt is taken off at once after killing a *mouton*, the meat gets from it a disagreeable "sheepy" flavor—which is a very different thing from the unique and delicious flavor properly dressed mutton has.

Perhaps the most striking illustration of the rapid action of osmosis is provided by venison, which is unfit to eat if the deer has been tortured by a cruel chase. Its terror affects the digestive juices, and the whole body becomes tainted.

### IS COLD STORAGE A BLESSING?

In an editorial entitled "Cold Storage Hardly a Blessing" the New York "Times" called attention during the holiday season of 1911 to the fact that the price of cold-storage turkeys was six cents a pound less than that of the fresh-killed birds. "This difference of almost 25 per cent. is an admission by the cold-storage people, forced from them by unalterable public opinion, that their much-wanted wares are to just about that extent inferior to those which they vociferously declare to be no better."

Quoting the happy expression that cold-storage fowls taste "as if they had been buried and dug up again," the same writer remarks: "None of us really knows how fowls do taste after they have gone through that process. We can imagine the flavor, however, and do, noses helping tongues."

Were it not for the storage people, chickens and eggs would come into our markets fresh, cheap, and in abundance at the time when they are at their best. But it is precisely when they are at their best and cheapest that the storage men corner the market and hold the

goods till they are good no more; whereupon they sell them at their own prices, largely increased through gambling. In view of such facts the "Times" refers to cold storage as "a baleful invention."

A baleful invention it certainly is—and a needless one, too. To quote Dr. Wiley again: "Poultry is a food product which under the present scientific methods of production can be furnished in a fresh state all the year. The necessity for cold storage, therefore, is not so apparent in this case as in that of fruit and other perishable foods."

The American public, surely, will not much longer tolerate the present condition of affairs. There are packers and packers. Some are more careful and cleanly in their methods than others; but cold-storage fowl at its best is more or less denatured, and at its worst it is worse than denatured, putting us almost on a level with the African Bushmen who, when they kill a sheep, eat the entrails with their contents. I would no more eat such undrawn storage poultry as is placed daily before thousands of my countrymen than I would the flesh of a hyena or a vulture.

It was estimated that, in 1912, $75,000,000 worth of poultry was consumed in New York City. Of this, only $1,500,000 represented the business done in live chickens, and nearly all of this went to the Kosher butchers of the East Side. Surely Christians cannot afford to be less cleanly than Hebrews

in regard to what they put in their stomachs.

The time has come for Christians to gird up their loins and fight for untainted food on their tables, too. There is encouragement in the information that in one season 1,100 more cars of live poultry were shipped to New York City than the season before (1910), and that plants were being established near the city for providing poultry freshly slaughtered and dressed. The consumer must, however, make sure that the fowls are not only freshly killed but drawn within a few days; the second joint is sometimes tainted on the second day. Butchers and poultry dealers would make friends if they gave up the habit of charging for fowl at so much a pound including the intestines. Let them charge more per pound for the meat alone, refusing under any conditions to have an undrawn bird in their shops, and the poultry business will soon be doubled, nay, quintupled.

The fact that fresh fowl costs more than frozen is due to artificial conditions which can be remedied and *must* be remedied. For the present, if you cannot afford a six-pound fowl, try one weighing three pounds. If your dealer understands—as mine understands—that you will not under any circumstances eat a cold-storage bird he will supply a fresh one. What you want is not quantity but quality—particularly the true chicken Flavor. In the chapter on Savory Cooking it will be shown how a few pounds of fresh chicken

can be made to yield their delicious flavor to a dish much larger and much cheaper than would be afforded by a fowl double its size cooked in the usual way.

In Europe, most persons travel third class on the railways because they cannot afford first or second. In this country, nearly everybody can afford to travel first class. Americans are always bound to have the best of everything—if they know how to get it. Only in the gastronomic world are they—with the exception of the Jews—traveling third class—eating third-rate poultry prepared by third-rate cooks. This cannot last. We can afford the best. Let us have it.

### SPOILING THE AMERICAN OYSTER.

Nowhere in the world are oysters more abundant than in America. Nowhere are they cheaper or better. As a rule, too, we cook them well, in various styles; but in the opinion of most epicures a cooked oyster is an oyster spoiled. Its food value in any case, raw or cooked, is very small, and it is chiefly as a relish that those who know how to eat value it. But for years the public has been allowing the men who market oysters to eliminate the very elements which give them relish by soaking them in fresh water, which makes them bloated, blonde, and tasteless.

The dealers declare that many consumers demand them that way; floating makes them bigger. There are such consumers; they sacrifice quality for quantity;

they know not that usually the best oysters by far are the small brunettes straight from the deep sea; and they further demonstrate their gastronomic obtuseness by smothering their oysters under several strong condiments, which in themselves would destroy their delicate, natural Flavor.

In some of our States the government has come to the rescue of the epicure—who is in despair at this wholesale denaturing of his favorite delicacy—by enacting laws against the soaking of oysters because few of the streams in which this is done are free from typhoid and other deadly germs; but many of us do not feel sure that the health boards (because of indolence or "graft") exercise the necessary supervision, and therefore we deprive ourselves of the cheap luxury which Europeans have most reason to envy us. At banquets, where everybody used to eat oysters on the half-shell, it is noticeable how many plates the waiters remove that have not been touched.

Having thus summed up the indictment, let us consider a few of the more important details.

The London "Lancet" of April 22, 1911, had an editorial article on Shell Fish and Disease in which it pointed out that while from the nature of the case the testimony is usually of a very circumstantial kind, "which only becomes convincing in its cumulative aspects," there are instances on record like the outbreaks following certain banquets in Southampton and Ports-

mouth which admitted of no doubt as to the source of the disease.

Dr. H. T. Bulstrode made a comprehensive report upon enteric fever and gastro-enteritis in England to the Local Government Board of London, in 1906, in which he showed by means of maps how many of the mussel, oyster, and cockle beds were exposed to contamination, his revelations being, as the "Lancet" remarks, "decidedly disquieting." Even in cases where the shell-fish were collected from locations relatively remote from contamination by sewage they were likely to be "brought back and cleansed on shore much too near the mouths of sewers." England is thus in the same predicament as the United States, but that is small comfort for us.

In an address before the New York Academy of Sciences delivered by Dr. George A. Soper, President of the Metropolitan Sewerage Commission and reported in the "Times" of March 14, 1911, it was pointed out that there are over 500 sewer outlets discharging into the rivers and harbor of New York each day a volume of sewage that would fill the channel of the East River from the Brooklyn Bridge to a distance of fifteen miles. "New York gets many of its oysters from Jamaica Bay—about a million bushels a year. The water at this section is heavily polluted, and to this can no doubt be traced a great part of the typhoid that breaks out in this city. The Board of Health

has found that 15 per cent. of all typhoid is due to the eating of polluted shell fish."

James L. Kellogg, professor of biology in Williams College, in his admirable book on Shell Fish Industries [1] sums up the results of his thorough study of this subject in a chapter on Bivalves in Relation to Disease. It may be stated as a fact, he says, that "epidemics are sometimes caused by eating uncooked oysters. Several times they have been traced directly to that source. The evidence collected on that point in this country and abroad is conclusive."

There are four reasons for objecting to the process of "floating" oysters. The first—the danger of conveying a deadly disease—has been sufficiently dwelt on. Let us now consider the second:

Were all oysters taken from the ocean and not near the mouths of harbors or rivers that bear sewage, no one need ever hesitate to eat them raw. The trouble lies in the fact that, as Professor Kellogg puts it, "before food mollusca are marketed they are *almost invariably* placed for a few hours in fresh water to undergo what the oystermen term the drinking process. Oysters sold in shell as well as those that have been shucked are usually subjected to the fresh water treatment. To make delays and the cost of transportation as light as possible, the localities selected for this are almost without exception in harbors or river mouths

[1] New York: Henry Holt & Co., 1910.

near large markets. In very many cases such waters bear the sewage of cities of hundreds of thousands of inhabitants."

With these facts—which have often been pointed out—before him, is it necessary to call the reader's attention to the circumstance that even if it had never been proved that oysters can serve as conveyers of deadly diseases, the process of floating them—that is, *bloating them with sewage*—must be condemned as unspeakably vile and disgusting?

What aggravates the matter is that oysters have what Professor Kellogg calls "wonderfully efficient mechanisms for *straining dangerous organisms out of the water*." "Several gallons of water every day pass through the gills of every full-grown oyster or clam, and every solid particle is removed from it and remains in the body." "It is thus plain that even if relatively few in the water, the chances are that a dangerous number of disease organisms will be strained out of it by these shell-fish."

Indeed, were it not for the fact that most of these disease organisms are destroyed by the digestive fluids of oysters and those who eat them, there would be vastly more typhoid fever than there is now from the thirty million bushels that are sent to our markets every year from our shore beds. The danger comes from the organisms on the gills, or on the shell, which, in that case, it is not safe to handle.

Berlin has its *Rieselfelder*—vast meadows and gardens made fertile with the city's sewage. This liquid sewage is subjected to such thorough chemical treatment that ere it reaches its destination it is perfectly harmless. When the *Rieselfelder* were opened, the city fathers had such confidence in their chemist that they ceremoniously drank some of this water. It was a disgusting, though perfectly safe thing to do. The eating of our sewage-bloated oysters is both disgusting and unsafe.

"Cleanliness is next to godliness" is a motto which it is even more important to apply to the inside of the body than to the outside.

After this demonstration of the dangers and the filthiness of the process of floating oysters, it is needless to advance further arguments. But in order to complete the rout of the "floaters"—who have long fought so fiercely for the privilege of spoiling the American oyster—reference must be made to the two other indictments against them, because of the interest and importance attaching to them. One is moral and legal; the other, gastronomic.

Dr. Wiley sums up the two in one sentence: "Not only does it (floating) deceive the customer in regard to the size of the oyster but it deprives the oyster of its proper taste and flavor."

Osmosis comes into play in "floating," as he further points out: "By this process the body of the oyster af-

fects a plumpness and largeness which materially increases its selling qualities, as it increases its weight and size and, therefore, the profits of the dealer. The principle of this process depends upon the fact that when a soft substance like an oyster, containing a mineral salt in its composition, is brought in contact with water, a process of diffusion takes place which is known in chemical physics as osmosis, whereby water passes through the cell walls and enters the cells of the oyster and the mineral substance thereof is forced out into the external water. Larger volumes of water pass into the cells than accompany the particles of mineral matter to the outside of the cells and the result is a swelling of the oysters and consequent increase in the size and weight by the addition of pure water, but at the expense of the natural salt, mostly chloride of sodium or common salt, which the oyster contains."

Thus does science confirm and explain the epicure's perception that oysters are denatured by being soaked in fresh water—*deprived of the tang of the sea*, which tang to any one who knows anything about the art of eating constitutes ninety-five per cent. of the value of an oyster.

There are exceptions to my statement that small oysters are the best. Some epicures prefer the large, adult Lynnhavens to the small Blue Points; and the Lynnhavens certainly are among the finest in flavor. But men who do prefer the naturally large oysters, or

oysters that have been *legitimately* fattened in *salt* water, ought to be the first to fiercely resent the floating which is done to deceive them as to the *real* size of the oysters they pay for, and gives them denatured oysters, bloated and sickened with sewage water.

Three centuries ago Massachusetts boasted oysters a foot in length, and in Maine a shell has been found measuring three inches over a foot. We need not worry, however, at the decreased size of our bivalves; it makes them more tender—though, to be sure, also less nutritious. In any case, however, the nutritive value of an oyster is so insignificant as to be practically negligible. How ludicrously small it is, is shown by Dr. Wiley. For one hundred pounds of shelled oysters, he says, only about ten pounds of meat are found. In ten pounds of the meat there is over 80 per cent. of water; so that "*the actual nourishment contained in* 100 *pounds of oysters is reduced to a little over one pound!*"

Could anything more triumphantly demonstrate the comparative importance of Flavor over nutriment in this, the most delicious of all sea foods?

Yet it is to this all-important Flavor that our dealers show such brutal indifference, not only in the various ways pointed out in the preceding pages but in other ways. For instance, oysters spoil even more rapidly than fish and should therefore be kept alive to the last possible moment before serving. Yet how lamentably

seldom is this done! It can be done not only in cities on the coast, but in those of the interior, it being possible to keep oysters alive and in excellent state for consumption for a week or ten days or even longer.

It would be unjust to the oystermen to accuse them of perpetrating all their crimes against shellfish from sheer greed for extra gain. Ignorance also comes into play. Only one opener in fifty seems to know that the best thing by far about an oyster is the liquid in its shell. Watch the other forty-nine and you will see them wantonly wasting this precious, fragrant liquid, and in many cases they will serve the oyster on the flat shell, so that you get no juice at all. Always ask for them on the deep shell and don't he afraid, after you have transferred the morsel to your mouth to drink the liquid from the shell. It may not look elegant, but elegance be hanged!

Dealers who wish to get rich quick by creating an unprecedented demand for oysters with the real tang of the sea should bear all these things in mind and further prepare themselves by reading pages 158 to 164 of Dr. Wiley's *Foods and their Adulteration.* Then let them remember that honesty is the only profitable policy. The public is not in a mood to be fooled and trifled with any longer.

In the autumn of 1912 Dr. Wiley called attention (in "Good Housekeeping" for November) to the important fact that under present conditions not only is

it seldom safe to eat raw oysters, but that they are particularly risky in two of the "R" months—September and October—because of the danger of pollution due to the crowding at the seashore, which is becoming greater and greater as the summers wear on, many of the resorts being near beds in which oysters thus become sewage-contaminated even before they are "floated" by dealers.

In September, 1912, the Bureau of Chemistry published its Bulletin 156 on *Sewage Polluted Oysters as a Cause of Typhoid and other Gastro-Intestinal Disturbances*, by George W. Stiles, Jr., Chief of the Bacteriological Laboratory. He reviews the literature on the subject, showing how in many cases epidemics of typhoid and other diseases were traced to the eating of raw shellfish, and then relates how, with a detective ingenuity worthy of a Sherlock Holmes or a Burns, seventeen cases of typhoid and eighty-three cases of gastro-enteritis following a banquet held at Goshen, N. Y., in October, 1911, were traced directly to eating Rockaway oysters floated at Indian Creek, and twenty-six other cases, ten of them typhoid, were traced to the eating of Rockaways, some of which came from the same lot furnished for the Goshen banquet.

The Rockaway oysters thus got a "black eye," but if perhaps the worst offenders, they are by no means the only ones. "All the oysters of New York Bay, Narragansett Bay, and the Potomac River, the waters

near Norfolk, Va., and the mouth of the James River, the mouths of the Connecticut and Merrimac Rivers, and other industrial streams, and the continental border of Long Island Sound, are open to suspicion," says Dr. Wiley, and should not be eaten raw. More and more, too, will object to eating them cooked. Boiled filth does not appeal to the imagination.

The plain and distressing truth is that our great shell fish business, the pride of Gastronomic America, will be ruined altogether unless the barbarous custom of discharging the sewage matter of cities and villages into rivers and the ocean is stopped. It seems incredible that we, with our incalculable wealth, should be so far behind Europeans, especially Germans, in this matter of keeping our sea food clean and edible. The disposal of sewage matter after German methods is the most important problem now before the American public, more important by far than tariff questions, warships, irrigation projects and Panama canals.

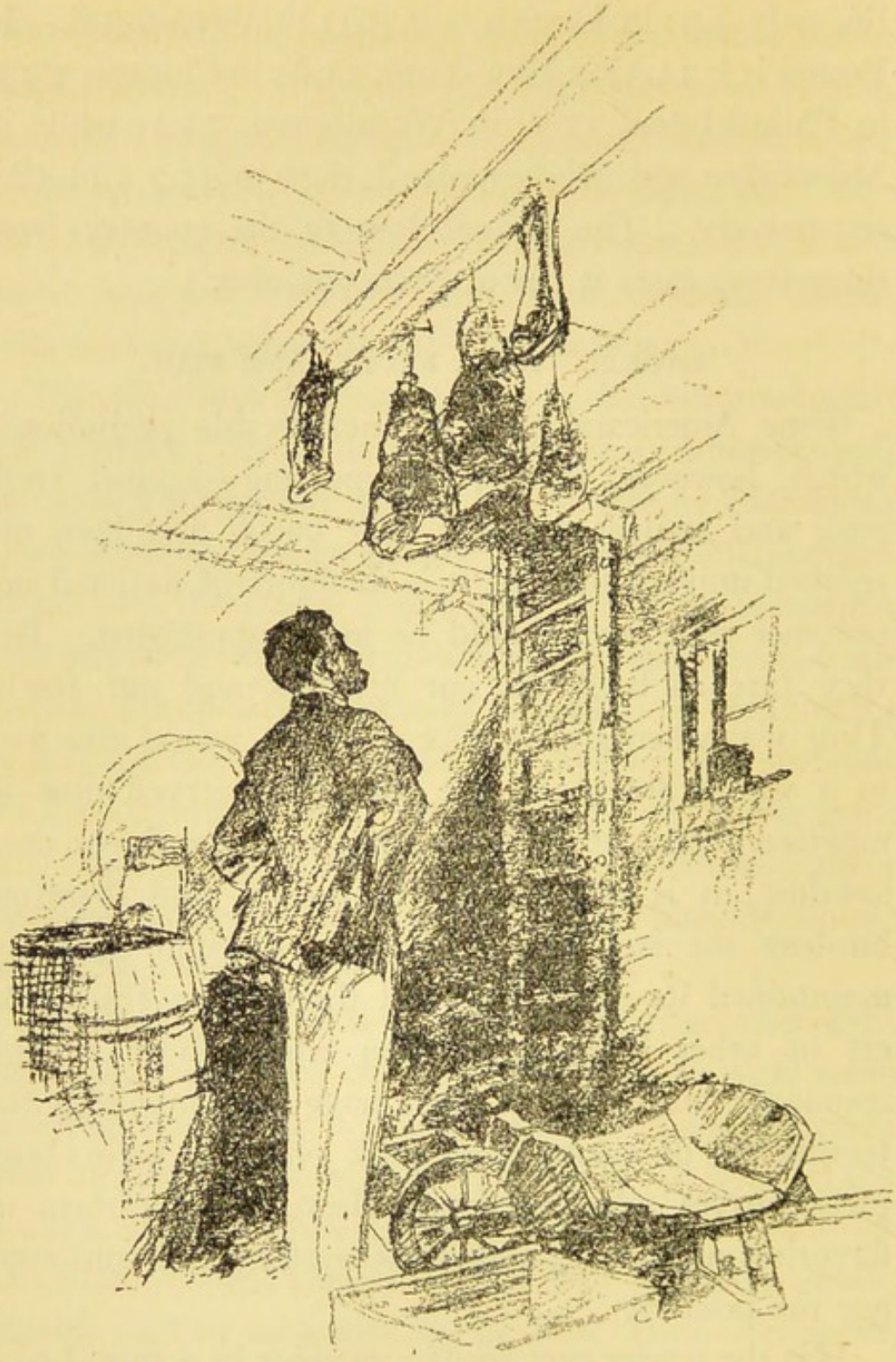
Typhoid fever could be reduced to a minimum were the sewage disposed of scientifically as it is in some German and English cities. The startling assertion that in 1909 there were more cases of typhoid in the United States than of plague in India was made by Dr. Allan J. McLaughlin, of the United States Public Health Service at a meeting in New York, December 5, 1912, of the Association of Life Insurance Presidents. The typhoid fever rate per 100,000 is, in Ber-

lin, only 2.9; in London it is 3.3; in Vienna, 3.8. In Boston it is 11.3; in New York, 11.6; in Chicago, 13.7; in Philadelphia, 17.5; in Washington, 23.2; while in Milwaukee and Minneapolis it rises to 45.7 and 58.7 respectively. The annual loss to the country from these fever cases is put at $100,000,000.

### "SMOKED" HAM, BACON, AND FISH.

Some Americans have an inexplicable prejudice—which, however, is fast disappearing—against fresh pork and against sausages, but bacon and ham are relished universally, and it is therefore of national importance that they should be made appetizing. But they fare as badly as our bivalves and our fowls. Time was when a crisp slice of bacon would give zest to a whole breakfast, but the bacon served now in nineteen cases out of twenty has no more flavor than sawdust; it is eaten without pleasure, and therefore burdens the stomach for hours. Virginia ham has maintained its supremacy and there are a few packers of other hams and bacon who uphold a high standard; but most of them have succumbed to the temptation of curing their pork products with cheap preservatives which denature them, making them as flavorless as floating makes the oysters, and cold storage the poultry.

Has the reader ever spent a summer in a farm-house and casually come into a corner of the woodshed where



Where smoked hams were suspended from the rafters

smoked hams were suspended from the rafters? If so, he will remember the appetizing fragrance which suddenly made his mouth water and make him long for breakfast. Some persons think they do not like smoked meats; but they almost invariably do when they thus come across the real thing.

Smoke is not only the best of all preservatives, it is also the most valuable of condiments, imparting to meats or fish a delicate aroma without altering their natural flavor. A famous Austrian physiologist, Professor Brücke, pointed out many years ago that smoked meats are more digestible than fresh meats; but he did not give the reason, which is that the delicate yet penetrating Flavor added by the smoke creates an appetite and thus causes a flow of digestive juices to the stomach. The American consumer is now usually deprived of this healthful condiment and wholesome pleasure because those who handle pork products have discovered that they can save much time, trouble, and money by soaking them, as just intimated, in cheap solutions of chemicals instead of smoking them in the old-fashioned way, carefully and *slowly*.

Farmers are busy folk and therefore naturally eager to learn ways of lessening their labors. They consequently succumb readily on reading an alluring advertisement like the following, clipped from a paper published in a Western village:

## "Smoke Your Meat With a Brush

There's a new and better way of smoking meat. You accomplish in but a trifle of time all that you can by the tedious old fashioned process. Your meat will be hard and firm, it will be protected from all germs and insects and it will have a more delicate flavor than if smoked in the old way. Use

## Brown's Condensed Smoke

It contains all the preservative elements of the smoke, without the rank, disagreeable elements. You simply apply it with a brush or sponge, giving the meat one or two coats, and the smoking is done. Price 75c."

In England, also, long famed for its deliciously flavored smoked hams and bacon, the farmers and packers have been approached by the tempter. "A case in point," says the "Lancet" of February 5, 1910, "is seen in a rapid method of making hams, bacon, and certain fishes appear to be smoked by applying to them a fluid called 'smoke essence.' "

Is it straight dealing, it asks, to call an article painted over with smoke essence "smoked"? "We had occasion recently," this leading medical journal continues, "to examine a specimen of smoke essence in the laboratory, and the results of the analysis were interesting. We found it to consist chiefly of creosote, analine dye, and a salt of iron." Even if such a mixture is harmless "that fact does not justify leading a

consumer to suppose that a bloater, a tongue, a rasher of bacon or ham, treated by this simple process, had been adequately cured by the operation well known as 'smoking.' There can be no question at all that the color is added to complete the disguise, and we feel bound to admire the ingenuity of the inventor of a mixture who puts into it a salt of iron which is calculated to give a side of bacon an appearance of natural rustiness."

In conclusion, the "Lancet" expresses its regret that such matters as these affecting the purity of the food supply were not "strongly dealt with" when the Departmental Committee on Food Preservatives and Coloring Matters issued its recommendations nearly a decade previously.

It is passing strange how patiently the average Englishman, and still more the average American, allows himself to be fooled by food manipulators whose chief aim is to save time, trouble, and expense.

The familiar definition of genius as "a capacity for taking pains" is incorrect, but such a capacity is certainly necessary for the production of the best foods, including bacon and ham. We Americans, speaking collectively, lack it and that is one of the main reasons why we must be branded as an ungastronomic nation.

A striking illustration of the importance the Bohemians, for instance, attach to such matters is found

in the village of Wallern, where a coöperative society has been formed for the sole purpose of getting meats smoked in the best possible manner, with beech wood.

The point I wish to call special attention to is that the pork products in this model house are smoked, according to the size of the pieces, for a period of *two to three months.*

In a recent *American* book on pigs these directions are given: "If the hams are to be smoked they should be hung in the smoke stoves *at least three days.*"

Three days! In Germany and Austria, where the world-famed Westphalian and Prager hams are cured, six weeks is the minimum time for a good article. The maximum, for the highest-priced hams, is three months.

We are now in a position to understand why so many Americans imagine they do not like smoked meats. They have in mind either such meats as have been chemically "smoked," miles away from any smoke house or stove, or such as have been actually smoked, but too briefly, or in too strong smoke.

Dealers have slyly taken advantage of the naturally growing aversion to "smoked" meats. "Slightly Smoked" is a label one often sees now, and ere long, if not checked they will have the audacity to say to a housewife asking for smoked ham or fish or bacon that they have "none in stock," there being "so little demand for it."

That is the way many of the best things are crowded out of the market.

In conclusion, let me whisper in the reader's ear the secret why those who handle pork products and fish are so eager to get rid of the smoke house that during the process of smoking the ham and bacon may lose up to twenty per cent. of its weight.

"But why does the dealer not charge more, to make up for loss of weight?" He does, dear Madam. He charges more every year and saves the full weight, too, by avoiding the smoke house. The joke is on you. He will do this as long as you meekly tolerate it. He will tell you with a look of injured innocence that you are "the first one to complain"—and perhaps you are, though merely one of many thousands who have been fooled.

As I have said, there are exceptions. A few firms are selling real smoked ham and bacon, and they are coining money. Others will perhaps find out ere long that it pays better to please the public than to fool it.

At present, the outlook seems hopeless. Some years ago, when there were still a few dealers left who did not try to get rich quick at the expense of your stomach and health, I used to lunch often on smoked fish. But in the year 1912 you could not—at least I could not—get a genuine smoked fish for love or money. One day in December, I walked into a delicatessen store in which I saw through the window a plateful of white-

fish, a variety which is particularly good smoked. They were choice specimens, but after a sniff at them I beat a retreat with, I presume, a disgusted expression. "What's the matter with those fish?" asked the dealer. "They are a first-class article." "Fine fish," I retorted, "but they are not smoked." "They may not be smoked enough . . ." "They are not smoked at all," I interrupted, "they are chemically preserved and dyed to save weight." "You seem to know more about it than I do," he said. "I certainly do," I answered: "If they were smoked I would take a dozen of them."

Fancy the situation—to be unable, in the second largest city of the world, to get smoked fish! I have tried dozens of places, always with the same result. If others refused to buy the denatured stuff offered, smoked fish would soon be in the market again.

The best foreign methods of smoking meats are described in No. 3655 of the Daily Consular and Trade Reports (Washington, December 8, 1909). Fortunes are in store for all American packers who will follow those methods and advertise *honestly:*

"We give our pigs clean food, feeding a fine flavor into our hams and bacon; we do not destroy this flavor with chemical preservatives but intensify its appetizing qualities by the use of beechwood smoke."

Where beech-wood or hickory, oak, or maple are not available, corn cobs make a cheap and satisfactory substitute.

### FLAVOR IN BUTTER.

On every table in the land, except that of the very poor, there is one article which appears two or three times a day all the year round, and that article is butter. More than $300,000,000 worth of it is consumed every year in the United States. One would therefore suppose that the public would insist with all its might and main on having its butter good. It does no such thing, but meekly accepts the indifferent and often vile stuff offered by dealers—an unpalatable lubricator which I would no more think of eating than I would axle grease.

A few years ago Miss Alice Lakey, chairman of the food investigating committee of the National Consumers' League, said that "ninety-five per cent. of all samples of butter submitted were adulterated. We are eating practically no pure butter."

While there is evidence to show that butter was made four thousand years ago, it seems to have taken some nations a long time to "catch up with the procession." We are a long way ahead, on the whole, of the Spaniards, who, as late as the seventeenth century, kept butter in medicine shops "for external use only" (doubtless there were good reasons!) and who to this day hardly know what edible butter is; or of the Irish of that same century who are spoken of by James Houghton as rotting their table butter by burying it in

bogs. But we are lamentably behind some of the European nations, notably the French, Germans, Austrians, and Swiss, in the making and the appreciation of first-class butter.

In some of our leading restaurants and hotels, as well as in expensive clubs and the residences of wealthy families, one may come across such butter; but one is not sure of getting the real thing even after paying the highest price. I seldom eat it at home—there are too many disappointments—and when I travel in the United States I rarely have the courage to try it. In rural summer resorts we have found that the only way to get edible butter is to make it ourselves.

As regards Europe, on the contrary, I can repeat what I have said about poultry: that during a five months' trip in 1912 I did not once have butter placed before me which I could not eat with pleasure.

The unwillingness of Americans to take pains in the preparation of foods to which I have referred as one of the main indications of our being an ungastronomic nation is strikingly illustrated in the department of butter-making, wherein it is the chief cause of our inferiority.

Our Government has done its best to enlighten the butter-makers. In 1904 the Department of Agriculture published, for free distribution, Farmers' Bulletin No. 241: "Butter-making on the Farm," by Edwin H. Webster, Chief of Dairy Division, Bureau of Animal

Industry; and, in 1905, Circular No. 56 of the same Bureau: "Facts Concerning the History, Commerce and Manufacture of Butter," by Harry Hayward, assistant chief. These pamphlets contain in concise form invaluable information which, if generally utilized, would revolutionize the butter business.

Mr. Webster refers to "the great amount of poor butter made on the farm," and Mr. Hayward also confesses that "a very small percentage of all dairy butter made is of really high grade."

When one reads of all the diverse precautions that must be taken to ensure a good article, and bears in mind the characteristically American unwillingness to take pains with the things that are put into our stomachs, one wonders not that our butter is so inferior.

A few of the hundred-and-one precautions necessary to secure a first-class article may be briefly mentioned. The cow must be kept carefully cleaned, particularly the udder, and so must the hands of the milker, and the pail which holds the milk. "The habit of some milkers of wetting their hands with milk just as they begin is a filthy practice and the cause of much bad milk and poor butter." There must be no hidden, inaccessible places in the pails, nor must rusty tinware be used, because it imparts a metallic flavor to the milk. Some of the so-called washing powders are very objectionable. The walls of the barn must be whitewashed, and the ventilation such that the air is changed every few

minutes. The pails must be rinsed first with cold, then with boiling water. The milk must be removed as soon as possible from the barn, where it readily absorbs dust or bad odors from the air, and then stored in a cold place, far away from decaying vegetables or fruits or other things, the odors of which it might absorb. The sun should pervade the cold storage room but not look on the milk. If possible, the cream should be collected by means of a separator, for the proper handling of which there are a number of rules, the neglect of any one of which will spoil the butter. It is absolutely necessary to cool the cream thoroughly, immediately after separating, and to avoid mixing of cold with warm cream. Then there are a number of directions concerning churning; working the butter to get out the milk and water; packing; marketing; feeding the cows, and so on, none of which can be disregarded with impunity.

This complexity of the art of butter-making may help to explain the situation in America, but does not excuse it, for in the gastronomic countries of Europe people are not too lazy, ignorant, or indifferent to turn out a first-class article every day in the year.

What I wish to call particular attention to is that all these precautions necessary for the making of first-class butter relate to its Flavor. *Persons buying butter for any other purpose than the enjoyment of its Flavor are extremely foolish*, for they can get the same amount

of fat and general nourishment very much cheaper in a hundred other ways.

It is for the sake of securing an agreeable aroma or Flavor that all the rules just enumerated, and two-score more, must be observed. If this is not done—if only one or two of them are neglected—there are developed in the milk, or the cream, or the churned butter, bacteria of a very disagreeable kind, which will convert butter that might have been of the highest grade into a second, third, or fourth grade article, or one quite unfit for human consumption, because of excessively rancid, fishy, smoky, tallowy, leeky, soapy, cheesy, or other flavors. The art of butter-making consists in eliminating all disagreeable flavors and fostering the agreeable ones.

Renovated or process butter is made of butter in which, on account of careless manufacture or storing, the disagreeable bacteria have so got the upper hand of the agreeable ones that even those persons who, because of a slender purse or an imperfectly developed sense of smell, are contented with fourth-grade butter, refuse to buy it. This stuff (often sold, *horribile dictu*, as "cooking butter") is subjected to a process of purification, which makes it a wholesome and nutritious article of diet. Yet it is sold at a much lower price, for the reason that it is inferior in Flavor to good butter.

The long and fierce fight between the butter-makers and the manufacturers of oleomargarine is also in the final analysis, a question of Flavor.

Oleomargarine is a mixture of vegetable and animal fats, diversely mixed. This mixture is churned with milk to impart a butter Flavor; or there is added to it more or less butter, in which case it is known commercially as butterine, although legally it is classified as oleomargarine.

If made honestly, of clean material, and unadulterated with borated Chinese egg-yolks, or with preservatives, oleomargarine is a perfectly unobjectionable and wholesome food. The trouble is that, as Dr. Wiley has pointed out (1911), "there has been a constant disposition on the part of dishonest manufacturers and dealers, since the time when oleomargarine became a commercial commodity, to sell it as butter. Although the penalties of National and State laws are very severe in this respect the practice is continued. The opportunity for gain is so great that the cupidity of the manufacturer overcomes his fear of punishment and disgrace."

There has been much outcry because of the special tax on oleomargarine and the severe laws against selling it as butter. As a matter of fact these laws should be even more severe and much more rigidly enforced. The practice of selling it as butter not only defrauds the consumer but it tends to drive real butter out of the market, since such butter cannot be produced at nearly so low a cost as margarine, especially if made with the care and expenditure of time necessary for the produc-

tion of first-class butter. The best butter costs five or six times as much as the best margarine. It is needless to say that in the compounding of "butterine" the best butter is not likely to be used.

By mixing milk or butter with his fats, the manufacturer of margarine confesses that his own product lacks the one thing which gives butter its advantage, for table use, over a dozen other fats that might be chosen—its appetizing Flavor, which makes it digestible and enables us to eat it with relish every day in the year. It is owing to this superiority that pure butter is entitled to legal protection against unfair competition.

It might be argued that the American farmer, whose butter is, as we have seen, usually of a low grade, does not deserve the protection the Government gives him against the underselling of the margarine maker, because good oleomargarine is preferable to bad butter. Such protection is, however, due to the associated system of manufacture known as creameries. The creamery, which in 1900 had already usurped one-half the butter business in the country, "has done much," as Mr. Hayward remarks, "to improve the quality of American butter, and if all butter came direct from creameries there would be no such quantities sold by producers at prices which are often actually below the cost of production, as is the case at the present time."

### SWEET BUTTER VERSUS SALT.

There are now a number of model creameries in the United States turning out butter which would probably equal the best European were it not habitually spoiled by the injudicious use of a "starter" to turn the cream quite sour, and by the addition of salt. The subtle and much disputed question of sour cream versus sweet will be discussed in the chapter on French Supremacy. That of "salt or no salt" must be disposed of now.

The assertion frequently made that unsalted butter tastes insipid to most users is not confirmed by my own experience. No doubt the subtle aroma of sweet butter escapes many who are partially anosmic (a frequent defect analogous to color-blindness), or who have neglected to train their sense of smell, or who have deadened their olfactory nerve by excessive smoking or drinking of strong liquors, so that they cannot appreciate the delicate aroma of European butter. But I have come across many Americans at home and abroad who, given a fair chance, instantly and emphatically preferred the unsalted butter.

Once I made a special experiment at a rural boarding house in Maine. Of a dozen persons at the table only one liked salt butter better; two had no decided preference, while the other nine voted, after a fair trial and comparison, for sweet butter first, last, and all the time.

The only trouble was that much more was consumed of the sweet than had been eaten of the salt; which shows the folly of those dealers who think they are smart in selling pounds of salt at the price of butter, whereas in truth they would sell twice as much butter if they left it sweet, because that kind is so much more palatable and tempting. Boarding house keepers will always order salt butter.

Undoubtedly the vast majority of Americans at present prefer, or think they prefer, salted butter. To convince them that this preference simply proves that their gastronomic education has been neglected, let me add a few significant details.

Dr. Wiley, in whose taste, judgment and knowledge we all have so much faith says that "the best grade of butter is that which receives no treatment other than the washing and working process to which attention has been called. This kind of butter is known as natural or unsalted or uncolored butter, that is, a fresh, sweet product of an agreeable aroma, palatable, of fine texture and grain, and is the best product of its kind for human consumption. It also brings the highest price on the market."

Until a few years ago it was almost impossible, even in New York City, to get unsalted butter. To-day it is usually served in the most expensive hotels and restaurants, some of the wealthy folk use it at home, and the general customer has a chance to buy it in a

few places, at fancy prices. It is seldom as good as the same product in the humblest inn of Continental Europe, but it is improving from year to year.

In connection with this fact it is interesting to read the words of Chief Hayward, in the Government publication already referred to.

"*What is known as the highest class trade demands a much lighter salted butter than is demanded for the lower grades. Furthermore, there is an increasing tendency on the part of the best trade to ask for a butter containing less and less salt. Butter which has a clean, pure flavor needs little salt; that which is off-flavor or tainted in any way is improved by being strongly salted.*"

In other words, the worse the butter, the more salt it needs, and the better the butter the less salt it needs. From this it follows logically that the best butter needs no salt at all.

The notion that salt "brings out" the Flavor is ridiculous; it spoils it. In the gastronomic countries of Europe the consumer would no more allow salt to be put into the butter he eats than into the cream he puts in his coffee, or the ice-cream he takes for his dessert.

There is absolutely no excuse for continuing the barbarous practice of denaturing American butter by the addition of salt. It does not even help to make it keep. On this point Dr. Wiley remarks: "It is a

common supposition that salt in butter is a preservative. This is true when used in large quantities, that is, in quantities which render the butter somewhat unpalatable. The very small quantity of salt used purely for condimental purposes cannot be regarded as aiding in any material way the preservation of the product."

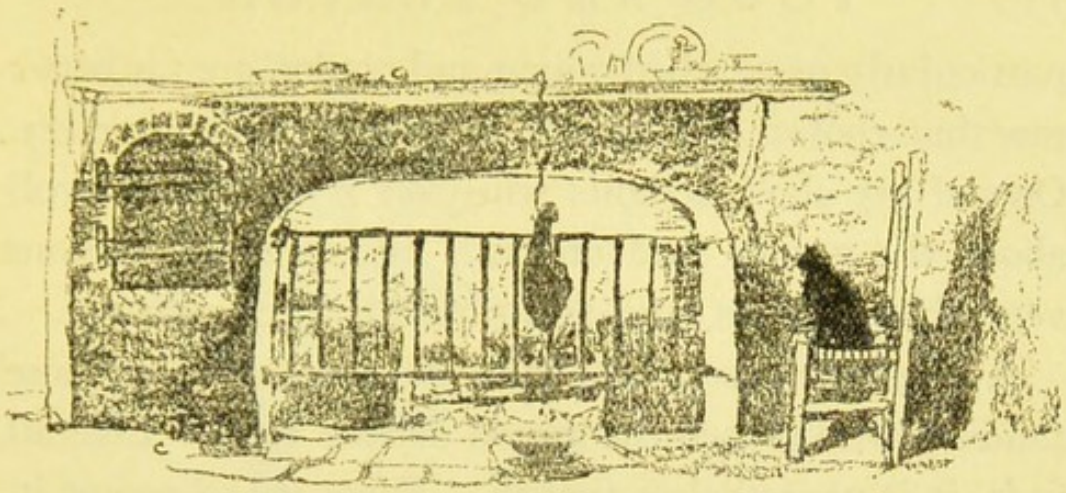
There is also a comic side to the question and the joke is on the butter-maker and dealer. I have already pointed out that we are tempted to eat much more of the sweet butter than of the salt. There is another weighty reason why the makers would profit by leaving out the salt. Dr. Wiley observes that "there is a tendency on the part of the greedy manufacturer to add excessive quantities of salt because it is very much cheaper than the butter itself and thus he hopes to add to the profit of the industry. On the contrary this practice usually results in loss, since such highly salted butter naturally brings the lowest price."

The funniest part of the story remains to be told. By throwing in handfuls of salt the maker not only lowers the market price of his butter but also decreases its weight! Read Assistant Chief Hayward's explanation of this seeming paradox:

"Butter will usually weigh less after the salt has been added and the butter worked than before. This is due to the fact, already mentioned, that salt unites, or collects, the small drops of moisture into drops so large that they can be separated from the butter, and, as the

total weight of the water or brine thus separated exceeds the weight of salt added, the butter consequently loses weight by reason of salting."

If, *in spite of all this*, the butter-maker and dealer persist in foisting strongly salted butter on you, beware! It can only be because, as Chief Hayward has pointed out, "that which is 'off flavor' or tainted in any way, is improved by being strongly salted." Do you wish to habitually eat bad butter thus "improved"? Can it be possible that you do not resent being the dupe of the astute butter men?



# IV

## THE SCIENCE OF SAVORY COOKING

### DESIRABLE RAW FOODS.

NOBODY wants a boiled or fried orange or grapefruit for breakfast. Other fruits, such as apples, pears, peaches, plums, cherries, grapes, and diverse berries are often cooked, in many ways; but when ripe, sound and of good stock, they usually "taste" better raw than cooked. We do not boil our melons, nuts, or radishes, nor, as a rule, our celery and green-salad leaves of various kinds, or our cucumbers. Tomatoes make an excellent stew, but they are better still sliced raw, with vinegar and oil, and best of all eaten out of hand right off the plant.

These things nearly everybody knows. Many, however, are not aware that the best thing about a cabbage is the core, eaten raw, and that carrots, turnips, and

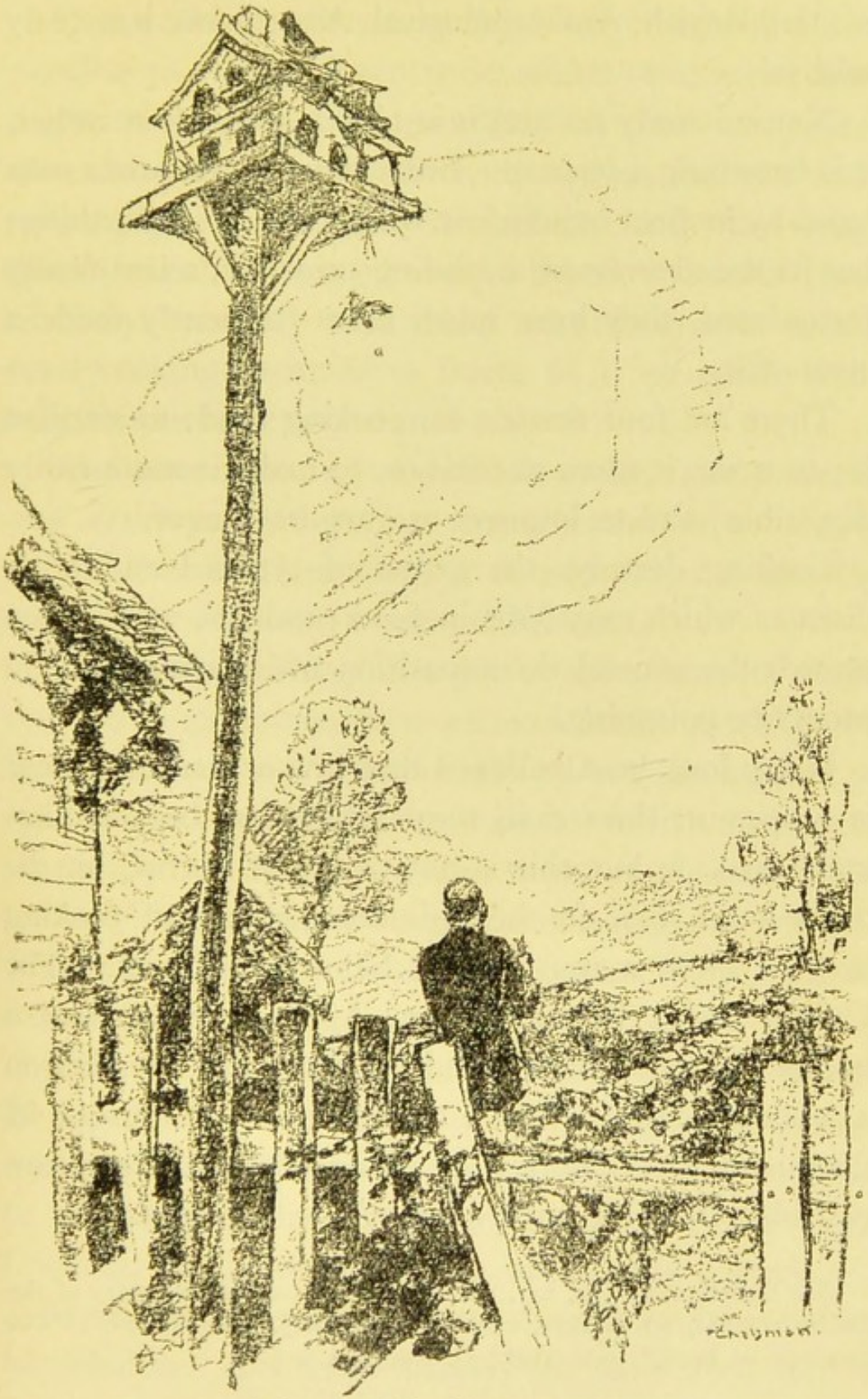
particularly peas, when young and tender, are far better raw than cooked. Raw carrots taste a little like celery. One of my chief delights when on a farm is to stroll about the garden and orchard, sampling the various vegetables, berries, and fruits just before breakfast.

A tolerable case might thus be made out for those faddists who preach the gospel of raw food. Like all fads, it is nevertheless foolish. Were we to accept it, we might still eat sun-dried meat, or ham, sausages, and fish thoroughly smoked, but we would hardly care to eat raw bacon, or veal, or mutton, or poultry, or beef (though a "beefsteak à la Tartare" is edible when buried under diverse "trimmings" from the delicatessen store). I should like to see a faddist eat a raw potato or beet, or a plateful of raw pumpkin, squash, or beans!

Were we to live on raw foods altogether, we might survive to tell the tale, but we should have to give up that infinite variety which is the chief spice of our diet. At the same time one of the great arts of civilization would vanish from the earth—an art which does as much to distinguish us from animals as the fine arts do—more so, in fact, for birds sing and beavers build houses, but no bird or other animal ever cooks its food.

### FLAVOR AS THE GUIDING PRINCIPLE.

"Cookery is an art which almost more than any other has civilized mankind," as President E. B. Tylor



Before breakfast in the garden

of the British Anthropological Association has truly said.

Nor is it only an art; it is also a science—or rather, it is becoming a science. From time immemorial cooks have, by instinct or accident, often done the right thing; but in the absence of a guiding principle, scientifically formulated, they have much more frequently made a mess of it.

There are four reasons for cooking food: to sterilize it; to make it more nutritious; to make it more easily digestible; and to improve or vary its Flavor.

Cooking destroys the germs of typhoid and other diseases which may lurk in food products, and it also retards the general decomposition which may result in ptomaine poisoning.

It has long been believed that raw or semi-raw meat is more nutritious than meat which has been moderately cooked; but this is not true. It is true, on the other hand, that in the ordinary methods of cooking there is often a considerable loss of nutriment. The United States Department of Agriculture has had a number of experiments made to place this question on a scientific basis.[1] Much remains to be done, but in the end it will doubtless be found that there is no appreciable loss if French methods are followed.

[1] See Bulletins Nos. 34, 141, 162, 193. A convenient summary of the results reached, up to 1911, may be found in J. Alan Murray's "The Economy of Food," New York: D. Appleton & Co.

That cooking makes most foods more digestible it is needless to prove. Even fruits which taste better raw, digest more readily when cooked. A great many persons who cannot, for instance, eat apples, find them not only agreeable but easily assimilated and most beneficial to health when stewed or baked. Cereals (particularly oatmeal) and many vegetables and meats need cooking—sometimes hours of it to make them easy to masticate and digest.

*The main object of cooking, however, is to preserve and develop the countless savors latent in good raw material, to combine them or to add others where the material is deficient in natural Flavor.*

This is the guiding principle to the *science* of cookery. Strange to say, there are cook books in which the word Flavor is not to be found! The recipes given in such books may be correct, but to follow them mechanically is like playing the notes of a piano piece without knowing anything about expression marks. Flavor is the soul of food as expression is the soul of music.

*Born* cooks know this instinctively and act on it. But cooks can also be *made*. Tremendous improvement could be effected in our kitchens in a short time by attending to the elements of the Science of Savory Cooking, long since discovered, but usually ignored.

Much has been written about the wastefulness in our households. A French family, we have been told a

thousand times, could live on what is thrown away in an American kitchen. True; but as long as we enjoy our present national prosperity this waste is a far less deplorable matter than the *criminal* way in which ignorant or careless persons habitually denature our best food materials by allowing the healthful Flavors to escape during the process of cooking.

### THE PHILOSOPHY OF SOUP MAKING AND EATING.

In each of the processes of cooking, such as boiling, roasting, frying, stewing, steaming, baking, it is necessary to observe certain elementary rules which can easily be taught.

*Boiling.* In boiling meat, everything depends on whether the object is to keep the juices within the meat or to get them out; in other words, whether the meat is intended to be eaten, or simply used for the purpose of making a rich, flavorful bouillon or soup. If the meat is to be eaten, it is plunged at once into *boiling* water, which coagulates the protein on the outside and prevents the loss of the juices. The bigger the chunk, the better.

If the meat is *not* to be eaten, it is put into a pot of *cold* water and the temperature is raised gradually. In this case the richest broth is obtained if the meat is cut up into small pieces and cooked a long time.

It is almost universally believed that "soup meat" (usually beef) boiled in this way has lost most of its

nutritive qualities and that these have gone into the soup. In reality, it is all a matter of Flavor. We prefer the soup to the meat boiled in it, merely because the Flavor of the meat has been transferred to the soup. The nutritive matter remains in the meat; the soup stock has very little of it—from one to five per cent. only. It is evident, therefore, as Dr. Wiley points out, that "*the soup stock is valuable as a condiment and flavoring and not as a food.*"

The same is true of beef extract, which is simply a concentrated soup stock—thirty-four pounds of beef boiled down into one pound.

Here we have the whole philosophy of soup making and soup eating, reduced to the simplest terms. Soup contains the essence of meat Flavor, and we eat it at the beginning of a meal because this Flavor stimulates the appetite, which in turn causes the digestive juices to flow freely. The richer the soup is in Flavor, the more it stimulates the appetite. The beef extracts sold in little jars are, if made by reputable firms, among the most valuable appetizers—invaluable, in fact, in a country in which the science of making savory soup is so little understood or practised as it is in the United States.

The makers of meat extracts have laid themselves open to censure by making extravagant claims as to the nutritive properties of these extracts, instead of dwelling principally on their importance as flavorful

appetizers. This, to be sure, they could hardly have been expected to do until the all-importance of Flavor in Food had been impressed on the public in a special monograph.

### WHEREIN LIES THE VALUE OF VEGETABLES?

Except for the making of soup stock, and of extracts and beef tea, boiling of meats is not much in vogue in America. Vegetables, on the other hand, are usually boiled—and thereby hangs a melancholy tale.

Boiled they should be, but not in the careless, unscientific way generally practised in America and England, where they usually are served at table entirely denatured, that is, deprived of their Flavors.

Villainous and idiotic are the only adjectives that adequately describe this method of cooking vegetables, for their utility as food lies chiefly in these Flavors, the nutritive value of green vegetables being small.

How small it is may be seen by the analysis given in Dr. Wiley's "Foods and their Adulteration," Part VI, where he says, for example: "There is very little nourishment obtained in eating a turnip which perhaps is 95 per cent. water,—yet its palatability, its condimental character, and its general salutary effect upon digestion is such as to make it worth while to pay even a high price in proportion to its nutriment."

If the reader wants more evidence on this point he

may find it in Sir Henry Thompson's valuable book, *Food and Feeding*. Speaking of "the entire cabbage tribe in great variety; lettuces, endives, and cresses; spinach, sea-kale, asparagus, celery, onions, artichokes, and tomato," he remarks that all these are "valuable not so much for nutritive property, which is not considerable, as for admixture with other food chiefly on account of salts which they contain, and for their appetizing aroma and Flavor."

Therefore, to boil green vegetables without the slightest attempt to preserve or develop their natural Flavors, as is almost universally done in our country, is, I repeat, villainous and idiotic.

Americans undoubtedly eat too much meat. Preaching about the injuriousness of this excess may do some good, but a much more effective way would be to cook vegetables more temptingly.

If peas and string beans are succulent and fresh, they are delicious when simply boiled in salted water. In cities they seldom are quite fresh, and, as a rule, it is well to add soup stock or butter to develop the Flavor. In any case, it is of importance that the water should be already boiling when the vegetables are put in. If this is not the case, there is a loss of valuable salts and Flavors. Some loss there must always be; that is, the water always absorbs some of these juices and Flavors; but note the difference. French cooks preserve this vegetable stock, as they do the meat stock,

for diverse combinations. Our cooks pour it down the sink.

It is fortunate that the United States Government has undertaken to establish the principles of savory cooking by scientific methods, which will lead to more satisfaction and generally helpful results than the empirical, haphazard methods hitherto followed by cooks.

An interesting glimpse into the kitchen laboratories of our Government experts is given by Murray in his "Economy of Food."

"It is obvious," he says, "that the loss of nutrients will be increased by cutting the vegetables into small pieces, and by soaking them in cold water before cooking. In the case of potatoes, turnips, and similar products, the loss might be greatly diminished by cooking them whole with the skins on, but as a rule this method is not practicable.

"These conclusions are confirmed by the experiments of Snyder,[1] Frisby, and Bryant. They found that when potatoes were peeled, cut into pieces in the usual way, and soaked in cold water before boiling about half the total nitrogen—including about a quarter of the true albuminoids—was lost. When put into cold water and cooked at once, only about a sixth of the total nitrogen —including a twelfth part of the true albuminoids— was lost. When the potatoes were put, at once, into boiling water, the loss was only about half the amount

[1] Bulletin 43, U. S. Dept. of Agr.

recorded in the last case; but, for some reason, this method is not suitable for some kinds of potatoes, as they 'go to smash' if so treated. The loss from potatoes boiled in their skins was quite inconsiderable, being less than one per cent. of the total nitrogen.

"In boiling carrots which had been scraped and cut into pieces, the amount of the loss was found to depend almost entirely upon the size of the pieces. Small pieces lost about 40 per cent. of the total nitrogen and 26 per cent. of the sugar. With large pieces, the loss of nitrogen was about 20 per cent. and of sugar, 15 per cent."

A number of useful hints for the practical cook are supplied by these scientific experiments.

It is needless to say that in potatoes and beets, and in dried vegetables, like beans, corn, and peas, the proportion of nutriment is greater than in the succulent greens. In the cooking of dried vegetables the preservation and development of Flavors is also of great importance, with a view especially to digestibility. Unlike the green, the dried vegetables should be cooked by putting them into cold water; and prolonged cooking is necessary in order to soften and otherwise prepare them for the alimentary canal.

Our benevolent Government a few years ago engaged one of the country's chief cooking experts, Maria Parloa, to write a brief treatise on the *Preparation of Vegetables for the Table* for free distribution by the De-

partment of Agriculture as Farmers' Bulletin No.256. Like all these documents, it is excellent; in less than fifty pages it explains the best ways of cooking potatoes, beans, peas, carrots, asparagus and two-score more of the products of the garden; and these pages are followed by others on vegetable soups, seasoning and sauces for vegetables, and salads and salad dressings.

Every cook, urban as well as rural, should have a copy of this pamphlet and mark with a red pencil the more important directions. If every cook in the country knew and practised only the following directions given in this useful document, what a transformation there would be in our dining-rooms!

"All green vegetables, roots, and tubers should be crisp and firm when put on to cook. If for any reason a vegetable has lost its firmness and crispness, it should be soaked in very cold water until it becomes plump and crisp. With new vegetables this will be only a matter of minutes, while old roots and tubers often require many hours."

"All vegetables should be thoroughly cooked, but the cooking should stop while the vegetable is still firm." "Over-cooked vegetables are inferior in flavor and often indigestible." "Badly cooked, water-soaked vegetables very generally cause digestive disturbances, which are often serious." Cabbage "is apt to be indigestible and cause flatulence when it is improperly

cooked. On the other hand, it can be cooked so that it will be delicate and digestible."

*Steaming* is one of the best ways of cooking vegetables. It is largely practised in France and Germany, but neglected in England as it is in America. Potatoes have more of their natural Flavor when steamed than when cooked any other way. An English writer says on this point: "Steaming has the double advantage of conserving the Flavor and making the food more digestible. Its only drawback is that it takes more time, and this is probably the reason why it has somewhat fallen into disfavor in England."

### BROILING, ROASTING, BAKING, FRYING.

As this volume is not intended to be a practical cook-book, no attempt is made to give rules for all the various processes of cooking food; nor is it necessary, for nearly every family owns a cook-book giving the required directions. What I wish to emphasize is that in all these processes the rules given by the best chefs refer directly or indirectly to the preservation and development of the food Flavors. A few brief paragraphs will suffice to prove this point.

*Broiling.* As one expert puts it: "The ideal to be reached in broiling steak is to sear the surface very quickly, so that the juices which contain the greater part of the *flavoring* of the meat shall be kept in, and then to allow the heat to penetrate to the inside until

the whole mass is cooked to the taste of the family. To pass the point where the meat ceases to be puffy and juicy and becomes flat and hard is very undesirable, as the *palatability* is then lost. Exactly the same ideal should be kept in mind in broiling chopped meat. If this were always done, hard, compact, *tasteless* balls or cakes of meat would be served less often."

The three words I have italicized show that in this case, as in all others, my contention is borne out that Flavor is the guiding principle in all scientific cooking.

The use of the gridiron for a broil, or "grill," as the English call it (after the French griller), also imparts to the meat a slightly burnt taste relished by epicures.

*Roasting.* Why is our roast beef usually so insipid and unappetizing?

Sometimes the inferior quality of the meat is to blame, but more frequently our disappointment is due to the cook's indolence or the substitution of baking for roasting.

Real roasting is like broiling in so far as it requires exposure of the meat to an open fire. It differs from broiling in that it also calls for frequent basting, that is, taking up with a spoon the fat which flows from the meat and pouring it over the surface, thus aiding the initial searing in keeping in the juices, on which the Flavor depends.

Ordinary cooks are too lazy to baste and therefore

this precious juice escapes into the pan, where it is in turn spoiled by a deluge of water and an uncooked mass of flour, the resulting liquid being a sorry substitute for real, savory gravy.

In place of roast meat most families now have to put up with baked meat. Baking in an open pan in a modern range results in the tainting of the meat with the disagreeable flavor of charred fat spattered by the cooking process against the top and the sides of the oven. The oven being unventilated, and not easily washed, the result is a permanent "oven taste" in the roast beef, mutton, veal, pork, or chicken, which is almost as exasperating to a discerning diner as the taint of cold-storage poultry.

This objectionable oven taste can be eliminated by using a double roasting pan, which also has, to a certain extent, the advantage of being self-basting. A conscientious cook, who knows the value of Flavor and of real gravy, will nevertheless look after the basting personally.

The value of gravy is far too little understood. Nothing is more appetizing in association with a good plain roast than the gravy made from its fat and some of its juices. In starting a roast it is of prime importance to expose the meat at once to a very high temperature so as to sear the surface and (as already stated) keep the juice in the meat. But before the searing process is completed, enough of the juice usually

escapes to make, in combination with the fat which continues to ooze out, a delicious gravy.

The French do not add flour to gravy; if it is added, it should at least be used sparingly, and cooked five to eight minutes in the gravy.

*Frying.* Give a dog a bad name, etc.! Frying has been denounced as an invention of the devil, a source of countless digestive disorders. As ordinarily practised it fully deserves its evil repute. From a dietetic as well as a gastronomic point of view nothing could be more objectionable than the fried steaks, bacon, potatoes, and diverse deadly fritters daily placed on hundreds of thousands of American tables. But frying on rational principles is an entirely wholesome and most desirable branch of the science of savory cooking.

Success or failure in this branch is chiefly a matter of temperature. At the moment the meat, fish, or vegetable is put into the fat, this must be sufficiently hot to coagulate the surface so that (as in the processes of roasting or broiling) the juices with their Flavors are kept within.

If the fat is not hot enough, the food comes out soaked with grease and highly indigestible. On the other hand, care must be taken that the fat is not scorched. This point is best explained in one of the Agricultural Department's helpful publications.[1]

[1] "Economical Use of Meat at Home," by C. F. Langworthy and Caroline L. Hunt. Farmers' Bulletin 391.

"The chief reason for the bad opinion in which fried food is held by many is that it almost always means eating burnt fat. When fat is heated too high it splits up into fatty acids and glycerin, and from the glycerin is formed a substance (acrolein) which has a very irritating effect upon the mucous membrane. All will recall that the fumes of scorched fat make the eyes water. It is not surprising that such a substance, if taken into the stomach, should cause digestive disturbance. Fat in itself is very valuable food, and the objection to fried foods because they may be fat seems illogical."

The temperature required varies with the different foods and styles desired. On this point, as well as on the relative merits of the various baths to be used, sufficient information is given in cook books. The best frying baths are made of suet and veal fat, fresh butter, and pure olive oil. For the sake of economy, and variety in flavor, it is also advisable to use the drippings from fried bacon, ham, or sausage—but *not* from fish.

In speaking of broiled meat I referred to the slightly burnt taste which is relished by epicures—somewhat as dissonances are by music-lovers. In the case of fried and roast meats, properly browned on the surface, there is a somewhat similar but less dissonant flavor which comes from browning the meat with fat. If the browning has been done scientifically many persons (I am one

of them) prefer the outside slices of roast meat to the inside.

### COMBINING THE FLAVORS OF MEATS AND VEGETABLES.

Apart from the adventitious browned flavors just referred to there are in broiled, baked, and roast meats usually no combination flavors except such as come from the butter and salt that are added after the meat is done.

Two most important details to know are that if the salt is put on meat before it is broiled, it allows the juices to escape; but that in frying a steak (which is not a barbarism if properly done) salt added at once helps to make a delicious gravy.

In the frying of meats or of vegetables (parsnips, carrots, egg plant, oyster plant, and particularly potatoes) a desirable extra flavor can also be added by using the fat previously fried out of bacon, ham, or sausages, or the fat from a pot-roast or the soup kettle.

Endless possibilities for combination Flavors are offered by two of the cooking processes: boiling and stewing. The first of these has already been briefly considered under the head of the Philosophy of Soup-making.

*Stewing* is not usually considered one of the most "high-toned" of cooking processes; yet, if scientifically done—think of a real Irish stew!—it provides dishes second to none in savoriness—dishes fit for gods, kings,

and epicures. And a man might live a hundred years and have a new variety of stew every day, so great are the possible permutations and combinations of vegetables and meats.

More savory results can often be secured by stewing than by any other process of cooking. It is well-known that the "sweetest" (that is, the most highly flavored) meat is that near a bone. Moreover, the bone itself, thoroughly cooked, yields most agreeable flavors of its own. Now, in making stews, the bony parts (shoulder, neck, end-pieces of ribs) are used, and the prolonged cooking called for by this process results in extracting all the sweetness from the bones and the meat nearest them. Boiling yields similar results, but the savors pass into the liquid, leaving the meat almost flavorless, whereas in a stew the flavors enrich the gravy, the vegetables, and the meat alike, in a particularly appetizing manner.

In ordinary stewing—the method of preparing the French boeuf à la mode, or the Irish stew—the meat and the vegetables are put into water and allowed to simmer slowly.

A more elaborate method of stewing is known as braising. In this process a strong liquor of vegetables and meats is used in place of water, and it is usually advised that both the vegetables and the meat be fried in a little fat before being placed in the pot to braise.

This does not seem altogether scientific, because in a stew the object is not to keep in the juices but to get them out and combine them.

A less objectionable way, which some consider the last refinement necessary to produce a first rate braise is thus described: "Have well-fitted to the braise-pot a sunk copper or iron cover, in which some hot coals or charcoal are placed, in order to transmit downwards a scorching heat to the top of the portion which is uncovered by the liquid in the pot below. In this case it is usual to cover the portion, especially if a fowl, with a piece of white paper, which serves to shield a delicate morsel from a too fierce heat." [1]

### SAVORY FOOD FOR EVERYBODY.

It is to be greatly regretted that in America, as in England, the process of making diverse savory stews is so little understood. For not only do such dishes appeal to the most fastidious epicures, but a thorough and general knowledge of correct stewing would go far toward solving the problem of providing savory food for everybody.

Too many Americans look on the ability to buy the most expensive cuts of butcher's meats as the gauge of prosperity, if not respectability. Now, the difference

[1] Sir Henry Thompson devotes six valuable pages of his "Food and Feeding" (Chap. V. and Appendix) to the subject of stewing and braising.

between these expensive cuts and the cheaper ones lies much less in their nutritive value than in their texture and flavor.

Inasmuch as I am preaching throughout this volume that the Flavor is all-important, this ought to justify the general scramble for the more expensive cuts, but it does not; for in truth these differences in Flavor and tenderness can be obliterated by skilful cooking, especially in the stew pan.

It has been well said that "*the real superiority of a good cook lies not so much in the preparation of expensive or fancy dishes as in the attractive preparation of inexpensive dishes for every day and in the skilful combination of flavors.*"

Has not the French chef been praised a thousand times for his alleged ability to prepare a host of toothsome dishes from thistletops?

The Government at Washington, which so kindly looks after our welfare in many ways, has not overlooked this matter. In a pamphlet (to which reference has already been made,) issued as Farmers' Bulletin 391 for free distribution, and entitled "Economical Use of Meat in the Home," two of the Government's experts in nutrition, Dr. C. F. Langworthy and Caroline L. Hunt, have given forty-three pages of practical information and advice, which, if generally heeded, would not only go far toward solving the high-cost-of-food problem, but toward making us a gastro-

nomic nation. It is a document which cannot be too highly commended to the attention of all who are interested in cooking and eating.

The object of the pamphlet is to show that the number of "tasty" dishes which a good cook can make out of the cheaper cuts of meat or meat "left over" is almost endless. Directions are given for developing the natural flavor of meat even in the cheapest cuts and for further heightening the savors by the judicious use of condiments and sauces; and these general directions are followed by a number of special recipes, for making stews with dumplings; meat pies; meat with macaroni, or beans, or eggs; meat with vinegar, casserole cookery; pounded or chopped meat, etc.

In conclusion the authors refer to the strange prejudice which some housekeepers seem to have against economizing in the ways suggested by them; upon which they comment that surely "the intelligent housekeeper should take as much pride in setting a good table at a low price as the manufacturer does in lessening the cost of production in his factory."

The trouble with most cookbooks is that they are so bulky that few have the patience to wade through them to get at the general remarks to be found here and there. This Government bulletin is so short, and yet covers so much ground, that it is likely to do a vast amount of missionary work in American kitchens.

### MEAT EATING OF THE FUTURE.

Boycotting the butchers may be an effective way of temporarily lowering the price of meat, but to make it permanently cheaper another method must be followed: we must eat less and thus decrease the demand.

This we can do *without depriving ourselves of any of the coveted pleasures of the table.* We like to eat meats because we enjoy their Flavors; but it is possible and easy to enjoy these same Flavors in a way which makes our meals not only more economical but also more nutritious.

This method has long been in use, but not to such an extent as it should be. It consists in *extending the flavor of meat* to other material which costs less but has a higher nutritive value.

The most valuable pages of the Bulletin referred to in the last section are those exemplifying the diverse methods of thus extending the flavor of meat. The recipes are preceded by these illuminating words:

"Common household methods of extending the meat flavor through a considerable quantity of material which would otherwise be lacking in distinctive taste are to serve the meat with dumplings, generally in the dish with it, to combine the meat with crusts, as in meat pies or meat rolls, or to serve the meat on toast and biscuits. Borders of rice, hominy, or mashed potatoes are examples of the same principles applied in

different ways. By serving some preparation of flour, rice, hominy, or other food rich in starch with the meat we get a dish which in itself approaches nearer to the balanced ration than meat alone and one in which the meat flavor is extended through a large amount of the material."

Dr. Wiley, in discussing this aspect of the question, goes so far as to express the conviction that "the meat eating of the future may not be regarded so much as a necessity as it has in the past, but that *meats will be used more as condimental substances than as staple foods.*

Meats as condiments rather than as foods! *There* is a revolutionary doctrine for you!—a doctrine subversive of all the beliefs and practices of the past! Yet it is a doctrine which meat-eaters may accept calmly in view of the fact that what delights them in meat is its Flavor, and that even with a minimum quantity of meat this flavor can be preserved, developed, and extended in the diverse ways hinted at in the preceding pages.

In view of this truth, meat-eaters should ponder what Dr. Wiley says in favor of our eating less meat than we do and using it as a condiment:

"In all meat, for instance, that costs twenty-five cents a pound, such as steaks, there is over one-third or a half of it which is inedible, so that the edible portion really costs double the amount. On the contrary,

when a pound of flour or maize is purchased, the price of which is perhaps only one-eighth that of meat, the whole of it is edible. Thus, from the mere point of economy as well as nutrition, the superiority of cereals and other vegetable products is at once evident. On the one hand, a cereal is almost a complete food containing all the elements necessary to nutrition, and it costs only a few cents a pound. On the other hand, a steak or roast is only a partial food and it costs much more than cereals."

### THE FOLLY OF VEGETARIANISM.

The vegetarians who would banish all meat from our diet must not infer from the remarks just quoted that Dr. Wiley endorses their doctrine. He is an epicure as well as a man of science, and no epicure will ever advocate exclusive vegetarianism. While conceding that man "cannot be nourished by meat alone," but that he "can live and flourish without meat," he holds that he "is an omnivorous animal both by evolution and necessarily by heredity"; and he has written much, and *con amore*, about the pleasures of the table provided by meats cooked in savory ways.

It is needless to dwell on the fact that most persons find meats more appetizing and digestible than any other foods, and that it would therefore be ridiculous as well as harmful to banish them from our tables.

The chief argument against vegetarianism is that

it would deprive us of thousands of the delicious plain or combination Flavors which make our food appetizing and digestible; and this argument is so irrefutable, so crushing, that not another word need be wasted on the subject. The *Flavor Test* settles it for all time, as it does everything relating to food.

### WHEN TO USE CONDIMENTS AND SAUCES.

Salt has been defined humorously as that which, if not put in the soup, spoils it.

Potatoes, eggs, and many other foods are thus "spoiled" if eaten without a pinch of salt. It is, in fact, added to most cooked foods, by whatever methods prepared.

Bread requires a considerable amount of salt to make it tasty. American bakers usually put in too little, and that is not only one of the reasons why our bread is so inferior to the best European, but explains the prevalence of the habit of eating salted butter, which, as previously pointed out, is as great a gastronomic barbarism as it would be to eat salted ice cream or drink salted coffee or tea, although under the circumstances it is more pardonable than it would be if the bakers were not such bunglers.

In many countries some of the most important condiments—salt, sugar, vinegar, mustard, and pepper—are placed on the table so that every one may season his food to suit his individual taste. Yet in most cases

these condiments do not give such good results when used at table as when added to the food while it is cooking.

It is well known that nothing so exasperates a French cook as to see some one (Americans and Englishmen are the chief sinners) take a salt shaker in one hand, a pepper box in the other, and sprinkle their contents over the dish he has prepared, without even trying to find out whether he had properly seasoned it in the kitchen.

Our addiction to such a habit is, of course, a lamentable confession that *our* cooks usually know not how to season food. It comes to us generally in such an insipid condition that we take it for granted that we must do something to make it palatable.

Apart from the table condiments just named there are many others which are usually reserved for the kitchen. Among these are allspice, bay leaf, capers, celery seed, cinnamon, cloves, curry, garlic, onions, ginger, nutmeg, sage, thyme. Also, a great variety of bottled sauces and of flavoring extracts, such as the essences of vanilla, lemon, almonds, etc.

At the risk of wearying the reader by seeming always to harp on the same string, I must call attention to the fact that, with the sole important exception of sugar, all these diverse condiments have practically no direct nutritive value but are used the world over *simply because of their agreeable Flavors*.

If they lose these Flavors—as they do if their volatile essences escape, or if they are adulterated (which is frequent, because so easy) the only thing to do is to throw them into the garbage pail.

Greater even than the number of spices and condiments is that of sauces. These, also, are of two kinds: some of them, like tomato, walnut, or mushroom catsups, Worcestershire sauce, pickles, and tobasco, are served at table, while another very large class of sauces is usually made fresh in the kitchen for each meal.

All of these sauces—once more it must be parroted—like the spices and condiments just discussed, are valued solely because of their Flavors—their importance to the Science of *Savory* Cooking.

One of the most important branches of this science relates to the proper use of sauces and condiments.

Many persons commit the gastronomic sin of pouring a bottled sauce over a plate of meat or fish without previously ascertaining whether it needs any seasoning.

Surely, among all the food Flavors, nothing is more delicious than the natural savor of fresh sole or salmon, or a juicy steak or chop just off the grill. To put any kind of sauce—be it the best in the world—on such a dish is as unpardonable as it would be to pour cologne over a bunch of fragrant violets.

It is when the fish is a trifle "tired," or the meat

without much flavor of its own, as so often happens, that these commercial sauces come to the rescue. Used only on such occasions, they have their value; and they are also desirable because of the variety they supply in the combination of flavors.

The French make hardly any use of bottled sauces; theirs are domestic, made in their own kitchens, and they attach more importance to them than to anything else in culinary art.

"Sauces, by the care and labor they require, by the costly sacrifices which they necessarily involve, ought to be considered as the essential basis of good cookery," according to Dubois-Bernard. "A man is never a good cook," he adds, "if he does not possess a perfect knowledge of sauces, and if he has not made a special study of the methodical principles on which their perfection depends."

The sauces provided in Parisian restaurants and private houses are certainly delicious; yet the French often err—and that is almost their only serious gastronomic fault—in sacrificing to them the delicious natural Flavors of diverse prime meats, just as Americans and Englishmen do by pouring on their bottled sauces.

Butter has among its many virtues that of developing the natural Flavors of meats and vegetables and may therefore often be used as a sauce in plain cooking à l'Anglaise. But, except for occasional variety, other sauces should be allowed to assert themselves

over the natural food flavors only when these are not of the best.

### COOK BOOKS.

Theodore Child—an American gastronomic missionary who unfortunately died young while traveling in Persia—remarks in his book, *Delicate Feasting*, that while there are hundreds of cook books, many of them admirable in their way, and bought by many, few are read or used, for the reason that most of them consist of a vast number of recipes, and "a cook must be already very learned in his art in order to know how to use them with advantage."

In other words, these books fail to explain the principles of the art of cooking—the ways of preserving, developing, and combining Flavors—as I have attempted to do in this chapter.

There are exceptions, and the best of these, so far as I know, is Mary Ronald's *Century Cook Book* in which various methods of cooking are explained lucidly, so that those who boil, fry, broil, and so on, not only may know what to do but why to do it thus and not otherwise. The different sections, on meats, fish, vegetables, entrées, breads, desserts, etc., all have prefatory pages of most useful condensed information.

A fairly complete list of the best cook books and other treatises on gastronomic topics may be found in Ellwanger's *Pleasures of the Table*.

No fewer than 2,500 books and brochures, mostly French, are listed in George's Vicaire's *Bibliographie Gastronomique.*

Probably the best and most widely used of the French cook books are those of Urbain-Dubois. There are seven of them: *Cuisine Classique*, *Cuisine Artistique*, *Grand Livre des Patissiers et des Confiseurs*, *Patisserie D'Aujourd'hui*, *Cuisine D'Aujourd'hui*, *Ecole des Cuisiniers*, and *La Cuisine de tous les Pays*, which includes recipes of all the nations who know how to eat.

To another French classic, Richardin's *La Cuisine Francaise* (*L'Art du Bien Manger*) with its 2,000 *recettes*, its menus of historic as well as gastronomic interest, I shall refer in the next chapter.

The Germans and Austrians not only have books on the special ways of preparing food prevalent in different parts of the country, but books about the specialties of other countries, such as the making of marmalade in the English way, etc.

The author of *Die Kunst des Essens*, Emil Weissenturn, took the trouble to make lists of the still surviving cook books of various countries. Of 17 written in the fifteenth century, 10 were Latin, 1 English, while Germany, Italy and France each contributed 2. In the sixteenth century Latin was still in the lead with 42, followed by Germany with 30 and France with 21. Italy contributed 16, Spain 5, Greece 2, England 2.

In the seventeenth century France heads the list with 104 books; Germany printed 39, 31 were in Latin, 18 Italian, 10 English, 7 Dutch, 1 Portuguese, 1 Swedish. In the eighteenth century Germany comes to the fore with 96, France following with 60 and England with 34; 14 are in Latin, 11 Dutch, 5 Italian, 4 Spanish, 3 Swedish.

In the nineteenth century Germany's lead is still more remarkable—374 books as against 152 contributed by France. England makes a spurt with 118. Italy rises to 15; Sweden contributes 10, Holland 8, Poland 7, while Latin survives with 7.

Of recent English and American books that have come to me for review I liked particularly Nicolas Soyer's *Standard Cookery*, Marvin H. Neil's *How to Cook in Casserole Dishes* and *Practical Cooking and Serving*, by Janet McKenzie Hill, which is a complete manual of not only how to cook food, but how to select and serve it. The author is the editor of the "Boston Cooking School Magazine," and she has a great deal of interesting and valuable information to impart.

In 1911 Soyer's *Paper Bag Cookery* was published. In it the famous chef who originated paper bag cookery—which has many advantages provided the right kind of paper is used—explained his method. His *Standard Cookery* includes the substance of the smaller book while at the same time covering all the branches

of cooking, with over four hundred pages of menus. Hors-d'Œuvres are here treated more fully than in any other English book, fifteen pages being given to them. No fewer than seventy pages are given to this subject in Escoffier's excellent *Le Guide Culinaire*.

Chafing dish cooking

French raffinement is shown in many of Soyer's recipes. Under "Fried Eggs," for example the average American cook will read with astonishment that they should be dealt with one at a time and that, with a wooden spoon, the yolk should be quickly covered up with the solidified portions of the white in order to keep

the former soft. Imagine Bridget taking so much trouble. She might, perhaps, be induced to heed these directions in making an omelette: "Heat the pan until nearly a brown color. This will not only lend an exquisite taste to the omelette but will be found to ensure the perfect setting of the eggs." Such seeming trifles make perfection.

Casserole Cookery is quite important enough to have a book to itself; it is the cookery of the future, and Mme. Neil's monograph of 252 pages should be, like the *Century Cook Book* and Soyer's *Standard Cookery*, or Mme. Hill's book, in every kitchen.

In French restaurants more is always charged for casserole dishes than for others and they are decidedly worth it. The Flavor of food is particularly rich and appetizing when it has been cooked slowly in earthenware pots. For braising, pot roasting, and stewing, which are slow-cooking processes, the casserole is far superior to metal pans in every way.

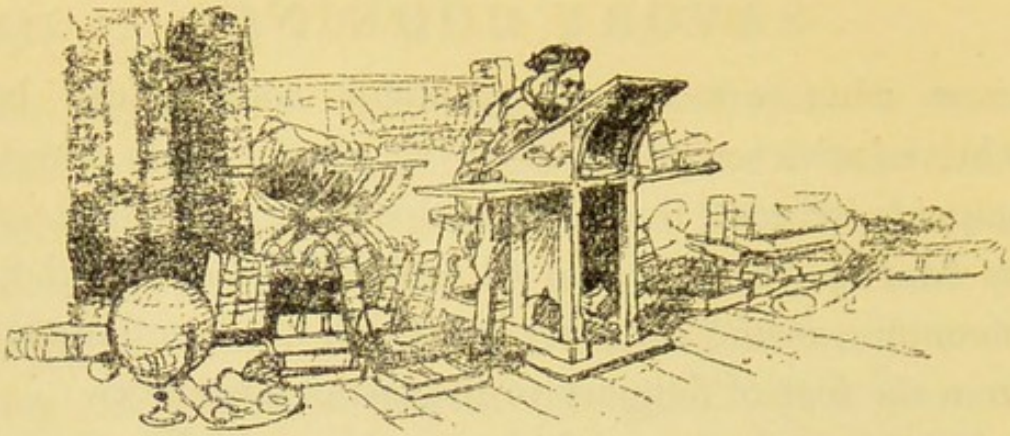
Chafing Dish Cooking is treated in Chapter XIV of the *Century Cook Book*, and there are several smaller volumes specially devoted to this interesting branch of the art—dining-room cooking it might be called—one by Alice L. James.

Who has not enjoyed a welsh rarebit made in a chafing dish—or terrapin, or lobster à la Newburg, or chicken livers, or crab toast, smelts, venison, etc.?

For housekeepers of moderate means who want to

know what wonders of palatable cooking can be achieved with scraps and left-overs, among other things, no guide is better than *The Helping Hand Cook Book* by Marion Harland and Christine Terhune Herrick. It contains menus for every breakfast, lunch and dinner from the first of January to the last of December.

While purchasers of fireless cookers are always provided with brief printed instructions, I would advise every owner of such a box to get a copy of Margaret J. Mitchell's *Fireless Cook Book*, which contains full directions, with recipes and menus. The question of seasoning is discussed; there are chapters on meats, vegetables, desserts, etc.; hints as to how to tell good material from bad; directions to prevent over or under cooking, etc.



## V

## A NOBLE ART

NO one who has read the last chapter, and Chapter II can fail to be convinced that cooking is not only a science, but the most important of all sciences—the science on which our health depends more than on any other; a science concerning which Sir Henry Thompson has truly said that an adequate recognition of its value in prolonging healthy life and in promoting cheerful temper, prevalent good nature, and improved moral tone, "would achieve almost a revolution in the habits of a large part of the community."

Nor is cookery merely a science, it is also an art. It can and will be classed in the future as one of the fine arts.

A famous French lawyer once declared that he would not believe in the advent of real civilization

until a chef had been elected a member of the Institute of Arts and Sciences.

The details given in the preceding chapter show how a good cook can vary the Flavors of food as a composer varies his orchestral colors; and if she does her work with intelligence and *con amore* she can get genuine artistic delight therefrom. At the same time she will have the moral satisfaction of knowing that she is giving gastronomic pleasure to those who benefit by her art.

A cook can be genuinely creative, inventing new sauces, new flavors, new combinations, new dishes, with appropriate names for them, thus acquiring universal fame, as did Carême and many others, among them Béchamel, whose name has become a household word the world over, not because he was a marquis but because he invented a new sauce.

From a moral point of view, cooking is one of the noblest of the arts. The old adage that the way to a man's heart is through his stomach is often sneered at as being materialistic if not coarse. It is no such thing; it simply hints at the truth that it is extremely difficult for a man to be amiable and loving when he suffers the pangs of dyspepsia. On this subject one of the 30,000 persons who wrote to the London "Telegraph" in answer to the question, "Is Marriage A Failure?" made some remarks which every young woman who is, or expects to be, a wife should ponder deeply:

Where the husband is an intellectual man, and engaged in intellectual pursuits, good cookery assumes a tenfold importance, as the want of physical exercise entailed by most intellectual occupations renders it imperative that all food eaten shall be of first-class quality and cooked to perfection. The most intellectual man in existence ceases to be intellectual while he has a couple of pounds or so of bad food slowly decaying in his stomach instead of digesting. Is "A Young Girl's" ideal of married life to have the man she loves always bright and cheerful, always intellectual, and generally at his best, and to have as strong and healthy, and even brighter and better company, at sixty and seventy than at twenty-four? I am sure it is. Then let her give him a chance of realizing that ideal by giving the utmost attention to his dinners, so that the food he eats is on his stomach and brain like feathers, and not like lead. If she wishes him to degenerate into an ill-tempered, exacting grumbler before forty, or to prefer dining anywhere rather than at home, then let her devote herself wholly to the drawing-room department of the house, and leave the kitchen and the dining-room to hired servants. Good cooks quickly become bad ones where the mistress neglects personal superintendence, and just so long as ladies have a soul above cookery will ill-temper and dyspepsia, with all their consequent train of ills and discomforts, be the rule, and not the exception, in middle-class English homes.

### THE SOCIAL CASTE OF COOKS.

One of the most amazing phenomena in the United States is the great number of girls of all classes who consider kitchen work beneath them and not worthy of serious attention.

Girls of the working classes are not in the least ashamed to confess their absolute ignorance of the art of cooking, though they know that after marriage they

must cook for their families. Then they bewail their fate if their husbands, tormented by dyspepsia, seek relief in strong drink. France, it has often been said, is on the whole a sober nation because it is a nation of good cooks.

American girls should remember that, as a Chicago expert has testified, "few men abandon or get a divorce from a woman who is a good cook."

The most amazing of our young women are the factory workers and shop-girls who imagine they are of a higher social caste than cooks, and look down on them.

What makes this attitude the more ridiculous is that the mothers of all these girls were cooks (mostly very bad ones!) and that all of these girls themselves, when they marry, must spend much of their time in the kitchen.

To be sure, they are not paid for this work, as professional cooks are.

Some of the social "reformers" are now demanding that husbands pay their wives for domestic work. If that point should be carried, what would be the social status of the wives—nine out of every ten in the country—who cook for their families?

In future, if there is any looking down, it will be done by the cooks, whose work is infinitely more elevating, refined, scientific and artistic than that of factory and shop girls, who, instead of enjoying the cooks' splendid opportunities for exercising their brains, their

taste, and their inventive powers, are reduced to the level of mere machines by the deadly monotony of having to make so and so many dozen shirt-waists or paper boxes, or ruining their health by standing behind a counter, serving the same things, day after day and year after year, to customers *most of whom look down on them* as being of a lower social status.

That settles the foolish notion that American girls refuse to become cooks because they do not wish to lose social caste. Society women are no more addicted to inviting the girls who wait on them in stores to their banquets or teas than they are the girls who wait on them at home or preside over their kitchens.

Moreover, no mistress would dare to treat her cook so contemptuously, so insultingly, as shop girls and factory girls are often treated, or as chorus girls are treated habitually on the stage.

French supremacy is demonstrated in many ways, not the least of which is the recognition, generations ago, of the noble status of the cook, domestic or professional.

It may not be literally true that French girls read cookery-books with the avidity with which ours read novels, but certainly they are proud of their ability to cook savory dishes.

An article in the New York "Times" (February 11, 1912) on the most exclusive clubs in Paris, where the chefs receive the salaries of ambassadors, states that

members "have obtained permission for their daughters—young women, belonging to well-known French families—to be present in the kitchen while the head cook is preparing dinner every afternoon. While the chef officiates in front of the huge furnace which stands in the center of the kitchen he is surrounded by a group of fashionably dressed young women, who follow all his movements with the greatest interest and listen eagerly to his explanations as he initiates them into the mysteries of his art."

The French cuisine is preëminent to-day because a century ago the daughters of the best French houses were taught to cook. And, as Anatole France has remarked, these girls knew that "there is no humiliation in washing dishes."

To be sure, dish washing, as done at present, is monotonous and hardly entertaining. But if we tried to avoid all things in this world that are monotonous and not entertaining, what would happen?

My own work includes some hours of daily drudgery. What busy man's or woman's does n't? Why discriminate against the kitchen? Read Marion Harland's delightful little book on *Household Management* (New York: Home Topics Publishing Co., 23 Duane St.); you can do it in an hour and you will benefit particularly by the chapter on "Fine Art in 'Drudgery,'" in which, writes the distinguished author, "I give a recipe for dish-washing as carefully and with as much

pleasure as I would write out directions for making an especially delicious entrée or dessert."

Women and men who prepare for the stage, dramatic or musical, have to undergo an enormous amount of drudgery and keep it up all their lives. In the summer of 1912 I heard the greatest of all pianists, Paderewski, daily practising elementary "five-finger" exercises, and he admitted that it took great strength of will to keep it up; but he knows the truth of the remark once made by Hans von Bülow that if he neglected his practicing one day he knew it; if two days, his friends knew it; if three days, the public knew it.

That is a kind of drudgery compared with which dishwashing is a picnic. Most dishwashers, moreover, dawdle dreadfully. They could do their work in one half if not one quarter the time it takes them. See the remarks of the astonished Isabella Bird Bishop in her book on the Rocky Mountains on the way she saw two young bachelors disposing of their kitchen work in the twinkle of an eye.

### ROYALTY IN THE KITCHEN.

England is in a state of transition. As the London "Times" (October 29, 1910) remarked, there are in that country many women who would be proud, and even consider it rather smart, to cook a dish of savory eggs in a chafing-dish on a silver-strewn sideboard, but who would nevertheless be ashamed to say that they

could knead and bake a loaf of bread which could rival that made by their cooks.

A change is, however, impending, and the good example comes from those socially highest up. Queen Victoria's daughters had to spend many hours in the kitchen, and the present Queen also is, as the "Times" informs us, an expert cook, and altogether "a pattern mother and a skilled housekeeper, who would put many middle-class mistresses to shame by her accurate and up-to-date knowledge of details."

Queen Alexandra was the chief patroness of the Universal Cookery and Food Association, founded in 1885.

*Noblesse oblige.* The English royal family feels that it is its duty to set a good example to the women of the whole country in this matter, and the example is being followed widely. There is, indeed, a nation-wide awakening in the United Kingdom regarding the importance of the culinary art, as we shall see in a moment, in considering the subject of cooking in schools.

Sarah baked and cooked for Abraham, though she could command as many servants as a queen.

It would be easy to give a long list of queens and other women of the highest nobility who recognized the nobility of the art of cooking by their interest and participation in it.

Kings, too, have not held it beneath their dignity to prepare savory dishes with their own hands. Louis XVIII invented the *truffes à la purée d'ortolans*, and

always prepared the dish himself, assisted by the Duc d'Escars.

Frederick the Great was too busy with his political work and his flute to spend his time in the kitchen, but he wrote a poem in praise of his cook.

In Germany, as in England, it is obligatory on the princesses of the Empire to learn how to cook a good meal; and the daughters of the aristocracy of all grades follow their example.

Louis XIII prepared his own game, and prided himself on his preserves, while Louis XV also was an amateur cook. He was particularly fond of making rich sauces.

Under Louis XIV Condé won international fame as inventor of an improved bean soup. A Papal Cook Book was printed in Venice in 1570 by order of Pope Pius V. Richelieu and Mazarin invented dishes still named after them. The philosopher Montaigne wrote a book on the science of eating (*Science de la gueule*). Sauce Colbert is named after the statesman who originated it. Béchamel was immortalized by a new sauce of his concoction. When Carême went with Lord Stuart, the English Ambassador to Vienna, he was treated as a personal friend. Louis XVIII, George IV and other crowned heads vied for his allegiance but he preferred to bestow the benefit of his supreme art on Rothschild in Paris to whom he had been presented by Prince Louis Rohan.

Volumes might be written regarding the personal interest in culinary art taken by rulers of all kinds. The highest form of royalty is genius.

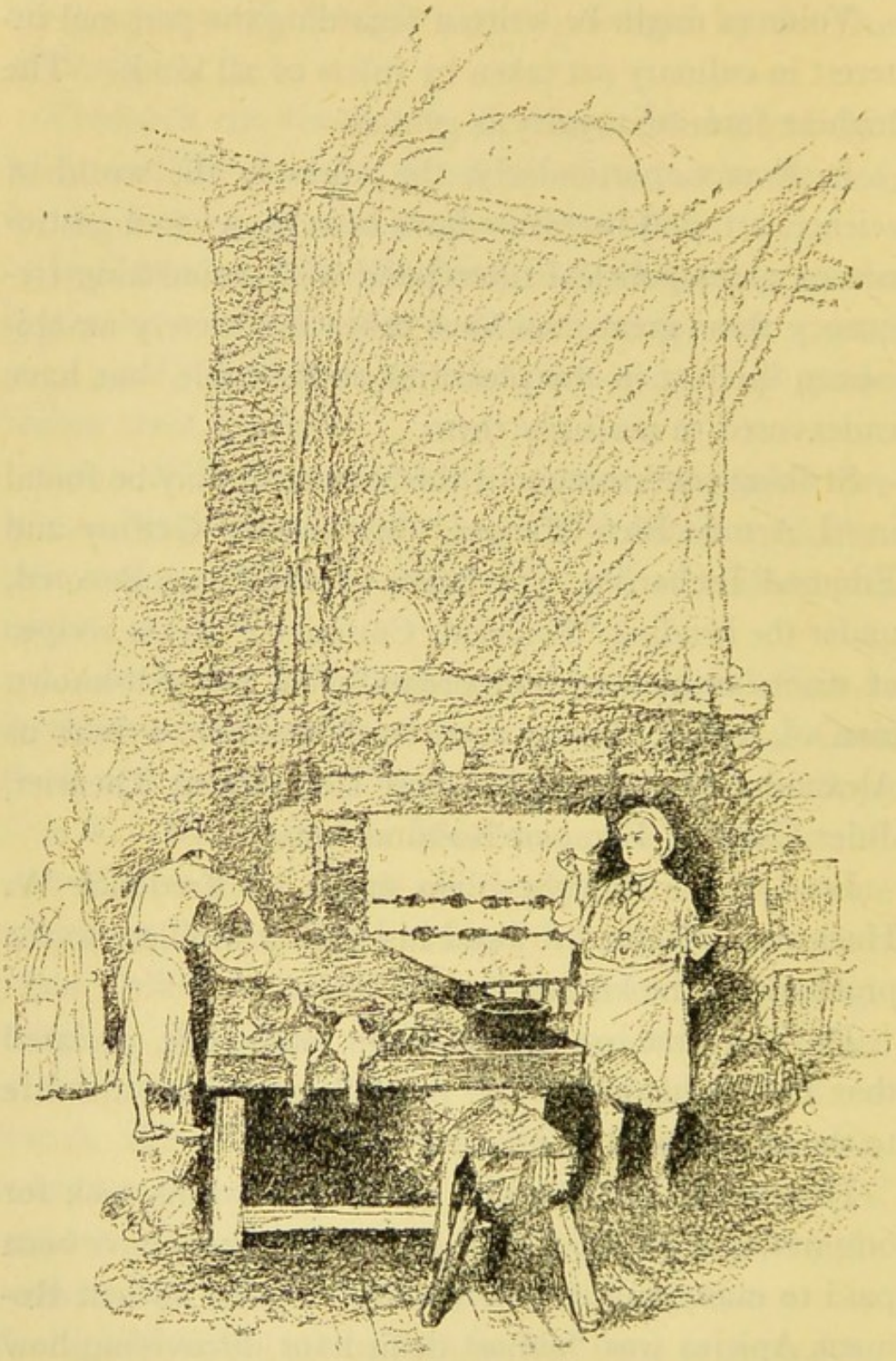
In France, particularly, the rulers in the world of science, art, and literature have been as devoted gastronomes as the political rulers; and with astonishing frequency these great men have taken not merely an epicurean interest in the pleasures of the table, but have endeavored to multiply them.

Striking confirmation of this statement may be found in "L'Art du Bien Manger," by Gustave Geffroy and Edmond Richardin, 375 pages of which are devoted, under the heading "Ecrivains Cuisiniers," to the recipes of dishes originated and promulgated by well-known men of letters, among them such eminent writers as Alexandre Dumas, father and son, André Theuriet, Jules Claretie, Edmond Rostand, etc.

Lord Bacon thought it no shame, as Frederick W. Hackwood recalls, "to bend his mighty intellect to the problems of the kitchen."

David Hume, on retiring from public life, declared that he would devote the remaining years of his life to the science of cooking.

Henry VIII made a gift of a manor to his cook for originating a good pudding, and royal honors have been paid to many culinary inventors. By the ancient Romans Apicius was "almost deified for discovering how to maintain oysters fresh and alive during long jour-



A fifteenth century kitchen in France

neys." In Athens Dionysos was highly esteemed as the inventor of bread; in his honor there were street processions of men carrying loaves.

### ROSSINI, CARÊME AND PADEREWSKI.

Just as Caruso is prouder of the caricatures he draws than of his achievements as the leading tenor of his time, so Rossini prided himself more on his skill in dressing a salad than on his having written successful operas. He frequently delighted his guests with dishes prepared by himself, and used to declare, half seriously, that he had missed his vocation.

One day, when a friend, taking him at his word, asked him why he had not become a cook, he replied that he would have done so had not his early education been too much neglected.

A famous French chef, proud of his profession, declared that while there have been musicians and other artists who were already famous at the age of twenty, preëminence in cooking has never occurred under the more mature age of thirty.

Carême, at an early age, had the ambition, as he relates in his memoirs, of elevating his profession to an art. For ten years he studied with the most eminent chefs, besides reading books and taking notes like a scholar.

Like all genuine artists, he was grateful for true appreciation of his art. Of Talleyrand he wrote: "He

understands the genius of a cook, he respects it, he is the most competent judge of delicate progress, and his expenditures are wise and great at the same time."

Why do not great culinary artists abound in America?

Because there is too little appreciation of their art.

Paderewski, in his château on the shores of Lake Geneva, where he lives like a king of epicures, thanks to the intelligent and artistic housekeeping of his devoted wife (the Baroness of Rosen), told me an anecdote which illustrates this point.

During one of his first tours in the United States he enjoyed a dinner which was equal to anything he could have expected in one of the best Parisian restaurants. He was so surprised and pleased that he sent his thanks and compliments to the chef.

A few years later, happening to be in the same city. he again went to that restaurant. The meal he got was still far above the average, but was not as good as before. However, on the occasion of a third visit, he again tried the same place. The food was uninteresting from the beginning of the meal to the end.

He asked the head waiter whether the former chef had left. He had not left, the waiter informed him; and, on being pressed for an explanation of the change in the quality of the meals, he said:

"If you had to play, night after night, before an

audience of barbarians who did not appreciate the best things in your performances, would you continue, year after year, to play as well as you do now?"

Paderewski had to confess to him that, in all probability, he would not.

### LOOKING DOWN ON OTHERS.

In my career as a musical critic I have found that I could do much more toward improving the artistic doings of singers and players by praising their best things than by finding fault with their poorest.

In the culinary art, likewise, the reader will find that far better results are reached by praising the cook for her successes than by never speaking to her except to find fault. It makes her try to *earn more praise*, not only in the making of that particular dish but in the making of others.

Above all things, a mistress who expects artistic dishes from a superior cook should never appear to be looking down on her.

This looking down business, perhaps more than anything else, stands in the way of our getting good cooks.

At the same time, perhaps more than anything else, it shows what fools these mortals be.

All over the country, but particularly in the West, I have found that most families look down on other families. It is chiefly a question of money. Those who have an income of $3,000 look down on those who have

only $1,000 or $1,500, while those who have $10,000 do all they can to show their superiority to three-thousanders, only to be, in turn, snubbed by those whose income is $20,000; and so on.

One day in a California village where I was spending the winter, I was surprised at the rudeness of a storekeeper with whom I had had some pleasant chats. He hardly answered my questions; in fact, he snubbed me. I found out next day that he had just inherited a large fortune, a piece of luck which he celebrated by promptly looking down on everybody he knew.

As a rule, however, I regret to say, the women are more addicted than the men to this preposterously silly habit of looking down on others. Not to speak of its being extremely ill-mannered it is the most deadly obstacle to the solution of the problem of domestic help.

We shall never have a sufficient supply of good helpers until mistresses recognize the fact that cooking is a fine art, and that those who practise it should be treated, not as servants, but as practitioners of the most important profession in the world—a profession which stands to the medical in the relation of prevention to cure; and that prevention is better than cure we all know. It 's cheaper, too.

An old English writer has justly remarked that "the kitchen is the best pharmacopœia."

F. W. Hackwood calls attention to the suggestive fact that all the best old cookery books in the English

language were written by medical men. Sir Kenelm Digby and Dr. Mayerne in the seventeenth century, Dr. Mill and Dr. Hunter in the eighteenth, and Dr. Kitchiner in the nineteenth gave to the world "the best English cookery books of their respective eras."

Queen Anne's physician, Dr. Lister, declared that "no man can be a good physician who has not a competent knowledge of cookery."

That is the opinion prevalent among the best medical men of to-day, who hold correct advice in regard to diet and the proper cooking of the food recommended to be usually of more importance than drugs.

Many thousands of invalids have been killed by improper or badly cooked food.

The foolish factory and shop girls who look down on kitchen work should be reminded of the fact that none of the contributors to the pages of the various women's journals are more honored than those who are famed for their skill in cooking and giving others the benefit of their experience. Some of these women, like Mrs. Rorer, Marion Harland, Mrs. Lincoln, Christine Terhune Herrick, Janet MacKenzie Hill, Mary Ronald, and Helen S. Wright, have won international repute.

It is a curious fact that whereas in Europe most of the cook books have been written by men, in America the authors of such books are mostly women. From American women, with their keen intelligence and good

taste, great things may be expected in the way of gastronomic progress.

After the appearance in the "Century Magazine" of my brief remarks on the nobility of the art of cookery I heard of a wealthy young lady (I hope and believe there were many others) who was impelled, after reading them, to take up cooking and found it so fascinating that she neglected all her other pet diversions. I know educated young ladies who would rather cook than do anything else except, perhaps, go to the theater; they find it "so entertaining and engrossing."

Many anecdotes might be related of women known to fame who love kitchen work. To take only one case: Mrs. Champ Clark, who came so near being first lady of the land, is a noted cook and domestic science expert. One who knows her writes that "she does much of her own cooking, especially when intimate friends dine with her and they rave over her dishes. It has the good old Southern taste, and is minus the fingle-fangle garnishments often employed to cover up inferiority. Mrs. Clark's bread is a delight, and when she has the opportunity she always bakes it herself. She took first prize in a bread-baking contest once. She holds that such labor is not undignified for any of the first ladies of the land. The word 'servant' has been much abused, its early meaning 'to serve' being beautiful, and certainly there is nothing better than to do something for somebody."

There are signs that the ladies of our time will take up the culinary art as a fashionable cult, as did the ladies of the French aristocracy in the seventeenth century.

Many American society women are expert cooks and delight in inventing and concocting diverse dishes. One of the wealthiest women in the world is Mrs. George J. Gould. In summer, in her Adirondack camp, she spends much time in the kitchen helping to cook and to make preserves and jams. She has, it is said, "a perfect genius for combining things and creating new sensations of taste." Her children, boys as well as girls, understand cooking in all its branches. Grace Aspinwall, in the "National Food Magazine" (May, 1910) gives details regarding the culinary doings of other society women—Mrs. Philip Lydig, Mrs. Joseph Widener, Mrs. Norman de R. Whitehouse, Mrs. Oliver Harriman and Mrs. W. K. Vanderbilt, Jr.

Mrs. Woodrow Wilson is also fond of cooking, and after her husband was elected President of the United States the newspapers printed pictures of her at work in the kitchen.

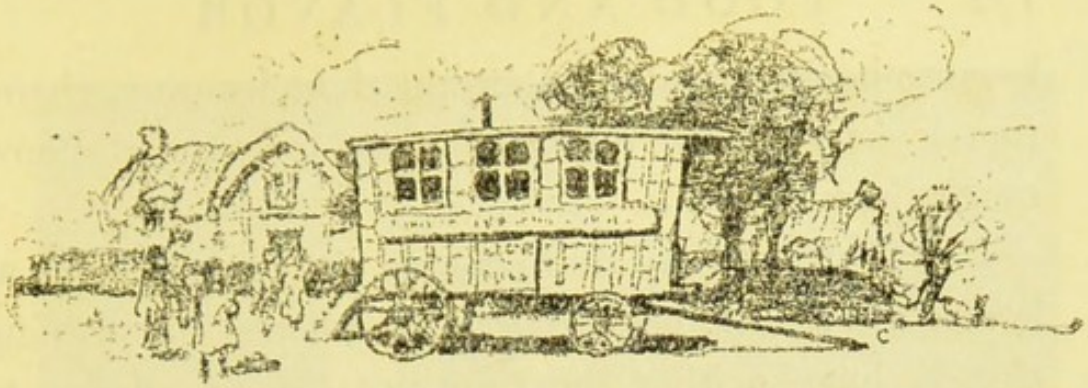
### DOES COOKING PAY?

The profitableness of the art also is a point not to be overlooked at a time when all professions, *except cooking*, are so overcrowded.

Had Rossini become a chef, he would not have

earned nearly as much money as he did with his operas. But he was exceptionally successful. The vast majority of musicians, and other artists of all kinds and grades, have not only much more drudgery to undergo than cooks, but they also have much less chance to boast of a fat bank account. The best chefs command $5,000 to $10,000 a year with free board and lodging. Not to speak of other advantages, what a splendid chance this gives them to "look down on" people who earn less!

The average income of physicians, clergymen, and teachers in the United States is about $600 a year, and it is not rising steadily like that of cooks. The better class of "plain cooks" now get, in New York, $25 to $30 a month with room and board. Such a cook can easily put into the savings bank $200 to $300 a year, or half as much as is earned by the physicians, clergymen, and teachers, who have to pay for their board and lodging. Does cooking pay?



# VI

## THE FUTURE OF COOKING

### SCHOOL GIRLS LIKE IT.

RESPECT for the noble art of cooking is being greatly enhanced by its introduction into our public and private schools as an important branch of education.

When this innovation was first suggested, the funny men of the newspapers seized on it as a welcome new subject for their jokes and cartoons, and even now not a few persons who have given the question insufficient thought speak of cookery as one of the fads and frills of our schools. But at a budget hearing in October, 1910, Dr. W. H. Maxwell, Superintendent of the New York City Public Schools, made the memorable statement that he considered the retention of cooking-lessons more important than the study of languages.

He might have gone further; he might have said that

because health is more important than learning, therefore cookery is more important than anything else now taught in our schools.

It is useless to say that cooking should be taught at home. Most mothers, especially among the working classes, have neither the time nor the knowledge to teach their daughters how to prepare food rationally.

Recognizing this fact, the Young Women's Christian Association also began some years ago to provide culinary lessons.

One of the reasons for this action may be found in a statement made in the Twenty-seventh Report of the New York Cooking School, that "good coffee and a palatable meal often remove the need of strong drink, and many a working-woman has had her cares lightened by the child who has learned to cook."

An English girl, who had thus been taught, said: "Mother tells me she 'd make a drop of nice broth for the children out of an old bone as she 'd have thrown away."

A glimpse of future possibilities is given by an experiment made in six Chicago schools, with 1,200 pupils. The boys in the manual-training classes made fireless cookers, and the girls did the rest. One result was a rich, palatable soup costing one cent a bowl.

The most encouraging aspect of the situation is that both in England and in America the experience has been that the children *like the cooking best of all their lessons*

COOKING CLASS AT THE WADLEIGH HIGH SCHOOL

and are glad to practise them at home. As one principal wrote, "The cooking has been enthusiastically received by the pupils, and *the parents are heartily in favor of it.*"

### BOYS AND SOLDIERS AS COOKS.

Schoolboys also should, and will, be taught. They can help their mothers at home—why not?—especially in daughterless families; and there are many occasions in life—when the wife is ill, or when men are serving in the army or camping—when such knowledge will prove useful.

Apart from practical considerations, it has an educational value, too, training, as it does, the memory, the power of observation, the senses of taste and smell, and the inventive faculty, besides inculcating neatness and cleanliness.

There are times when men who can cook receive better pay than most others, though their work be both easier and pleasanter. For instance, in an article entitled "In Canada's Wilderness," which appeared in the New York "Evening Post" of September 1, 1910, the writer described the trip of a prospecting party through a section of the Northwest which was tapped by the Grand Trunk Pacific Railroad. Speaking of the cooks, he said that they were "good cooks, and a good cook in that country is almost worth his weight in fine rubies. They are paid from $75 to $80 a month, and receive

housing and bedding. This is more money than any of the other men about an engineering camp receive, except the engineer himself."

One of these cooks had been manager and part owner of a great tea plantation in Ceylon; another had been an officer in a British regiment and had served in the South African War. He had just sold $12,000 worth of property in Edmonton.

The London "Daily Mail" of June 20, 1912, gives an account of an Oxford cooking school which has a special class for men who wish to learn to cook. It is well attended and the men, so the teacher says, "are very keen about the work, and much keener than the women would be as to details. Nothing escapes their attention."

The men work in pairs with the simplest of utensils, and each lesson extends over an hour. Special stress is laid upon frying and stewing, and upon the different meals that can be prepared in a pot or pan over a camp fire. They are taught the various ways of cooking vegetables, of making meat pies, and how to produce such delicacies as pancakes and scrambled or poached eggs. Each lesson affords time for cooking three dishes, and at the conclusion a number of recipes are given, and these are duly recorded for future reference.

The London County Council began to encourage boys in the autumn of 1910 when a school for teaching them how to cook was started. There were fifteen

pupils. Two years later there were forty. It is only a small beginning, but from such an avalanche may grow. The aim of the school was stated to be to equip boys between fourteen and sixteen with a knowledge of practical cookery to enable them to fill positions as cooks in first-class hotels, clubs, and restaurants. The course lasts three years and positions are guaranteed at the end.

According to official statistics, 106 boys in England attended cookery classes during 1910-11.

Soldiers in all countries have to do a good deal of camp cooking, and they seem to enjoy it. Circular 11 of the United States Bureau of Animal Industry is concerned with army cooking. The 1912 report of Brig.-Gen. Henry G. Shaw, Commissary General, shows that great advantage has resulted from the schools for bakers and cooks that have been established at Fort Riley, Kansas City, as well as at the Barracks in Washington and at the Presidio in San Francisco. During the year 253 cooks, 131 bakers and 52 mess sergeants have been turned out by the schools as experts.

An English translation has been published (London: Forster Ground Co.) of the French Manual of Field Cookery entitled *Livre de Cuisine Militaire aux Manœuvres et en Campagne*. It is a pamphlet of 35 pages, including specifications and pictures of necessary utensils, with simple recipes, and a preface by the French War Minister, who remarks, among other

things, that it is no longer enough to appoint certain men to the duties of cooks, but it is "necessary that every man . . . should be able to prepare his own food and that of any of his comrades, who may not be in a position to do so, by means of the simple apparatus available."

In continental countries there are many cooking schools for men. In Copenhagen, for instance, as we read in the "Lancet," "there is an old frigate moored in a canal close to the most fashionable center of the town. Here there is a school for ship's cooks. On board a ship with the limited space such as prevails at sea young cooks try their 'prentice hands at making dishes such as are served to passengers on sea voyages. There is an awning on the deck, tables are laid out, and numerous inhabitants of Copenhagen take their meals there, for they are both varied and inexpensive. Thus fully qualified cooks are being prepared for the sea, and it is not necessary to point out that, whether at sea or on shore, efficient cooking not only adds to the joys of life but is a very necessary aid to digestion."

### TRAVELING COOKING SCHOOLS.

In some parts of Germany traveling cooking schools have been organized by the Government. In Prussia it is intended to provide one of them for every county. These schools move from place to place, remaining long enough in each to give instruction in housekeeping to

the daughters of laborers, craftsmen, and farmers. In the case of the farm girls the instruction includes the caretaking of animals, poultry culture, and the raising of fruits and vegetables. All the girls are taught to cook, to sew, to repair and clean clothing, and to keep the house clean, with other things relating to health and nutrition.

One of the principal objects of these itinerant schools is to encourage the cultivation of a greater variety of vegetables in the home gardens. In most of the Thuringian villages, for instance, it is said that the only kind of vegetable known is cabbage. The teachers have had considerable difficulty in introducing variety, for the German peasant, like the lower classes everywhere, wants to eat only what he has had since his childhood. But once tasted the new vegetables are usually welcomed and acclimated in the villages visited by the itinerant culinary missionaries.

### ENGLISH SCHOOL DINNERS.

While the English are not gastronomically eminent among the nations of Europe, they are attaching more and more importance to kitchen work, especially in schools, in which lies the chief hope for the cooking of the future.

This growing interest was illustrated by the Conference on Diet in Public, Secondary, and Private Schools held in London in the last week of May, 1912. Prom-

inent experts made addresses, discussing the question of school diet from various points of view. The "Daily Telegraph" of May 30, in concluding its account of the Conference, made some remarks which are quoted herewith, as they give a vivid glimpse of the admirable culinary work that is evidently being now done in English schools:

"Of recent years more and more attention has been paid to the dietary in schools, and the general teaching of cookery will help on an improvement in a department of social life in which we are behind our Continental neighbors. Happily, there are a considerable number of schools in which the menus are drawn up on well-ascertained principles, including the element of variety. Here is an example of dinners served at a large school at 8d. each to over 100 children. It is chosen from those used from May 13 to May 17:

MONDAY.
Boiled Beef and Carrots. Roast Mutton.
Greens and Potatoes.
Cake Pudding. Milk Pudding.

TUESDAY.
Veal and Ham. Beefsteak Pie.
Greens and Potatoes.
Jam Roly-Poly. Milk Pudding.

WEDNESDAY.
Roast Beef. Haricot Mutton. Rissoles.
Greens and Potatoes.
Fruit Salad and Sponge Cake. Milk Pudding.

THURSDAY.

Roast Mutton. Stewed Steak. Potato Pie.
Greens and Potatoes.
Ginger Pudding. Milk Pudding.

FRIDAY.

Fish. Roast Beef. Liver and Bacon.
Greens and Potatoes.
Rhubarb Tart. Cabinet Pudding.

"If these menus reappear in the same order or connection it will be at a very distant date. The aim is to supply all the kinds of food necessary, and in a form the girls like. Pies, stews, and rissoles are great favorites, stews being the chief. This is fortunate, because a dish of stew of any kind is rich in fat and proteid, and if vegetables are added it becomes rich in salts too. The girls state each day at dinner which meat they wish for, and they help themselves to greens and potatoes. If they want a second helping of meat they can have it, but it is an unwritten law that they must finish all they take. It is also understood that if a girl does not eat her dinner she is not fit for afternoon school. This rule prevents elder girls getting the foolish notion that it is not 'nice' to have a good appetite.

"Cookery is part of the curriculum, so that sooner or later every girl learns the importance of food, and that it is useless to try to 'make bricks without straw'—in fact, the dinners are a practical illustration of the teaching in the cookery room."

The notion that it is not "nice" for a girl to have a

good appetite is not so common as it used to be. Now that we know the importance of appetite to proper digestion this notion seems criminal as well as silly, and should be denounced as such in all schools where it may seem necessary.

Like some of the Continental countries, England now also has traveling cooking schools. According to educational Blue Books issued in August, 1912, the record for the teaching of domestic science in 1910-11 included under the head of cookery 327,526 scholars. Concerning the traveling schools we read with reference to the North:

"The county authority have provided a traveling van as a center for cookery teaching throughout the country districts. The van is practically a movable room, carefully planned, with satisfactory arrangements, and has so far answered admirably.

"The van remains for four weeks at each school visited, and where two classes of girls can be provided, lessons are given both morning and afternoon on each day. It is used as a center for classes formed from other schools (if any) within walking distance. When the van was at Sutton some girls walked two to three miles, but made no difficulty about the distance. The teacher is usually besieged by applications to admit older girls—and even women—to the classes. Housewifery is now taught as well as cookery. The van makes a pleasant little room, and the girls enjoy their

work and do it very well. The North Riding authority have now built a second van, which is already in use."

Norfolk has a teacher who remains in a village for a fortnight, the children attending classes in a convenient kitchen of a farmhouse, adapted club-room, barn, &c., all day and every day during the fortnight.

The inspectors show that already the influence of these classes has had a reflex in the homes.

### PROGRESS IN AMERICA.

As far back as 1835 household economics was taught in young women's seminaries of the United States, as we are informed by Benjamin R. Andrews of the School of Industrial and Household Arts at Columbia University. In 1912 there were over 130 schools which gave collegiate degrees for proficiency in the courses in home-making, and it was clear from the way things were going that ere long every woman's college and high school in the country would have a domestic science department, if only to meet the competition of the Domestic Science schools which are springing up everywhere.

These special schools for home-making turn out the really up-to-date girls—the girls whom young men want to marry.

In recognition of the growing importance of this branch of education Representative Wilson of Illinois introduced, in 1911, a bill providing that a Bureau of

Domestic Science be established in the Department of Agriculture, with the object of investigating methods and appliances for the preparation of food and of gathering information to be used in training the boys as well as the girls of the schools and colleges in household and institutional management.

In 1910 there were in the elementary schools of Chicago only 75 kitchens available for use in giving the girls practical instruction in the art of cooking. In view of the fact that at least eight out of every ten girls in these schools are fated to spend a part of their lives in the kitchen, the superintendent of schools, Mrs. Ella Flagg Young started an agitation to have this number increased to 250.

In commenting on this subject the Chicago "Tribune" remarked: "A girl who has to hold in after life solemn communion with stewpans and gridirons had better learn in advance how to use them. It will save her mortification, bitter tears, and scoldings."

Not every husband takes the matter as calmly as the brute who, when his young wife met him with tears in her eyes and the information that the cat had eaten the first pie she had made for him, replied: "Don't cry, dear; we can easily get another cat!"

Bad cooking drives a man to drink sooner than anything else. Many honeymoons are shortened by home-made dyspeptic pangs. "Poor food ruins dispositions as well as digestions."

"Fashionable private schools are adding cookery to their subjects," I am informed; and the girls "have lots of fun with it." A wise thing; for even if these girls marry men who are wealthy enough to hire a cook they ought to know something about culinary art—the more the better—so they can tell the cook how they want things. Cooks in general are not so bad as they are painted. Many of them are simply inexperienced and glad to learn the better way. I know this from abundant experience in my own household, and I bless the stars that I have a wife who can tell what's wrong and how to mend it.

Most of the public schools in New York and many other cities now have courses in household science, including cooking. In the high schools attention is given, among other things, to the adulteration of foods and its detection; to the effects of certain bacteria, useful or harmful, on foods; to nutritive values; to the physiology of digestion; to money and labor-saving appliances; nursing and diet for the sick; cost of living; home sanitation; home-made fireless cookers; food adulteration; cooking as a moral agent; etc. The courses vary somewhat in different schools, but that all of them tend to domestic happiness and lowering of the death rate is certain.

There are indications that working girls are beginning to realize the gross injustice of marrying without having learned how to cook a palatable and digestible

meal. The New York "Sun" of January 15, 1911, had an interesting article telling how Miss Mary E. Brockman started evening classes in cooking, largely for girls about to be married. Some of them have worked in factories and shops for years, yet "hardly know an egg-beater from a potato-ricer." "They are eager to learn and make good pupils." "It might seem hard to work all day in a factory and spend two or three hours in the evening mixing flour or braising meat, but evidently several hundred young women find it almost a relaxation. Once started, the subject becomes increasingly fascinating."

"Increasingly fascinating." Bear that in mind. In cooking, as in piano-playing, and everything else, the drudgery comes first, but increasing skill brings satisfaction and joy to the artist cook—not to speak of the husband, the children, and the guests. And this joy lasts as long as life itself.

There is in New York an Association for the Improvement of the Condition of the Poor which, in 1911, was teaching 50,000 "little mothers" how to cook while their parents are away working. One of its main objects is to show the families how to economize *intelligently*. The fact that so many children as well as adults in our cities are so undernourished and so liable to disease is largely due to the spending of money on foolish, unnutritious, or harmful things. By simply substituting cereals and soups for their poisonous tea

and soggy cake, thousands of suffering families can be rescued. The Little Mothers even get some simple notions as to the chemistry of food and the advisability of not having too much of one kind, as the following, from the New York "Evening Post," shows:

"Girls," said Mrs. Burns to a group of small cooks one day, "I am going to give a luncheon, and this is what I am going to have: bean soup, pot roast, canned corn, white potatoes, and rice pudding. Do you think that will make a nice luncheon?" Up came a small hand. "Well, what is it?" asked Mrs. Burns. "Too much starch," said the solemn cook.

A book will doubtless be written some day showing by vivid illustrations how many of the problems of charity,—crime, poverty, and the prevention of disease and intemperance—can be solved by attention to rational cooking.

Ignorant feeding kills thousands of infants every month the country over. It is therefore a crime not to include food and feeding in the subjects of study in schools—all the more as most girls get no instruction whatever after they leave school at fourteen.

There will be fewer complaints about high prices when all girls are taught not only how to prepare a meal but how to buy food knowingly. As the New York "World" has forcibly remarked: "If women would pay half as much attention to the fluctuating prices of food as they pay to the prices of dress goods, —or as the men pay to the stock-ticker—and shop half

as assiduously for the one as they do for the other, one of the worst phases of the high-cost-of-living problem would be met at the start."

It is almost startling to find that the schooling of boys and girls in domestic science works the miracle of solving the important problem of how to keep boys and girls on the farm.

Professor Benson of the Department of Agriculture relates how, in 1907, he asked the teachers of thirty-four schools in Iowa how many of the boys and girls expected to remain on the farm when grown up. The answers were most discouraging. Provision was then made for giving up-to-date instruction in scientific farming to the boys and in rational household management to the girls. Three years later account was again taken, and it was found that whereas in 1907 all but 11 out of 174 girls wanted to leave the farm, in 1910, after being educated, only 17 out of 178 girls persisted in going to the city.

Progress in America is being greatly accelerated by the various women's clubs which are working in the interest of the food question. Also, by "Good Housekeeping," "The Ladies' Home Journal," "The Woman's Home Companion," "The Housekeeper," and a host of other magazines, which monthly publish not only columns of recipes but helpful articles of all sorts bearing on household science and management.

All things considered the outlook seems bright.

Characteristically American are the free lectures on cooking, with demonstrations, given in some of our large department stores. Good is also done by the booklets enclosed in many packages of food telling the purchaser of various ways of cooking it, alone or in diverse combinations. Surely, we are on the way to becoming a gastronomic nation!

### TEACHING THE ART OF EATING.

It is not enough that girls and boys at school should be taught to cook; they should also learn how to eat.

Few learn this at home. They are usually taught table etiquette: that they must eat silently, and not take soup off the end of a spoon (though that is the only rational way of doing it) or put the knife into the mouth; but the infinitely more important art of mastication is entirely ignored.

The art of eating is a branch of physiology and should be taught in all schools by experts, the earlier the better. If it were thus taught the next generation of mothers and fathers would know that it is a crime to let their children swallow food, particularly milk and cereals and vegetables, before it has been kept for a while in the mouth to be mixed with saliva and thus made digestible.

Children (and most adults, too,) are like animals: give them something good to eat and they gulp it down

eagerly and then look around for more to stuff into their unfortunate stomachs.

When I was a boy, a story in one of the readers, entitled "The Stomach's Complaint," made an indelible impression on my mind, and saved me many hours of the distress caused by overeating, eating too fast, or eating or drinking things too hot or too cold.

It should be indelibly impressed on all school children that *gluttony is a vice which defeats its own end, and that by eating very slowly much more pleasure can be got from one mouthful than by bolting a whole plateful.*

One stick of candy can be made to yield more "linked sweetness long-drawn-out" than a dozen sticks as usually devoured. Moreover, one stick will not cause hours of discomfort as the dozen sticks surely will; and, in addition, it will cost much less, thus leaving plenty of money to spend on other things. Surely this argument must appeal to all children who have brains enough to be worth schooling.

Every child should also be told over and over again, till the habit is formed, that the pleasure derived from candy and cake and all food can be vastly increased and intensified by consciously breathing out through the nose while eating (as explained on pages 62-3) and that this will be a further protection from indigestion.

If these truths were firmly impressed on all child

minds, two-thirds of the minor ills of mankind would disappear in two generations, and most of the major maladies also; for let me say it once more, the stomach is the source of most preventable diseases.

### REAL EPICURISM IS ECONOMICAL.

The future of cooking and eating lies in the hands of millions of boys and girls now in our schools.

It should be made clear to them how important it is to their welfare to be real epicures,—that is, persons who never eat too much, who select their food with a fastidious taste, and refuse to eat any that has no Flavor, or a wrong Flavor.

Were all of us, or most of us, epicures, what a change our markets would undergo! How the chemically denatured foods, the tainted cold-storage fowls, the drugged, soggy bread, the tasteless, frozen butchers' meats, would be swept away, together with frozen, unpalatable fish, wilted vegetables, unclean milk, unripe and decayed fruits, all of them the daily source of discomforts and disease (often including ptomaine poisoning) to thousands.

We must become a nation of epicures. To be sure, were we all as fastidious as gourmets are, only the best foods would be tolerated in the markets, and these cost more than the inferior grades. But that will not worry any one who bears in mind the three cardinal principles

of gastronomy which I am trying to emphasize in this book:

I. The food from which we chiefly derive our *nourishment* is for the most part cheap.

II. We need more or less expensive *flavor* in food to make it appetizing and digestible; but, fortunately,

III. We need *very little* of the savory material to flavor a *bountiful meal.*

Were we a nation of epicures, making daily practical application of these three cardinal principles of culinary knowledge, we could easily, though getting always the best material, live much more cheaply than we do now.

Count Rumford, in a report on dietary experiments made by him in behalf of the Bavarian Government with its army, dwelt particularly on the fact, demonstrated by these trials, that *much more depends on the art and skill of the cook than on the sums laid out in the market.*

The brain is mightier than the purse. With brains in the kitchen you can live better on two or three thousand a year than on ten times that sum without brains.

To solve the high-cost-of-food problem we should therefore above all things labor to get educated cooks into our kitchens.

Educated cooks can save us money. The more they save us, the more we can afford to pay them; and the more we pay, the easier will it become to persuade young women and men to become trained cooks.

Let us, therefore, with all our might and main endeavor to make the culinary art and science an honored profession, to which any one may feel proud to belong.

Fortunately, apart from all the things just considered which make for the popularity of cooking as a profession, there are others of the utmost importance which must now be dwelt on.

In most hesitating minds one of the chief objections to cooking as at present practised is the drudgery it involves. This drudgery is now being eliminated and will in a decade or two be reduced to a minimum.

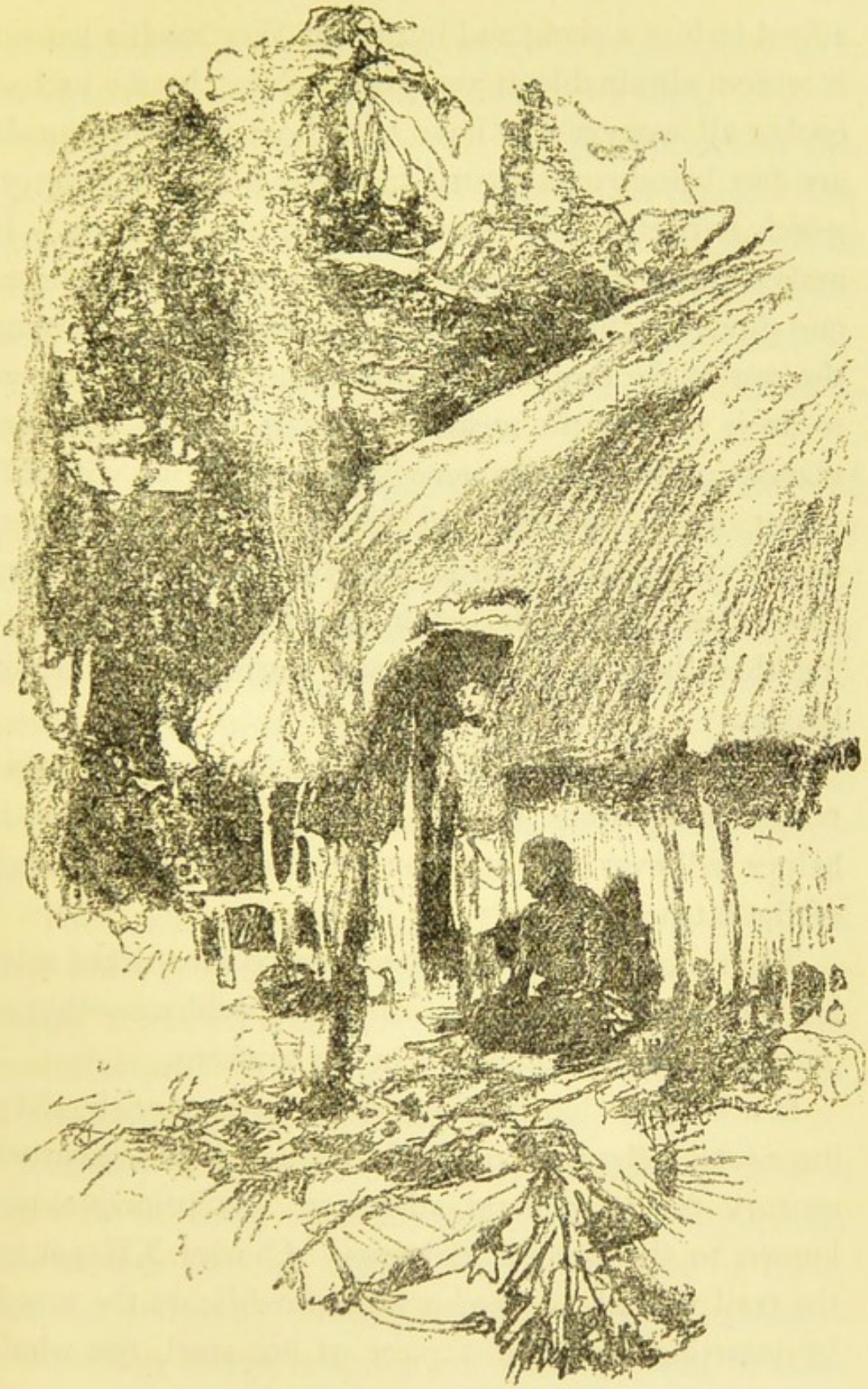
### FIRELESS COOKERS.

While President Tylor of the British Anthropological Institute was doubtless right in holding the opinion (already referred to) that cookery has done more than any other art to help mankind in its progress from savagery to civilization, it is odd that the latest and socially, as well as gastronomically, most important phase of this art takes us back to practices similar to those of primitive man. When Darwin, in his voyage round the world, tarried in Tahiti, his native guides on a trip to the interior prepared for him a meal which he greatly enjoyed. It consisted of pieces of beef, fish, and bananas, wrapped in large leaves and placed between hot stones, which were then covered with earth to keep in the heat. In about a quarter of an hour the viands were "most deliciously cooked."

One who has never had the good luck to taste, at a New England picnic, beans baked in the ground really does not know beans, though his home be in Boston. Nor does any one know the epicurean possibilities inherent in sea-food unless he has attended a shore clam-bake, at which lobsters, clams, and fish, just out of the water and wrapped in layers of seaweed, were cooked over heated stones, the whole being covered with more seaweed to prevent the escape of the heat and the flavors.

In these customs we have a survival of the primitive method of cooking praised by Darwin and numerous explorers and missionaries. Many of the benighted dwellers in our cities have never even heard of them; but within the last few years thousands of our kitchens have been provided with an apparatus which combines the advantages of Tahitian cooking and Rhode Island clam-bakes with modern conveniences—the cooking-boxes, or fireless cookers, which many rival manufacturers are now turning out by wholesale, and which are destined, in combination with gas and electricity, to bring about within the next ten years a domestic revolution so complete and far-reaching that future historians, in summing up the great achievements of the first quarter of the twentieth century, will probably name as the three most important ones wireless telegraphy, aviation, and fireless cookery.

Even in this rich country, only one family in ten can



Fireless cookery in Hawaii

afford to hire a cook, and in the far West such a person is seldom obtainable at any price. Now, by the fireless cooker all women who have to prepare their own meals are fast being emancipated from the hot-stove slavery, which is particularly cruel in our sultry summers. It makes it possible for them to cook breakfast, luncheon, and dinner at the same time, in perhaps an hour, leaving the rest of the day free for other work. All they have to do is to heat the meat, vegetables, cereals, or other viands on the stove for some minutes (varying with different foods), and then put them into the air-tight box, which, being lined with non-conducting substances, cooks them thoroughly, retaining all their flavors, keeping them hot for six hours, and warm for five or six longer.

There is a tradition among mistresses that cooks resent innovations in the kitchen; but no domestic helper will ever balk at a box which eliminates so much of the kitchen drudgery.

The fireless cooker will therefore go far toward solving the most difficult of all domestic problems—that of getting some one to help us in our kitchens.

It is strange that this important service for simplifying cooking should have had to wait till the twentieth century for its general adoption. Its principle was known to the ancient Hebrews. Charles XII got on the trail when he cooked a fat hen while on the march by inserting within it a piece of hot steel, the whole

being placed in a tin box which was wrapped in a woolen cloth and strapped on a soldier's back.

It was in the far North that the possibilities of this procedure were first appreciated in modern times. The general attention of Europe was directed at the Paris Exposition of 1867 to what was called the "Norwegian automatic kitchen"—a box in which food that had been heated to boiling point for a few minutes continued to cook slowly till done.

One would have supposed that such a wonderful saver of fuel, time, and trouble must have been adopted universally within a few years, all the more as any one could construct his own cooker out of an ordinary box lined with felt, hay, paper, sawdust, or some other poor conductor of heat. But years passed and little was done until some enthusiasts, prominent among whom was the Grand Duchess of Baden, took up the propaganda.

Then came the era of auto pianos and automobiles and auto everything. The automatic cooker was no longer a solitary voice crying in the wilderness. The manufacturers took it up, and now, especially in the United States, thousands are sold every day.

Already there are nearly as many "makes" of them as there are of pianos or automobiles, each claiming special advantages over all others. With the best of them, boiling, steaming, broiling, baking, frying, roasting—everything, except crisping and toasting—can be done

with satisfactory results. Soups and stews, in particular, which require hours of slow cooking at moderate heat, come out of these cookers with a delicious flavor.

From the gastronomic and dietetic points of view the most important of all the claims made for the fireless cooker is that the food flavors previously dissipated through the whole house as "kitchen odors" are retained in the meats and vegetables, making them exceptionally savory and appetizing.

It is needless to say that these cookers are of no use for broiling or frying steaks, chops, bacon, ham, sausages, or griddle cakes, which require only a few minutes to cook and must be crisp to be enjoyable.

Nor will the presence of a cooker make it any the less necessary for the mistress or the professional cook to thoroughly understand the culinary art. They must know about meats, and cereals, and vegetables, and flavors, and their combinations and extension, to which attention has been called. It is simply, in all households, valuable because it preserves flavors, eliminates the danger of burning or overcooking, reduces the cost of fuel by three-fourths or more, makes it easier to wash the pots and in other ways saves no end of drudgery; while for those who have to do their own cooking its advantages in giving leisure for other work, or diversions while the cooking goes on, are incalculable. The best of all wedding presents is a fireless cooker.

Automobilists and excursionists in general are finding these boxes a great convenience. They have also been used in the army.

Many women whose work is away from home hardly have even as much time to spare as is needed for starting a meal in the cooker. It is likely that restaurant-keepers and other caterers will be more and more called upon to prepare specially ordered meals for such cases and send them in the heat-retaining boxes in which they were made. Expert cooks, in all probability, will go from house to house to start the cookers.

### PRIVATE VERSUS COMMUNITY KITCHENS.

There is a future here for various new kinds of culinary work. But for one kind, it is to be hoped, there is no future, and that is the community kitchen—a single kitchen for a number of families. This plan has been tried in various countries, always without success. Berlin had its "Einküchenhaus"—for a time. The New York "Independent" of March 6, 1912, contains an account of a similar experiment in America. A dozen women presided in succession with invariably disastrous results.

It is impossible in such a case to suit the taste and purse of every family. In a large restaurant it is possible to cater to every patron's wishes, but where there are half-a-dozen or a dozen families clubbed together, some are willing to pay for fresh eggs and poultry and

unsalted butter, for example, while others would prefer to save the money and live on storage eggs and poultry, salted butter, wilted or canned vegetables, and so on. There is sure to be constant squabbling; troubles arise from feeing, bribing, and a hundred other sources. No; most of us want to be able to order our own meats, vegetables and fruits, and have them cooked and served as we like them.

"It was the fashion of forty years ago," wrote E. P. Powell in 1904, "for progressive economists to discuss a reform village, built in squares, one house on each corner, and a community boarding-hall and kitchen in the center of each square. Some experiments were made along such lines, but they fell to pieces over the table question. It is not easy for four families to agree on a menu three times a day, and on the qualities of the cooking. As a rule every woman must be mistress of her own kitchen."

The German delicatessen store (now acclimated in all our cities) with its cooked cold meats, pickles, cheeses, and diverse fancy groceries, is likely to be the nearest approach to a community kitchen (nearly every block has one) that the future will know; and the delicatessen store is only an appendix to the private kitchen.

Nothing could be more ridiculous than the wails of certain writers over the "waste of time" in having the cooking done separately for each family. There are plenty of persons in search of profitable employment

to supply the demand; and surely, it is infinitely more human, more intellectual, more enjoyable to practise the noble and useful art of cooking than to be merely one cog in a huge machine for making shoes or garments, or cigarettes, as are hundreds of thousands of factory workers, most of whom could lead much happier and more elevated lives if they were cooks.

"The gourmet distrusts dishes provided by pastry cooks and caterers," wrote the late Theodore Child; and this is another of the many reasons why every family that can afford it should have its own cook. I have never yet eaten ice cream, even in the most expensive places, as rich and luscious as the cream we make at home. Excellent jams and jellies are now for sale in the markets; but in your own kitchen you and your helpers can make jams and jellies, and preserves that are better still—made of material you have seen, and sweetened, or otherwise seasoned, to your individual taste.

The word home-made is still the synonym of gastronomic excellence. When a dealer wants to specially commend his offerings, he labels or advertises them as "home-made."

Owing partly to the present difficulty of getting good cooks, and partly to the selfish disinclination of too many American women to do as much at home for their husband or father as the husband or father does for them in the office, thousands of homes have been

abandoned in favor of apartment hotels. How these families can endure the insipid, monotonous, unappetizing meals served in these (for the most part expensive) places, is to me incomprehensible.

A reaction will come in favor of private kitchens, and it will be greatly accelerated by the latest improvements, now to be considered.

### SCIENTIFIC ELECTRIC COOKING.

In the average household the use of a cooking box does not do away entirely with the smoke, soot, heat, ashes, and kitchen odors, because of the need of heating the food on a stove for five minutes to half an hour before it is put into the air-tight box. The use of gas-stoves does away with most of these nuisances, while electricity abolishes them altogether, besides removing the danger of fire, keeping the air clean and cool, and enabling one to cook in any part of the house at any desired minute.

Electric cooking is still in its infancy, but the child is growing rapidly. At the Chicago Exposition of 1893 utensils were shown in considerable variety—chafing-dishes, stew-pans, coffee-pots, teapots, broilers, griddles, etc. Since that time hundreds of thousands of dollars have been spent in devising improvements, and at the electric exhibition in New York in 1911 the cooking-utensils were so prominent and boasted so many improvements that it seemed as though the time had

come for their general introduction into homes and hotels.

The United States Government has taken the lead by recommending electric ranges for future use on battleships, after experiments had been made showing that the change would result in greater economy of time, space, and money, not to speak of cleanliness, or of the better quality of the cooked food, because of the uniform distribution of the heat.

For home use, electricity is still in most localities comparatively expensive, but it will be less so when it comes into more general use. If the electric companies would more frequently follow the example of the gas companies in renting cooking-ranges, it would be a great stride forward. In England some of the companies charge a special low rate for electric cooking, because it is done mostly in the day time, when there is little demand for the current for lighting purposes.

But the most radical way to reduce the cost is to combine the electric range with the fireless cooker. Thousands of families that can not pay for an electric current five or six hours a day could easily afford one for the fifteen minutes necessary for heating the food before it is put into the box, besides the few minutes needed for crisping roasts, brewing coffee, or toasting bread.

In 1911, fancying myself a prophet of great things to happen, I wrote: "It is quite likely that the electric

range can be so constructed in part that no separate cooking-box will be needed; and then the culinary millennium."

The "Edison Monthly" reprinted my remarks and in an editorial promptly informed me that what I had voiced as a mere possibility for the future was already a fact: that electric fireless cookers had been put out by several manufacturers more than a year before my article appeared. It was a pleasant surprise to find that this was literally true; that my imagined "millennium cookers" were actually in the market.

In Chicago, on September 15, 1910, the following menu was served to nineteen persons in an electric shop:

Consomme Julienne

Radishes Olives Celery

Prime Roast Beef

Mashed Potatoes Lima Beans

Combination Salad

Fresh Peach Short Cake

Coffee

This meal was cooked in two hours; and by using high heat only so long as necessary (on the "cooker" principle) and then turning down the electric current the cost was made as low as only a trifle over a cent and a quarter per person.

For dishes requiring only a short time to prepare, the following details have been given:

"A toaster can be used for fifteen minutes at a cost

of 1¼ cents; fried oysters with bacon, prepared in the blazer of an electric stove consumes 2 cents' worth of current; to prepare creamed oysters costs 1¾ cents; finnan haddie, 2 cents; lobster à la Newburg, 2 cents; chicken and mushrooms, 2½ cents; spring chicken, 2½ cents; lamb chops with vegetables, 2½ cents; sweetbreads, 2½ cents; plain omelet, 1¾ cents; cheese omelet, 2 cents; Spanish omelet, 2¼ cents. To boil eggs the water-cup may be used on the dining-room table and one cup of water can be boiled for 1½ cents; Welsh rarebit may be made for 1½ cents; griddle cakes baked on the electric stove for 2½ cents for 1½ hours' operation."

West London in the autumn of 1912 had two private restaurants in which all the cooking was done by electricity, 1,200 meals being provided daily for the staff of a large establishment.

In the London "Daily Mail" of November 2, 1912, the following appeared:

An interesting test made in a small middle-class home gives the entire cost of the day's cooking at 6d. Beginning first thing in the morning, the time and amount of electricity used were carefully noted. For early morning tea the boiler or kettle of the electric range boiled rather more than two pints of water in four minutes, the electricity used equaling less than one-fifth of a penny. The whole cooking of the breakfast took ten minutes, the electricity used being less than 7-10th of a unit, equaling an expenditure of just under ¾d. The menu was five rashers of bacon and toast cooked on the grill in less than seven

minutes, five eggs boiled on a ring, and coffee made from the rapid boiler.

The midday meat meal consisted of an 8 lb. joint, potatoes, and other vegetables for five people, milk pudding, and coffee. The electric oven retains the heat so well that the pudding was placed in the oven after the joint was removed and the electricity switched off, the retained heat being sufficient to cook it; $2\frac{3}{4}$ units, or $2\frac{3}{4}$d., cooked this meal.

Tea time cost $\frac{1}{2}$d. for tea, hot grill cakes, and toast, and supper with a hot dish 1d. During the day water was boiled, cakes baked, and some soup simmered, at the cost of another unit.

The advance of the electric cooker can be gauged by the statement of the electric supply companies, who affirm that where they had but six private houses using cookers last Christmas they have 200 this year; or by the statements of the users, who say that they have no desire to return to old methods. Many big business houses have complete electric installations in their kitchens.

Electricity in the kitchen will make cooking an *exact science*. No longer will diners be obliged to rely on the cook's "instinct" or "knack," which too often fail. With the electric appliances the temperature can be controlled to a degree, and special switches permit fast, medium, or slow rates of cooking.

From the economic point of view the most satisfactory electric ranges are of course those in which the current shuts off automatically, while the dinner continues to cook with no further expense, the stove taking on the fireless cooker principle.

Further advantages claimed for electric cooking are

that the loss of weight in meat while cooking is greatly reduced, and that the results obtained by it have the advantages of the paper-bag cooking, which has come so much into use within a few years because of its cleanliness and its value in preserving the food flavors which in ordinary cooking are so lamentably dissipated.

Electric chafing dishes, toasters of various kinds, coffee percolators and tea kettles, waffle irons, boilers, stew and frying pans, are now at the service of all who have electricity in the house. Nor is this all. There are, besides, bread and cake mixers, coffee grinders, food choppers, ice cream freezers, egg beaters, vegetable slicers, food graters, apple peelers, knife sharpeners and polishers—all of them run by the electric current.

Thus we see that the housewife and the cook of the future, instead of feeling like a drudge in a smoky, smelly, overheated kitchen, will have the dignity of workers in a cool, clean laboratory for the scientific preparation of savory food and the abolition of dyspepsia.

The editor of the electric magazine referred to indicates another important result of this agreeable transformation of the kitchen. Caste feeling is largely a matter of dress. "The poorest stenographer is a lady, because, in so far as her stipend permits, she dresses like a lady. Accordingly, she looks down upon the cook drawing the same wages and 'keep,' because the cook

works with red face and streaming hair over a hot stove." But in the electric kitchen of the future the cook will be able to be as neatly dressed as if she were presiding over a glove counter; and this will act as a great social leveler.

The cook's work will also be lightened by the growing practice of preparing food and drink on the dining-room table, to have it hot, and with the flavor at its best. The choicest coffee, for instance, is usually spoiled by being prepared carelessly in the kitchen. Epicures make their own coffee and tea; they are also able now to have better toast than ever comes from the kitchen by making it on the table in an electric toaster. Eggs and bacon, taken sizzling from the electric frying stove and eaten out of the pan, have a richness of flavor that will astonish those who have never tried them this way; and the same is true of many other breakfast and lunch dishes.

### IMPORTANCE OF VARIETY IN FOODS.

It is likely that in the development of electric cooking inventive America will lead Europe. But in other respects the American cooking of the future will have to borrow many useful hints from the older and more experienced nations of Europe.

We need, especially, greater variety in our dietary. The following chapters will endeavor to indicate the best ways of multiplying our pleasures of the table.

Before beginning with France, which has the largest number of lessons to teach, let us briefly consider the need of variety.

King Philip V of Spain engaged Farinelli, the most famous vocalist of his time, to sing four songs for him, without change of any kind, every evening for ten years. He was not in his right mind, "as a matter of course," one feels tempted to add, and yet are there not at this day, and in this country, many thousands of persons whose musical pabulum consists entirely of half a dozen tunes, which they sing, hum, and whistle decade after decade? For them the countless inspirations of genius given to the world in the last three centuries do not exist at all. And how much enjoyment they thus miss!

Vastly more surprising, since everybody eats, is the fact that the majority of persons are equally ignorant of the countless delicacies invented by ingenious cooks of the past and present. What Sir Henry Thompson wrote, more than a quarter of a century ago, regarding the average Englishman is quite as true to this day of the average American: "He cares more for quantity than quality, desires little variety, and regards as impertinent an innovation in the shape of a new aliment, expecting the same food at the same hour daily."

Breeders of fine animals have long since discovered that nothing is so conducive to health and other desirable qualities as variety in the food given.

A monotonous diet soon palls on the appetite, fails to stimulate the digestive organs, and the result is dyspepsia, loss of pleasure, energy, and earning power, and the shortening of life. Think of the pallid victims of the everlasting hog and hominy in the South! "Hasty pudding and milk," as Artemus Ward sagely observed, "are a harmless diet if eaten moderately, but if you eat it incessantly for six consecutive weeks, it will produce instant death."

At a conference on diet in schools held in London, all the speakers agreed that "monotony is the most fatal thing to digestion in both young and old, and that the knowledge that such and such a dish must inevitably come on Monday and such and such another on Tuesday, is destructive beforehand to appetite which is essential to good digestion and nutrition."

When the average American or Englishman travels, he is glad to see new cities, new scenery, new costumes and new faces; but he is comically indignant if he cannot get the same food he has always had at home. It would be much better for him if he could be made to understand that Cowper's maxim, "Variety 's the very spice of life," applies to diet as much as to anything. Every country has something to give and teach us regarding the pleasures of the table. No other land yields such a lavish and varied supply of raw material as the United States, and all we need in order to become the leading gastronomic nation is to wake up to

the importance of good and varied cooking and rational eating, and to learn all we can from nations famed for their culinary art.

The methods of obtaining the diverse national food flavors can often be studied without traveling abroad, since in our cities we have cooks and restaurants of nearly every land under the sun. In New York one can make a gastronomic trip of the world.

# VII

## FRENCH SUPREMACY

A GRUMBLER might ask "What 's the use trying to learn new things from foreigners when so many of our families can hardly afford to buy the ordinary meats and vegetables for any kind of meal?"

But it is precisely because foodstuffs are becoming expensive that we ought to look to the older and less extravagant nations of Europe for guidance. Our Government has been commendably alert in this matter, doing a most useful service by issuing Farmers' Bulletin 391, which, as previously pointed out, shows how, by expert cooking, the cheaper cuts of meat may be made to yield more nutrition as well as

more appetizing flavor than the choicest cuts as at present prepared in American households.

### KITCHEN ALCHEMY.

It is to France chiefly that the world owes this invaluable lesson, which gives to those of moderate means many of the advantages of the well-to-do. In that country the humblest peasant family enjoys palatable meals because the cook is an alchemist who knows how to transmute the baser metals into silver and gold.

The secret of this alchemy lies in the use of the stock-pot, which saves for the table a vast amount of animal and vegetable nutriment and flavor such as in American cities and on American farms are wickedly wasted.

It is no consolation to know that the British are almost if not quite as foolishly wasteful as we are. But they are beginning to learn of the French. Sir Henry Thompson's "Food and Feeding" sounded a note which is being listened to more and more attentively. A more recent writer comments instructively on "French Thrift and British Waste":

"In a French household such a thing as waste is almost unknown. The positive waste of odds and ends in this country is simply appalling. Look not only under the vegetable stalls in our streets, but also in almost all dustbins, and you will see as much as, if it had been kept clean, might have given health literally to thousands of people.

"Besides the outside leaves of cabbages and cauliflowers, and the outside layers of onion skin, there are the peelings of potatoes, turnips, carrots, and apples, and the tops of beet-roots and turnips, and the large outside sticks of celery. In France and other countries these go, as a matter of course, into the stock-pot. In England the stock-pot is scarcely used at all among the poorer people. It is not too much to affirm that half a dozen changes in the ways of English poor people, including first and foremost the use of the stock-pot, would increase our national prosperity more than our social reformers dream of."

### SEVEN HUNDRED SOUPS.

There are a thousand uses in an intelligently conducted kitchen for the delicious bouillon in the stock-pot, redolent of the flavors of diverse vegetables and meats.

Dumas wrote that the French cuisine owes its superiority to the excellence of its bouillon—the product of seven hours of continuous simmering. He knew what he was talking about, for he was almost as far famed for his knowledge of kitchen lore as for his novels; and his "Grand Dictionnaire de Cuisine" is one of the monumental contributions to the arts of cooking and eating.

Another Frenchman, Ferdinand Grandi, wrote a book in 1902 entitled "Les 700 Potages, ou l'art de Pré-

parer les Soupes, Consommés, Bisques, Purées, Garbures, Semoules, Légumes, Farineux, Potages de toutes Sortes et de tous les Pays."

Seven hundred soups seems a large order, yet it is possible to prepare not only seven hundred but seven times seven hundred kinds by combining the juices and flavors of diverse meats with those of an endless variety of vegetables. That this is not an exaggeration any one may convince himself by turning over the pages of Baumann's "Meisterwerk der Speisen," which, in its 2016 pages, indicates the nature of about that number of soups.

It must not be inferred from the foregoing remarks about the stockpot that nothing goes into it except odds and ends—peelings and tops of vegetables, bruised bones, trimmings from joints, scraps of poultry or other meat that is left over at table. On the contrary, those who can afford it put in chunks of carefully chosen meats to enrich the bouillon.

For making the national French soup known as *pot-au-feu* the pieces generally selected are the top round, the shoulder, or the ends of ribs. Preparing the pot-au-feu is not so simple a matter as it may seem. In "L'Art du Bien Manger" we read that the boiling must be done slowly and methodically and that the vegetables to be used must be fresh:

"To make an excellent bouillon, cook, preferably in an earthenware casserole, or, if that is not available,

an iron pot; put in the meat, the bones, cold water and salt. Put the pot on the fire, bring it to the boiling point and skim carefully, then after this first skimming add a glass of cold water. Let it boil up again and skim a second time. When the soup begins again to boil slightly slacken the fire, uncover the pot partially and let it simmer gently.

"After three hours' simmering add the vegetables and two pepper-corns. Let this go on simmering two hours more. Color the liquid with a little caramel made from burned sugar. Remove all the fat from the bouillon, put it through a fine sieve and pour it into the soup tureen in which you have placed thin slices of bread which have been browned in the oven. The beef from the stock may be served garnished with the boiled vegetables. (The use of pepper is a matter of taste.)

"The economical side of the pot-au-feu is to furnish soup for two meals. What is left over may be kept in an earthenware jar into which it should be poured through a fine sieve after it has settled somewhat in the soup kettle."

Dumas, who relied for his culinary directions on his friend Vuillemot, of the Tête Noire at St. Cloud, advises that only the freshest and juiciest meat should be used and that it should not be washed, as that would rob it of a portion of its juice. The bones that are added should be broken up well with a mallet as that

will result in the gelatine being effectually extracted from them. "Then we place them in a horsehair bag with any scraps of fowl, rabbit, partridge, or roast pigeon which may be found in the larder; in fact, the remains of yesterday's dinner."

As I am not writing a cook book, my main object in presenting these excerpts is to provide an illustration of that use of brains and painstaking care in the kitchen which explains French supremacy in matters gastronomic.

### SAVORY SAUCES.

The same traits are abundantly manifested in the making of sauces.

While Dumas attributed the culinary superiority of the French to their bouillon, George H. Ellwanger, who has written an entertaining book on "The Pleasures of the Table," declares that "the supreme triumph of the French cuisine consists in its sauces."

Many of the French gourmets and chefs have held the same view, and undoubtedly more inventive skill has been shown, and more reputations have been made, in the realm of sauces than in any other department of the art of cooking.

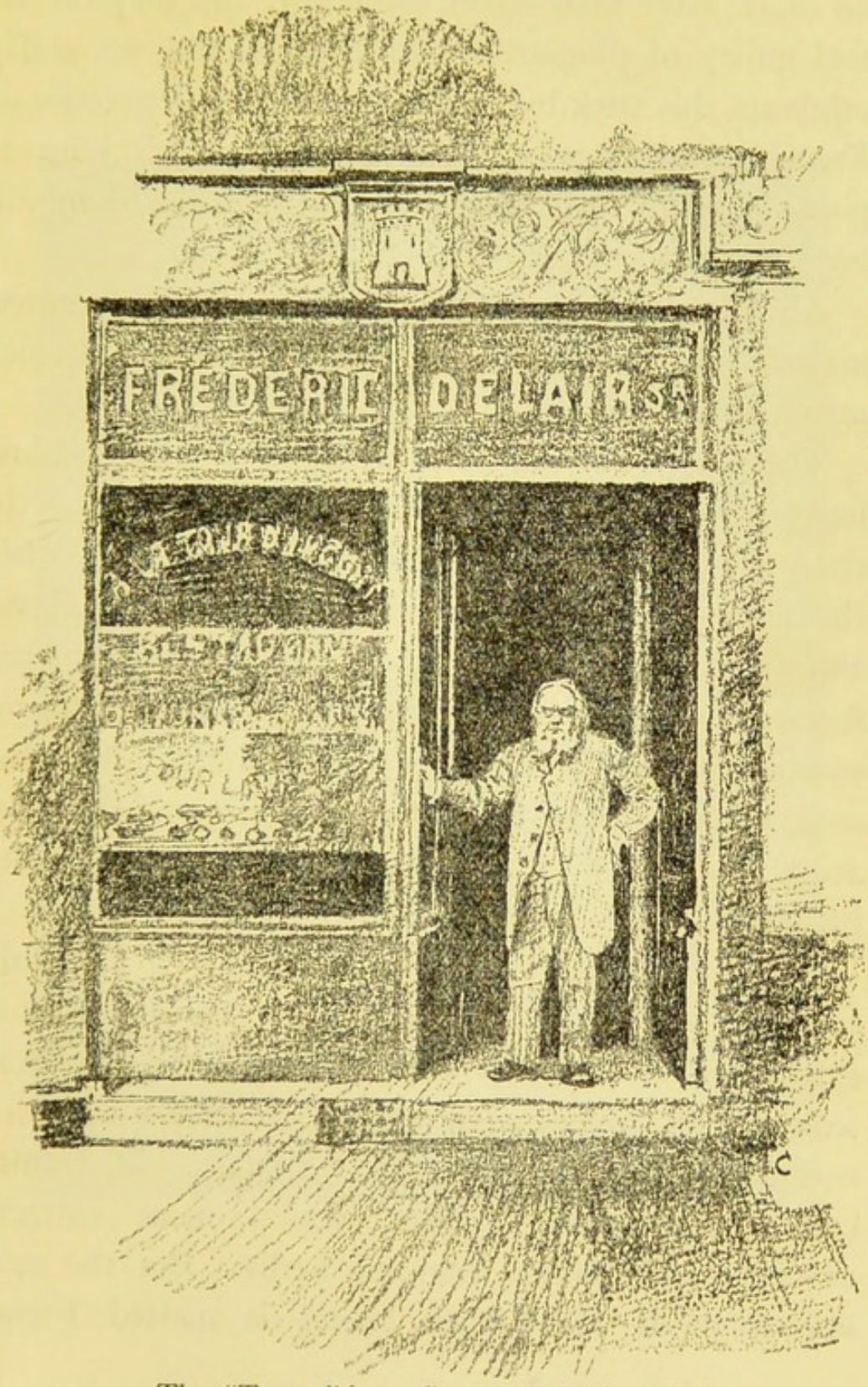
Recipes for eighty-one of the best French sauces are given in "L'Art du Bien Manger," and two hundred and forty-six sauces are described in Charles Ranhofer's "The Epicurean." Perhaps the number of pos-

sible sauces is not as large as that of the soups; yet there is ample scope still for inventive genius.

Not only men but cities have been made famous by a sauce. In the restaurants of Paris and all over Europe, in fact, Rouen duck is often on the bill of fare. But as Lieut.-Col. Newnham-Davis says in "The Gourmet's Guide to Europe," "the Rouen duck is not any particular breed of duck, though the good people of Rouen will probably stone you if you assert this. It is simply a roan duck. The rich sauce which forms part of the dish was, however, invented at Rouen."

It was with a duck sauce that one of the French restaurateurs of our time won fame and fortune. For a number of years every American and Englishman in Paris who could afford it, went to the Tour d'Argent to eat a duck as prepared by Frédéric Delair. He used two ducks for each order. One of them, well-cooked, was for the meat, while the other, quite rare (or underdone, as the English say) was put into a silver turnscrew and had all its juices—including that of the liver—squeezed out. These juices make a sauce which I have eaten with enjoyment and impunity; but I have been told by a physician at Lyons that some persons are made ill by it, owing, apparently, to some injurious quality in raw duck-livers.

Most of the Paris restaurants, now that Frédéric is



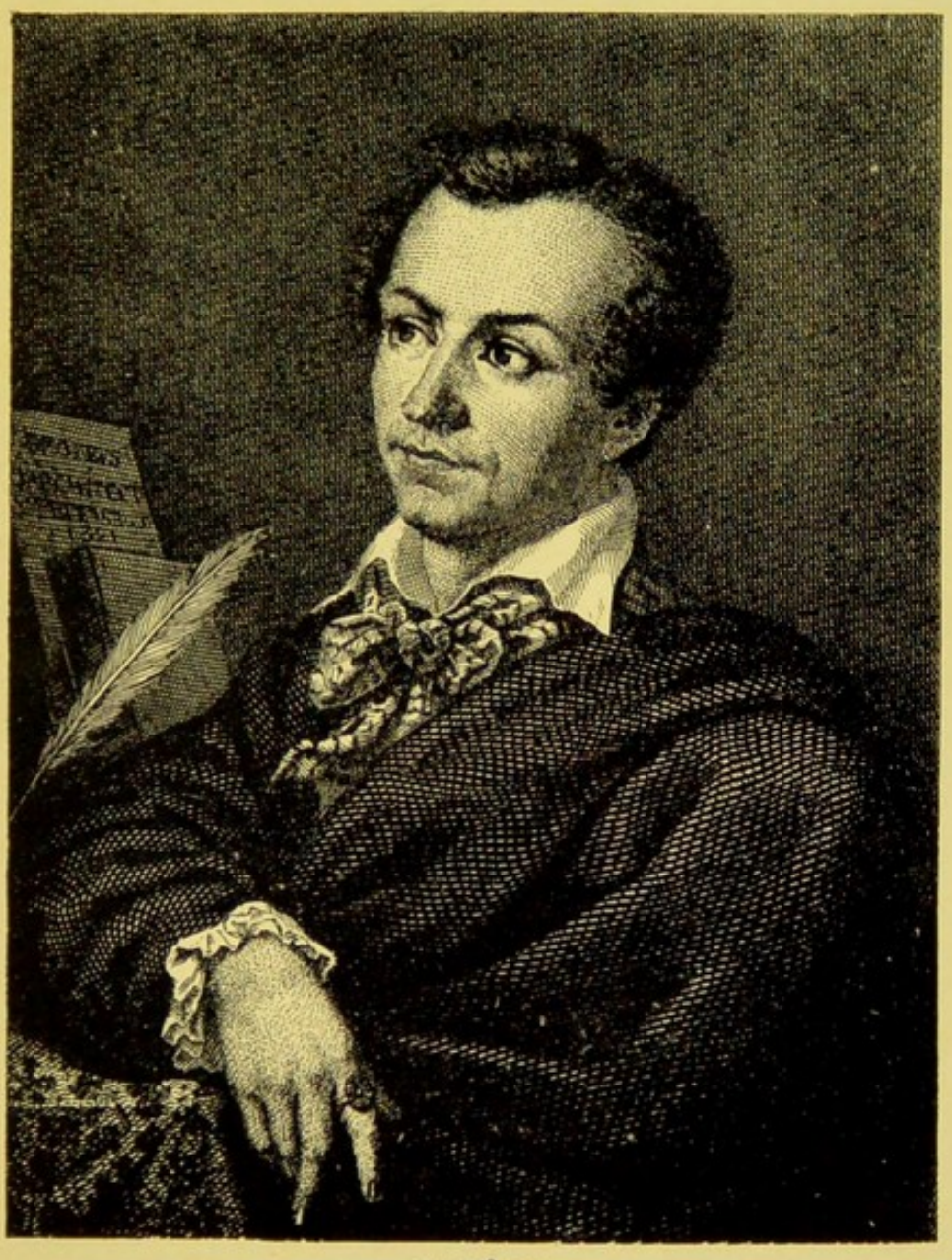

The "Tour d'Argent" and Frédéric Delair

no more, have their silver turnscrew, and they do not feel guilty of plagiarism, for Frédéric did not really originate this trick but adapted it from the practice of French peasants who tried to get as much juice as possible out of their tough and skinny ducks by smashing the carcasses with stones.

Already in the middle ages the *saucier*, or sauce-maker, was the headman in the cuisine of French aristocrats.

The age of Carême (who wrote eloquently and lovingly about sauces) was, as Ellwanger remarks, "the era of quintessences—of the *cuisine classique*, when chemistry contributed new resources, and fish, meats, and fowls were distilled, in order to add a heightened flavor to the sauces and viands that their etherealized essences were to accentuate. One thinks of Lucullus and Apicius, and of the 'exceeding odoriferous and aromatical vapor' of the ovens of the artist mentioned by Montaigne."

The most common ingredients used to make the savory and appetizing French sauces are the yolks of eggs (raw or cooked), salt, pepper, mustard, vinegar, lemon juice, tomatoes, bouillon, shallots, anchovies, onions, garlic, carrots, olive oil, orange rind, truffles, cream, mushrooms, pickles, wines, meat extracts, cayenne, and diverse aromatic herbs. But the most important of all French sauces is melted French



CARÊME

butter—not "kitchen butter," but the fresh, fragrant product of the creamery. With such butter, *and plenty of it*, gastronomic miracles can be performed.

There is a great deal of local Flavor in French sauces. Blindfold a Parisian gourmet who knows his country, and place before him dishes made after the fashions of different provinces, and he will tell you at once the name of the town they smack of.

The coast towns enjoy special advantages in this respect, as they can use diverse shellfish and other marine creatures peculiar to their region to impart special overtones of flavor, so to speak, to their sauces.

French enthusiasm over sauces reached its climax in the exclamation that with sauce Robert a man might be pardoned for eating his own grandfather!

Brillat-Savarin, like many of his countrymen, went too far when he declared that "poultry is for cookery what canvas is to the painter."

No doubt, many of the sauces served with poultry in French restaurants (each of which has its specialty, as it has in the line of fish sauces) are delicious, yet good chickens, ducks, and turkeys, not to speak of game birds, have flavors of their own which it is a barbarism to disguise even with the noblest of sauces—except once in a while, for the sake of variety. The way to cook any winged creature if you want the most delicious flavor it can yield, is roasting *à la broche*.

PROFITABLE POULES DE BRESSE.

Of the barbarism just referred to, many Parisian restaurants, I regret to say, are habitually guilty. One evening, at one of the best of them, I was simply dumfounded when a choice poularde, which cost as much as the almost extinct canvasback duck does in New York, was served with—*horribile dictu*—a sauce made of American canned corn! It was not an attempt to cater to the supposed taste of a New Yorker, for it was a *plat du jour*, prepared before we arrived and served to others. Had I been the host of the occasion instead of merely a guest I should have taken the headwaiter into a corner and whispered some advice into his ear.

What aggravated the crime was that it was a poularde de Bresse that was thus maltreated.

Many varieties of chickens are raised in France—the *poule commune*, the *race de Houdan*, *race de la Flèche*, *race de Crèvecoeur*, *race de Barbezieux*, *race Caussade*, etc., besides imported varieties; but the noblest of them all is the *race de la Bresse*.

The poulet de Bresse is the most highly esteemed of all domestic birds that are served not only at French dinners, but at the best restaurants and hotels all over Europe. It has a richness of flavor that puts it far above other fowls—as far as its delicious fragrance puts the Gravenstein above all other apples.

In France the poule de Bresse has long been held in

highest esteem. Brillat-Savarin wrote in 1825: "as to chickens, the finest are those from Bresse, which are as round as an apple." English breeders have recently discovered its superior merits. It promises, the London "Telegraph" remarks, to "become very popular in the near future, and deservedly so, considering the breed's laying and table properties, which have been tested for fully a century across the channel. Bresse is one of the principal towns in the Aisne district, and the breed which bears its name was always cultivated for its white flesh, with delicacy of flavor. Poularde de Bresse usually fetches a higher price than any other fowl in the Paris market." "It behoves our English poultry keepers to use every effort to popularize the Bresse fowl in this country. The specialist club, started some three years since [1909] has already done much. . . . Mr. G. H. Caple, of Stanton Prior, near Bristol, is honorary secretary, and will give all needful information."

It is to be noted that the Bresse fowl not only "puts on flesh in a wonderful way," but has all the other qualities most desirable in a farmyard bird. Several varieties have flesh as juicy as the Bresse, and almost as delicate in flavor, but there is always some trait or other that puts them at a disadvantage. The Houdan, for instance, is a good bird for the table and a fair layer, but it requires too much attention to be generally profitable. La Flèche provides a tender morsel but

flourishes only in dry regions, and the same is true of the Crèvecoeur class, which is extremely sensitive to humidity. The Belgian Campine puts on good flesh but not enough of it. The American Wyandotte and the Leghorn are robust, and good layers, but the flesh is inferior in flavor. Much better in this respect are the Plymouth Rocks, but they are poor layers. The Langshans class is good to eat, but does not fatten easily, while the Cochins grow too slowly and their flesh is mediocre as to flavor.

The poule de Bresse has none of these flaws. The black variety is the hardiest of all chickens, flourishing in any climate except the extreme north, and on any soil, dry or humid. As a layer she is among the very best, often winning prizes for size and number of eggs. Though prolific she is not too eager to set, but when she does hatch, she makes a devoted mother. Best of all, the flesh is tender and juicy, there is plenty of it, and in flavor it is beyond compare.

Truly, the poule de Bresse is the chicken for the farm and the market—"c'est la véritable poule de rapport, celle qui convient à la ferme," as a French noted *aviculteur* remarks.[1]

To my great surprise, in looking over Farmers' Bul-

[1] La Poule. Production Intensive des Oeufs. Par A. Linard, Paris: S. Bornemann. See also the same author's "La Poule. Production Intensive de la Chair"; and "Les Poules, Poulets et Chapons." Par François Rontillet, Paris: Le Bailly—for information as to the best French ways of feeding, housing, caponizing, and fattening fowls.

letin No. 51 (1907) entitled "Standard Varieties of Chickens," I found no mention of the poule de Bresse in this forty-six-page document, which begins with the statement that there are 104 standard and a large number of nonstandard varieties of chickens raised in this country. Can we afford to be so far behind the French —and the English?

Ungastronomic America confronts us in the statement, in Bulletin 51, that although as a table fowl the Leghorn is only "fairly good," it "holds the same place among poultry that the Jersey holds among cattle. The question of profit in poultry has been decided in favor of the egg-producing breeds."

In a country in which most poultry is spoiled by being put into cold storage undrawn, it is no wonder that the laying capacity of a fowl should alone be deemed worth considering; for, under these conditions, as previously pointed out, breed and feed are of no consequence so far as flavor is concerned. But the time is coming when the American consumer will imperatively demand Flavor in Food; and bountiful harvests will be reaped by farmers who look ahead now and stock their poultry yards with an eye to good and abundant flesh as well as good and abundant eggs. The Bresse race will fill the whole bill. It is best for eggs, best for the table. A Bresse hen will virtually hatch two chicks from one egg.

DIGESTIVE VALUE OF SOUR SALADS.

Salad goes with chicken as the piano goes with a song. To eat lettuce with the cheese, as many Englishmen and not a few Americans do, is preposterously absurd. As for putting sugar on lettuce I cannot write down my opinion, for it is not fit for print. Salad cries for vinegar, as a parched plant cries for rain.

Vinegar is not only agreeable to the senses of taste and smell, and most refreshing, especially in summer, but it plays a very important rôle in the digestion of food.

It has been said that God sent us our food and the devil our cooks. This is not *always* the case, but the devil certainly inspired the man who taught that, in mixing a salad dressing, the vinegar should be added by a miser.

This maxim, widely accepted, has done a great deal of harm, not only in spoiling many millions of dishes for the palate, but in preventing salads from heading off dyspepsia, with all its evil consequences.

Many physicians have deplored the insufficiency of fat in the average American's diet. Fat is especially important as a source of energy, and also because fat meat is more savory and appetizing than lean meat. Furthermore, physiologists have shown by laboratory experiments that the presence of fat in meat or vegeta-

ble dishes makes them yield a larger degree of nutriment (apart from what it contributes itself).

Professor John C. Olsen of the Brooklyn Polytechnic Institute says that "fats and oils furnish fully half the energy obtained by human beings from their food. Fats also exert a beneficial influence on the digestive process, so that a diet without fat is dry and unpalatable."

The only drawback is that fat makes the food "rich" and difficult of digestion—unless the cook is an artist.

This is why so many persons exclude it from their dietary, at the cost of energy in men and the beauty of health in women.

It is here that salad comes to the rescue. The vinegar in it, if genuine, excites by its fragrance and acidity the digestive glands not only in the mouth and the stomach, but in the pancreas, which acts on all the constituents of food, particularly the fats.

The pancreas is a gland near the stomach; it secretes the juice known as pancreatic and pours it into the duodenum, or small intestine, which—some ten or fifteen feet in length, is folded about it. To prevent intestinal indigestion there must be an abundant flow of pancreatic juice, and this flow is stimulated by the vinegar in the salad we eat and other acids in our food.

On this point the greatest living authority on the subject, Professor Pawlow, makes the following extremely important remarks:

*. . . an acid reaction is not only necessary for an efficient action of the peptic ferment, but is at the same time the strongest excitant of the pancreatic gland. It is even conceivable that the whole digestion may depend upon the stimulating properties of acids, since the pancreatic juice exerts a ferment action upon all the constituents of the food. In this way acids may either assist digestion in the stomach where too little gastric juice is present, or bring about vicarious digestion by the pancreas where it is wholly absent. It is easy, therefore, to understand why the Russian peasant enjoys his kwas with bread. The enormous quantity of starch which he consumes, either as bread or porridge, demands a greater activity upon the part of the pancreatic gland, and this is directly brought about by the acid. Further, in certain affections of the stomach, associated with loss of appetite, we make use of acids, both from instinct as well as medical direction, the explanation being that they excite an increased activity of the pancreatic gland, and thus supplement the weak action of the stomach. It appears to me that a knowledge of the special relations of acids to the pancreas ought to be very useful in medicine, since it brings the gland—a digestive organ at once so powerful and so difficult of access—under the control of the physician.*

It is obvious from these disclosures that if every American family followed the French custom of eating

a sour salad at least once a day there would be very much less intestinal indigestion, which is even more distressing than indigestion in the stomach.

It is further obvious that Fletcherizing, or "mouth work," *alone* does not avert indigestion, for saliva has no effect on fats. The pancreas takes care of these, particularly if aided by acid ingredients in our food.

Probably no detail of the French menu is therefore so important to us as the daily sour salad.

An astonishingly small number of American families know what a delicious and hygienically valuable dish salad is with a French dressing of *good* olive oil and *pure*, fragrant vinegar.

There is very little nourishment in salad leaves until the oil has been added; and the oil is what we need, with the vinegar to help digest it.

The two words I have just italicized explain why so many Americans imagine they do not like salads with vinegar and oil dressing. Unless the oil is good and the vinegar pure and fragrant such a salad does no good but may do much harm; and it is seldom that one can buy good oil and vinegar in a grocery store.

Of all the food adulterators none are more rascally and abundant than the makers of artificial vinegar. Pure vinegars made of cider, wine, or malt can be sold at a very good profit to the manufacturer and dealer at from ten to twenty cents a quart; but this profit does not satisfy the swinish greed of the adulterators and

unscrupulous grocers. By using acetic acid, a by-product of the distillation of deadly wool-alcohol, they can make "vinegar" at a cost of two cents a gallon, or 90 cents a barrel, which retails at over $20.

The pure food law covers this case, but the fines inflicted are so trifling compared with the gains, that the adulterators regard them in the light of a joke and continue their profitable poisoning, though many of them have been before the courts two, three, or four times. Jail is what their crime calls for. This so-called vinegar is in most cases injurious to the health of those who consume it, and by its lack of agreeable fragrance it discourages the healthful practice of eating sour salads.

It is foolish to get vinegar of the nearest corner grocer unless you know he is honest. It is best to buy it in the sealed bottles of firms which have a national or international reputation for fair dealing.

The same caution should be observed in purchasing olive oil. Do not buy it of a grocer who exposes his bottles in the show window. If he does not know that sunlight spoils the best olive oil, he is not likely to know, or care, what the best oil is.

Among the adulterants used to cheapen olive oil small quantities of castor oil, lard oil, fish oil, and even petroleum have been found. More frequent are rape-seed and poppy-seed oil. Peanut oil is much used, but the most frequent adulterant is cotton seed oil, which costs only about one-fifth the price of high-grade olive

oil and therefore offers great temptation to the dealer.

Cottonseed oil is not inferior in nutritive value to olive oil, and Dr. Wiley assures us that no objection can be made to it "from any hygienic or dietetic point of view." Of the three million barrels of it produced in this country every year, not less than two-thirds are consumed as food. It is "perfectly satisfactory," the doctor adds "to those who have not acquired a taste for olive oil."

If you like cottonseed oil there is no reason in the world why you should not pour it into your salad bowl. But if you wish to enjoy the epicurean delights of true salads you must train your sense of smell and learn to distinguish between fragrant oil and cottonseed oil, which, at its worst, has a disagreeable flavor and at its best is practically odorless and tasteless.

It is the fragrance, the Flavor, of olive oil that keeps it in the market, boldly defying its cheap rivals.

A great many Americans who think they do not like olive oil know not what real olive oil is. They have been fooled by the adulterators. They may have been careful to buy bottles labeled "Pure Virgin Olive Oil"; but, as Dr. Wiley says, "this expression upon the label has been found in many instances of olive oil highly adulterated and belonging to the cheapest grade."

There are more than a dozen grades of olive oil. It varies with the locality it is grown in, the care taken in its manufacture, the season, and so on. The first press-

ing (virgin oil) is the best; the virgin oil of the month of May is finer than any other, and the best oil comes from Italy.

It is worth while to cultivate a "taste" for the finer kinds, for they are the most fragrant and digestible. Such oil is not only a table delicacy second to none, it is also used more and more by doctors for diseases of the stomach and other parts of the digestive tract. For gall stone it is almost a specific.

As a cosmetic, nothing equals olive oil. The beauty of Spanish and Italian women is owing largely to their daily and liberal use of it in salads and cooked foods. It improves the complexion and rounds out the lines of the form.

Eating salad is by far the most agreeable way to take olive oil. There are persons with whom all acids disagree; these unfortunates have to do without the fragrant vinegar; but they can easily learn to like salads with oil and salt alone. The taste is decidedly worth acquiring.

In making the dressing, oil should by all means be applied "by a spendthrift." "Put on as much as you think you can afford," I feel tempted to advise; but, of course, you can get the best results more cheaply by painting each leaf with oil or by thoroughly mixing the leaves with it before putting on the vinegar. Always make sure that there is no water in the bowl and that the leaves are well dried.

In hot weather the vinegar should be put on first, to make the salad more piquant and refreshing. One spoonful of vinegar (pure and fragrant, if you please) to every two of oil is not too much. Let the stirring be done "by a maniac," according to the old maxim, for it is most important.

Salt is a necessary ingredient, and a trifle of cayenne makes the salad more digestible. Black pepper is, to some epicures, an unwelcome intruder, though it is often used even in Paris restaurants, where I now find it necessary to add *sans poivre* in ordering a salad. Once in a while, for variety's sake, add a little mustard, or rub the inside of the big bowl (it must be big, and Russian lacquer is the best) with garlic. A few tablespoonfuls of meat gravy—particularly chicken gravy (from roast or fricassee) give additional richness and savor to the dressing.

If you can get no pure and fragrant vinegar, by all means use lemon juice as infinitely better than "vinegar" made of acetic acid and water. But if malt, wine or cider vinegar is at hand it is preferable to the lemon, which does not harmonize so well with oil. Lemon is too loud—too self-assertive—like a trombone added to a string quartet.

It is a subtle thing, this gastronomic instrumentation, and there are differences of opinion as in matters musical. There is nothing better than a glass of lemonade—except, perhaps, a glass of limeade;—in

very warm weather it is a luxury to suck a lemon like an orange. But if a slice of lemon is put in my tea I lose the delicate aroma of the leaves, which I am after; and so with salads. The fragrance of vinegar is more delicate, and does not overpower the fragrance of the oil. On the other hand, in making mayonnaise, which is also a French dressing, having been invented by the Marshal de Richelieu, and which is often used for green salads as well as for meat and fish salads, lemon is perhaps preferable to vinegar. Apparently the addition of the yolks of raw eggs to the other ingredients prevents the lemon tone from being too loud. With sardines, also, a lemon is all right, because their own flavor is not so weak as to be easily routed.

In remote regions, where pure olive oil cannot be obtained, a very fair substitute for French salad dressing may be provided by following the practice of Belgians and Germans of putting small cubes of fried bacon into the vinegar. Sometimes the vinegar, thus oiled, is heated and then poured over the leaves. That wilts them but makes a piquant dish for a change. In one way or another, have a sour salad with your dinner, especially if it includes fat food, for the reasons given.

### ESCAROLE, TOMATOES, ARTICHOKES, ALLIGATOR PEARS.

In nineteen cases out of twenty the salad served in our country is lettuce, and in nine cases out of ten the

diner is insulted with huge green leaves fit only for boiled greens or the stock-pot.

Green lettuce is good to eat raw only in its infancy (when two or three inches high) or when it has shot up higher in a few weeks on very rich, moist soil. Much better, however, is head lettuce, with the white inside leaves, crisp and succulent. Even those, unfortunately, are somewhat indigestible to many, unless very carefully chewed.

Those who find lettuce troublesome should by all means try the bleached white hearts of the variety of endive known as escarole (the French call it scarole).

Until a few years ago it was very difficult to find escarole in any American market, and it is not abundant now. In the catalogues of seedsmen who give several pages to the different varieties of lettuce, escarole is disposed of in four or five lines of small type. One catalogue, of the year 1912, referred to it as "unsurpassed for salads;" the others made no comment at all, or spoke of it as "good for soups or greens." As there has been practically no demand for escarole seed, it was lucky to be listed at all.

Some seedsmen, however, when they know of a good thing, try to create a demand for it. Prominent among those is W. Atlee Burpee, of Philadelphia. To him I confided my sorrows over the difficulty of getting good escarole—or often any escarole at all. I called

attention to the fact that it is, to say the least, equal in flavor to the best head lettuce, and much easier to assimilate, one member of my household being able to eat it by the bowlful, whereas lettuce invariably gives her indigestion.

It is much easier to raise, also, than lettuce, which is extremely "cranky" in summer. Even in cool Maine lettuce sometimes is wilted by a single hot day, unless cared for like a tender hot-house orchid; whereas escarole has as many lives as a cat. I have often, in thinning out my plants, thrown them away by the dozen, to be roasted by the sun; but if a rain came along in a day or two, they revived, took root unaided, and grew into healthy plants!

A further advantage is that, in rich soil and with plenty of water, a single plant will yield two or three hearts if those of the outside leaves which are not needed for bleaching the center are left on; whereas head lettuce is never of the "cut-and-come-again" kind.

The only trouble with escarole is that it has not been educated. Lettuce has been trained by dozens of experts, the result being a large number of excellent varieties, some with heads as solid as cabbages. My object in writing to Mr. Burpee was to persuade him to give escarole a "college education"— to teach it how to head, and bleach itself, like lettuce.

He promptly replied that he would get seeds abroad of all the different varieties and experiment with them

in his Fordhook trial grounds; also, that he would write to Luther Burbank and try to get him interested. Unfortunately Mr. Burbank was too busy with other reforms to take up this plant too; but Mr. Burpee forged ahead, and in November, 1912, he sent me copies of the notes on the varieties of escarole he had sowed—seventeen in all. "One or two or these," he wrote, "seemed to be much better than the Broad Leaved Batavian, but none of them are really self-folding." There seems to be hope in a variety numbered 5131 on his schedule, which is thus described: "Foliage pale yellowish-green, a robust strong grower, averaging twenty inches in diameter, leaves eight inches long by four inches in breadth, plain leaved, but slightly curved, *inner leaves being much incurved*, giving the impression of its being an excellent strain for bleaching."

Along those lines I have no doubt that a head-escarole will be evolved in a few years, and that the world will be indebted to Mr. Burpee for one more gastronomic delicacy as welcome as his improved head-lettuces, his limas, his stringless pod beans, and his improved melons, cucumbers, squashes, tomatoes, cabbages, and other vegetables. Mr. Burbank wrote to me under date of December 18, 1912: "It is so natural for escarole to spread flat on the ground, that it will take some time and a little pains to make it form a head." Mr. Burpee will take the time and the pains.

The bitter taste of escarole—a mere trace where the plant is well grown—is welcomed by epicures and hardly noticed by others.

The dressing is the same as for lettuce. A combination that cannot be too highly commended is tomatoes with escarole. This mixture is, I think, my favorite of all salads.

So far as tomatoes are concerned, we have nothing to learn from the French. As it is an American plant —its original home being Peru—it is proper that Americans should have a greater number of varieties and improvements than any other country.

The Germans are only just learning to like tomatoes; the English have made more progress in this important branch of gastronomic education; the French revel in the tomato; and in Italian cookery it is an important ingredient; but in the United States tomato-eating amounts to a passion, a frenzy.

In New York every corner grocery, even in the poorer quarters, has its constant supply. Apparently, all classes, rich and poor alike, are bound to have their tomatoes daily, be their price five cents a pound or twenty-five or more. For this astonishing appetite there must be good reasons. The tomato, with its delicate acid flavor is unquestionably most wholesome. Often I walk a mile to bring home the best specimens of this grand appetizer I can find; and in my vegetable garden the patch most carefully enriched

and hoed and watered is that where the tomato grows.

To get it at its best you must pick it off the vine and eat it on the spot, without any condiment. It is good in a score of ways—stewed, grilled, as a catsup, even canned—but for table use it is most desirable in the salad bowl, alone or in combination with escarole or lettuce.

It ought to be needless to add that it is much pleasanter to eat, and more digestible, if it is peeled (which is easily done after soaking it a moment in hot water) before slicing; but few cooks will take this extra trouble, slight though it is, unless specially requested.

If we can perhaps give even the French points on tomatoes, they have much to teach us regarding another vegetable which is among salads what diamond-back terrapin and canvasback duck are among meats—the globe artichoke.

Fortunately, unlike turtles and wild ducks, this noble plant is yearly becoming more abundant in our markets. It would be as much in demand as tomatoes were its flavor equally known and the samples on sale as tempting as those served in Paris and London. It is for the consumer to insist on having the best varieties sent from abroad and cultivated at home; but the dealers on their part ought to be alive to the fact that the way to increase sales is to offer the best at the lowest price.

The French artichoke makes a savory vegetable, served hot; but how any one can eat it—or asparagus—hot, when he might have it cold as a salad, with French dressing, is a mystery to me. Of course, it must be boiled, except when very young and tender.

To get the artichoke at its best one must ask for it in a first-class Paris restaurant. The waiter brings a huge specimen in a large plate, removes the inedible "choke" in the center with a movement like that of a dextrous carver (French waiters receive prizes for skill in carving), and there it lies in all its fragrant magnificence.

Rossini objected to the turkey as being a bird too large for one and not large enough for two. Time and again in Paris I have had placed before me an artichoke big enough for two; and since my partner prefers the scales and I the *fond*, we were both happy though married.

As the scaly leaves of the artichoke must be dipped into the dressing and sucked, it is not for persons who object to using their fingers except to hold knife and fork, any more than are crawfish, or olives, or peaches.

The Moors of Morocco prefer to use their hands for conveying food to the mouth, because, as they sensibly maintain, they know that their hands have been thoroughly cleaned, whereas knife and fork may have been washed carelessly.

The merits of the French artichoke were known in

New Orleans long before they were in any of our other cities. In various forms and combinations, it helped to give distinction to the famous local cuisine.

The Frenchman who first ate an artichoke was as bold as the man who ate the first oyster, for the plant looks like a thistle and he ran the risk of being classed with thistle-eating quadrupeds. Compared with the succulent globe of to-day it must have been thin, dry, and tough. Yet, even now, the artichoke is capable of much further improvement. Burbank, if he had time, might put as much meat into the base of each scale as there is now in the bottom, and make the bottom as big as a full-sized turnip.

This suggests one of the many ways in which the study of gastronomy serves as a guide to wealth. A rich harvest is sure to be reaped by those gardeners who will introduce to American markets the *best* French artichokes, and by the dealers who will encourage their purchase by asking *reasonable* prices for them. In December, 1912, I asked a dealer in Washington Market, New York, why there were so few artichokes offered for sale. "They are so cheap—we can't get more than 15 cents apiece for them," he replied. That's the American way—at present.

For years importers and dealers have done their best to discourage the growing interest in another delicious basis for salad—the alligator-pear—by charging the most outrageous prices for it—usually twenty to fifty

cents apiece, though it can be bought in the West Indies for a penny or two and brought to New York for a cent a pound. Even at such extortionate prices the demand usually exceeds the supply. I often hunt for some all over town and usually end by saying, "What fools these dealers be."

The alligator-pear—or let us call it avocado, please—is one of the Creator's masterpieces—what we would call a stroke of genius had a mortal originated it. But, like other works of genius, it is not appreciated by all—or at once. An American, writing from the West Indies, declared that there the avocado is "ever present and always welcomed." But, he proceeds, it is "a pitfall and a snare, and many a green foreigner has been taken in by the name and afterwards by the pear itself. Such a magnificent specimen of this luscious fruit, the 'pear,' as the one seen in the Jamaica markets causes the hand of the new arrival to go down promptly into his pocket for a penny with which the coveted fruit is secured. Yum, yum! A pear weighing three or four pounds! What a feast! The knife appears, a generous slice is cut out, but when it touches the palate! Yah! It is a flat, flabby, tasteless vegetable (although it grows on a tree), but sliced and eaten with salt at the table it forms a pleasant relish."

Had this man eaten it with French dressing he would have found it a food fit for gods. The avocado was undoubtedly created to serve as a salad. If you cut it

in two, lengthwise, and take out the big stone, you have two halves like those of a small melon. The flesh, firm though soft and custardy, has a most exquisite flavor —a faint flavor which, with oil and vinegar makes a symphony of fragrance.

Until a few years ago I myself, misled by poor specimens, groped in utter darkness as to the enchantments of the avocado. It was Hildegarde Hawthorne who, returning from Jamaica, brought us some choice samples. There was joy in the mansion thereat. It was like the discovery of a new song by Schubert or Grieg, or a new painting by Titian.

After writing the above remarks I came across a clipping in which an evident epicure objected to "desecrating" the avocado pear by oil or mayonnaise dressing when served. "Eat it with a spoon slowly," he advises, "to give time for the pleasure it imparts to permeate the very soul, and let who will rail at fate. There are those who give it a slight sprinkling of salt, others who dust it over with a little white pepper, but personally I would as soon think of flavoring my currant jelly with garlic or my chateau Yquem with Trinidad rum."

This sounds plausible, and I admit that a perfect avocado is better without than with vinegar and oil. An imperfect one is n't; and in most cases we have found in our dining-room that the avocado is rather too rich to be eaten without a little acid dressing. It con-

tains seventeen per cent. of oil, and is known in some regions as the "butter fruit."

To return to France. Next to the artichoke and the escarole—which is the better of the two I don't know—the most desirable thing it has given us in the way of salads is the romaine—but how much whiter, crisper and tenderer it is in Paris than what is offered for sale under that name in New York!

Another chance to coin good money, messieurs gardeners! Americans *must* have the best, and if you don't supply it, a rival will.

The American lobster and shrimp salads cannot be beaten; but we have much to learn of the French and other Europeans as to the endless varieties of green, vegetable, fish and meat salads by way of multiplying the pleasures of the table, and banishing intestinal dyspepsia, for which salads are more remedial than Fletcherizing.

When once the importance of this subject is fully understood, salads will become the principal lunch dishes in American homes and restaurants, especially during the hot months when to be "three miles from a lemon"—or something else that is refreshingly sour—is a hygienic tragedy.

"Fruit salads," when not sour, make desirable desserts. When not sour, such combinations should not be called salads. As a rule sour fruit mixtures seem incongruous to a *trained* palate.

In these days of Debussyan influences one must be prepared for all sorts of anarchistic combinations of flavors. Personally, I draw the line at the compound of Roquefort cheese and sour salad now placed unblushingly on some American tables. The mixture of these two delicacies is awful. One can easily see how the illegitimate union was suggested by the illogical custom of serving cheese with salad, dressed or undressed—the usual English way.

### VEGETABLES AS A SEPARATE COURSE.

The mess just referred to, which would make a Parisian gourmet shudder, is only one illustration of the Anglo-American mistaken policy of serving together foods that are preferable separately. On this point, too, France has an important lesson to teach us, particularly in the serving of vegetables.

The making of a menu requires as much taste and judgment as the arranging of a concert program. Next to variety, contrast is the most important thing to be considered. A vegetable served separately provides some of this needful contrast.

An English epicure declares that the secret of the excellence in French cookery lies in the lavish use of vegetables. "Where we use one kind, French cooks use twenty."

This point was sufficiently dwelt on in the paragraphs relating to the making of savory soups and

stews. It illustrates Gallic skill in culinary *orchestration*. But the French know that at a dinner, as at a concert, a *solo* piece is desirable, and therefore they always serve one choice vegetable as a separate course.

As a matter of course the vegetable selected for this distinction—be it peas, beans, spinach, cauliflower, asparagus, artichoke, carrots, or whatnot—must be particularly fresh and succulent. It must also, like the singer's solo number, have an accompaniment, that is to say an appropriate sauce.

No French cook would spoil the delicate natural flavor of green peas with mint, as the English do. I once asked a waiter in a London restaurant why mint was put with the peas. He promptly replied: "Peas 'ave no flavor, sir!"

In France, butter (French butter) is used as the best accompaniment to a solo vegetable. It makes the string beans and whatever else it goes with more savory, without obliterating their individual flavor, as the mint does in the case of peas.

### PARIS RESTAURANTS.

The French have reason to boast that the gastronomic center of the world is in Paris, within a circle intersected by a line drawn from the Place de l'Opéra to the Place Vendôme. In this region there are scores of restaurants of the first rank in which one eats the best soups and stews, the best veal, the best poultry, the

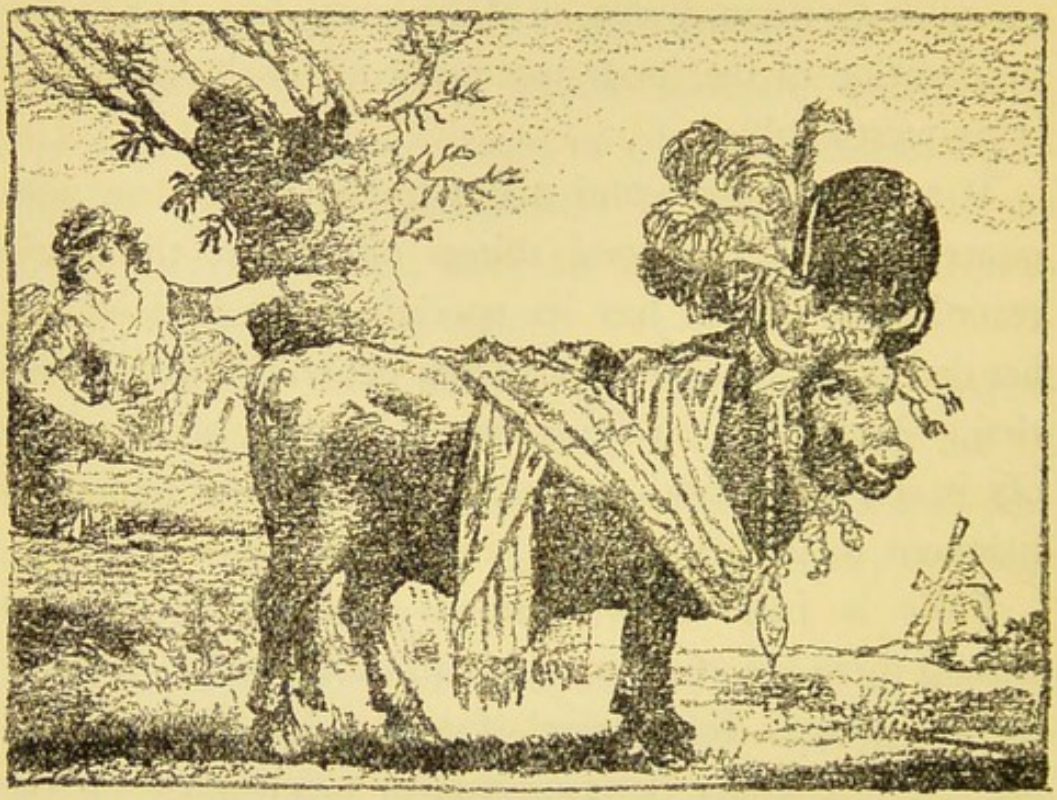
best salads and sauces, the best vegetables, the best entrées, the best bread and butter, the best cheeses, to be found anywhere on this big planet of ours. Some persons, for sufficient reasons, prefer English roast meats or German, Swiss, or Austrian pastry, but in the preparation of the foods just named French supremacy is unquestionable.

It takes months—and a big purse—to get an adequate idea of the good things offered at the Paris restaurants. Each has its special dishes and sauces, handed down in some cases from generation to generation. Not to have a unique sauce for sole, or a monopoly in a special kind of soup, would subject an establishment to the danger of being classed as second-rate.

Paris is full of professional epicures—prominent among them are authors and journalists—who frequent certain places for special famous dishes and who quickly resent any deterioration or carelessness on the part of the chef. It is these connoisseurs who are served best; they are willing to give the cook time to prepare a dish scientifically, and they take time to eat it hygienically, that is, with lingering enjoyment of its appetizing flavors.

These gourmets appreciate epicurean subtleties like that practiced by the late Frédéric of the Tour d'Argent, who held that "different kinds of fuel should be used for the roasting of different kinds of meat, believing that the spiced scents of some woods trans-

mitted in the cooking add to the pleasure of eating all kinds of game";—a notion which was acted on by the ancient Romans as well as by Japanese gourmets, and which is also justified by the fact that in the smoking



Boeuf à la Mode

of ham and bacon it makes a decided difference what kind of wood is burned.

One of the oldest Parisian restaurants is the Boeuf à la Mode which, for more than a century, has owed its vogue in part to its special way of preparing and serving the dish after which it is named.

A specialty of these restaurants is pancake. In our own country "French pancake" is usually a thick, leathery griddle cake rolled round a spoonful of jelly

and served tepid on a tepid plate. In Paris the head waiter himself attends to the important function of putting the finishing touches on the cakes. They are brought in from the kitchen thin, crisp, and hot; but that is not enough. The waiter has before him a chafing dish into which he puts one of the cakes, with a hard sauce, and some liqueur which is set on fire. He has also before him a pile of hot plates for each of the diners; into one of these plates each cake is transferred when ready and brought to you by another waiter, to be eaten red-hot. It is worth a trip across the Atlantic to eat those pancakes.

Mutton on the best Parisian menus is not simply mutton. It is mutton of a particular "vintage," and in some cases the name of the breeder of the sheep is printed on the bill of fare.

Fruit is brought to the table in large baskets. Cherries, and particularly the fragrant wild strawberries, seem doubly appetizing when served that way. A fragrant French melon sometimes perfumes a whole dining-room. Those who have to count their francs, however, had better inquire as to prices before indulging freely in fancy fruits.

Very expensive, though worth the money, are the *langoustes*, which are as good as the American lobster. Better still are the *ècrevisses*, or crawfish, which are kept on sale alive in the great market place, and are therefore always good, and safe to eat.

Some restaurants are favored for their lunches, others for their dinners, still others for their late suppers. In this last class, it is needless to say, vulgar extravagance prevails. Usually there is the latest kind of dancing, or music, or some other kind of stupefying noise, and gastronomy takes a back seat.

Warm weather brings into favor the summer restaurants, in which usually one can lunch or dine in the garden or under a tree. That the breathing of outdoor air while eating is as great an appetizer as the savory food itself, is one of the many lessons we have yet to learn of the French and other Europeans.

How did the restaurants of Paris get their culinary supremacy?

During the Revolution many of the nobles were ruined, and their chefs—among them Méot, Robert, Roze, Véry, Leda, Legacque, Beauvilliers, Naudet, Edon became caterers to gourmets at large. "Beauvilliers, who established his restaurant about 1782, was for fifteen years the most famous restaurateur of Paris, and provided liberally such delicate and sublimated dishes as those which had hitherto been found only on the tables of the king, of the nobles, and of the farmers-general. The great restaurateurs of modern Paris are nearly all successors of one or the other of the famous cooks above mentioned," as Theodore Child pointed out.

In the Bibliothèque Nationale in Paris I came across books giving curious glimpses of the restaurants at earlier periods. In 1574 there was published a "Discours sur les causes de l'extrême cherté qui est aujourd'hui en France et sur les moyens d'y remédier." The author complains that people are no longer satisfied with three courses but must have meats in half-a-dozen styles, with sauces, *hachés*, *pasticeries*, all sorts of *salmigondis*, etc. Every one he says, now goes to dine at Le More, Sanson, Innocent, or Hanart, "maistres de volupté et despense, qui en une chose publique bien policée et reglée seraient bannis et choissis comme corrupteurs des moeurs."

This diatribe against the providers of savory food as corruptors of public morals who, if the police tended to its duty, would be chased from the city, seems to indicate that Puritan ideas on the subject of the enjoyment of food once prevailed even in France.

As late as 1842 there were only seventeen restaurants in Paris, where now there are more than seventeen times seventeen. At the date mentioned, most of them were near the Palais Royal, and one could dine for two francs—forty cents!—while lunch was only a franc and a quarter. There were places where a workman could get, for twenty centimes (four cents), bread, wine, soup, and meat enough for a meal.

In Paris, as elsewhere, prices have soared since that time, but correspondingly cheap eating places abound

in all quarters. The lowest-priced restaurants likely to be patronized by tourists and resident foreigners are the Duval, and other "Bouillons," at which one who knows may get good dishes. Well-to-do Parisians and foreigners may often be seen in these eating places, and one of them actually has a star of excellence in Baedeker.

At one of these establishments I had one of the best *petite marmites* I have ever eaten. If you don't know what a petite marmite is I am sorry for you. I have dined repeatedly with a Frenchman noted both as artist and epicure, and each time he ordered petite marmite. If you ask a French head waiter's advice in London or Paris, he is more likely than not to suggest petite marmite. It is so good, and the making of it gives such a deep insight into French methods that I will quote the recipe by Escoffier in his "Le Guide Culinaire." It is for ten people.

*Nutritious elements:* 2 lbs. beef, one lb. lean, the other well mixed with fat, as the end of a rib. 1 marrowbone wrapped in cheese-cloth, 1 fowl—not too young and tender, giblets from four fowls. *Liquid:* 3 litres (about three quarts) of white consommé—recipe follows—the seasoning to be added just before serving.

*Aromatic elements:* 2-5 lb. carrots (200 grammes), 2-5 lb. nearly ripe turnips, 3-10 lb. leeks (150 grammes), 1 small celery heart, ½ lb. cabbage, blanched, cooked separately with bouillon and drippings.

"*Observations.* The 'Petite Marmite' consommé is served without clarifying, and owes its merit only to the materials

which it contains and the extreme care brought to its preparation. It must be served slightly fat. Its special savor, different from clarified consommé, must recall the homely Pot-au-feu, and be recognized unmistakably in Croute au pot, Consommé à la Bouchère, and others of which it is the base, the only difference being that these consommés do not need absolutely to have fowl in them, whereas it is rigorously obligatory in the Petite Marmite.

"For 10 litres of white consommé 7 kilos of beef (between 14 and 15 lbs.) 4 kilos being lean meat, the other 3 soup bone, 2 1-5 lbs. carrots (5 or 6), 900 grammes (nearly 2 lbs.) turnips, 1 lb. leeks, 2-5 lb. parsnips, 2 medium-sized onions, 3 cloves, 3 cloves of garlic, 3 pieces celery, 14 litres (14 quarts approximately) cold water, 70 grammes brown salt (salt that has not been purified). Cook five hours.

*"Observations:* Simple consommé is habitually cooked 5 hours, which is quite sufficient to get all the nutritious elements from the beef. On the other hand this is quite insufficient for the bones and fails to extract their nutritive principles. To obtain this result slow cooking from 12 to 15 hours is necessary. In great kitchens it has become the habit to make a first consommé with the bones (crushed) which will cook at least 12 hours. This consommé is then used for a second cooking of the meat alone which takes about 4 hours, that is only the time necessary to cook the meat. This second operation can be shortened by cutting meat and vegetables in small pieces and clarifying them as usual."

As the American practice of bluffing—of charging a high price for a poor thing, to make the consumer think it must be good—is not a Parisian trait, the more expensive the restaurant, the better the food is likely to be.

Next to the Bouillons, in the culinary hierarchy, are

the Brasseries. At these, one can get well prepared dishes at reasonable prices, which are always marked on the bill of fare; and, as the name indicates, one can take a glass of beer or a bottle of mineral water instead of the expensive wine which the highest class restaurants expect every one to order, on penalty of perhaps not being served with a meal prepared in the chef's best mood.

These leading restaurants are at present in the throes of a serious struggle for existence; pessimists go so far as to predict the extinction of the whole species in the not very distant future. The Maison Doré and the Café Riche had to make way some years ago for business houses that could better afford to pay the soaring rents, and in 1912 the Durand was transformed into a tailoring establishment. Of the old classical restaurants the Tour d'Argent, Lapérouse, Paillard, Bœuf à la Mode, Voisin, hold their own, yet I have dined in them on evenings when they were anything but crowded.

Doubtless the custom of some of these places of not affixing prices to the viands offered on the bill of fare has had something to do with bringing about this result. Even a well-to-do diner does not always care to be entirely at the mercy of the head waiter in the making-up of his bill. But it is the multiplying of the brasseries that is chiefly responsible for the decline of the high-priced restaurants, and another dangerous

rival that has helped to bring it about is the palatial, up-to-date hotel. Some of these hotels employ as good chefs as the leading restaurants and offer as abundant opportunities for sumptuous and savory repasts, at prices tall enough to please the most reckless visitor from New York or Buenos Ayres.

Gourmets will doubtless continue to frequent the classical restaurants as long as they maintain their high standard. It would be a historic as well as a gastronomic calamity to have them disappear. If necessary the Government should give them a subvention as it does to the Opéra and the Théâtre Français; for these epicurean establishments have done quite as much as the theaters to make France famous among the civilized nations of the world.

It is owing to them that French long ago became the culinary world-language. Go wherever you please, from Paris to Berlin, to Lucerne, Milan, Vienna, Constantinople, Tokio; or, in the other direction, to London, New York, Chicago, San Francisco, Melbourne, —everywhere, at the leading restaurants, you will find the menu printed in French, and, in case of a course dinner, the viands offered in the order prescribed by French gourmets.

In Germany, after the Franco-Prussian war, chauvinistic attempts were made to banish French words from the bill of fare. These attempts were, as Hermann Dunger frankly admits in his *Verdeutschungs-*

*wörterbuch* (1882), a failure; in some cases the comic consequence was that Germans who recognized a dish under its French name had n't the remotest idea what it was when translated into their own language. Like the Italian forte, piano, adagio, diminuendo, and other musical expression marks, French gastronomic words have become parts of a spontaneous Esperanto—a world-language, which has come to stay; a perpetual reminder of the most important contribution made by the great French nation to modern civilization—the gradual substitution, everywhere, and particularly in Germany and England, of refined methods of preparing food in place of the barbarous mediæval ones prevalent until two centuries ago.

We get an interesting glimpse of French gastronomic leadership by glancing at the words successively adopted by the Germans. In 1715, when the "Frauenzimmerlexicon" of Amaranthes appeared, the following French words had already gained currency, among them: bouillon, carbonade, champignon, côtelette, coulis, crème, à la daube, entremets, farce, fricadelle fricandeau, fricassé, gelée, hachis, marinieren, omelette, pikant, potage, ragout, saucisse; and for most of these there was no exact equivalent in German.

During the time of Louis XV Germany further imported the following: dejeuner, diner, souper, dessert, entrée, fumet, haut-goût, poularde, saucière, sorbet, table d'hôte, bonbon, champagne, limonade, liqueur.

To a later period belong baiser, boeuf à la mode, consommê, filet, hors d'œuvre, konserve, roulade. These as well as the words gastronome and gourmand were imported during the early decades of the nineteenth century. To the second half of the century belong croquette, entrecôte, flan, remoulade, meringue, purée, vol-au-vent. The word menu was not adopted in Germany till after 1850.

### RUSSIAN AND AMERICAN INFLUENCES.

In Paris as in New York one can make a gastronomic tour of the world. While the French, in return for all the culinary terms they have lent their neighbors seem to have adopted only one Teutonic word ("Bock," for beer), they amiably tolerate the presence within their walls of German and Austrian restaurants, some of which are excellent, though thoroughly exotic from the French point of view. In one of them the host is so much of an epicure himself that in his delight with the Viennese menu he sketches for you, he will blow a kiss at the enjoyments it calls up in his imagination.

Most Germans and Austrians, however, are glad to frequent the French restaurants while in Paris, and the same, as Col. Newnham-Davis informs us, is true of the English visitor, though if he desires a chop or a steak, he can have one made to order in one of the many grill rooms in foreign style that have come into

existence, and in one of which the joints of beef and mutton are wheeled to the tables and carved there to order, as in some London eating houses. The Italians are more apt to cling to their own style of cookery, and they have plenty of places adorned with Chianti bottles where they can have their spaghetti, their risotto, their fritto misto, and their other excellent fries. The Spanish also have places where they can indulge their appetite for home dishes; and so have many other nations, including Greeks, as well as the Turks and other Orientals.

Of all the foreigners only two, the Russians and the Americans, have had a definite influence on the French cuisine and menu—and not to their advantage, it must be confessed.

From the Russians the Paris restaurateurs borrowed the custom of beginning a meal with hors d'œuvres, or appetizers. I remember the time when the hors d'œuvres in France simply meant radishes, butter, and a few thin slices of sausage which were placed on the table at once and against indulging in which the guide books warned tourists unless they were prepared to face a substantial addition to their bill. To-day, the price of the appetizers is usually noted on the bill of fare, and it is not at all high, even at the aristocratic restaurants. Cold smoked salmon, tunny fish, sardines, baby artichokes in oil, various vegetable, fish, and lobster salads, cold eggs, sliced

sausages, and sundry other delicacies are offered, with bread and butter.

These things undoubtedly are good, and they are appetizers; but they are also appetite destroyers—quite too substantial to preface an elaborate dinner. In Russia and Scandinavia, where the extreme cold creates a ravenous appetite and a great capacity for stowing away things, they may be all right; but in temperate climes, and for dwellers in cities who get little exercise, they are too heavy. When I see one of these displays of cold dishes I always think what a tempting lunch they would make all by themselves; but if I eat them before dinner I certainly cannot enjoy what follows as much as I would without them; and that, I believe, is the experience of most diners who are not neighbors of the Eskimos.

It is different with caviare and oysters. These are merely appetizers, containing little nourishment; but caviare is not for everybody, and as for oysters, since they must be served ice-cold, it is unwise to chill the stomach by beginning with them. Let them follow the soup, which is, because of its warmth and its stimulating effect on the digestive glands, the best thing to begin a meal with. Muskmelons and grapefruit may be allowed to precede it if served without ice, which certainly impairs their flavor.

While adopting the Russian hors d'œuvre habit, the Parisians have had too much taste and moderation to

indulge in its Gargantuan extremes. The performances of Russians and Swedes border on the miraculous.

If Russians in Paris cannot everywhere indulge in the riotous profusion of hors d'œuvre they have at home, they can do so at La Rue's, which has a full line of them and also of diverse other "mets Russes nationaux."

Americans who wish to eat ham and eggs, or hash, or corn muffins, griddle cakes, breakfast cereals and that sort of thing, may find them in hotels and in not a few of the restaurants. American lobsters, at Eiffel Tower prices, are on every menu, and there are places where oysters from across the Atlantic, as well as native, can be ordered raw, scalloped, fried, broiled, or in diverse stews, *tout comme chez nous*. The numerous grill rooms are also accommodating, though they do not open early enough to offer an American breakfast, while the hotels seldom venture on anything beyond bacon and eggs before lunch time.

It would be well if the Parisians ate an American breakfast and followed it up with a lighter lunch; but it would require another revolution to bring about such a reform.

Paris has become considerably Americanized. One can hardly wonder at having our cotton seed oil served instead of the noble juice of the olive at the cheap restaurants; but when I found that it was used un-

blushingly at some of the more expensive places I was shocked at this sign of decadence—or effrontery—and visions of cold storage poultry, salted butter, and doughy bread with inedible crust—but no! such things no one would *ever* dare to place before Parisians!

The fact that their own olive oil is not as a rule equal to the best Italian may have made them for the moment tolerant of the American invader. The health authorities speak of diverse other substitutions and adulterants as being in use; but these are not necessarily American, though we lead the world in our tolerance of them.

What the Parisians chiefly complain about in reference to American influence is that it has introduced our national vice of hurry into the kitchen and the dining-room. When so many of the wealthiest patrons of the restaurants expect to get dishes served at a moment's notice, to be gulped down and hastily followed by others, the very strongholds of gastronomic France—slow cooking and leisurely eating—are assailed.

The chief danger to the French cuisine lies in the fact that, as Mr. Paderewski put it in a talk I had with him on this subject, "it is so much easier to prepare a meal the American way."

South Americans, though they have little to boast of at home in the way of pleasures of the table, adapt

themselves more easily to French ways, and as they are rapidly increasing in numbers in Paris and spend even more money than the North Americans, their influence will perhaps counteract that of the impatient visitors from the United States, who usually know so much more about making dollars than about spending them rationally.

Every American has attended banquets at which there was more to feast the eyes than the palate. In the *Figaro* Marcel Prévost complained (1910) that this sort of thing was gaining in Paris. "Mangeront-ils?" he asked—will Parisians of the future eat? Judging by the present tendency, they will not, he answers—they will feed. They will take nourishment, but gastronomy, the art of dining with intelligence and pleasure, will have ceased to exist. In the house the cause of this change is what Prévost calls the "progrès de la coquetterie féminine." Women, to be sure, were never the greatest of the culinary artists, but they used to pay some attention to food and its preparation, whereas at present their chief thought is of the appearance of the dining-room and the table. The linen, the porcelain, the glassware, must be of the finest, the flowers of the costliest, but the food and wine are provided by a paid caterer, who seldom knows his business. As for eating in restaurants or hotels, that is no better. The famous "maisons" have disappeared, to be replaced by huge palaces, in which every-

thing is showy and sumptuous but the food everywhere the same, without distinction or individuality. What is worse, the younger generation does not seem to regret this. French youth even drink American cocktails and are not ashamed!

While there is no doubt some truth in these allegations they are absurdly exaggerated. Complaints as to the decadence of French cookery have been made at regular intervals—like the complaints about the disappearance of great singers. I once amused myself by writing an article covering three centuries, in which I quoted the laments of each generation over the decline of the art of song as compared with the brilliant achievements of the preceding generation of singers. Were it worth while I might compile equally amusing evidence on the subject of the French cuisine. Thackeray complained of a similarity of dinners. Charles Monselet in 1879, looked "in vain for the tables that are praised or the hosts that are renowned." In 1866 Nestor Roqueplan complained that the French "no longer find places devoted to the Flemish kitchen, others to the Normandy, Lyonnaise, Toulousian, Bordelaise, or Provençal kitchens." But he had the good sense to add that "France nevertheless is still the country where eating is found at its best."

So it is at the present day, and is likely to be for years to come. No matter how many of the best chefs are taken away by American millionaires or Russian

Grand Dukes, Paris remains the world's high school of culinary art.

### PROVINCIAL LOCAL FLAVORS.

While there may be fewer opportunities than there were formerly to get special Lyonnaise, Toulousian, or Bordelaise dishes in Paris, the Provinces themselves offer abundant opportunity to study and enjoy the infinite variety of French cookery. How large a field is open to the student may be inferred from the fact that Col. Newnham-Davis devotes no fewer than seventy pages of his "Gourmet's Guide to Europe" to a study of the inns, hotels, and restaurants of Provincial France. He found that "almost every town of any importance has some special dish or some special pâté of its own; there are hundreds of good old inns where the cuisine is that of their province, and there are great tracts of country which ought to be marked by some special color on all guide-book maps, where the cookery is universally good."

This noted English epicure advises gourmets who have time to journey leisurely and especially those who have an automobile at command, to make a journey of gastronomic exploration in the district between Montpellier and Toulouse, which is "a cradle of good cooks" and where some of the traditions of cookery of the old Romans still linger. The land of the Meuse, the Moselle, and the Saône is another and more north-

erly paradise of good cooking. "In Dordogne there is not a peasant who cannot get a traveler *en panne* a

Coming to market, Brittany

truffled omelette which would make an alderman's mouth water . . . and all the Midi from the Alps to the Pyrenees is a happy hunting ground for the gastronome."

My own experience in these regions is much more limited, but wherever I followed this epicure's advice I found him a reliable guide. In most parts of France, however, a guide to good cheer is hardly needed, for you can stop at almost any inn with the assurance of getting a savory lunch, dinner, or supper. In Provençal inns garlic is no doubt used too freely, but no harm can come to those who cannot stomach it, since its warning appeals as distinctly to the nose as the rattlesnake's does to the ear.

The Pyrenees are famed for trout and chicken. The chicken we found excellent, the trout less so. An innkeeper with whom I discussed the matter admitted frankly that they left something to be desired in the matter of flavor. A Parisian epicure to whom I had mentioned trout one day, shook his head and suggested sole or turbot instead.

Sole is at its best at Dieppe. In that town there is a restaurant, formerly frequented by Whistler, where the waiter, to please fastidious guests, proudly serves soles caught with his own hands in the early morning hours.

Cannes has a hotel the guests of which can go to a tank and with a net catch the particular fishes they want to eat half an hour later. At Aix-les-Bains there is a caterer who "will not have any salt-water fish in his larder, for Aix in summer is so hot that sea fish do not always come to table quite fresh,

and this risk he will not run, in the interest of his clients."

America is not the only country where oysters are cheap. At Caen one pays only ten or twelve cents for a dozen of the best bivalves from Ouistreham and Courselles.

All along the French coast, west and south, one comes across dishes which owe their unique and usually delicious flavor to some special variety of shell fish, peculiar to the place, which is added to the sauce.

Marseilles is perhaps the best place for experimenting with shell-fishes new to the visitor's palate. That this city owes its international fame largely to a special marine stew called bouillabaisse everybody knows. As I have eaten this dish in Marseilles itself but once and that so long ago that I do not remember the details, I will quote Col. Newnham-Davis's graphic remarks on it:

"The Southerners firmly believe that this dish cannot be properly made except of the fish that swim in the Mediterranean; the rascaz, a little fellow all head and eyes, being an essential in the savory stew, along with the eel, the lobster, the dory, the mackerel, and the girelle. Thackeray has sung the ballad of the dish as he used to eat it and his *recette*, because it is poetry, is accepted, though it is but the fresh-water edition of the stew. If you do not like oil, garlic, and saffron, which all come into its composition, give it a wide berth; but

I should mention that the bouillabaisse at the Reserve is quite a mild and lady-like stew compared to that one gets at Bregailla's or the restaurants of the Rue Noailles."

Marseilles is not far from Italy, but before we proceed to that country, to learn what it can teach us in regard to wholesome and enjoyable foods, we must return for a moment to Paris to consider a few more of the specialties in which it asserts its gastronomic supremacy.

However interesting the Provinces may be because of their local dishes and delicacies, and because of the proof they afford that the value of well-cooked food is appreciated throughout France, their most important function, from our point of view, is that of providing the first-class material out of which the Parisian cooks prepare their chefs d'œuvres of culinary art. This material is sent daily from all directions to the metropolis in special express trains, to be offered for sale in the Halles Centrales, which, to the lover of good food and beautiful flowers, is one of the most interesting spots on earth.

### THE WORLD'S GREATEST MARKET PLACE.

Emile Zola made these Halles Centrales the background of one of his naturalistic stories, "Le Ventre de Paris." Even his realistic and graphic descriptions

fail, however, to convey an adequate idea of the colossal food traffic carried on in this market place, which, to be sure, is now much bigger than it was when he wrote his novel, not long after the erection of the vast structure, in 1851.

Ten pavilions there are in this building, each of them containing two hundred and fifty stalls. Retail dealers are installed in the front pavilions, while the others are occupied by the wholesale vendors, whose business also overflows into the streets leading to the market place. For the storing of provisions there is further a cellar under the Halles, divided into twelve hundred compartments.

To see this food market in its most characteristic aspects one has to get up long before the sun. It was half past four on a May morning when my wife and I unbolted the door of our hotel and hailed an auto-taxi to take us to the Halles. All Paris was still in bed, with the exception of the street-cleaners, who were giving the city its morning bath, a few chauffeurs, and the market gardeners, porters, vendors and buyers whose business it is to bring and distribute the daily provisions of the French metropolis. The following details as to what we saw are taken from an article written by my companion:

"At this early hour buyers are still rare. Inquisitive Americans may wander about with the freedom of disembodied spirits, and without attracting much more

attention. We kept discreetly out of the way of hurrying porters and of swearing cartmen who were bring-

The world's greatest market place

ing their huge loads of vegetables to market. From the carts enormous mounds of carrots, long white turnips, cauliflowers, salads of all kinds, cabbages, sorrel tied in neat packages, radishes black and red, were being unloaded and stacked with incredible dexterity and rapidity, each mound a picture; the carrots and turnips were built up in square fortresses, the vegetables turned outward with perfect regularity, an orange and white feast to the eye, as well as a promise of joys to come for the palate. Beside these are heaped pointed cabbages of freshest green; cauliflowers

as white as bridal bouquets; lettuces laid head down; escarole and romaine lying on their sides, displaying round, appetizing tips; chicory, a frizzled tangle of greenish white; while nearby bee-hive heaps of rosy radishes add another vivid color note.

"A little farther on our noses are greeted by the most exquisite perfumes, coming from large baskets of strawberries—the big cultivated ones—and the still more fragrant wild berries, the 'petites fraises des bois' which Parisians so dote on. Cherries, too, are plentiful, but they do not fill the air with luscious odors, as do the strawberries, though their deeper red, the gloss of their perfect surface and the contrasting pale green of their stems are a delight to the eye.

"The æstheticism of the Paris Halles is one of its dominant characteristics. Flowers appear in every corner mixed in with the stalls for edibles. Although a whole cross-street is given over to them, they are too abundant, Paris loves them too well, and needs too many for them to find sufficient room in one place only. A whole long block is devoted to *bleuets*, the simple corn flowers of the fields, packed in bunches a foot square; but roses reign supreme, pink, red, tea, moss, of all varieties, picked fresh and adding their perfumes to those of fruits and vegetables.

"There are also masses of irises, France's flower, yellow and blue; spicy pinks, ranging from white to dark red, through all the shades from palest salmon to deep

rose; pansies, purple or yellow, bunched by colors; peonies, rose-scented, long stemmed, heavy-headed, in crimson, in pink, in white; Iceland poppies, bitterly fragrant, white, yellow, orange.

"It is almost impossible to tear one's self away from this riot of color and perfume, but there are so many sights that demand attention.

"Even the dead are not forgotten in the great market, for in one section of the Halles, under its huge resounding roof, one may buy the bead wreaths which are made to adorn French graveyards. There is almost a western American atmosphere in this light touching upon death in this center of vivid life, and once more we realize the kinship between French and Americans—except in the matter of eating, in which alas, we are so far behind them.

"The fish market does not open till late, for Paris wants its fish fresh caught, but there is the meat market to see, and there are still streets and streets of vegetables, streets filled with people, especially of busy porters with full or empty 'hottes'—the large baskets used in carrying vegetables—on their backs; or with the flat fruit baskets, four feet by two and a half, balanced on their heads, on which they carry loads of other baskets filled with strawberries, walking along as calmly as if they were alone in the world, and as if the streets were not slippery with vegetable leaves. We found it difficult to keep our footing on this green

refuse from cabbages and lettuces, carrots and turnips, which had been cut off at one blow by the men who stacked them. But it was all fresh, clean, and sweet smelling.

"By six o'clock the vegetable mounds had disap-

Paris market porters

peared almost entirely, as if melted away by the rising sun, and one understands why photographs of the Paris market are so scarce. When the sun finally shines through the soft morning haze there is little left to snap-shot. Three porters in blue blouses with 'hottes' on their backs politely consented to pose, and a pretty Parisian girl, brown-eyed and red-cheeked, had gladly stood near her pile of sorrel to be caught in the camera.

"The artichokes do not pose well. Great baskets heaped with these green scaly globes fill one street, but to catch them is next to impossible. First a cart gets stalled in front of a particularly fine group, and when that is gone there is a mass of people who must pass. Every one who notices the photographic attempts asks 'Is it for the Cinéma?'—the Paris rage of the moment—and one good-natured, impertinent Parisian asks if photographs are for sale and at what price. He is really so 'sympathique,' in the French sense, that one immediately confides one's desires and difficulties to him.

"At the chicken stalls, where the would-be photographer has to change a film, she finds an exhibition of the lower-class rudeness, and also of the lower-class politeness of the French market woman. From a corner which seemed to belong to no one she is rudely requested to move on, while ten steps farther on she is made welcome, given a chair, questioned about the 'Cinêma,' and apologized to for the lack of civility of the other woman.

"At another stall among the vegetables, one saucy young woman gets well laughed at by her companions. She is not too busy to notice the strangers, and, after looking them over with rather an impertinent stare, she remarks that it is 'funny to see these English people in Paris.' A laughing rejoinder from the strangers that they are not English but Americans makes her

look abashed, much to the amusement of the other women.

"In this retail department there are plenty of string beans which are better in Paris than anywhere else,

Halles Centrales

but the best of which an ignorant American would not think of buying. They are small and thin, and streaked with black, almost as if rusted. To the eye they are far less tempting than the thick rich green beans in our markets, but in taste they are more lus-

cious. On the other hand, French peas are not equal, usually, to the English and American ones, being harder and less sweet, and therefore their flavor is not impaired, as ours would be, by the fact that the market-women sell some of them shelled. A real genre picture they make, three of these women, dropping the pale green pearls into wooden bowls, and talking even faster than they shell.

"We passed rather hastily through the meat market, although that is quite as interesting in its way as the other quarters, but we were especially desirous to see the fish market in its glory. However, we had a rapid view of great beef carcasses hung in rows, hundreds of lambs, calves and other creatures, and of the neat stalls where calves' heads, pigs' and lambs' feet, livers, sweetbreads, brains, and even lungs are all hung in neat array, or displayed attractively on slabs. French dealers know to perfection how to set off their wares. They have special methods of presenting their fine poultry so that no buyer can resist them, no matter what the price may be for turkeys, ducks, capons and poulardes.

"Vine and other leaves for decorative purposes are sold regularly in the market, and no one who has not seen it can imagine how much more tempting a fine Camembert or Pont l'Evèque can appear when it is set carefully on a fresh green leaf. The large cheeses cannot be thus decorated, but the smaller ones, as well as the pats of Normandy butter and the tempting little

brown pots of delicately sour 'crême d'Tsigny,' are always displayed in this way. The fine fruits, too, are made the object of solicitous care; in one corner of the market we ran across two men who were tenderly unloading the most fragrant melons, and arranging fine peaches, six in a box, laid carefully on a bed of soft white cotton. The perfect bunches of grapes for which some wealthy American may, later in the day, pay a fabulous price at the Café de Paris or at Voisin's, are temptingly exhibited in the same manner. It is strange that Paris is generally more æsthetic and artistic in its food and flower displays than in those of the many other luxuries and fashions it provides for the world.

"At six-thirty the fish market opens, and as one approaches, the deafening noise of the wholesalers, crying their wares, and selling to the highest bidder, fills the ears. The nose, too, takes cognizance of the perfume of the sea, the salt freshness of recently caught fish, quite different from the ancient and fish-like smell of an ordinary New York fish stall. We breathe it in with almost as much pleasure as we did the fruit, vegetable and flower perfumes. Here again the eyes are satisfied as well as the nose. Pale brown fish in a pale brown basket may be an accident, but it is a happy one. Quantities of spiny 'langoustes,' with long feelers, splotched with yellow and red; of lobsters with huge claws; of neatly arranged soles, lying in

pairs; of beautifully marked Spanish mackerel, of great white skates, and of many other sea-fish are being rapidly transferred from the wholesale to the retail departments. In the fresh-water section, huge tanks,

A bit of the great Paris market

with water flowing in rapidly from great faucets, hold carp, eels, and other fish, all alive; but the greater number of tanks are filled with scrambling hundreds of crawfish, the much prized French 'écrevisse,' which, with the langoustes, reach the high-water mark for shell-fish prices in the restaurants—but they are worth it. The écrevisse is no better than our Oregon crawfish, but the latter are being rapidly exterminated, whereas in France the delicious creatures are properly protected.

"In this same section another French delicacy, snails, are for sale. Boxes full of them may be seen, some of the snails remaining patiently in their home corral,

while others, more adventurous, were crawling up the fish tanks, or had even dropped to the floor, owing to their too great desire to explore the world.

"The market itself is quite as much inclined to spread as the snails. All the adjacent streets are filled with shops for edibles, especially of the less perishable variety, like cheeses of all kinds, some as big as auto-wheels. The cabarets do a brisk business in feeding the providers of Paris food, but foolishly we failed to try one of these places to discover what kind of breakfast the food-raisers themselves eat, and we went back to our hotel hungry, past all this mass of eatables, past cafés which were just being opened, where floors were being washed and chairs lay inhospitably on the tables. One almost felt as if Paris never was ready to eat breakfast."

Besides the Halles Centrales there are a number of smaller covered markets distributed over the city, much frequented on certain days by all classes. Women everywhere are fond of shopping, but in France foreigners as well as natives revel in the joys of marketing. Read, for instance, this joyous outburst of an American girl dwelling in Paris for her musical education:

"Now the mystery why the shops and galleries are almost deserted by the French on Wednesdays and Saturdays is explained. They are all at the market,—a dense struggling, chattering mob, pawing away at the fresh country produce, while above the din rise the

shrieks and howls of the booth venders. A lively, a typically French scene. You get one of those French net-work bags, which will stretch to hold nearly a bushel of supplies, and sail into the thick of the fray. By the time you are out on the other side you are loaded to the ears with enough stuff to last the party a week and have spent just four francs. Celery, one cent a bunch. Fresh country potatoes, 35 cents a bushel. Country killed meats at one-half city prices. It is more fun than a circus, and from that time on you will set aside an hour every Wednesday and Saturday to go a-marketing, as one of the prime joys of life."

### MODEL MARKET GARDENS.

The biggest vegetables and fruits are by no means always the best. But, given a good variety, the ideal to be aimed at is to have it as big as possible while still young and tender.

This ideal the French market-gardeners live up to, and that is what makes their productions a joy, first to the eyes, and then to the palate.

Intensive cultivation is the key to the mystery of how it 's done. Expert testimony is to the effect that the market gardens in and around Paris are "the best and most thoroughly cultivated patches of ground in Europe." From them "at least threefold more produce is gathered than from similar extent of garden-ground elsewhere." Though the climate is far from

mild—and even in the harshest months—whole trainloads of lettuce heads and other vegetables are sent daily from Paris to other cities, some of them as far away as Russia.

Eight crops in one year are frequently gathered from a garden. No time is wasted; while, for instance, the cos lettuce in one bed rears its head on high, the ground underneath is already carpeted with the green leaves of a young crop of escaroles. This rotation is one of the secrets of success. Thorough cultivation and enrichment of the soil constitute another, some of the crops being grown in beds made up almost entirely of manure. But mainly, it is "owing to the abundant watering of these gardens that the Paris markets are throughout the hot season better supplied with crisp, tender, fresh vegetables than any other capital in Europe."

Water makes up nearly the whole substance of most vegetables—for instance, over 88 per cent. of carrots, 90 of cabbage, 93 of lettuce and pumpkins, 95 of cucumbers. Withhold it on a few sunny days, and the vegetables become mere masses of tough fiber. As long ago as 1878, W. Robinson, F. L. S., whose words I have just cited, called attention in his valuable and beautifully illustrated book on the Parks and Gardens of Paris to the anomalous fact that though all failures in English gardens are attributed to "want of sun," nevertheless if there is a warm and sunny season the market supplies soon run short, owing to the absence of any

preparation for watering garden crops. "Three warm days in July show their effect in Covent Garden, inconvenience the housekeeper, and injure and reduce the supplies of vegetable food at a time when these are more than ever important for health."

Since that time, no doubt, some improvement has been effected in England, but Covent Garden Market is still largely dependent on French gardeners for its best products, in the line of vegetables, and also of fruits and berries.

### MUSHROOMS AND TRUFFLES.

One of the most interesting chapters in Mr. Robinson's book is on Mushroom Culture in Caves Under Paris, those he visited being at Montrouge, just outside the fortifications. The beds are from sixty to eighty feet under the street and from this single cave the daily gathering averaged from four hundred to fifteen hundred pounds, the favorite size of the mushroom gathered being about that of a chestnut.

There are thousands of abandoned stone quarries in France, hundreds of which are used by mushroom growers, who earn many millions a year by thus catering intelligently and zealously to the palates of their countrymen—and of foreigners, too, for there is a large export trade—in mushrooms, fresh, canned, powdered, bottled in oil or butter, or preserved in other ways.

An odd detail about these caves is that, although they are well ventilated, the mushrooms refuse, after a while, to grow in them till after a general cleaning out and a rest of a year or two.

Although, both as a separate dish and as an ingredient of diverse sauces, soups, stews, and gravies, mushrooms play an important part in the cuisine of the French, they seem on the whole to risk the eating of fewer varieties than are consumed in some other countries. About a thousand different varieties are known to botanists, yet in Paris, as I was informed by a professor of the University of Lyons, only twenty-five kinds are commonly eaten, while in the markets of Lyons only half-a-dozen sorts may be offered for sale. One cannot but admire this prudent self-denial on the part of a race so addicted to the pleasures of the table.

In Germany there are frequent expositions of mushrooms and other fungi, for educational purposes. In England the Board of Agriculture issued in 1912 a little book entitled "Edible and Poisonous Fungi," with colored pictures of more than a dozen good mushrooms besides the one usually consumed (*Agraricus Campestris*). An English friend of mine likes to recall the days of his boyhood when his breakfast consisted of several platefuls of mushrooms which he gathered every morning fresh under the trees.

In American forests mushrooms grow in superabundance, but few are gathered for the table, though most

of them are harmless. Speaking of the hills of the Blue Ridge Mountains near Harper's Ferry Dr. Wiley says he has seen "large areas of the forest almost covered with these growths in August and September, but the courage leading to their consumption was wanting."[1]

A picture in the *Fliegende Blätter* shows a little girl bringing a basket of mushrooms from the woods. Being asked by the pastor in passing if she is not afraid her family may be poisoned, she answers cheerfully, "Oh, no! We sell these."

The nutritive value of mushrooms is small. It is on account of their delicious and varied Flavors that they are gathered and cultivated; and Flavor, as has been pointed out so many times in the preceding pages, is so important to good digestion and consequent health that it is a great pity that in eating them one runs the risk of a painful death; at least in the case of wild mushrooms, some of which aggravate their offensiveness by trying to look as much as possible like certain harmless specimens.

While truffles, like mushrooms, grow all over Europe, as well as on other continents, in many varieties, it is the French, again, who have taught the world the most valuable lessons regarding their diverse

[1] An excellent summary of what it is important to know about mushrooms and toadstools is included in Dr. Wiley's "Foods and Their Adulteration." Of the many books specially devoted to this subject Gibson's is perhaps the best.

uses for flavoring soups, sauces, meats, and gravies.

The French varieties happen to be the best of all, especially those grown in Périgord and in the Department Vaucluse, which was reafforested in 1858 with oaks, in the shade of which these fungi are particularly at home.

In Russia, formerly, bears were used to unearth them, but to-day pigs and trained dogs are relied on for locating the ripe specimens—a feat which man, with his inferior powers of smell, cannot imitate; the result being that when he tries to harvest them himself, great waste results through the uncovering of unripe specimens. Maybe, some day, our noses will be so well trained that truffle-hunters will be able to get along without pigs, dogs, bears—or flies, which, in warm weather, hover over the spots where the ripe fungi are hidden from the eye.

Truffles are expensive, and therefore often adulterated—with dirt, to increase their weight, with unripe tubercles that have little or no flavor, and in various other ways, including the making of artificial truffles from potatoes. An English writer says that the "false truffle" (*Scleroderma vulgare*) "is extremely common on the surface of the ground in woods, and is gathered by Italians and Frenchmen in Epping Forest for the inferior dining-rooms of London, where continental dishes are served. It is a worthless, offensive, and possibly dangerous fungus."

### TRAINING TREES FOR FANCY FRUITS.

Good fruit is more abundant and cheaper in the United States than anywhere in Europe. When sun-ripened and picked at the right time, it is all that fruit should be. Unfortunately, it is not usually brought into our markets in that condition.

The Paris restaurants have a way of adorning their entrance with a stand covered with various kinds of properly ripened fruit, the fragrance of which serves as an appetizer preceding the hors d'œuvre or the soup. They are extra choice fruits, and expensive, but in the markets one can buy the same very much more reasonably.

In the raising of fruit the French rely less on climate than on their own skill and care. The best peaches eaten in Paris do not come from the Sunny South, but from the neighborhood of the city, where they are grown against walls, and carefully cultivated and protected. When visiting France at the request of the London "Times" to study the methods which have made fruit in that country so good, Mr. W. Robinson found it a common thing to see a professor of fruit-culture and his class assembled round a tree, pruning it and discussing every operation as it goes on.

The pupils have much to learn, for the French do not simply cultivate trees in orchards as we do, but subject them to much trimming and bending of the branches

so as to secure the best distribution of the sap and the greatest amount of sunlight and warmth.

The Japanese have taught us how to prune a chrysanthemum plant so as to make it produce giant blossoms. Our florists make use of the same method to concentrate the sap and vigor of a root and stem in a single perfect American Beauty rose. It is not size alone that is aimed at. Sometimes the result of such a method is a thing like the Belle Angevine pear which, though flavorless, may fetch a guinea in London because of its size and beauty. As a rule, however, Flavor is carefully safe-guarded. The leaves are kept trimmed so as to enable the sun to do its best in developing an aroma.

Outside of France the finest collection of espalier fruit trees I have seen is on Paderewski's estate, at Morges, on the Swiss side of Lake Geneva. It is surprising what a variety of forms the trees can be made to assume, as the fancy of the cultivator decides.

### BREAD CRUST VERSUS CRUMB.

Although the publishers of this book, when they asked me to write it, generously allowed me as much elbow room as I might desire, I must resist the temptation to dwell much longer on the details of French gastronomic leadership. To exhaust the subject would require a whole volume much bigger than this. Before

closing this long chapter, however, I must dwell briefly on three more important kinds of food—bread, butter, and cheese—in the making of which the French excel.

Unlike ourselves and our English cousins, they partake of nothing but bread and butter for breakfast, wherefore it is not surprising that they take particular pains to have these good. Bread is also eaten at other meals much more freely than in other countries, including Germany and Austria, which alone rival France in the making of it.

The best French bread is made in such a way that to have it in prime condition it must always be fresh. At all hours, therefore, one sees boys hurrying along the streets with baskets loaded with tall loaves. Without exaggeration, these loaves are often a yard long, but no thicker than a man's forearm. This is the Parisian bread *par excellence*, and what is most characteristic about it is that it is practically *all crust*.

Bread is regarded as the staff of life—an English writer, Winslow, called it so as long ago as 1624—and it has become so more and more in recent centuries. It is therefore of the utmost interest to know how the French, who admittedly know more about good food and the best cooking than any other people in the world, bake their bread. They bake it, as I have just said, in such a way that it is *nearly all crust*.

Nearly all crust! And the French, it is needless to say, dote on this crust. For the crumb they have no

liking; often you may see a Frenchman poke out with his thumb what little crumb there is and leave it on his plate.

How different this from the practices prevalent among the least gastronomic of civilized nations—the English and the Americans!

The English way was graphically described in the "Observations on Mastication" which Dr. Campbell contributed to the London "Lancet" (July and August, 1903):

"Witness the fashion of eating bread-and-butter at any place of refreshment, and the last thing you will be served with is a plateful of crusts of bread. Many establishments, indeed, make a regular practice of giving away their crusts as unsaleable. Thus, the rectangular loaves used for bread-and-butter in the aërated bread-shops are cut transversely into slices, each loaf thus yielding two end crusts which are put into baskets for the poor, only the soft crumby pieces being reserved for the customers."

Similar practices prevail in the United States and Canada.

The lowest biological specimen—mere gastronomic protoplasm—is the pale, ten-dollar-a-week clerk whose deadly substitute for bread is the half-baked dough ("butter cake") he eats at lunch time—a dyspeptic mess without the suspicion of a crust on it. His taste, unfortunately, is shared by some of the well-to-do,

whose education has been neglected. Two youths walked into the breakfast room of an Italian hotel one morning and sat down at the table next to ours. The first thing they did was to push away the nicely browned crusty rolls and ask the waiter if he had any "soft bread." He had none, of course. He should have told them—I came near doing it myself—that those Italian rolls, though not equal to the best Parisian, had much more flavor and were much more digestible than the home-made crumb they were crying for—like babes for pap, though their teeth looked sound.

In many New York hotels and restaurants, imitations of Parisian loaves or rolls are now placed on the tables. Some of them are quite good—a great improvement on the ordinary American bread—yet most of the diners look at them askance. In downtown lunch places, if you fee the waiter regularly, he will not insult you by putting a crusty end piece on your plate. I always fee well, and therefore have the greatest difficulty in making the waiters believe that I sincerely, honestly and truly prefer an end piece—a particularly brown one at that. Some of them look at me with the incredulous expression of the farmer who, on seeing a giraffe, exclaimed, "There ain't no such animal!"

It is needless to say that I prefer the goldenhued endpiece because I find it infinitely richer in flavor than the crumb. It is for the same reason, principally, that the

French insist on having crusty bread. There are other reasons—they may not be aware of them but instinctively they act on them. Let me give them in the words of a distinguished medical man—the same Dr. Campbell, Physician to the London Northwest Hospital, whose words I have just quoted. "Loaves," he writes, "should be shaped so as to give a maximum of crust and a minimum of crumb, and should be baked hard. Such loaves are quite as nutritious as the ordinary ones, and much more digestible, containing as they do an abundance of dextrine and not a little maltose, and compelling efficient mastication, especially if eaten, as they should be, without any fluid. A lady who has been catering for a large number of girls gives the bread in this way, and she tells me that there is *keen competition for the most crusty portions.*"

The words I have italicized are of the utmost significance. They show that if English—or American—girls, or boys, or women and men—prefer crumb to crust, it is not owing to innate depravity but to lack of opportunity to learn better. Give them a chance to ascertain the superiority of crust to crumb and they promptly take to it as if they were in Paris born.

They cannot be blamed for neglecting American crust, for the crust of the ordinary American bread actually is inferior to the crumb, being tough, leathery, and flavorless. But the American crumb is nearly always indigestible. The moral of the story is that

we should discard it in favor of Parisian crusty bread, boycotting every baker who does not honestly try to surround his loaves with crisp, toothsome crust.

Ordinary American bread is greatly improved in flavor and digestibility when it is toasted. *Toasting is the conversion of crumb into crust.* It is resorted to daily by hundreds of thousands of Americans who, either knowingly or instinctively, adopt this way of avoiding the soggy bread which ruins the stomach and undermines the health. On this point let me cite the words of another medical expert, Dr. Alexander Bryce, author of "Dietetics," "Modern Theories of Diet," "The Laws of Life and Health," etc., endorsing the views of Russia's most eminent physiologist:

"Pavlov demonstrated that the chewing of fresh, moist bread [such as most Americans insist on having] produced no secretion of saliva worth mentioning, but dry bread caused the saliva to flow in large quantities. Stale bread, crust of bread, toast, zwieback (double-toasted bread), and plenty of biscuit compel fairly prolonged mastication with plenty of saliva, while soft bread is usually bolted with no production of digestive juice of any consequence."

Besides the yard-long loaves referred to, the French have an endless variety of breads, one of the best of them being the crescent-shaped "croissants" usually served with the morning coffee. Different provinces and towns have their own special kinds, but Paris is the

paradise for bread-eaters; elsewhere, the bread is not so uniformly excellent, though nearly always better than that served in most other countries.

While the preponderance of crust over crumb is the most important aspect of Parisian bread, there are a number of other things to which it owes its excellence. For a high-class product it is important to select flour made of wheat which has a particularly fine flavor. The Flavor is also largely affected by the milling, the way the dough is made and kneeded, the quick or slow fermentation, the kind of oven used and its temperature, the length of leaving the bread exposed to the heat, and many other things.

A French baker's apprentice has to go through a four-years' course of studies before he is considered an expert. Is it a wonder that such favorable results are achieved? But besides his knowledge he must have an infinite capacity for taking pains. *Plus on se donnera de peine pour pétrir la pâte, plus on obtiendra de pain, et meilleur il sera. On n'a rien de bon sans travail.* "The more trouble you take in kneading the dough, the more bread you will get, and the better it will be. You cannot get anything good without work."

So say the authors—there are three of them—of the "Nouveau Manuel Complet du Boulanger," published in Paris by L. Mulo. It is a book of 626 pages with 93 illustrations. Besides an introduction which gives a bird's-eye view of the history of baking, there are ten

chapters treating exhaustively of wheats and flours and their adulteration; on the making of dough and the different kinds of leaven; on troughs and ovens; on diseases of bread; on the peculiarities of the breads of various countries, including, of course, those of France, Austria and Germany as the most important.

Summing up their conclusions, the authors of this encyclopedic work say, under the subhead, "Signes Caractéristiques d'un Pain Bien Fabriqué," "Well-made bread must be light, well-raised and well-puffed up. Its color must be a particular yellow, shading into brown; it must be resonant when it is struck; its surface must be smooth, the inside full of cavities and *grandes crevasses;* its crumb white, very spongy and very elastic."

### HOW THE BEST BUTTER IS MADE.

"If I were king," exclaimed a Sicilian shepherd boy, "I would have goosefat with my bread every day."

While the ancient Greeks and Romans already made many varieties of bread, butter was known to them only as a medicine, olive oil being generally used in place of it in the preparing of meals.

It was probably in Italy that really palatable butter was first churned, and very good butter is made in that country to-day; (that poor Sicilian boy had evidently never tasted any, else he would have preferred it even to goosefat!) but the best butter in the world is mar-

keted in Paris. Not once, during half-a-dozen sojourns in that city, have I had butter served which it was not a pleasure to eat.

While bad butter, such as most Americans eat daily, seems to be virtually tabooed in France, there are of course many degrees of excellence. In May, 1912, we visited a number of the leading Paris restaurants with the special object of studying these degrees. Everywhere the butter was very good, but the best, my wife and I agreed after repeated trials, was served at the Bœuf à la Mode. I therefore asked the head-waiter to find out from the dairy just how it was made. He did so, and received in reply a letter which is herewith reprinted in a translation:

In response to your communication of the twentieth I take pleasure in answering your questions. Our butter is always made with the cream of the previous day and after this cream has fermented twelve hours. In this way to-day's milk is skimmed at about noon and the cream is cooled to 37-40 degrees [Fahrenheit], then it is put in a place where it rises to 42°-47° [Fahrenheit] and at this temperature it is kept as nearly as possible till the next morning, when it is churned.

This method is a satisfactory one, and our butter is right.

Believing that these directions will prove to be what your customer wishes I beg you to receive my best salutations.

MARCHAND.

The information given in this letter relates to one point only, as that was the only point I had inquired about.

What I wanted to know was whether this super-excellent butter was made of sweet cream or of sour cream.

Edwin H. Webster, Chief of the Dairy Division, states in No. 241 of the Farmers' Bulletins, issued by the United States Department of Agriculture, that "practically speaking, all butter used in this country is churned from sour cream. Sweet cream butter to most users tastes flat and insipid." He adds that the American dairyman, when his cream is not sour, deliberately makes it so by adding a "starter," which is nothing more nor less than "nicely soured milk."

In the Paris bookstalls we bought everything we could find as to the French practices in this respect, and furthermore we spent hours in the Bibliothèque Nationale studying the documents relating to it.

D. Allard, Professeur Départmental d'Agriculture, says in his book "Le Beurre": "It is generally remarked that in the regions which produce the finest and best-liked butter, la Normandie and la Bretagne, great care is taken to let the cream turn sour before it is churned. There is here certainly a result of fermentation, for one can, as we have said, impart these qualities to sweet cream by adding select ferments.

"Besides this, fermentation gives another advantage: it makes the cream easier to churn and increases the yield of butter.

"One must not go too far, however. The farmers

know very well that the cream of a whole week gives a butter of unpleasant flavor.

"It is therefore the uniformity of fermentation that ensures uniformity in the production of butter; which explains the importance of this question."

Another writer, V. Houdet, Ingénieur-Agronome, Directeur de l'Ecole Nationale des Industries Laitières de Mamirolle, says in his book "Laiterie, Beuerrerie, Fromagerie" (fourth edition, 1912):

"No matter whether the cream has been obtained by letting the milk stand in a low temperature or by means of a separator, it does not, if churned at once, yield anything but a sweet butter, of pure taste but without bouquet and without *finesse*.

"In order that the butter may have the aroma, and particularly the nutty flavor which the consumers desire and which considerably increases its market value, it is necessary that the cream should ferment, should become soured, before it is churned, for it is particularly on this treatment, this *maturation* (ripening), that all the qualities of the product depend.

"While the cream is fermenting, the sugar of milk it contains is changed into lactic acid which reacts in the measure of its production on the glycerides, saponifies them while liberating the volatile acids which impart to the butter its perfume and make it keep better.

"At the same time, as with all fermentation, it is

necessary to stop in time; an excessive development of acid would yield a strong butter, rapidly undergoing a change and becoming rancid."

Director Houdet also points out, as did Professor Allard, that by souring the cream the yield of butter is "very appreciably increased."

Judging by these remarks, the French way is like the American: the cream is ripened (soured) before churning. Must we, therefore, conclude that the enormous difference (apart from the salt question) between the average American and the average French butter is due chiefly to American carelessness in regard to a number of details, particularly the degree of acidity and the regulation of the temperature which the French authors just quoted declare to be of the utmost importance in the manipulation of the cream while ripening?

Or is our butter usually so inferior because so much of it is marketed after undergoing cold storage, whereas the French get theirs fresh, as they do their poultry? Years ago the State Railway began to run special butter trains from Normandy, Brittany, and the La Rochelle district, which reach the Paris market early in the morning, refrigerating cars being used in summer, so that the butter always arrives in perfect condition.

Doubtless, such differences help to explain the inferiority of our butter; but a question of even greater importance which we must now consider, is this: *Is it true* that the best butter owes its fine flavor to the

ripening of the cream—the churning of sour cream instead of sweet?

The fact that dairymen in France as well as in America do use fermented cream does not necessarily prove this to be the case; for, as we have seen, *there are two other very important reasons for ripening the cream: sour cream is more easily churned, and it yields more butter than sweet cream does. This being the case, most dairymen, being human, would naturally be tempted to use acid cream even if it were possible to make a still finer butter with absolutely sweet cream.*

That this is possible, is the belief of many experts and epicures. A German lady in Berlin, who has had much experience, informed me that sweet-cream butter was in that region preferred by those who could indulge their appetites all they liked, whereas the sour-cream butter was ordered by those who wished to curb the appetites of their customers (in taverns, &c.). An English official, Francis Vacher, remarks in "The Food Inspector's Handbook," in which he gives the results of his experiences in sampling, that "it seems superfluous to say that butter of fine flavor cannot be made from sour cream. Yet much butter is made from sour cream, particularly in small farms and dairies."

United States Government and State officials have given much attention to this subtle question. While Edwin H. Webster, Chief of Dairy Division, Bureau of Animal Industry, attests, as we have seen, that

"practically speaking, all butter used in this country is churned from sour cream," [1] the Assistant Chief, Harry Hayward,[2] admits that "but a very small percentage of all dairy butter made is of really high grade." Bulletins 18 and 21 of the Iowa Agricultural Experimental Station contain the results of tests made by G. E. Patrick, F. A. Leighton, D. B. Bisbee and W. H. Heilemann, showing that butter made from sweet cream retains its flavor better than butter made from sour cream.

In June, 1909, the U. S. Bureau of Animal Industry issued Bulletin 114, in which the bacteriologist, L. A. Rogers, and the chemist, C. E. Gray, give the results of three years' study of this problem. They found that butter made from ripened (sour) cream, both pasteurized and unpasteurized, develops, in storage, fishy and other flavors typical of storage butter; that butter made from unripened, unpasteurized cream always developed a cheesy or rancid flavor; but that the *butter made from pasteurized cream without starter usually retained its flavor with little or no change.* Even at 32° F., where all the ripened butter showed decided changes, the sweet-cream butter deteriorated very little. Everything showed that "some factor having a deleterious influence on the butter was developed with

[1] "Butter-making on the Farm," Farmers' Bulletin No. 241.

[2] Facts Concerning the History, Commerce, and Manufacture of Butter. Bureau of Animal Industry No. 56. Both these pamphlets contain much information of value to butter-makers.

the ripening of the cream"; and this whether the acid developed normally in the cream or was added to it, as a "starter." Further: "Butter can be made commercially from sweet pasteurized cream without the addition of a starter. Fresh butter made in this way has a flavor too mild to suit the average dealer, but it changes less in storage than butter made by the ordinary method, and can be sold after storage as high-grade butter."

Still another official of the Department of Agriculture, L. A. Rogers, bacteriologist of the Dairy Division, contributed an important document in favor of sweet cream butter.[1]

He pointed out that a large part of the butter made in the central creameries in which the cream is received in a sour or otherwise fermented condition develops the peculiar oily flavor of mackerel or salmon. After a series of investigations lasting several years he testified that "in all cases in which the records were complete it was found that those experimental butters which be-

[1] *Fishy Flavor in Butter.* Circular 146, Bureau of Animal Industry, 20 pages, 1909. In September, 1912, the Department of Agriculture published another document, Bulletin 148 of the Bureau of Animal Industry, by L. A. Rogers, S. C. Thompson, and J. R. Keithley, in which "the superiority of butter made from pasteurized sweet cream is again demonstrated" in making butter for storage—for which most American butter at present is made. Attention is also called to the fact that pasteurization of cream serves as a protection to the health of the consumer by destroying such bacteria as those of tuberculosis and typhoid fever, "which are known to survive for long periods in butter made from unpasteurized cream."

came fishy were made from high-acid cream"; and that "fishy flavor may be prevented with certainty by making butter from pasteurized sweet cream."

The same authority informs us that in our central creameries "the cream is *usually received in a very acid condition*"—surely a most unfortunate circumstance, inasmuch as the experts, including the French, are, as we have seen, agreed that *a high degree of acidity spoils the butter*. And now we come face to face with the all-important question: Does a *low* degree of acidity *really* improve the butter, as Professor Allard and Director Houdet maintain it does?

In other words, is the delicious flavor of the best butter actually due to the lactic acid developed by the ripening of the cream?

Dairy Chief Webster admits that "there are undoubtedly *desirable flavors in cream that do not come from the development of acid*. Just what these are is not known at the present time, but the rich creamery flavor, or, as it is sometimes described, the nutty flavor, of a fine quality of cream is a combination of acid and other flavors."

The "nutty" flavor is found particularly in May and June butter. The German biologists, H. W. Conn and W. M. Esten, who made careful studies of the ripening of cream which they published in Nos. 21 and 22 of the "Centralblatt für Bakteriologie" (1901) found that "the peculiar flavor of June butter, which

is so much desired by the butter-maker, *is not due to the development of the common lactic bacteria.*"

This brings us back to Paris and the Bœuf à la Mode. It was in May that we found the butter there so very delicious, and May is the month when the grass in France is greenest, juiciest, richest in flavoring possibilities. After collecting a large amount of material relating to the influence of food in varying the quality and Flavors of meats (which will be presented in Chapter XII), I have come to the conclusion that it is to this rich spring food that the nutty flavor is chiefly due.

As long ago as the middle of the last century epicures guessed what made the Flavor of spring butter so good. In the first volume of his *Gastrophie*, Eugen Baron Vaerst declares that "mountain butter is the best. March butter is particularly good because of the grass fodder the cows get. Summer butter is less good, were it only because of the heat and the annoyance to which the animals are subjected by torturing insects. . . . Winter butter tastes of straw and other winter feed."

The assertion that mountain butter is the best, reminds me of an episode in Bayreuth where, one summer, the family that gave us lodging and breakfast had the butter brought down every morning fresh from the mountains by a peasant girl. You pay in Germany for as much bread and butter as you eat. The first day we ate all that was given us and asked for double the amount next morning, and once more double that for

the third day. It was as good and sweet and tempting as ice cream. The incident is worth mentioning as a hint to dealers and butter-makers how they might quadruple their business by supplying people with fresh butter, unsalted and made of sweet cream, as was that Bayreuth mountain butter.

In future discussions of this subject it will be necessary to make it clear just what is meant by sweet cream and sour cream. If, as the two German bacteriologists referred to say, there are some acid bacteria present in milk as it is drawn from the cow, then there is no such thing as absolutely sweet cream; and, chemically speaking, the cream we put in our coffee twelve or twenty-four hours later is still less so. But *physiologically* speaking, that is to our tongue, such cream still is sweet and remains sweet under ordinary atmospheric conditions for several days; that is, it does not *taste* sour and does not clot in the coffee cup. From the physiological point of view, therefore, the cream from which the best butter we found in Paris was made was sweet—absolutely sweet to the tongue, whatever the acidimeter may have indicated.

From the foregoing remarks any dairyman who wishes to get rich quick can gather what he must do. Another point must be borne in mind in making butter which is not to be eaten at once. Bulletin 71 of the Iowa Experiment Station calls attention to the fact that to preserve the quality (Flavor) of the butter, it

is not enough to pasteurize the cream; the water also must have its germs killed by being heated to a certain degree and then cooled again. The experiments made showed that butter made from pasteurized cream and washed in pasteurized water kept normal just twice as long as butter made from unpasteurized cream and washed with unpasteurized water, even though well-water was used.

### CHEESE AS AN APPETIZER.

While there is but one way to make perfect butter there are many ways to make perfect cheese. Butter is always butter, varying only in the degree of palatability, whereas from a pail of milk can be made hundreds of varieties of cheese, each perfect in its way. Every country has its own, differing from those of other countries and provinces, as the costumes and customs differ. The chief difference lies in the Flavor, and this is due to a variety of causes, one of them being the source of the milk. The Laplander makes several kinds of cheese from reindeer milk, while in some parts of Italy buffalo cheese is eaten. Goat cheese is diversely made in Germany, France, Italy and other countries, while for some of the finest cheeses, including genuine Roquefort, sheep supply the milk. By far the most important animal, however, is the cow.

What would Europeans and Americans do without the cow? It is *possible* to get along without her.

When I visited Japan, less than a quarter of a century ago, the first experiments in the production of milk, butter, and cheese were being made in the Hokkaido, with a herd of fifty imported cows.[1] The courtesy of the Governor-General enabled me to test the products, and I found them very good. But owing to scant and expensive pasturage, Japanese epicures will never be able to depend much on cows; and think what they miss! No veal, no beef, no suet, no cream, no butter, no cheese! Think of the endless uses we make of these, alone, or in thousands of culinary combinations!

Nevertheless, we still have much to learn concerning the diverse uses to which at least one of the products of the protean milk pail can be put. We make above 300,000,000 pounds of cheese a year, worth over $30,000,000; but there is less to boast about its quality than its quantity. We are strangely monotonous and unoriginal. About three-fourths of our cheese is an imitation of the English Cheddar, while the rest consists mostly of imitations—generally very poor ones—of Swiss, Dutch, Italian, or German cheeses, or the French Camembert, Roquefort, and so on. Have we no gastronomic imagination? Shall we permit not only the epicures but the peasants of Europe to look down on us for our lack of it? We have, to be sure, a few specialties, such as the Pineapple, the Brick, Isigny, and some special varieties of cream cheese; but for a

[1] See the details in the chapter on "American Sapporo," in my "Lotos Time in Japan."

nation of nearly a hundred millions, we make a very poor showing indeed in this branch of gastronomy, as in so many others.

To a patriotic epicure it is humiliating to peruse Bulletin 105 of the Bureau of Animal Industry, entitled *Varieties of Cheese*. It contains, on 72 pages, descriptions and analyses of all the domestic and foreign cheeses about which information could be found in the literature bearing upon the subject. The authors are C. F. Doane, of the Dairy Division, and H. W. Lawson, of the Experiment Stations. The number of cheeses described by them is 242. Of these 63, or more than a fourth of the whole number, are French. Germany follows with 40, and England comes third with 24. Switzerland is credited with 20. Italy contributes 19, Austria (with Bohemia, Hungary and the Tyrol) 17, and Holland 8. These are the leading cheese producers.

France, as was to be expected of the chief gastronomic nation, heads the list in the matter of quality as well as quantity. Few epicures would deny that the best three cheeses made anywhere are Camembert, Roquefort, and Brie. Other world-famed kinds are Pont-l'Evêque, Neufchâtel, Mont D'Or, Gruyère, Port du Salut. Among the less-known kinds are some which are almost if not quite as good as the more familiar varieties.

A pound of cheese made of unskimmed milk has

twice the nutritive value of a pound of beef. It is characteristic of the gastronomic French people that, notwithstanding this fact, the best cheeses made by them, for themselves and the rest of the world, are valued and intended much less as food than as relishes, to be consumed in very small quantities.

The French custom of using cheese as an appetizer, to be eaten at the end of a meal, has been adopted the world over. Usually one thinks of appetizers (hors d'œuvres) as being served at or near the beginning of a meal; but think the matter over and you will see that an appetizer is even more useful at the end, as a harmless stimulant to keep up a steady flow of saliva.

It is not a mere accident that the three favorite French cheeses are those that have the most piquant and stimulating Flavor. This Flavor is due chiefly to molds, which are specially cultivated with great skill and patience. In Camembert and Brie the mold is on the rind and gradually works its way in, till the whole is permeated by it. In Roquefort the rind is clean of mold, which is started and developed in the inside.

Besides these molds, which, of course, differ in the several varieties, there are other sources of Flavor, such as the salt added to the curd, certain fatty acids, and ammonia-like bodies, these being particularly noticeable in well-ripened Camembert; but what chiefly determines the characteristic Flavor of these cheeses is their private and particular kinds of mold.

Perhaps some day the French will erect a statue to Flavor in Food. To the many illustrations given in these pages of the intelligence they exercise and the trouble they take to secure it, let me add one more—the making of Roquefort cheese.

We need not dwell on the first stages of the process, the heating and cooling of the milk, the adding of the rennet at a certain temperature to curdle it, and so on, as these do not differ materially from the ways of making other cheeses. Sheep's milk is used for the genuine article, but Roquefort made elsewhere of cow's milk is so similar in taste to the original article that no doubt remains as to the all-importance of the mold.

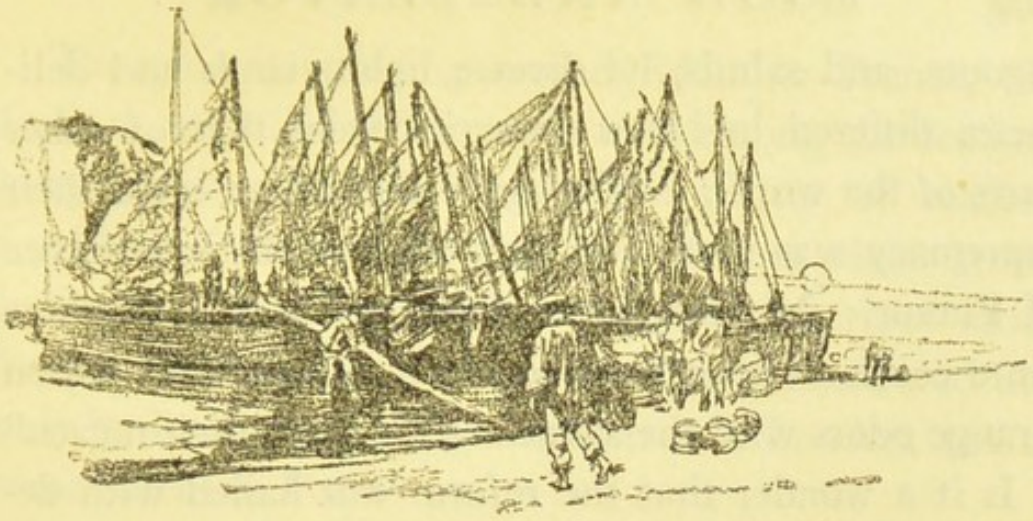
This mold is secured by making bread of wheat and barley flour to which have been added whey and a little vinegar. This bread is kept in a moist place for a month or longer till it has become moldy through and through. Then the crust is removed and the moldy crumbs are placed between layers of the cheese curd.

The romantic part of the story now begins. In the neighborhood of the town of Roquefort there are many grottoes, or natural caverns, steadily ventilated by a cool, moist current of air. Into these the cheese is taken for the ripening process. There is a great deal of salting and scraping to prevent the mold from growing on the rind. To favor its development in the inside, fresh air is provided by piercing the cheese with machinery having up to a hundred fine needles. Thus it

gradually acquires its green marbling and the piquancy which makes the epicure's mouth water.

Roquefort cheese has been famous for over two thousand years. The ancient Romans were very fond of it, as Pliny relates, and imported it in large quantities. The demand increased from century to century, until half a million sheep were required to supply the demand and four hundred factories were kept busy. To-day, enormous quantities of imitation Roquefort are made in various countries. Some of it is quite tasty, but epicures will continue to ask for the original, and it is right that the law should protect them and the makers by compelling imitators to put "Roquefort Type" on their labels.

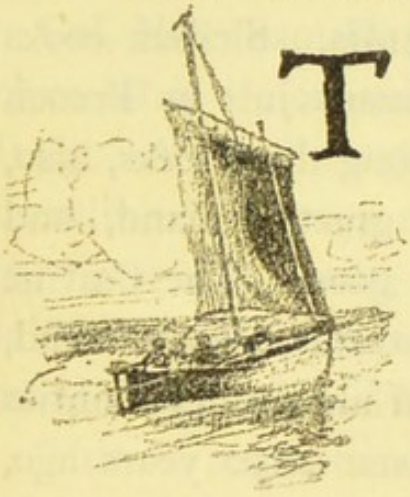
To a good many persons the piquancy of Roquefort does not appeal. Few, however, fail to succumb to the wiles of Camembert. Its popularity is attested by the fact that New York hotels alone use 30,000 of these cheeses a week during the season. There is a demand at present for about 4,000,000 Camemberts from the United States alone, and sometimes Caen and Havre are unable to supply the demand. Many attempts to manufacture Camembert have been made in America. The president of one of the largest pure food companies told me he had spent $30,000 in the attempt to produce a satisfactory Camembert; then he gave it up and began to import it. You can import cheeses but you cannot import or reproduce local flavors.



# VIII

## EPICUREAN ITALY

### THE CRADLE OF MODERN COOKERY.



THE fact that Roquefort cheese was relished by Roman epicures twenty centuries ago indicates that French gastronomy is not entirely a product of modern times. Yet it was not till the reign of Louis XIV (who died in 1643 that France began to lead the world in this branch of civilization. The cradle of modern culinary art was Italy. Katharine of Medici brought its higher branches from that country, which, in the sixteenth century, was supreme in all the fine arts, the chef's included.

Italian cookery differed in those days from that of other countries as French cookery, with its entremets,

ragouts, and salmis, its diverse light viands and delicacies differed in latter centuries from that of other parts of the world. What gave the Italian cooks their supremacy was that they were alive to the importance of Flavor. Montaigne expressed admiration of these same cooks "who can so curiously temper and season strange odors with the savor and relish of their meats."

Is it a wonder that the reform was hailed with delight, Voltaire going so far as to exclaim: *Un cuisinier est un être divin?*

Venice was the gate by which Oriental luxuries entered Italy. At the same time there were culinary traditions which came to the Italians of the Middle Ages direct from their own ancestors. Sicilian cooks were favored by the ancient Romans just as French chefs are in modern Europe. Among the Greeks, also, the cooks from Sicily were in great demand, and Sicilian cookery was proverbially good. The Carême of his time was the Sicilian Archestratus, who, we read, "traveled far and wide in quest of alimentary dainties of different lands," and who, some 2250 years ago, wrote a long poem on gastronomy.

Three centuries ago Burton referred to the fondness of the Italians for frogs and snails, two delicacies now universally associated with Gallic epicureanism. The French, to be sure, have by their special care in the rearing of these creatures (there are books on the subject) made them peculiarly their own.

Though now playing second fiddle to France, the Italians are still holding their own among the leading gastronomic nations. They have plenty of reasons for liking their own cooking, nor are they alone in enjoying it. In New York and other American cities Italian restaurants are always well patronized and not only by Italians, and the same is true in London, and to some extent in Paris.

Let us briefly pass in review the most desirable foods and dishes of the Italians to see what we can learn from them.

### OLIVE OIL AND SARDINES.

Col. Newnham-Davis declares that "really good pure olive oil is almost unknown outside the boundaries of Italy. An Italian gentleman never eats salad when traveling in foreign countries, for his palate, used to the finest oils, revolts against the liquid fit only for the lubrication of machinery he so often is offered in Germany, England, and France."

This is somewhat misleading. While inferior or adulterated olive oil is certainly served in many otherwise respectable European restaurants, even in Paris, I have eaten delicious olive oil made in France. Spanish oil usually has a flavor too strong for most of us, but when it is carefully refined this is not the case. In Lyons I was once the guest of a family of epicures who preferred Spanish oil to any other, and their

salads certainly were delicious. But, on the whole, the finest olive oil comes from Italy.

The superiority is purely a question of Flavor, for all olive and other table oils have the same food value.

Many factors combine to make Lucca and other Italian olive oils so pleasing to the palate. The soil is specially adapted to the cultivation of the olive tree, and care has been taken to select the best varieties. The old Roman epicures, who gathered their delicacies from all parts of the world, already preferred Italian olive oil, especially that of the variety known as the Licinian and grown in Campania.

No less important than soil and variety is the proper harvesting of the crop. In Asia, as well as in Greece and in many parts of Spain, much of the oil produced owes its inferior quality to the fact that the olives are knocked off the trees with poles or shaken off. The Italians who make the best oil pick the olives by hand and deliver them at the mills without bruises.

These same Italians subject the olives to four successive pressings. The oil from the first, known as virgin oil, is the finest, and as it is also the most expensive, unscrupulous dealers may and do sell the yield of the following and increasingly inferior pressings under that name. Eternal vigilance is everywhere the price of getting pure food and the best of it.

There is food for thought in the official information that Spain exports large amounts of olive oil to France

and Italy and that the greater part of this is reëxported from those countries, largely in the form of mixed oil. In 1911 Spain exported 90,419,723 pounds of olive oil, valued at $7,397,977.

Much good has no doubt been done by the Italian Society of Permanent Chemical Inspection, for the analysis of food products and official certification of purity. The honest grower of and dealer in olive oil suffers much from the competition of the cheap oils.

In the interest of honesty a law was passed in Spain in 1892 providing that all cottonseed or rapeseed oil imported into that country must be denatured by the addition of 1½ per cent. of wood tar or petroleum and also that all imported olive oil found to contain cottonseed oil or other similar products shall be rendered unfit for consumption in the same manner.

The dangerous nature of the competition to which the olive grower is exposed is illustrated by a remark made by commercial agent, Julian Brode, in the *Consular and Trade Reports* (August 29, 1910.) Writing from Alexandria he says: "The natives, most of whom are Mohammedans and large oil consumers, have been educated to substitute cottonseed oil for the olive oil they formerly used, and the latter is now found only in the houses of the wealthy. The change, which has taken place in Egypt, and which is now taking place to a great extent in Turkey, can likewise be made in Tripoli, Tunis, Algeria, Morocco, and other

Mohammedan countries if proper efforts are put forth."

Bearing in mind the remarks in a preceding chapter regarding cotton seed oil the word "educated" in the above quotation is painfully sarcastic. It is purse versus palate, cheapness versus Flavor, which remains for the wealthy alone to enjoy and get the benefit of.

It is in the sardine industry, however, that olive oil is fighting its hardest battles. The oil in a box of sardines costs, if genuine, more than the fish in it. Consequently, efforts are being made to substitute cheaper oils. From regions where sardines are canned in wholesale quantities come reports of annually decreasing imports of olive oil, with a corresponding increase in the imports of cheaper oils. Were it not for the public's "prejudice" in favor of Flavor in oil, the olive would doubtless be kicked out altogether. I have read in a consular report that "cottonseed oil has been selling about fifty per cent. cheaper than the olive oil used in packing. This saving, the packers say, would be given to purchasers of their goods."

The dear, generous, philanthropic packers! To think that it is not for their own sake but to help the consumers that they are so very anxious to give up olive oil, and to persuade the Government not to make them state on the label what kind of oil they use!

They point out—disinterestedly, of course!—that cottonseed oil is "claimed to be physically as pure as olive oil, just as digestible, and even a better preserva-

tive." The question, therefore, "is simply up to the manufacturers of cottonseed oil to educate the public to these facts and destroy the prejudice against their product."

In England, in the summer of 1912, a different kind of education was carried on by the importers of a special brand of sardines. In big advertisements the public was informed that a sardine is not necessarily a pilchard but may be the chinchard, the herring or the small mackerel, or the brisling which fattens on the small shellfish of the Norwegian fjords. All of these become sardines only when they are cured. The flavor depends in part on the kind of fish canned, the food they eat, the time of the year they are caught and, in part, on the way they are cured. For the better grades olive oil is used, but for the cheaper class trade coarse olive oil is taken, or cottonseed or peanut oil. Of olive oil there are fourteen grades and the best of these is the right kind if you want the best sardines.

Here were interesting things for British sardine buyers to ponder. They were thus warned not to continue to ask the grocer simply for sardines, but for sardines of a particular kind put up by a reputable firm. If the firm which boasted that it used the best fish and the best of the fourteen grades of olive oil has a wise head it will live up to its claims. In such things honesty is by far the best policy—in the long run.

Smoked sardines are almost, if not quite, as good as

those simply packed in olive oil. They are usually marketed as Kieler Sprotten and should be better known in this country.

### FRIED FISH AND FRITTA MISTA.

Doubtless the word sardine comes from the Italian island, Sardinia, around which the small fish used for canning abound.

Small fish of various other kinds are a favorite article of diet all over Italy. In Venice, for instance, among the most characteristic sights are the numerous little shops in which piles of fried fish are exposed for sale inside the open window, if window there be. They are eaten with slices of polenta, or thick corn meal mush, cut off with a thread from a huge loaf. The gondolier, as he passes by, exchanges his penny for some of this food and departs munching it with evidence of perfect satisfaction.

The oil used for frying these little fishes is not, as a matter of course, the virgin oil of the month of May. But it is infinitely better than the "cooking-butter" sent to the kitchens of thousands of wealthy Americans. It is more economical, too, than our frying baths. When the French composer Massenet, a noted gourmet, visited Italy for the first time, he enjoyed a meal consisting of "an excellent snail soup and fish fried in oil which must have done service in the kitchen at least two or three years."

It is acknowledged by epicures of all lands that in the art of frying, the Italian cook ranks supreme. In the more expensive eating houses butter (not "cooking butter") is often used, but the national way is to fry in oil, and when the oil is prime the result is delicious. An American girl, who married an Italian, writes to me from the Riviera Ligure: "Oil is used for frying, and it seems to me everything is fried—even green vegetables get a bath of hot oil. When butter is used it is for a condiment."

Fried food in England and America is usually greasy and indigestible because the cook does not understood that a deep frying-kettle is best, that the oil (or whatever liquid is used) must *at the start* have a temperature of nearly 500° Fahrenheit, so that a thin film may form immediately over the outside of whatever is to be fried, thus keeping in all the juices and flavors; and that whatever oil may adhere to the food after it is fished out must be allowed at once to drain off on a napkin or otherwise. The Italian cooks seem to know all these things instinctively, the result being that their fried foods come up to the test given by Mary Ronald, who remarks in the *Century Cook Book* that properly fried Saratogo chips can be eaten out of hand without soiling one's gloves.

*Fritta mista* is one of the chefs d'œuvre of the Italian cook. The first time I ate one was in Rome. We went to a little restaurant marked in Baedeker

with a star. After eating the mixed fry containing sweetbreads, shredded artichoke bottoms, brains, cocks-combs, truffles and other delicacies, done to a turn, we decided that the restaurant deserved two stars.

It will be noticed that the favorite fritta mista consists largely of things that Americans have only recently learned to use or still despise. The value of sweetbreads, which used to be thrown away, has been discovered—they are now almost worth their weight in radium. Brains would be equally relished by nine Americans out of ten—if not by all—if they would taste them fried as served to me on August 22, 1912, at Como. I give the date because it was a memorable gastronomic event.

The Italians are like the French in relishing these "trimmings." Mary Ronald relates an amusing story of a French family who moved into one of our Western towns where calves' heads, livers, brains and sweetbreads were still undiscovered luxuries. They wrote home that the price of living there was nominal because the foods which they most prized were given away by the butchers as food for dogs.

Many years ago Sir Henry Thompson tried to persuade the British to substitute olive oil for lard. His advice affords at the same time an amusing glimpse of a certain culinary custom: "Excellent and fresh olive oil, which need not be so perfect in tint and flavor as the choicest kinds reserved for the salad bowl, is the

best available form of fat for frying, and is sold at a moderate price by the gallon for this purpose at the best Italian warehouses. Nothing, perhaps, is better than clarified beef dripping, such as is produced, often abundantly, in every English kitchen; but the time-honored traditions of our perquisite system enable any English cook to sell this for herself, at small price, to a little trader round the corner, while she buys, at her employer's cost, a quantity of pork lard for frying material, at double the price obtained for the dripping. Lard is, moreover, the worst menstruum for the purpose, the most difficult to work in so far as to free the matters fried in it from grease; and we might be glad to buy back our own dripping from the aforesaid little trader at a profit to him of cent per cent, if only the purchase could be diplomatically negotiated."

### MACARONI THE REAL STAFF OF LIFE.

Next to olive oil the best edible thing Italy gives to the world is macaroni in its many varieties. We import more than four million dollars' worth of it yearly, and we have learned, by raising durum wheat, to make a fair imitation of the products of a Gragnano factory; but most of all this is probably eaten by the Italians who have come to live with us.

In the average American household macaroni is far too seldom served. In one of its varieties, it might advantageously replace potatoes served at one at least

of our three daily meals. Just why we should have potatoes served at every meal I have never been able to understand. Most desirable substitutes, besides macaroni, are boiled chestnuts, rice and hominy, the rice and hominy being particularly good when fried. Not that I would say a word against potatoes. Baked, fried, boiled, steamed, mashed, hashed and browned or with cream—in all these and many other ways they are good, and it would be a calamity to be deprived of them because they not only make an excellent accompaniment to other foods, especially to meats, but are also most tasty when served as a separate course, in the French style. But enough is as good as a feast. What we need is variety; and sometimes, when we have to economize on meat, we need something more nutritious than potatoes.

Potatoes impose much work on the kidneys, wherefore those afflicted with rheumatism should avoid them. Besides, macaroni has many times the value of potatoes as a flesh former. It owes this value to the large amount of gluten in it, the potato being useful chiefly as a heat-producer.

Gluten is a word the meaning of which everybody should know.

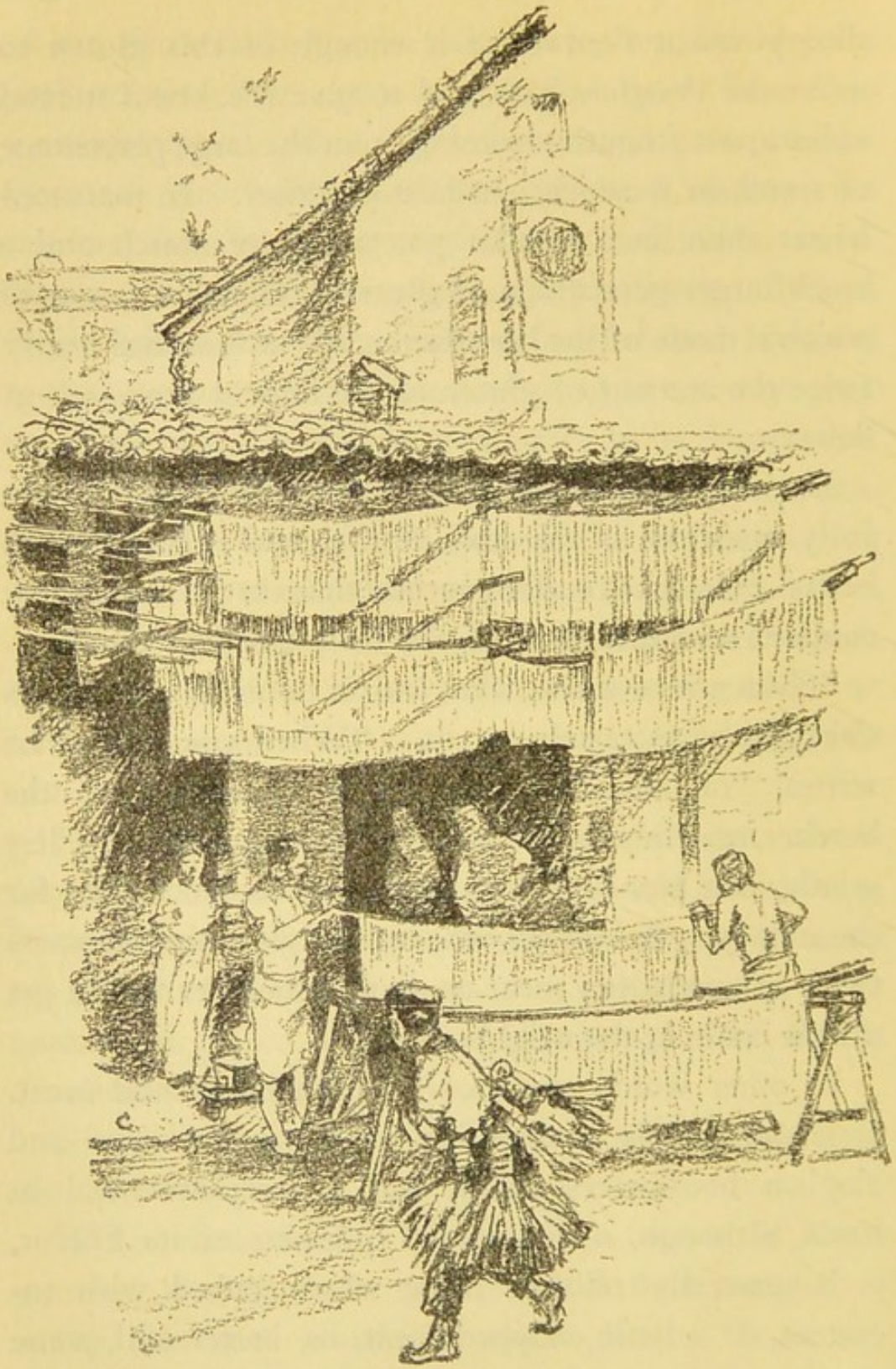
When wheat flour is kneaded in a current of water most of the starch is removed and there remains a sticky substance which is called gluten. It is the nitrogenous, or flesh-building, part of the flour. In or-

dinary wheat flour there is enough of this gluten to make the dough cohere and to give the bread a food value apart from that coming from the large percentage of starch in it which is a heat-producer. In macaroni wheat there is a smaller percentage of starch and a much larger percentage of gluten. Genuine macaroni which is made of the best durum wheat flour has nearly twice the amount of gluten as the highest grade wheat flour.

Bread is generally called "the staff of life," but in Italy macaroni is the staff of life, and it has a much better title to this designation than bread because it contains so much more of the body-building gluten.

"Gluten is to wheat what lean is to meat," as Charles Cristodoro has tersely put it. "When you think," he writes, "of macaroni flour, it is like going to the butcher and buying a roast and getting less bone, less gristle, and less fat, but about twice as much lean for the money. A butcher who would give his customers twice as much lean meat as another butcher would get all the trade in the neighborhood."

In other words, macaroni is both bread and meat. It is not merely a side-dish, as many American and English housewives fancy, but a complete meal in itself, although, owing to the mildness of its Flavor, it is generally relished more when cooked with tomatoes, or a little chopped meat, or, better still, some cheese or butter or both, because, like bread, macaroni



Macaroni Drying

is deficient in fat, some of which it needs to make a dish well balanced as to nutritive ingredients.

For lunch there is perhaps nothing quite so desirable as a dish of marcaroni thus prepared. At present it is difficult to get such a dish properly cooked, except in our Italian and French restaurants. But I believe the time will come when every American and English business man and woman will have a chance to eat an appetizing and easily digestible lunch in a macaroni cook-shop.

This point seems of such great importance that I shall emphasize it by citing Sir Henry Thompson's advice.

"Weight for weight, macaroni may be regarded as not less valuable for flesh-making purposes, in the animal economy, than beef and mutton. Most people can digest it more easily and rapidly than meat; it offers, therefore, an admirable substitute for meat, particularly for lunch or mid-day meals, among those whose employments demand continuous attention during the whole of a long afternoon. To dine, or eat a heavy meal in the middle of the day is, for busy men, a great mistake: one nevertheless which is extremely common, and productive of great discomfort, to say the least."

Macaroni might, this eminent dietician suggests, be prepared at the restaurants "as a staple dish, in two or three forms, since it sustains the power without tax-

ing too much the digestion, or rendering the individual heavy, sleepy, and incompetent afterwards."

All these remarks refer to macaroni generically—the whole marcaroni family, which is a big one. Its best known members are spaghetti, and vermicelli; but there are many others equally good and known only to Italians. Among these are *fidelini*, *stellete*, *tagliarini*, *lasagnetti*, and many others. Altogether, I am told, there are about fifty varieties of *pasta*—which is the generic name for all of them.

The most delicately and deliciously flavored of them all is *tagliatelli*, but it is hard to get. Beware of substitutions!

"Subito! Subito!" exclaimed the waiter at the Vapore restaurant in Venice when, for the first time, I had ordered this—to me—unknown dish and finally asked him why he did not bring it. He had gone out specially to buy some fresh butter to cook it with, and when it came on the table—*tagliatelli al burro*—it was a feast for the gods. If you gave me the choice, at your expense, of all the dishes on the elaborate lunch bill of fare of the most expensive New York restaurant and tagliatelli al burro was one of them, tagliatelli with butter I would order.

There is also such a thing as gluten bread, made for persons of weak digestion or troubled with diabetes; but it is said that one tires of this.

No one ever tires of the macaronis. I could eat

a dish of them three times a day and smack my lips after each.

To be sure, there is macaroni and macaroni. An Italian can tell the genuine by its smoothness, its clear yellow color, its hornlike toughness and general glutinous aspect. The genuine is not necessarily imported; a good brand is, as I have said, made in America of real durum wheat; but in this, as in all other things, eternal vigilance is called for; the world is full of gay deceivers. Macaroni made of ordinary wheat flour is poor stuff, but fortunately it is easily distinguished from the real thing. Being deficient in sticky gluten, it is not able, when it is subjected to the drying process, to bear its own weight and is therefore laid out flat instead of being "poled"—that is, thrown over reed poles on which it is exposed first to sunlight and then to damp cellars and shaded storehouses. Therefore, to get the real Italian Flavor, look for the flattened pole marks at the bend in the end of the macaroni.

While macaroni is the national dish of Italy, it is as great a mistake to suppose that all Italians eat it three times a day, as it is to think that rice is the daily diet of all Japanese. Rice, in Japan, is a luxury to be served in the poorer families only on holidays, or in case of illness. Professor Chamberlain relates in his *Things Japanese* that he once heard a beldame in a village remark to another with a grave shake of the head, "What!

Do you mean to say that it has come to having to give her rice?" the inference being that the case must be alarming indeed if the family had thought it necessary to resort to so expensive a dainty.

In the same way it has been said about Italians that it is as accurate to assert they live on macaroni, as to assert that Americans live on turkey. Some do, many don't.

When I arrived in Japan, some of the geishas were convulsed with laughter over my clumsy efforts to eat with chopsticks. I found it a good deal like fishing—never knew when I'd get the next bite. Macaroni eating is less difficult to the inexperienced, yet many Americans seem to be in doubt as to how it should be done. (Maybe that is one reason why it is not served as often as it should be.) The approved Italian way is to gently spear a stick of it with the fork, convey the end to the mouth, and suck it in without much waste of time. An American observer was so impressed by this process that he came to the conclusion that the Italians have reels in their throats.

Another way is to wind the paste round your fork till there is a wad that just fits your mouth. But there is no loss of Flavor if the macaroni is cut into convenient pieces and eaten *ad libitum* any way you please.

The most astonishing sight I witnessed during my seven visits to Italy was at Naples. We had hired a cab in front of the hotel and told the driver we wanted

to see the people enjoying their open air life. He took us to a street where everything, including cooking and eating, was done outside the houses. Presently he stopped at a place where macaroni was being cooked in a huge kettle. A beggar ran up and offered to eat some right out of the boiling water if we would pay for it. The cook ladled a huge portion into a tin basin and the man swallowed it all in a few seconds, steaming hot. His stomach must have been lined with asbestos. The driver had in the meantime, also at my expense, taken a large glass of wine; but instead of being in league with the cook, as I supposed he would be, he told me to "give him a lira—quite enough," and drove off rapidly before the macaroni man could vociferate his demands for more.

Mabel Phipps Bergolio, the American lady whose remarks on frying were quoted on another page, hardly thinks it true that the Italians are too poor to eat macaroni. "My husband thinks it depends upon the part of Italy they live in. Here, the *contadine* eat *minestrone*—a thick soup made of oil, garlic, and all kinds of vegetables which they cultivate here. In Piedmont rice is the principal food, because it is grown there in large quantities. In the mountains near here, our maid tells me, they eat minestrone and chestnuts all the year round and nothing else. In the South, Naples, etc., macaroni is eaten and is cheaper there than in this part of the country on account of the flour

which is raised there. Garlic and oil are used in preparing it, and this, with fruit, seems to be the food of the *meridionale*. In the North potatoes and polenta are eaten in large quantities in regions where the soil is adapted to raising tubers and corn."

### COOKED CHEESE IN PLACE OF MEAT.

It would be sufficient honor for one nation to provide the world with the best olive oil and the *real* staff of life. But Italy lays claim to another gastronomic distinction.

It is generally conceded that the Americans and also the English, French, Germans, Russians and Scandinavians, eat more than is necessary, especially meat. In a previous chapter attention was called to the fact that, in the cooking of the future, meat is destined, for diverse reasons, to be used largely, if not chiefly, as a condiment to be added to equally nutritious but cheaper foods. The Italians, more than any other nation, have shown how this can be done without any real deprivation.

When our greatest man of letters, Mr. Howells, was consul in Venice and gathering the material for his delightful book on life in that city, he was impressed particularly by the surprisingly small scale on which provisions for the daily meals were bought and the general absence of gluttonous excesses: "As to the poorer classes, one observes without great surprise how

slenderly they fare, and how with a great habit of talking of meat and drink, the verb *mangiare* remains in fact for the most part inactive with them. But it is only just to say that this virtue of abstinence seems to be not wholly the result of necessity, for it prevails with other classes which could well afford the opposite vice. Meat and drink do not form the substance of conviviality with Venetians, as with the Germans and the English, and in degree with ourselves; and I have often noticed on the Mondays at the Gardens, and other social festivals of the people, how the crowd amused itself with anything—music, dancing, walking, talking—anything but the great northern pastime of gluttony."

After describing the meals and referring to the great market at the Rialto and the way provisions are distributed throughout the city, he says: "A great Bostonian, whom I remember to have heard speculate on the superiority of a state of civilization in which you could buy two cents' worth of beef, to that in which so small a quantity was unpurchasable, would find the system perfected here, where you can buy half a cent's worth."

Half a cent's worth of meat will not go very far, even in Italy, but for a few cents' worth you can get enough to impart the Flavor of veal, lamb, or chicken to a pot of farinaceous food or a dish of vegetables, and that is all a true epicure needs to be happy.

Throughout Italy, especially in the South, meat is used sparingly. Large joints are seldom cooked, because of the effect of the warm climate in spoiling animal food rapidly. But there is another food which does not thus deteriorate and which is therefore used largely as a substitute for meat, and that is cheese.

To speak of cheese as a substitute for meat seems odd to those who—like most Americans—have been brought up to look on cheese with French eyes, as a dessert. The Italians also have cheeses—notably Gorgonzola, a variety of Roquefort—which are eaten at the end of a meal; but more characteristically Italian is the use of cheese as an ingredient of various cooked dishes, which take the place of meat.

While the statement made by one writer that the Italians put cheese into everything they eat is an exaggeration, it is true that many of their dishes are thus enriched; and it is this enriching of foods with cheese, to make up for the absence or scarcity of meat, that constitutes one of the great lessons Italy is teaching the world. Gastronomically, this lesson is as valuable as what France has taught the world regarding the dessert usefulness of ripened cheese as an appetizer; and from an economic point of view it is much more important, because meat is becoming dearer every year, whereas cheese is not only cheaper but *more nutritious* than meat.

More nutritious—yes, twice as nutritious. In

Farmers' Bulletin 487, entitled *Cheese and its Economical Uses*, two of our Government's nutrition experts published a table (p. 13) based on a series of experiments which show that "cheese has nearly twice as much protein, weight for weight, as beef of average composition as purchased, and that its fuel value is more than twice as great. It contains over twenty-five per cent. more protein than the same weight of porterhouse steak as purchased, and nearly twice as much fat."

Thus does science justify the culinary practices of Italy, and explain how it happens that the sturdy sons of that land, instead of being, as many foolishly suppose, idlers, habitually indulging in *dolce far niente*, can and do accomplish the hardest manual labor, notably railway building—abroad as well as at home—on a diet which contains little or no meat.

Among the first things that strike one on visiting Italy the first time is the universal custom of putting grated cheese in the soup.

Being hot, the soup dissolves the cheese at once; and this is a point of great importance. There is an impression the world over that cheese is indigestible, and this is correct so far as raw cheese is concerned, unless it is taken in small quantities at dessert and carefully munched with a hard cracker or a crusty roll of bread. Cooked cheese, however, is easily digested—provided the cook knows her business and does not follow the

British custom, graphically described by the eminent chemist, W. Mattieu Williams, of making, for instance, "macaroni-cheese," which is "commonly prepared in England by depositing macaroni in a pie-dish, and then covering it with a stratum of grated cheese, and placing this in an oven or before a fire until the cheese is desiccated, browned, and converted into a horny, caseous form of carbon that would induce chronic dyspepsia in the stomach of a wild-boar if he fed upon it for a week."

How it should be prepared, it is not the mission of this volume to indicate. The best cook books reveal the method and so does the Farmers' Bulletin (No. 487) just referred to. This bulletin should be, indeed, bound and placed in the kitchen of every American and English home, as it goes into the subject in much more detail than any of the cook books. There are in it pages on Kinds of Cheese Used in American Homes, The Care of Cheese in the Home, The Flavor of Cheese, Nutritive Value and Cost of Cheese and Some Other Food Materials, Home-made Cheeses, Cheese Dishes and Their Preparation, Cheese Soups and Vegetables Cooked with Cheese, Cheese Salads and Sandwiches, Cheese Pastry, etc.

Especially important are the pages devoted to a description of "Cheese dishes which may be used in the same way as meat." Under this head we find, among many other things, and with the recipes in full, refer-

ences to cheese sauces, corn and cheese soufflé, macaroni and cheese, baked rice and cheese, cheese rolls, nut and cheese roast, Boston roast, baked eggs with cheese, cheese omelet, fried bread with cheese, cheese with mush, cheese croquettes, oatmeal with cheese, etc.

Doubtless the best cooking cheese is Parmesan; but when the genuine article cannot be obtained in bulk (never buy it grated, in a bottle) it is better to use Swiss or even American cheese (cheddar). The Dutch Edam is also excellent for the kitchen, as good as when eaten raw. Of the Italian uncooked cheeses for the table, the best are Gorgonzola and, particularly, Caciocavallo. This is not, as its name suggests, made of mare's milk. It looks like a rag doll, is similar to Edam in consistency and has a very pleasant and unique Flavor owing to its being slightly smoked. Beware of American imitations, cured with "liquid smoke."

In times of meat scarcity and high prices it is well to remember that hard-working men can (as experiments have shown) fully sustain their strength for months on the cheapest of all products of the dairy—cottage cheese made of skim milk, to which, just before eating it, some cream is added for fat and flavor. Strange to say, in all the literature on this matter I have never seen any reference to the transformations to which cottage cheese can be subjected. By standing a few days, it gets a ripening flavor that appeals to epicures, and if

it is then boiled it assumes a consistency like that of Port Salut, making another pleasant variant.

A helpful little volume for those who wish to know how the Italians use cheese in cooking and how they make a number of other national dishes is Antonia Isola's "Simple Italian Cookery." Here are receipts showing how *risotto*, and other rice dishes, *ravioli*, polenta, *gnocchi* of farina or potato, are made (all of them delicious and desirable in American and English homes, particularly the gnocchi), and how eggs, fishes, vegetables, and meats can be cooked in tempting Italian ways. The chestnut, as a matter of course, is a frequent ingredient in the dressings and the pastry.

### BIRDS, TOMATO PASTE AND GARLIC.

While the Italians are sparing in their use of meat, it must not be supposed that they do not know how to make the most of it when they do indulge in it. They are born cooks—it 's a great pity none of them are ever to be found in our "intelligence offices"—and their experts know as well as the great French chefs how to prepare a savory roast, stew, broil, entrée, or dessert. In the making of sauces, the blending of meat and vegetable flavors, the cooking of fish and shellfish, one also finds much variety and local Flavor on the peninsula. Details as to those points may be found in abundance in the forty pages Col. Newham-Davis devotes to this country in his "Gourmet's Guide to Europe."

To enjoy the national and particularly the local varities of Flavor, it is well to take only a room in an Italian hotel and eat in the restaurants. I always do this, paying a little more for the room, which is only fair to the host. The trouble with these hotels is that the table d'hôte, though usually good, is not Italian but French, and in Italy you want something different, to get an idea of the variations in flavor of the spaghettis, the minestrone soups, the gnocchis, the risottos, and so on. Sometimes the hotel has attached to it a locally conducted restaurant, in which case it is needless to hunt for another.

For one of their gastronomic habits the Italians are justly denounced by other Europeans—their slaughter of millions of birds, largely blackbirds, siskins, greenfinches, and other song birds, that yearly seek a refuge among them on their flight to or from the north. All efforts to curb this slaughter have so far proved unavailing. The difficulty is double: the birds are very good to eat and the common people cannot understand our point of view. Lina Duff Gordon, in her book, "Home Life in Italy" (which takes the reader right into the kitchens and the market places), tells about one of the hunters: "Once, when he offered us a bunch of blackbirds strung together by the neck, which he said made an excellent roast, we seized upon the opportunity to deliver a lecture on the shooting of singing birds. He listened so attentively that we rejoiced at having

made an impression on an important convert, until looking up with eyes very wide open, he exclaimed: 'Ah! Sangue della Madonna! Then you have no sport in England!' "

It is hardly fair to chide the Italians for making too much use of garlic, unless we include in our censure the French—particularly those of the Southern provinces—and the Spaniards, who not only put it in their food but eat it raw in chunks. On this point I may be permitted to cite from my "Spain and Morocco" some remarks on a peasant who drove me from Baza to Lorca: "At noon he took his lunch, composed of ten raw tomatoes, half a loaf of bread, a piece of raw ham, and a large bulb of garlic consisting of a score of bulblets, which he took one at a time to flavor his portions. It is doubtful if he expected another meal that day, and in watching him a brilliant theory came to my mind:—perhaps the poorer classes in Spain are so fond of garlic for the reason that they have so little to eat; for, as it takes several days to digest a bulb of it, they always feel as if they had something in their stomachs."

In the best Italian restaurants, as in those of Paris, it is understood that garlic, while delicious for flavoring, is so only in homœopathic doses. Moreover one can always dine without garlic by simply saying to the waiter, when ordering a dish, *senz' aglio*.

Whether Italian peasants eat raw ham, as that Spanish teamster did, I do not know. Ham is not an

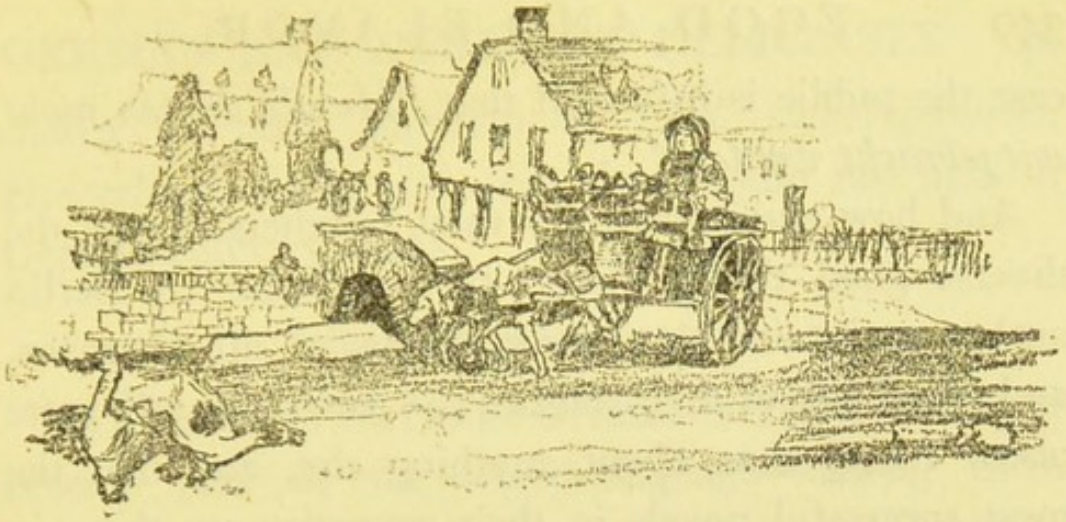
Italian specialty. At Naples one may get the genuine smoked article, but it is so expensive that only the wealthy folk can afford it. But in his enthusiastic addiction to tomatoes that Spaniard was akin to the Italians. How they do love them—raw or cooked—more even than we do, if that be possible. Next to cheese, nothing is so frequently added to the macaronis as tomato sauce, either as we make it, or in the form of the paste which is one of the unique Italian products that ought to be better known in other countries.

The best tomato paste comes from the Province of Naples, where it is made of a small variety of the fruit which has a special Flavor that is much relished. This, to be sure, they do not waste on foreigners. What is exported is, as we read in the "Daily Consular and Trade Reports" (Dec., 1910), usually not even second rate, but "of the third quality," which is "of course, very inferior, because it contains little tomato extract and is almost entirely liquid. There is no demand for it in the Italian market, and it is prepared exclusively for exportation to America, where it meets the requirements of the immigrant peasants from Sicily. The latter, when at home, either do not use any tomato paste or consume a certain kind of hard tomato paste (*conserva di pomidoro*) which is made by the peasant women."

Consul Hernando de Soto further informs us that "tomato paste of the first and second quality also is

exported, though in much smaller quantity, from Palermo to the United States, where it is patronized by a more prosperous class of Italians and also, it is stated, by some Americans."

Many more Americans would buy tomato paste were they sure of not getting the third-class article after paying for the best, as happens with so many things we eat.



# IX

## GERMAN AND AUSTRIAN DELICACIES

### A COSMOPOLITAN CUISINE.

IN the matter of cuisine the Germans are the most cosmopolitan of all peoples; they learn eagerly from other nations, and sometimes improve on the original. They like variety; when traveling, unlike the English and Americans, they prefer things new to them, and it has been justly said that one of the Germans' chief objects in touring is to enjoy exotic pleasures of the table.

At home they avoid monotony by frequently supping in restaurants or beer gardens, the whole family being taken there, including the dog, unless a great crowd is expected because of a special musical treat, in which

case the public is informed that "*Hunde dürfen nicht mitgebracht werden.*"

And how enthusiastically these burghers discuss the diverse good things placed before them! A Berlin author maintains that three-fourths of all Germans, and four-fifths of their cousins, the Austrians, talk more about eating than about anything else, and that the most successful novels in their countries are those in which there are descriptions of banquets that make the mouth water. No need of preaching gastronomy to them!

To deny that the Germans have a cuisine of their own, as some of their own writers have done, is folly. While they have set a good example in being willing to learn from their neighbors—as the Italians learned from the Orientals and the French from the Italians—they have also originated and improved a number of things gastronomic which deserve to be transplanted to other countries.

A contributor to the "Frankfurter Zeitung" points out that "more than one dish which in Germany, France, and England is relished under a French name was originated by German cooks." He exhorts these cooks to give the dishes they create German names, choosing such as a foreigner can pronounce. England has succeeded in adding some of its food names—like beefsteak, Irish stew, mock-turtle soup, pudding, roast beef, toast—to the world-language, and the French have

shown by their adoption of *Lied*, *Concertmeister*, *Hinterland*, *Bock*, etc., that they would not balk at German culinary terms.

### DELICATESSEN STORES.

As a matter of fact some German terms have already become part of the world-language—among them sauerkraut, pumpernickel and the names of various sausages and cheeses. The most eloquent testimony to German international influence is, however, the ubiquitous delicatessen store. In New York there is one every few blocks, and these places are patronized by many who are not Germans. To be sure, few of these shops equal the originals in Munich, Dresden, or Berlin, in variety and gorgeousness of display.

Edward Grieg, like most of the great composers, was an epicure. It is related of him that one of his favorite amusements was to gaze at the displays of good things in the delicatessen stores. One day, while lingering before one of these windows he said to the American composer, Frank Van der Stucken: "What an ideal symphony! How perfect in all its details, in form, contents, and instrumentation!"

Grand gastronomic symphonies they are, indeed; and what is more, the appeal of these delicacies is to the palate as well as to the eyes. When a German pays his good money he wants something good to eat, and if he is fooled, woe to the culprit. Strict are the

laws, and enforced they are, too. Officers of the health boards visit the stores at unexpected times, taking away samples for chemical analysis. Fines are inflicted for the least lack of obedience to the pure food law, while gross offenders may be punished by life-long imprisonment with hard labor.

The examiners, of course, visit not only the delicatessen stores but the butcher shops, groceries, bakeries and all places where food is offered for sale.

In Berlin there is a special institute for the inspection of foodstuffs which is directly under the control of the police. It makes chemical and bacteriological examinations of things offered for sale. Purchasers who suffer from the ill effects of foodstuffs have the privilege of applying to the police, who promptly make an examination of the suspected article. This does not cost the complainant a penny and the expense to the city of this invaluable institute is only about $12,000 a year.

Encouraged by the knowledge of these facts, a German may boldly enter any delicatessen store, confident of getting things that will taste good and do no harm. And what a variety of luxuries is spread out before him!

Cold roast joints of all the butchers' meats are placed in line on the counter, with hams, raw or cooked, and sausages diverse, all eager to be sliced to suit. I say eager because these things—especially the

sausages and the hams—taste so good that it surely must give them altruistic joy to be eaten. Cold fowl is there, too, ready for the carving knife, or to be taken away whole. The Germans often lunch or sup on these sliced meats, huge platterfuls of which are brought on the table—*Gemischter Aufschnitt*—and none of it is wasted, you may be sure.

Chicken and fish salads diverse, including herring salad, and potato salad—one of Germany's great contributions to the world's gastronomic treasure—are at hand, as well as another international delicacy of Teutonic origin—sauerkraut, raw or cooked; and sauerkraut *is* a delicacy; nor is it indigestible when cooked the right way and long enough. Proof of its high standing is provided by the fact that France's gastronomic high priest, Brillat-Savarin—whose famous work on the *Physiology of Taste* has become so popular that a penny edition of it is sold in the streets—puts it, with partridge, on the menu of one of three fine dinners he suggests. The French, indeed, are almost as much addicted to the eating of sauerkraut as are the Germans. In England and America not a few persons foolishly sneer at it as "rotten cabbage." It is no more rotten than pickles are rotten, for it is simply pickled cabbage—cabbage pickled in its own juice plus salt, and soured by fermentation.

The pickles eaten by Germans are not all sour; they like, almost better than the sour kinds, the dill pickles,

which are cucumbers preserved in a liquid flavored with the blossoms and seeds of an umbelliferous Oriental plant, *anethum*, cultivated in German gardens for its spicy aroma. Teutons seem to take to this naturally; with others it is an acquired taste, like that for olives.

Smoked or soused herrings, sprats, and diverse spiced fish (*marinirt*) are always on sale in the delicatessen stores, and they are acknowledged among the best specialties of Germany. Eel and other fish in jelly are other characteristic edibles the Fatherland has reason to be proud of; and have you ever eaten cold goose in an acidulated meat jelly? It is worth while going to Berlin, just to taste this Prussian *Gänseweisssauer*.

Smoked Pomeranian goosebreast is always in stock; its taste is not unlike that of raw smoked ham and there is no danger of trichinosis, though, to be sure, that danger from eating ham has been reduced in Germany to a minimum by the strict system of meat inspection.

The heads and feet of calves, sheep, and swine, wild and domestic, are much in demand; a wild boar's head often is the center of interest in the show window of a delicatessen store. Of course there are also canned meats and vegetables, with diverse fancy groceries and cheeses of various countries, together with crackers and breads of diverse shape, size, and color. But enough

has been said to show that a German delicatessen store is a treasure house of appetizing foods, many of them peculiar to the Fatherland, and most of them agreeable to the palate of a real gourmet.

It is possible that a thousand years hence Bismarck's fame as a statesman may have waned; but Bismarck herring will continue to be served in all lands until the seas are fished out. On a warm summer day, when you are not hungry and yet feel a vague longing for something piquant, try a Bismarck herring with potato salad. You will bless me for the advice. It is very good for the stomach, too, the doctors say.

### SAUSAGES AND SMOKED HAM.

The French have excellent sausages and so have the Italians. They are hard to beat, and yet, in the matter of variety and general excellence, the Germans as makers of *würste* are supreme.

Various are the tastes of sausage eaters, but all of them may be gratified west of the Rhine. I have before me a book by Nicolaus Merges bearing the title "Internationale Wurst und Fleischwaaren Fabrikation." Concise directions are given in it for the making of more than a hundred and fifty kinds of sausages, all of which are manufactured in Germany, though some are of foreign origin.

Why so many kinds of sausage? There is not much difference in their nutritive value. They are made in

different ways simply to secure variety in Flavor, to please all palates.

The book referred to shows how this variety is secured. Different meats are used and these are diversely blended, spiced, and cured. The possibilities are unlimited; the hundred and fifty varieties in the Merges volume are a mere fraction of the total number, nearly every locality having its special kind.

Of liver sausages there are two dozen varieties, the cheapest being made from ordinary beef liver while the *Gänselebertrüffelwurst* (goose-liver-truffle sausage) may cost a dollar a pound. Of sausages in which blood is used there are more than a score. These are cheap, and—well, if they cost nothing I would n't eat them.

The biggest of all the sausages is the Cervelat made in Braunschweig (many German towns have become world-famed by the making of some particularly well-flavored sausage, cheese, cake, or beer). The Brunswick brand is compounded of beef and pork, both lean and fat. The Westphalian variety includes less beef. Some kinds of Cervelat exclude pork, containing only beef or veal. There is also a homœopathetic Cervelat. It is intended for convalescents, and has a minimum of fat and spices. A kosher Cervelat is made for Hebrews.

Beef from old cows is not in the best repute, yet for the making of Salami it is preferred to the tenderloin

of a young steer. (The toughest meat sometimes has the richest Flavor.) Salami hails from Italy, but special varieties of it are made in Germany, as well as in Holland, Switzerland, Russia, and Hungary.

It is needless to give details regarding Plockwurst, Mettwurst, Knoblauchwurst, Knackwurst, Schwartenmagen, etc., in all their transformations. In some varieties anchovies, kidneys, or brains are used.

Bärenwurst is not often seen now, as bears are getting scarce. Horse meat of course is used (why not?) for cheaper sorts, and the bow-wow joke of the comic papers is not altogether without foundation. American Indians agreed with the Chinese in regarding dog meat as a great delicacy—the dish of honor to be served to guests. Dog meat sausage may be quite legitimate, as long as it is honestly labeled as such.

There is a story of a wealthy Berlin butcher whose son had been promoted in the army by Moltke, and who, to show his gratitude, advised the Field Marshal never to eat sausage. But those days of uncertainty are past. Inspection is now so strict in the Fatherland that one can safely eat whatever is offered.

When the eminent German novelist, Ernst von Wolzogen, visited the United States (1911) he exclaimed, on the eve of departure, to a reporter for the New York "Staatszeitung": "Great heavens, if you knew what an indescribable longing has often seized

me in your country for a good German sausage! No—for their food I cannot envy the Americans."

Considering the large number of Germans in the United States it seems strange that they do not insist on having as good sausage made here as on the other side. But they do not. The home-made sausage is usually compounded of worthless scraps, and is apt to be indigestible. As for the "imported" Cervelat and other kinds, they are often so in name only—which explains that wail, *de profundis*, of Freiherr von Wolzogen.

American sausages made after English or original recipes are generally spoiled by an excessive amount of sage. Sage should always be used homœopathically, else it overpowers all other flavors. Were I Czar in the realm of gastronomy I should forbid the use of sage altogether.

The next time you go to Europe do not forget to make an automobile trip from Munich to Berlin, taking in Nuremberg on the way. We did that, with some friends, in the summer of 1912, and when we reached the city of Hans Sachs we steered straight for the Bratwurstglöcklein, a little eating shop, known by name at least, to epicures the world over, though only one dish is cooked in it, and that dish, as the name indicates, is sausage.

Five *Würstchen*, no bigger than your thumb, are served with a portion of sauerkraut. The cost is half

a mark—twelve cents—a portion and you can have as many encores as you like. Some of us took four, and so tender and tasty were the little things, as well as the *kraut* that we had no occasion to regret it. After all, we were mere tyros, as our waiter informed us; he has known many a man to eat a dozen portions or more and not send for an ambulance—at least, that 's what he said. The number of portions served daily vary from 3,000 to 5,000; the record is 25,000 served on a day when there was a Sängerfest.

Nuremberg has two other eating places similar to this, but the Bratwurstglöcklein maintains its pre-eminence, owing to its traditions; for it was in its little rooms that the men who (with the aid of the Bratwurstglöcklein) made that city famous—among them Sachs, Welleland and Dürer—used to gather for food and drink.

After we had paid our bill—not a ruinous one for an automobile party—we started for the next town on our list, after buying a few boxes of the world-famed honey cakes (*Lebkuchen*) of the town. We all had seen the other sights of Nuremberg before. Besides, we were on a gastronomic trip, and discipline had to be preserved.

Observation has convinced me that Americans would be as enthusiastic sausage eaters as the Germans are if they could get them as well made and cooked. In a large New York down-town restaurant you can see, on

certain days, half the guests ordering "country sausages," which, though good, are not to be mentioned on the same day as those of the Bratwurstglöcklein. The inference is inevitable that a lunch-room serving honest duplicates of the German delicacy would prove a gold-mine.

The proprietor of another down-town restaurant who provides excellent little Frankfurters informed me he got them at a certain shop in which two butchers had successively made their fortune by simply manufacturing these honest little sausages and really smoking them instead of using "liquid smoke." It makes such a difference to the palate as well as the stomach.

Genuine Frankfurters are made of solid meat (not lungs) and they are always smoked. They are known as Frankfurters throughout the greater part of Germany and Austria, but in Frankfort they call them Wiener Würstel, to dignify them, presumably, as exotics.

Smoked sausages and other meats are in great vogue among the Germans, whose addiction to them gives them the right to pose as true epicures. Do they not provide the whole world with smoked goose-breast, Hamburger Rauchfleish, and the best of all hams, the smoked Westphalian?

In South Germany they have a special word for smoked meats, Geselchtes, or Selchware. The composer Brahms never missed a chance to get a dish of

"G'selchtes"; it gave him an appetite when nothing else would.

Bismarck, the most famous of German gourmets, took great delight in feasting on smoked meats and fish —Spickgans, Spickaal, Schinken, &c. He knew as much about the different varieties and the places they came from as any dealer in delicatessen, as we know from the table talk recorded by Dr. Moritz Busch.

Smoked Westphalian ham has carried the fame of Germany to the lunch tables of all parts of the world; and not a whit inferior in Flavor is the Austrian variety, Prager Schinken. Raw or cooked, these are among the superlative delights of the epicure, ranking with caviare, Camembert, and canvasback duck.

On the appetizing quality of properly smoked meats which makes the mouth water and facilitates digestion I have already commented.

German and Austrian hams owe their fame to the fact that they are smoked and otherwise cured scientifically, regardless of cost, with a view to developing the most delicate Flavor.

The first thing to be noted is that the men who cure the meats do not dare to denature them (*i. e.*, spoil their natural Flavor) by soaking them in solutions of chemicals which are not only injurious to health but which would make it possible for them to hide the putrescence of spoiled meats—as is so often done in America.

The law on this point is very strict. By orders of the Imperial Federal Council, dated July 4, 1908, the following substances have been forbidden: Boric acid and salts thereof, formaldehyde, the hydroxides and carbonates of the alkaline salts, sulphurous acid and the salts thereof, the salts of hyposulphurous acid, hypofluoric acid and salts thereof, salicylic acid and its compounds, chloric acid and salts, and all coloring matter.

Consul Talbot J. Albert, of Brunswick writes that "the German inspection laws, especially in regard to hams and all hog products are so strict that their adulteration would be immediately detected, the products confiscated, and the manufacturer severely punished."

The ingredients used in the curing of hams before they are smoked are salt, saltpeter, and pepper. The quantity of these and other ingredients and the method employed are business secrets difficult to ascertain.

In America, sugar-cured ham is advertised in large letters. Sugar, no doubt, is a good preservative, and it is harmless, but somehow it seems as incongruous with meat as salt is with cream or butter. Ask an epicure if he would like his oysters with sugar, and see him shudder. In Germany, hams are seldom sugar-cured.

"The Daily Consular and Trade Reports" for December 8, 1909, contains such information on the subject of smoked sausages and hams as the consuls in various German cities were able to gather. They found

that sausage is smoked up to three or four weeks, unless it is to be eaten at once. The smoking makes it lose some weight and cost more—but what of that, as long as the Flavor is improved? The American way is to save the full weight by using chemicals and then sell the denatured stuff as "smoked" meat. It is profitable to the packer. The consumer—well, it serves him right if he continues to buy such stuff without a protest.

Of the contributors to the Consular symposium on smoked meats in Germany, Vice-Consul Frederick Hoyermann of Bremen gave the most informing account.

"The fresh ham is put into pure common salt (sodium chloride) and is kept therein for about three weeks, whereupon it is washed and air-dried. After having been exposed to the air for about eight days it is ready for the *smoking process, which lasts from six to eight weeks.* It is hung up in the smoke of beechwood chips, which must burn slowly so as not to create heat or evolve too much smoke. The ham must be smoked thoroughly but gradually, and must remain cool while undergoing the process. Thereupon it is cleaned and is then ready for use."

Now note what the same writer says about the "quick-smoking" process: "Hams are smoked by a simpler and cheaper process, pine wood being used for smoking instead of beech, the time allowed for smoking

is considerably reduced, and stronger smoke applied. Hams thus cured are, of course, inferior in quality, as they lack in Flavor and are not fit for export, because only high-class meats will pay the cost of transportation."

The so-called Westphalian hams do not all come from Westphalia. The name is generally applied to choice hams which have been smoked thoroughly but gradually in accordance with the methods indicated in the preceding paragraphs.

One more important detail. The Germans know the value of feeding Flavor into food. As Consul Carl Bailey Hurst, of Plauen wrote: "The best and most durable hams are those of hogs which have been fed during the few weeks previous to slaughtering on acorns or corn."

Juniper berries are sometimes thrown on the beech wood while hams are being smoked, in the belief that that still further improves their Flavor. Maybe it does—I have had no opportunity for comparisons. Possibly it is a mistake. The Germans, though they make the best hams and sausages in the world, are as a nation far from impeccable; in the use of spices, in particular, they often blunder grossly. It is surely an aberration of taste to mix cloves, bay leaves, cinnamon, caraway seeds, sage, or ginger with the preserving fluid; for these strong condiments destroy the individual Flavor of the meat.

Excessive use of spices is the chief blemish of German cookery. Many otherwise well-made dishes are spoiled by the addition of pungent condiments which completely monopolize the palate. The excessive use of these condiments is a survival of medieval coarseness. I shall not dwell on this, however, or on other deplorable relics of the coarse appetite of former generations, because the object of this book is not to point out the shortcomings of European nations but to call attention to practices in which they are ahead of us. Let us therefore proceed to another department of gastronomy in which the Germans (and their neighbors) can teach us useful lessons.

### LIVE FISH BROUGHT TO THE KITCHEN.

The Paradise of fish-eaters is Copenhagen. New York and other American port towns could get some very important hints from the way things are done there. Before 1892 it was difficult to bring live fish into the town without contaminating them with sewage and spoiling their flavor. In that year a general sewage system was constructed by which the city's sewage is carried two kilometers out into the open sea, thus putting an end to the contamination of the ocean front and the harbor. The gratifying results of this reform were described by the London "Lancet's" representative at the Sanitary Congress in Copenhagen, October, 1910:

"This not only puts an end to the nuisances that used to arise, but enables boats full of live fish to come close to shore and right into the town by means of the fresh-water canals. In this manner at least the smaller fish are kept alive till the moment they are sold. Any number of wooden boats are pierced with holes and filled with fish; these boats just float on the surface of the water, and the living fish is taken out of them when wanted. But as every one cannot go to the water's edge to buy fish, there are water tanks on wheels and the live fish is brought to the doors of the people's houses.

"Never before," this sanitarian continues, "have I been in a town where all the fish, whether cheap or dear is so beautifully fresh. The principal fish market was built by the municipality and is let to a wholesale fish salesman. It is a delight to see how clean and bright these premises are kept. There is no spreading the fish on slabs so that dust and dirt may settle on them. Very pretty tessellated tile tanks are filled with running water, and here the smaller fish swim about."

In Berlin and other German cities the fish are also brought alive to the kitchen. An eminent artist who is also an ideal hausfrau, Mme. Gadski, informed me that she would n't think of buying a dead fish. "They are brought to the kitchen alive, and I reject those that are not swimming about," she said.

The Germans are great eaters of fresh-water fishes,

and there are ingenious arrangements for bringing them to market alive.

The large fish of the ocean cannot, of course, be delivered alive, but the transportation facilities are now so excellent that not only the more expensive kinds, like sole, turbot, and sterlet, but the cheaper sorts, like cod, haddock, plaice, and herring, are brought to city and town markets in prime condition.

A German culinary authority specially calls attention to the fact that the "ancient and fish-like smell" is a thing of the past. In the days when transportation facilities were less adequate this odor made it necessary to boil fish in two waters, throwing the first away. Now the cook has only the natural odor of the unspoiled fish to deal with, which, being agreeable, is carefully preserved in the cooking.

The fishing places off the German coast are visited daily by fast steamers to collect the catch. The boats are provided with refrigerating apparatus, and so are the express trains which at Stettin, Geestemmünde, Cuxhaven, and other coast towns, take the fish from the boats and carry them at full speed to the cities all over the Empire.

The same excellent arrangements for keeping the fish cold without spoiling their flavor by freezing them are to be found on German steamers. On the eighth day out on the *Kaiserin Auguste Victoria* I found the salmon as fresh-tasting as if it had just been caught.

"How do you do it?" I asked Captain Ruser; and he explained the system—the refrigerating arrangements which, with steady ventilation, provide a frigid atmosphere without actually freezing the fish or the meat.

Such things cost time and money; but the Germans, being a gastronomic nation, consider them worth while, on sea as well as on shore:

Hamburg sets a good example in showing what a municipal government can do in the way of providing the people with fresh fish and telling them what to do with them. The following is from the "Fremdenblatt" of that city; similar notices frequently appear in the newspapers:

> Sale of Cheap Sea Fish. "The Staatliche Fischereidirektion" informs us that on Tuesday, August 20, there will be on sale, at the known 150 shops, fresh haddocks—averaging ¾ pound apiece—at 23 pfennigs [5¾ cents] a pound. Besides this, many shops offer for sale fresh mackerel at twenty to twenty-five pfennigs [5 to 6¼ cents] apiece, according to size. The mackerel is an excellent fish both for frying and boiling. New directions for cooking haddock in a variety of ways are contained in the illustrated booklet, "Fischkost," which is given free to purchasers at all the stalls.

The Hamburgers are lucky in having the "net gains" of sea fishing placed before them at the earliest possible moment. With the aid of the arrangements just referred to these fishes can, however, be bought in good condition as far away as Vienna. A few years ago the

Austrian officials had a number of railway cars constructed for the transportation of sea fish and also of live fresh-water fish. Germany has had such cars for decades, bringing fish not only from her own ports but from Holland and elsewhere. African eels are sent from Algiers to Marseilles and thence by express trains all the way to Berlin.

Eels are usually despised in America and with good reason, for their scavenging habits often make them inedible. But there are eels that live on fresh food, such as small crustaceans at the bottom of the sea, and fish roe; and these are as good as any fish that swims. The large eels served in Berlin are as tender, juicy, and sweet-flavored as shad. When I was a student at the University of Berlin, one of my pet excursions was up the Spree, stopping at an inn where eels of medium size —*blau gesotten*, were served as a specialty. They were delicious, though they did look strikingly like snakes as they lay curled up on the plate swallowing their own tails.

Not a few persons whose education has been neglected refuse to eat eels, believing them to be allied to snakes, when in truth they are no more related to snakes, zoölogically, than whales are. And even if they were of the snake family what of it, if they taste good? The eminent Norwegian explorer, Dr. Lumholtz, who spent several years among the Australian

wild men, told me on his return, while we were enjoying a dish of terrapin together at Henry Villard's, that much as he liked this reptilian delicacy, of which we Americans are so proud, he thought that python liver, which he had had frequent occasion to eat, was quite as good.

While studying at Heidelberg I did not neglect, it is needless to say, the Wolfsbrunnen, famous for its trout. I have eaten trout, caught by myself in many parts of the world, including the Maine woods, Lake Tahoe in California, and Trout Lake in the State of Washington; but none tasted better than a dish served in Berlin at a sumptuous new hotel oddly called Boarding Palace.

All over Germany fish-breeding in ponds is an important industry. Bavaria alone had, in 1909, over 33,000 acres of such ponds, and probably has many more now; Saxony had 200,000 acres, while Silesia had nearly 60,000. The total area of fish ponds in the Empire probably does not fall far short of a quarter of a million acres.

Carp are grown in special abundance, and German carp are very good to eat, especially when they have been artificially fed and fattened with rice, potatoes, fish meal, or dairy refuse.

Other kinds grown are perch, pike-perch, tench, eels, and trout of several kinds, including the American

rainbow. The trout are fed shellfish, slaughterhouse refuse, horse meat, fish meal, and specially prepared foods.

Everything is done with German thoroughness, and the results once more prove gastronomy to be a good guide to wealth.

The profits are increased by selling the fish direct to consumers. Fish-growing associations have been formed for this special purpose all over the empire.

As these ponds are scattered all over the country it is possible to have everywhere fish just out of the water; and, as I have said before, the poorest variety of fish just caught has a finer Flavor than the best variety that has been kept a few days by any method whatever. I have lived in Germany three years and do not remember ever to have had on my plate insipid fish, such as we are doomed three times out of four to eat in our own country, chiefly because the fish are frozen.

Dr. Wiley insists in his "Foods and Their Adulteration" (1911) that "the consumer is entitled to know whether in any given case the fish he purchases is a fresh or a cold storage article. At the present time, in so far as I know, there are no national, state or municipal laws whereby this fact can be ascertained. Without raising the question of comparative value or palatability there is no doubt but what the consumer is

entitled to know the character of the fish he purchases."

Big Frauds in Fish: Under this head the "National Food Magazine" of Chicago has published some remarks by G. J. L. Janes, which vividly depict the outrages perpetrated in the United States by cold-storage men.

"The legal regulations governing the sale of fish are so lax that we have decided to stop handling fresh fish altogether rather than suffer the unjust competition and be a party to so many deceptions on the public. A dealer can take any kind of frozen fish, thaw it out, and mark it strictly fresh-caught fish, and if he so desire, sell it as such. This is being done all along State Street in Chicago to-day. It is not only a fraud and cheat on the public, but it is dangerous. Fresh-caught halibut costs 12 cents a pound wholesale. There is 20 per cent. waste in it, because of the fins, skin, etc., and hence we have to add 20 per cent. to the cost in order to break even on it. Nevertheless certain stores are advertising strictly fresh-caught halibut at 10½ cents a pound retail. Of course this is frozen halibut they are selling. That can be bought at 8 cents a pound wholesale. The same is true of other fishes, especially white fish. That costs 22 cents a pound when fresh. Certain stores advertise "fancy white-fish winter caught" at 10 cents retail. There is no mention of its being frozen or cold storage fish, and so the public is deceived. *It is dangerous economy to buy cheap fish.* No other

food deteriorates so rapidly after it comes from the water. Especially is this true of white fish, which spoils quickest of all. *Freezing breaks up the tissues*, and when it once is thawed it decomposes with enormous rapidity."

As long as the American public patiently tolerates such impositions on purse and stomach it seems hardly worth while to discuss the more subtle gastronomic problems, such as the question put by Dr. Wiley: "Whether or not the flavor and character of the flesh are impaired by the suffocation process subsequent to the capture of the fish." Undoubtedly fish is best when killed the instant it leaves the water, and then at once eviscerated and cleaned.

When we have become sufficiently civilized to insist on such measures being taken, attention will be paid to the suggestions of the Danish fisheries agent, Captain A. Solling, communicated to the "Daily Consular and Trade Reports" by Consul-General Wallace C. Bond, of Copenhagen. Captain Solling recommends that the fish, at least the better kinds, be cut while yet alive, promptly cleaned, and then wrapped in specially prepared paper which would prevent its coming in direct contact with the chopped ice. The objection may be raised, he admits, that this way of treating fish is too particular and takes too long; but the increased work and the increased expense will, he feels sure, soon be offset by the higher price secured on account of the bet-

ter preservation of the fish; and "the intelligent fishmonger will soon discover the advantage of handling fish, which if not sold to-day, may be sold in 3, 4 or 8 days and still be equally good and fresh."

Progress along this line of gastronomic civilization will be a boon to the American farmer. There are tens of thousands of lakelets and ponds in our country, most of which might be used for fish culture. They will be so used by farmers as soon as we have learned the lesson the German ponds teach, and stopped buying the flavorless frozen stuff sold in our fish markets.

In Switzerland there has been formed a Fish-Growers' Association for the enlightenment of the land owners. Its motto is: "Every Farmer a Fish Pond Owner." Attention is called to the demonstrated fact that an acre of fish pond is more profitable than the same area devoted to the ordinary farm crops.

### GAME AND GEESE.

The same care that the Germans show in the growing and transportation of fish is also manifested in their treatment of game.

During the automobile tour across Germany to which reference has been made, we purposely stopped, as a rule, at the smaller towns and taverns; but everywhere, without advance notice, we had excellent food. I had previously come to the conclusion that the average German restaurant serves nearly if not quite as good meals

as the average French restaurant, at least in the provinces.

It was game season, and everywhere we were able to get partridges—plump young birds, juicy, and cooked scientifically, at about one-third American prices.

Hares and rabbits are a German specialty, and *Hasenrücken* is a very different thing from the undrawn rabbit abomination sold in American markets. The Californian cottontail is the nearest approach we have to the Teutonic hare. I shot dozens of them in Los Angeles County one winter and found them as tender and almost as well flavored as young chicken.

Venison is seldom to be had in our markets and usually only at fancy prices. In German restaurants it is as cheap as beef; sometimes cheaper. The back—*Rehrücken*—costs a trifle more, and is better than the rest of the meat, which is usually served roasted or as a ragout; but all is good. It seems to be a specialty of the Rhine boats.

Other game also is abundant and cheap, for the simple reason that the greed for sport is regulated by severe laws which are strictly enforced. We, too, now have game laws in most of our States, but they are seldom enforced effectively and most of them, moreover, were made on the principle of locking the stable door after the horse has been stolen.

Africa is at present the scene of ruthless slaughter of

game, big and little, but at its worst it is not often so reckless, extravagant, and wasteful as the hideous carnage of which Americans have been guilty. Time was when wild pigeons blackened the sky and were slain by the hundreds with poles. Wild turkeys inhabited every thicket and could be bought for twenty cents apiece—they are twice as much a pound now, though seldom on sale at any price. Ruffled grouse were so plentiful that a bounty was offered for their extermination, their abundance being a menace to the crops. To-day you pay $5 for a brace of these birds. Deer, until lately, were killed for their haunches, the rest being left for beasts of prey; while millions of buffaloes were slaughtered for their tongues and hides—often for the tongues alone.

The Audubon Society, aided by generous donors and, to some extent, by the Government, has done royal service to protect game and song birds. The intelligent sporting clubs are lending useful aid, while the Yellowstone Park has been set aside as a great game preserve. Unfortunately, although the animals are safe from guns while they remain in the Park, thousands are slaughtered in winter when hunger drives them outside its limits, while many thousands more perish because no provision is made for feeding these poor wards of the Government.

A pathetic picture is printed in Dillon Wallace's splendid book, "Saddle and Camp in the Rockies."

It tells a sad story. One settler told him there had been times when he could walk half a mile on the bodies of dead elk. Instead of helping its wards, the Federal Government actually gave permits to sheepmen which would have devastated the last refuge of the elks. The settlers saved the situation by holding an indignation meeting. "The sheepmen saw the point—*and the rope*—and discreetly departed."

In Germany the game animals are cared for in winter. While visiting Mark Twain's daughter and her husband, the eminent pianist-composer, Ossip Gabrilowitsch, in the Bavarian Highlands, in the summer of 1912, we met at their house a young tenor who was also a mighty hunter before the Lord. He gave us an account of the game laws and the general arrangements for preservation and multiplication, which convinced us that if we are to retrieve the errors and crimes of our predecessors, East and West, we must follow the example of Germany.

Pointing to the meadows round about, he explained that the hay made on these is preserved and fed to the deer in winter. Often one may see as many as a hundred at a time assembling for their daily meal, and people come all the way from Munich to see them at it.

As it had been found that too much hay or other dry food was not good for the deer, the owners of private game preserves, of which there are many, have taken to planting beets, turnips or potatoes, which re-

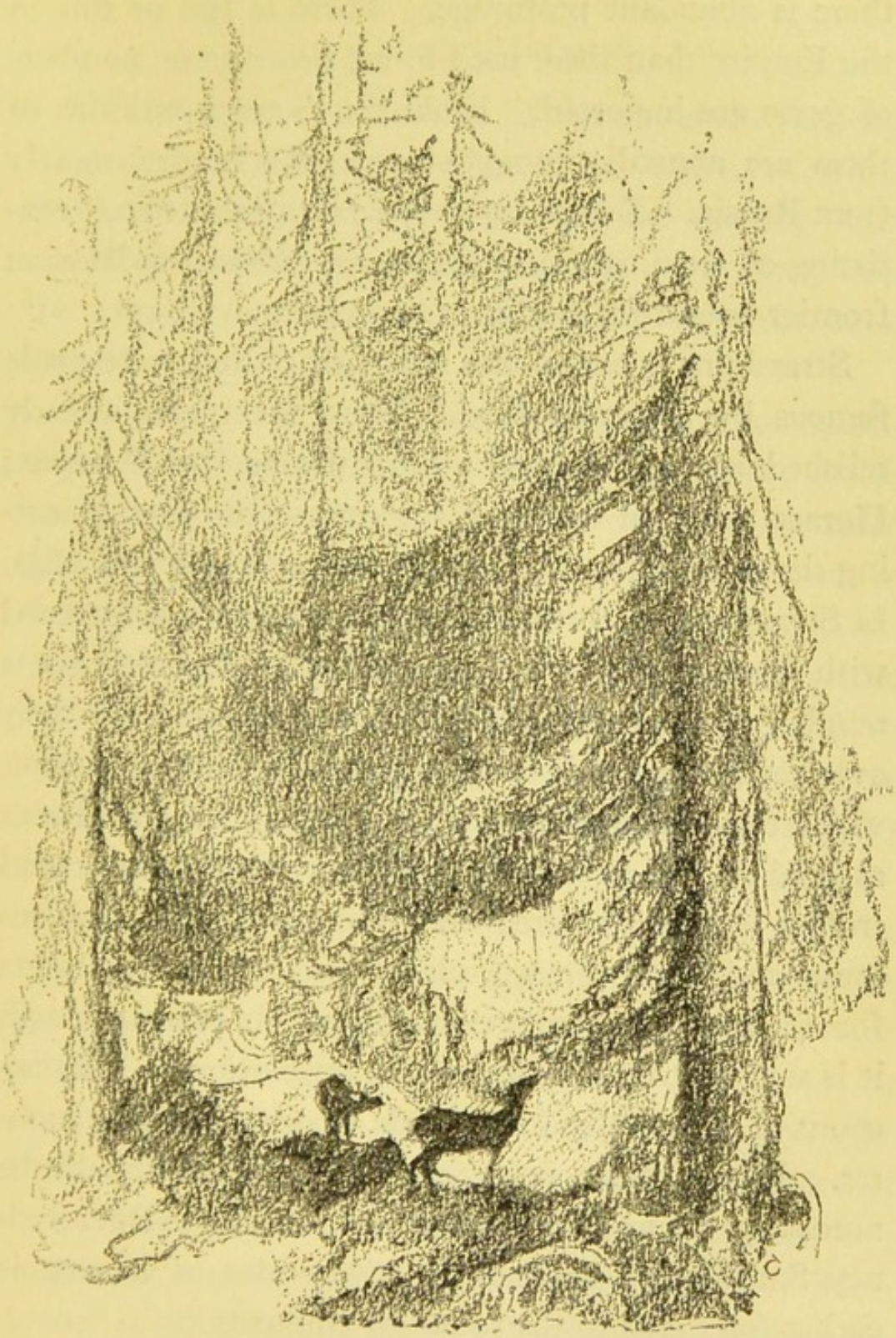
main in the ground till the animals dig them out from under the snow and soil.

A suggestive detail regarding the protection of birds is that thickets, bristling with thorns, are specially provided to help them during nesting time and when pursued by birds or beasts of prey. The clearing away of thickets in America has done almost as much as actual slaughter in exterminating birds. Lovers of song birds as well as epicures who like game for a change would unite in blessing our railway campanies if they followed the German example of planting shrubs as homes for birds all along the railroad embankments.

While the Germans are fond of partridges and other game birds, their favorite food, so far as the feathered tribes are concerned, is the domesticated goose. In the markets, especially of the northern cities, more geese are exposed for sale than all other kinds of poultry combined, and in restaurants *Gänsebraten* is seldom absent from the menu. The French rather look down on roast goose, but that is because their roast goose is not so juicy and tender as the Prussian, whether owing to a difference in variety or rearing I cannot tell.

The Germans are most painstaking in the growing and the proper feeding of this bird. They know that corn fodder yields the largest amount of fat—and goose fat is much in demand—while the finest Flavor is secured by feeding barley malt.

The best goose, like the best beef, is grown where



Deer in German Forest

there is abundant pasturage. There is less of this in the Empire than there used to be, hence large numbers of geese are imported. From six to seven millions of them are annually brought across the border, mostly from Russia. Every day, a special "goose train," consisting of from fifteen to forty cars crosses the Russian frontier bound for Berlin or Strassburg.

Strassburg is one of the many cities that were made famous by a special food. Goose liver was already relished as a great delicacy by the ancient Romans; Horace refers in one of his poems to the joys of eating the liver of the white goose fattened with juicy figs. In Strassburg, unfortunately, the geese are not fattened with figs, but are locked up in cages and stuffed for a number of days with shelled corn or noodles till their overworked livers become abnormally enlarged, after which they are made into what is known the world over as *pâté de foie gras*. This mixture of liver, meat and truffles is now prepared on a large scale also in Toulouse and other French places, but the headquarters for it is Alsace, where it is made in many places, though it is said that there is a growing opposition to it on account of the cruelty inseparable from the stuffing process. It 's a great pity that such cruelty should be necessary, for not a few epicures feel like the Rev. Sydney Smith, who exclaimed: "My idea of heaven is eating *foies gras* to the sound of trumpets."

IN A BERLIN MARKET.

That the goose is the food of the day and every day is made manifest in the markets of Berlin, of which there are more than a dozen. All the poultry stalls are filled with them, so much so that other meat, even the ever-present veal, shrinks timidly into the background.

Wherever one stops, the displays are most attractive. There are unfrozen, fresh-killed meats of all kinds, tempting even the sightseer who has no intention of buying. Autumn flowers, and large boxes of deep red *Preisselbeeren*—a berry very similar to the mountain cranberry found on Maine's highest peaks, and growing everywhere in Germany (it ought to be acclimated in our fields)—give rich autumnal hues to many of the market stalls, while the fragrance of Gravenstein apples fills the air near the fruit stalls.

As in Paris, the sea fish are fresh-caught, with ice about them, but never frozen, while fresh-water fish are carried to the buyer's house in a tank and selected alive. The German krebs, or craw-fish, is almost as much in evidence as the French écrevisses, and like these, it is kept in tanks of cold, running water, except for a few boxfuls, the probable supply of the day, which are sorted out by sizes for convenience. "Solo-krebs" is one of the items on a Berlin menu, and means one huge fellow, almost as big as a small lobster.

This Berlin market, unlike the Halles of Paris, does not encroach on and beautify the surrounding streets. It is orderly and law-abiding, and fills up its allotted space of two covered squares to the limit, but with no overflow. However, the shops nearby are generally for foods, with appetizing windows of sausages, smoked meats and fish, or cheeses.

An oddity of this market is that the upper floor space is divided about equally between fruits and household furnishings. There is an exhaustless supply of step-ladders, and besides these, every need of the kitchen is provided for.

Meat prices, which soar in Berlin, are much lower in the big markets than elsewhere.

Any one coming directly from the United States, where the veal is seldom so good as the lamb or the beef is sure to wonder at the abundance of calves in German markets. After sampling the veal a few times, one ceases to wonder why the Germans are so addicted to it, and the Austrians no less so. The French know how to cook veal, and a good cutlet *à la Milanaise* is not to be despised, but there is nothing in its way as good as the *Wiener Schnitzel* or the German *Kalbsbraten.*

The excellence of German veal is due largely to the strict exclusion from the markets by the meat inspectors of all animals that are too young or too old, the Flavor as well as the tenderness of the meat being largely de-

pendent on the right age for slaughtering the calf. The calves are, moreover, milkfed and not brought up on "hay-tea."

### VIENNA BREAD AND HUNGARIAN FLOUR.

While Parisian bread is as good as bread can be, it cannot be said that French bread, the country through, is so uniformly excellent as is German bread, throughout the two Empires. Not only in Vienna, Berlin, Munich, Dresden, Hamburg, Stuttgart, and the other large cities is it almost invariably crisp and tasty, but it is so in the smaller towns and even the villages.

Ellwanger does not exaggerate when he says in regard to Germany that "from her inviting *Bäckereis* and *Conditoreis* floats an ambrosial fragrance that may not be equaled by the pâtisseries of Paris, the variety of her products being as great as their cheapness and wholesomeness. One is born a poet, saith the adage; it is equally true that the German is a born baker who has no superior in his sphere."

The Parisians, indeed, learned the secret of making perfect bread from the Austrians.

Bread was baked by Egyptians and Hebrews two thousand years before Christ; also by the Greeks, from whom the Italians learned the art of making it. There are records of Roman bakers who became so wealthy and famous that they were invested with the dignity

of Senators, but there are reasons for believing that if any bakers of our time endeavored to sell the sour stuff these Romans made, they would be mobbed.

Eugen Baron Vaerst relates that a jury of French, English, and Italian epicures decided that the best pastry was made in Switzerland (Schweizerbäckerei has been famous for more than a century) and the best bread in Vienna. The Austrians may have got some hints from the Venetians, who made good bread and excellent *biscotti.* In consequence of that jury's decision, an enterprising baker set up a shop on the Boulevard Bonne Nouvelle, and "the Parisians, proud to have all that was best in different countries taken to them for their verdict and approval, decided that this was the best *bonne nouvelle* that had ever been brought to them."

This baker soon became wealthy and so did others who followed his example. To this day *pain viennois* is in the best repute in Paris, and so is Viennese pastry.

Most juries of epicures would agree to-day that not only is Viennese bread perfect but that, next to Paris, the Austrian capital has the best restaurants, and the most savory domestic cooking in the world. Many of the foods served have local Flavors, not the least agreeable of which are those betraying the neighborhood of Hungary—the *Gulyas*, the *Paprikahuhn*, and other dishes reddened and made piquant with paprika, which must not be confounded with the much sharper variety

of red pepper, cayenne, so dear to Spanish peoples of the old world and the new.

A specialty of the Austrian and South-German cuisine, the neglect of which elsewhere is incomprehensible, is the *Mehlspeise*, which ought to be adopted in England and America as an occasional substitute for puddings and pies. There is an endless variety of these *Mehlspeisen*, under the species *Nudeln*, *Spatzen*, *Kipferl*, *Kuchen*, *Strudel*, *Nockerl*, *Flockerl*, *Knödel*, *Schmarren*. Really, the *Kaiserschmarren* and the *Apfelstrudel* ought to be adopted as national American dishes by special act of Congress.

Flavorsome Hungarian flour (*Mehl*) is used in making these dishes (*Speisen*) and that is one of the reasons why they are so good. The Hungarian brand of flour is the best in the world, especially the highest grade, known as *Auszugmehl*. It has an amber tint known among bakers as the *gelbliche Stich*. On account of its agreeable Flavor, Hungarian flour is sent in large quantities to Germany, and some goes as far as Paris. Because of the freight expenses it is not usually sent north of Berlin. In that city the best bread is made of it, including the favorite *Knüppel* and the *Milchbrode*. Farther north, a mixture of German and American flour is used.

A few American grocers import Hungarian flour. The test of the best European product is that when the hand is laid on it, it flies up between the fingers.

American flour packs. Mrs. Arpad Gerster (whose husband is a brother of the famous Hungarian prima donna, Etelka Gerster) gives me the very important information that our flour can be made almost equal to the foreign by drying it on a platter on top of the stove. Bread, cakes, noodles, etc., made with flour thus dried have the much-coveted European lightness.

The Germans know as well as the French that the crust is the sweetest and most digestible part of bread and that its Flavor depends on there being a maximum of crust with a minimum of crumb, quite as much as it does on the grade of flour used, and the method of making the dough and baking it. To ensure a maximum of crust, white bread is usually baked in the size of rolls, as *Semmel*, and in a great variety of other shapes, every region having its specialty.

While it is true that, as a German writer remarks, the eating of white bread is a mark of prosperity in his country, it must not be inferred that it is only the poorer classes who buy the cheaper *Schwarzbrod*, made of rye. On account of its agreeable flavor this "black-bread" appeals particularly to epicures, and the darkest variety of it, Pumpernickel, is called for by gourmets the world over as the best thing to eat with cheeses of the Limburger type. It is also used as an ingredient in various *Mehlspeisen* and *crêmes*. It is made of flour from which the bran has not been bolted.

Cereal perfumery is not a thing you can buy at an

apothecary's. You get it by munching a piece of rye bread with fresh butter on it and consciously breathing out through the nose.

In France rye bread is almost unknown. In England attempts were made a few years ago to popularize it. *Nature* and other periodicals took up the matter, which had been brought to the fore during a political campaign where some of the speakers deplored the lot of the German laboring man for being obliged to eat rye bread. By way of reply, attention was called to the fact that the Kaiser himself always has rye bread on his table, and that in American cities, as in those of Germany, there is much demand for such bread in the wealthy quarters. Apparently the attempt to enrich the British menu with a cheap new delicacy failed, for trade reports of 1912 intimated that while there is at all times a demand for corn and oats on the Liverpool market, rye does not find sale there.

There are many other German bread and cake specialties that deserve to be introduced in other countries. Two of them are already known to epicures of many countries: the *Lebkuchen*, or honeycake, which made Nuremburg famous, and the lye-soaked, twisted, crisp *Pretzel*. This has a little salt strewn on the crust and the same is true of other kinds of small breads. Particularly good is the *Mohnbrot*, which is peppered with poppy seeds. Try it. Poppy seed is as good to eat as any nut that grows.

In these things the Germans show a good deal of imagination; but as for the anise-seeds so often mingled with the rye bread, I wish they would leave them to the imagination. The general use of them has probably done more than anything else to prevent the acceptance of German rye bread in foreign countries.

### GERMAN MENUS ON SEA AND LAND.

The Germans claim that the custom of providing a written or printed menu, or *Speisenkarte*, originated in their country.

At a meeting of the *Reichstag* in Regensburg, in 1541, Count Hugo of Montfort noticed one day at a banquet that the host, Duke Heinrich von Braunschweig, had before him a *Zettel*, or slip of paper, which he glanced at now and then. Being questioned, the Duke replied that it was a list of the dishes that were to be served, made for him by the chef so that he might save his appetite for those which he liked best.

Whether true or not, the story gives the *raison d'être* for a menu at every table-d'hôte meal. It is related by Friedrich Baumann in his *Meisterwerk der Speisen*, a monumental work in two volumes, of over two thousand pages, to which brief reference has already been made. Baumann has been called the German Carême (who was "the Luther of the French cuisine"). To him cooking was not mere handwork; it was an art and a science; and in his work

he not only enumerates and briefly describes the foods of all countries (for example, of fishes, and dishes made thereof, there are about twenty-five hundred!), but treats of everything pertaining to the growing, cooking, and serving of victuals with true German thoroughness and with hundreds of those footnotes which are accepted in that country as the best evidence of scholarship.

Of all the German cities none is visited by more American and English tourists than Munich; and few of these fail to go and see the Court Brewery, even though they may not wish to try the beer—the best in the world. You may eat at the Hofbräuhaus without drinking anything, though you will be stared at as a freak. There are several large dining-rooms and the bill of fare is large, varied, and thoroughly German. Look at the soups, for instance: bouillon with egg, bread soup, noodle soup with or without a large chunk of boiled chicken, which adds sixteen cents to the price, liver-noodle soup, and brain soup. All are nutritious and tasty and cost only four or five cents a big plate. The fishes offered on this particular day in September are carp, pike, sand-eel from the Danube, and perch-pike. These cost from about 27 to 32 cents a generous portion. Ochsenfleisch —boiled beef—is always in great demand and is usually juicy and well-flavored. Without vegetables it costs only 12 cents a plate. Five different cuts

of veal open the list of roasts, and the same price is charged for them—17 cents—though in other restaurants the kidney piece often costs a few cents more. Pork is two cents and a half higher, while chicken, goose, and pigeon may rise to the dizzy heights of 32 cents a plate.

Among the day's ready dishes—*Fertige Speisen*—we note haunch of venison at 35 cents and leg of venison for five cents less. Half a partridge is listed at 24 cents, and the same charge is made for a quarter of a wild duck. There is of course a *Sauerbraten*—a sort of bœuf à la mode with a palatable sour sauce—and you may choose bœuf braisé, or Greek steak, or various mutton dishes, smoked meats, and so on, the prices for these being about 22 to 24 cents, including a vegetable: cabbage, potatoes, beans, or rice, noodles, dumplings (Bavarian liver-dumplings—*Leberknödel*—are fine!) or macaroni with minced ham, which ought to be on every table in every country at least two or three times a week.

The roasts and fries to order include, of course, the *Wiener Schnitzel* (savory when you have German or Austrian veal) the *Paprikaschnitzel* and various other cuts from the calf or the ox. *Kompotts* are in Germany served with roasts as regularly as salads are in France; they are stewed fruits—apples, pears, apricots, cherries, and berries among which the Preisselbeere is most Teutonic and most delicious.

The *Mehlspeisen* on this particular menu are fewer in number and less racy of the soil that those you would find on a Viennese bill of fare. Besides the international omelette and the Italian macaroni there is only the German pancake and the *Windnudel.* Among the vegetables and salads are listed, rather out of place, the *Spätzl*, a variety of the noodles which are the German version of the Italian macaroni and other pastes, and which only a German knows how to cook to perfection. A glance at the twenty-two varieties of cold meats and appetizers and the dozen varieties of cheese brings to mind the international aspect of German gastronomy.

In the more expensive restaurants of Munich and other German cities the French influence is more obvious. I chose the menu of the Hofbräuhaus because of its thoroughly *bourgeois* and German aspect.

The largest restaurants in the world are in Berlin; one of them seats four thousand people. In the *bourgeois* places the food is usually less savory than in similar establishments in South Germany, but there is a larger proportion of the high and highest class resorts, with viands and prices almost, if not quite, on a level with those of Paris and London, which it is the ambition and intention of the Berliners ultimately to surpass in these respects as well as in the splendors of their hotels.

Another German ambition is to have the largest

# Breakfast.

## Fruit.

Oranges, Bananas, Grape Fruit, Grapes

## Preserves

Honey, Strawberry Marmalade, Jams, Quince Jelly
Sweet Pickel Peaches, Scotch Marmalade

## Coffee, Tea, etc.

Coffee, Coffeeïneless Coffee H. A. G., Cocoa, Chocolate
Ceylon Tea, Mixed Tea, Milk and Cream

## Bread

Rolls, Milk and Butter Toast, Toast plain
Various Kinds of Cakes and Crackers

## Cereals

Milk Rice, Oatmeal, Hominy, Force, Shredded Wheat, Grape Nuts

## Eggs, Omelettes and Pancakes

Buckwheat, Hominy, Rice and Wheat Cakes,
Pancakes plain, with Apples or Cherries
Apricot or Currant Marmalade
Potato Pancakes,
Boiled Eggs, Poached Eggs, Baked Eggs
Fried Eggs plain, with Bacon or à la Tyrolienne
Scrambled Eggs plain, with Ham or à la Bavaroise
Omelette plain, aux fines Herbes or with Strawberries

## Fish, Steaks, Chops etc.

Kippered Herrings, Haddock, Fish Croquettes, Sole, Salted Mackerels
Fillet Steak Westmoreland, Fillet of Veal Esterházy
Fillet Gulyàs with Mushrooms, German Beef Steak
Chicken Liver on the Spit with Piémontaise Rice
Calf's Liver with Apples and Onions, Fried Calf's Brains Sauce Rémoulade
Grill: Tenderloin Steak, Mutton Chops, Sirloinsteak, Lamb Kidneys,
English Ham, Frankfort Sausages

## Potatoes

Boiled, Fried, Baked, Mashed Potatoes
Saratoga Chips, French Fried Potatoes, Lyonnaise Potatoes

## Cold Dishes

Westphalian Ham, Smoked Bologna Sausages, Smoked Tongue
Potted Fieldfares with Truffles, Roast Beef, Chicken

## Relishes

Eel in Jelly, Oil Sardines, Anchovies, Fillet of Herring in diverser Sauce

## Cheese

Camembert, Herb, Imperial, Holland Cheese

# Gabel-Frühstück - Luncheon

**à la carte.**

**Vorspeisen**
Salat de Boeuf Parisienne
Küken-Salat
Geräucherter Aal
Royans à la Bordelaise
Heringsfilet, Remouladensauce
Rollmops
Anchovis

**Suppen**
Hühner-Kraftbrühe in Tassen
Schottische Graupensuppe
Kartoffelsuppe mit Croutons

**Fisch**
Gerösteter Lachs, Anchovisbutter
Streifbarsch, Sauce Pluche

**Eierspeisen**
Omelett mit Schnittlauch
Spiegeleier Othello
Verlorene Eier Cardinal

**Fleischspeisen und Geflügel**
Küken in Curry und Reis
Kalbsleber mit Aepfeln und Zwiebeln
Kartoffelmus
Zungenragout Financière, Fleurons
Entre-côtes à la Macédoine
Jungschweinskeule deutsche Art
Roastbeef au Jus

**Bürgerliches Gericht**
Klops à la Königsberg

**Auf Bestellung (vom Grill 15 Min)**
Hammelkoteletten, Beefsteak
Filetsteak, Rumpsteak

**Gemüse und Kartoffeln**
Brechspargel
Perlbohnen
Spaghetti italienische Art
Gekochter Reis
Französische und deutsche Bratkartoffeln
Kartoffelmus, Gebackene Kartoffeln

**Salate**
Kartoffelsalat, Achanaka-Salat

**Kaltes Buffet**
Lammrücken garniert
Galantine von Poularde, Sauce Cumberland
Chaud-froid von Reh mit Pilzen
Tournedos Jockey Art
Junge Ente in Aspik
Geräucherte Zunge
Gespicktes Kalbsfrikandeau, Roastbeef
Kaltes Geflügel
Geräucherter und gekochter Schinken

**Kompott und Süßspeisen**
Birnen
Blanc-manger mit Früchten
Schneebälle

**Käse**
Kräuter-, Schweizer-, Camembert-Käse

Frucht Kaffee

**Hors d'Oeuvres**
Salad de Boeuf Parisienne
Chicken Salad
Smoked Eel
Royans à la Bordelaise
Fillet of Herrings, Sauce Remoulade
Rolled Pickled Herrings
Anchovies

**Soups**
Chicken Broth in Cup
Scotch Barley Soup
Potato Soup with Croutons

**Fish**
Broiled Salmon, Anchovy Butter
Striped Bass, Sauce Pluche

**Eggs**
Omelet with Chive
Fried Eggs Othello
Poached Eggs Cardinal

**Entrées, Roasts and Poultry**
Curried Chicken with Rice
Calf's-liver with Apples and Onions
Mashed Potatoes
Tongue Ragout Financière, Fleurons
Entre-côtes à la Macédoine
Leg of Pork, German Style
Roastbeef au Jus

**Special Dish**
Klops à la Koenigsberg

**To Order (from the Grill 15 min.)**
Mutton Chops, Beefsteak
Tenderloin Steak, Sirloin Steak

**Vegetables and Potatoes**
Cut Asparagus
String Beans
Spaghetti Italienne
Boiled Rice
French and German fried Potatoes
Mashed Potatoes, Baked Potatoes

**Salads**
Potato Salad, Salad Achanaka

**Cold Cuts and Cold Dishes**
Saddle of Lamb garnished
Galantine of Pullet, Sauce Cumberland
Chaud-froid of Venison, Mushrooms
Tournedos à la Jockey
Duckling in Aspic
Smoked Tongue
Larded Roast Veal, Roastbeef
Roast Chicken
Smoked and Boiled Ham

**Compote and Desserts**
Pears
Blanc-manger with Fruits
Cream Puffs

**Cheese**
Herb, Swiss, Camembert Cheese

Fruit Coffee

Table-stewards and stateroom-stewards will take orders for dinner at any time during the day.

## Carte du jour.

**Hors d'Oeuvres:**
Hors d'oeuvre Varié
Caprice Sticks

**Soups:**
Consommé Grimaldi
Cream Soup á la d'Orléans
Fieldfare Soup Old Style

**Fish:**
Salmon Cutlets à la Count d'Artois
Sole Meunière
Turbot, Butter, Parsley

**Entrées:**
Fillet of Beef Renaissance
Lamb Chops, Sauce Périgueux
Stuffed Artichoke Bottoms
Croutons of Goose Liver Moderne (cold)
Broiled Sweetbread, Green Peas
Entrecôtes Jardinière
Leg of Lamb, Larded, Brussels Sprouts

**Grill: (15—30 min.):**
Mixed Grill consisting of:
Fillet Mignon, Lamb Chops
Kidney, Sausage, Tomato
Tenderloin Steak, Entrecôte, Sirloin Steak
Lamb Chops, Mutton Chops

**Ready Dishes:**
Prague Ham à la Fitz James

**Poultry:**
Cherbourg Poularde
Partridge

**Vegetables:**
Palm Marrow Bordelaise
Peas and Asparagus, Stew Corn
Boiled Rice
French and German fried Potatoes
Mashed Potatoes, Baked Potatoes

**Compote:**
Green Gages, Strawberries

**Salads:**
Lettuce Salad
Endive Salad

**Sweets:**
Strawberry Ice, Whipped Cream
Peaches à la Condé
Praline Ice Cream
Ice Napolitaine
Pastry

**Cheese Fruit Coffee**

## A few Suggestions

**I.**

Hors d'oeuvre Varié
Cream Soup à la d'Orléans
Sole Meunière
Lamb Chops, Sauce Périgueux
Stuffed Artichoke Bottoms
Partridge
Compote Salad
Strawberry Ice, Whipped Cream

**II.**

Fieldfare Soup Old Style
Salmon Cutlets à la Count d'Artois
Fillet of Beef Renaissance
Croutons of Goose Liver Moderne (cold)
Cherbourg Poularde
Compote Salad
Palm Marrow Bordelaise
Peaches à la Condé

**III. (Supper)**

Caprice Sticks
Consommé Grimaldi
Turbot, Butter, Parsley
Leg of Lamb, Larded, Brussels Sprouts
Praline Ice Cream
Pastry

and most comfortable floating hotels. The newest Hamburg and Bremen steamers are indeed unsurpassed in any respect, and their cuisine is particularly good. The trans-Atlantic steamers have the great advantage of being able to buy in New York the best things American markets offer, and in the German ports not only the European *delicatessen*, but those which the sister boats bring from Oriental countries. I once gained eight pounds in as many days crossing the Big Pond on a German steamer; and can you wonder, in view of the abundance of the choicest viands offered as antidotes to the hunger-breeding sea air?

There are now on the largest steamers Ritz-Carlton restaurants for wealthy epicures; but you need not go to these for good food, as the sample menus for first-cabin breakfast, lunch, and dinner on the *Kaiserin Auguste Victoria*, herewith reproduced, indicate. He must be hard to please, indeed, who cannot find something on such menus to tempt his appetite—unless he is sea-sick.

### GERMAN, SWISS, AND DUTCH CHEESES.

German steamers and German restaurants nearly always offer a variety of French, Dutch, Italian, English, and Swiss cheeses in addition to those of their own country, among the best known of which are the Handkäse, the Liptauer, the Harz, the Kräuter and the Limburger, which, though it originated in Belgium,

has come to be looked upon as a specifically German variety.

Germany is not, like Switzerland, Holland, and parts of France, a land of pastures green and studded with grazing cows. Pasturage throughout the Empire is usually so scarce—the land being needed for grain and other crops—that the cows, poor things, are kept in stables all the year round. It is therefore, not surprising that Germany is not among the great exporters of cheeses, most of the many domestic varieties, some of which are excellent, being consumed at home.

Very different is the situation in Switzerland, where cheese-making is one of the principal industries, the value of the exports exceeding $12,000,000 a year, nearly one quarter of which, in 1911, was sent to the United States. So good is the Flavor of Schweizerkäse that even France, in that year, took $2,688,539 worth of it, while Germany took $1,888,257 worth.

Nearly all the cheese which Switzerland exports is of the hard Emmenthaler type, put up in the huge cakes familiar to us all. It is practically the same as the French Gruyère. Not all Emmenthaler comes from the Emmenthal, the valley where the pasturage is particularly abundant and juicy.

The best flavored Swiss cheese is that which is made in summer, when the cows roam the mountain sides, going up higher and higher as the season advances and the snow melts, till they reach the slopes where even

at the end of August the soil is still moist and the herbage two or three feet tall. This succulent food, consisting largely of lovely Alpine flowers, they industriously condense into fragrant cream, butter, and cheese.

When we speak of the Alps we mean snow mountains, particularly those of Switzerland. The Swiss themselves, however, when they refer to the Alps, mean the green pastures on the mountain sides on which the cows gather sustenance and wealth for them.

On one of these Alps, above Mürren, I once accosted a peasant who gave me information which confirmed my belief that the much-liked Flavor of Swiss cheese is due not alone to the succulent Alpine forage, but also, in great part, to the way the best of it is made—with all the cream left in the milk.

This peasant was himself a cheese-maker, and our conversation took place within sight of his cowsheds. He was surprised when I asked him if he ever used sour cream to make butter. He had never dreamt of such a thing. Usually he churned it in the evening, using the cream that had risen on the morning of the same day. At the latest the churning was done the next morning before the cream could possibly sour in that climate. A sour "starter," such as is nearly always added to cream in America before it is churned, he had never heard of; the very idea amazed him.

And Swiss butter is nearly always good, while American butter is usually bad.

Questioned in regard to cheese, he said they made two grades of it, the *Fettkäse*, which contains all the cream, and the *Magerkäse*, made of skim milk. For the latter kind, he said, he had no use, because it was comparatively tasteless. It is made in considerable quantities, however, for the poor, of milk from which the cream has been taken for butter-making or for the hotel tables.

Cheese-making is much more of a fine art than most of us imagine. The utmost skill and care must be used to exclude undesirable flavors in the air due to uncleanly surroundings, since cheese absorbs these as readily as butter does. The season of the year and the feed must always be considered. Thus, in regard to the highly prized English Stilton we read that the finest variety "is principally made between March and September and solely from the milk of cows fed on natural pasture"; and that "the use of artificial food for the cows is at once detected in a change for the worse in the character of the cheese"—that is, its flavor.

Upon good feeding depends the production of fat in milk, and milk fat, alias cream, is a great source of Flavor. The best kinds of most of the leading cheeses are made of whole milk—milk with none of the cream taken out. Some kinds, like cottage cheese, are made

of skim milk yet how the addition of cream improves their Flavor! Camembert, of course, is made of whole milk, and in the manufacture of some kinds, including Stilton, extra cream is sometimes added.

Much spurious stuff is palmed off on unwary buyers as whole milk or cream cheese. The dealers who do this, think themselves "smart," but in the end they harm their business. The excellent little book on "Cheese and Cheese Making," by Long and Benson (London: Chapman and Hall, 1896) begins with these instructive words:

"Professor Henry, of the Wisconsin Agricultural College, recently stated that the loss of the American cheese trade with great Britain was owing to the fact that his countrymen did not make the best article, and that in many cases imitation cheese was produced for the sake of *a possible temporary profit but to the ultimate loss of all concerned.* Whatever may be the immediate gain effected by the addition of foreign fat to milk, or by the removal of a portion of the cream it contains, *the permanent value of the cheese industry to the producer is maintained only by the manufacture of the best* and of its production in the largest possible quantity."

The italics are mine. They emphasize what is one of the most regrettable aspects of the situation in America—the deplorable and at the same time foolish disposition to make an immediate extra profit by un-

loading on purchasers inferior cheeses and other foods in the belief that the consumers are too ignorant or indifferent to know or care what they get.

From personal experience I can relate a detail of New York market history which vividly illustrates the folly of this attitude.

For several years I was able to buy the best Edam cheeses made in Holland—full-cream and therefore full-flavored. One autumn, on returning to the city, I tried in vain to get this same brand at the places where it had been on sale. I sampled the substitutes but was not satisfied with their Flavor. Having found out through a grocer the name of the importer of that brand, I called on him and asked why he no longer had it on his list. He had the effrontery to inform me that it was because he had had so many complaints that that brand did not keep well—that it "dried out." I told him that my own experience had been just the reverse, and that, as a matter of course, the more cream-fat there was in a cheese the more slowly it would dry out. But he stuck to his story.

In a confidential talk with a grocer I then ascertained what I had suspected. Dealers in cheap Edams, made of skimmed milk, had crowded out the maker of the creamy Edam who, of course, could not make so low a price to the wholesale dealers as they did. "Why not import several brands and charge according to their value and Flavor?" I asked, adding that many persons

surely would gladly pay extra for the better grades. But that argument, too, was unavailing. The "smart" dealers did not wish to offer several grades; they wanted to charge the highest price for the lowest grade. And now note the consequences.

In one large market which I often passed there was at that time a large show case containing dozens of the familiar red "cannon balls"; but they were no longer of the full-cream brand the lively demand for which had won them the most prominent place in that glass case. The new brand bore a label on which was printed "Made of Skimmed Milk"; and this same brand seemed to be almost exclusively on sale all over town.

There was nothing dishonest about this procedure. Dealers have the right to sell any variety they choose, and this brand, being clearly marked, did not pretend to be what it was not. It evidently came from Holland, and it was as good a cheese as can be made of skimmed milk.

The importers and dealers evidently believed that the consumers were too ignorant or indifferent to care whether or not the cheese they bought had the rich creamy Flavor. At first I feared they might be right in this surmise, but ere long I found that I was by no means the only person who had stopped buying Edam because the best brand was no longer kept on sale in the American metropolis. The number of red balls

in that show case gradually diminished and finally disappeared altogether.

The Dutch Government has given much attention to the question of cream in cheese, and no wonder, for the annual production of cheese in Holland amounts to at least 175,000,000 pounds, of which two-thirds are exported. The Minister of Agriculture has authorized the use of labels guaranteeing purity and quality. The Government control stamp "can be used only on cheese made of unskimmed milk and containing 45 per cent. of fats," writes Consul Frank W. Mahin from Amsterdam. "It is the special intention to make the full-fat product more profitable by marking it, which at the same time will promote the manufacture of the cheese of superior qualities."

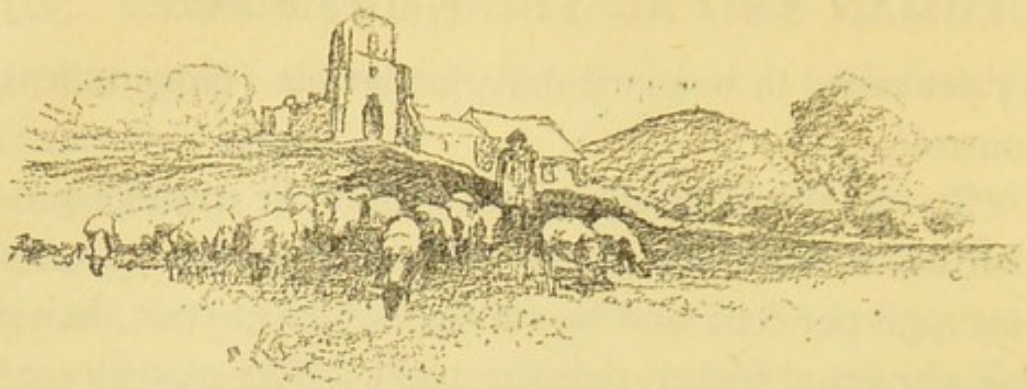
In another contribution on this subject to the "Consular and Trade Reports" (April, 1911) Mr. Mahin provides information which buyers of Edam or Gouda will do well to bear in mind:

"A meeting of the North Holland Cheese Control Station, attended by a representative of the Government, was recently held at Hoorn, at which it was decided to divide marked cheese into two classes: (1) Cheese of Edam shape, with fatty component in the dry material of at least 40 per cent., to be marked 40+, in a hexagon; (2) full fat cheese, of different shapes, with a fatty substance in the dry material of at least

45 per cent., to be marked Rijkscontrole (Government control).

"It was stated at the meeting that the average proportion of fat in the cheese made in 1910 by factories was 44.8 per cent. and by farmers 47.5 per cent., being one per cent. higher than in 1909. *The quantity of marked cheese sold in 1910 was 45 per cent. greater than in 1909, and the demand from dealers therefore has so much increased that there is now a shortage.*"

Evidently, dealers are not everywhere as short-sighted as were those of New York. However, in the autumn of 1912 I noticed, among these, signs of almost human intelligence. Before the end of 1912 I saw in some stores Dutch cheeses labeled "Above 40% butter-fat in total solids." By and by we may perhaps be permitted to spend our money even for the kind made by the farmers and containing 47.5 per cent. of cream fat.



# X

## BRITISH SPECIALTIES

### THACKERAY'S LITTLE SERMON.

ENGLAND has produced some eminent epicures. As prominent among them as among her novelists is William Makepiece Thackeray. In a magazine article on Greenwich and Whitebait, dated 1844, he expressed his scorn for those who do not appreciate good food. "A man who brags regarding himself; that whatever he swallows is the same to him, and that his coarse palate recognizes no difference between venison and turtle, pudding or mutton-broth, as his indifferent jaws close over them, brags about a personal defect —the wretch—and not about a virtue. It is like a man boasting that he has no ear for music, or no eye for color, or that his nose cannot scent the difference between a rose and a cabbage—I say, as a general rule,

set that man down as a conceited fellow who swaggers about not caring for dinner."

Three years earlier, in his Memorials of Gormandizing, which he penned in Paris, he preached another sermon on the subject—a sermon which may fitly be reprinted here because the state of affairs which distressed Thackeray has not been quite mended yet—far from it. Speaking of Parisian opportunities for gastronomic experiments, he says:

"A man in London has not, for the most part, the opportunity to make these experiments. You are a family man, let us presume, and you live in that metropolis for half a century. You have on Sunday, say, a leg of mutton and potatoes for dinner. On Monday you have cold mutton and potatoes. On Tuesday, hashed mutton and potatoes; the hashed mutton being flavored with little damp triangular pieces of toast, which always surround that charming dish. Well, on Wednesday, the mutton ended, you have beef: the beef undergoes the same alterations of cookery and disappears. Your life presents a succession of joints, varied every now and then by a bit of fish and some poultry. . . .

"Some of the most pure and precious enjoyments of life are unknown to you. You eat and drink, but you do not know the *art* of eating and drinking; nay, most probably you despise those who do. 'Give me a slice of meat,' say you, very likely, 'and a fig for your gour-

mands.' You fancy it is very virtuous and manly all this. Nonsense, my good sir; you are indifferent because you are ignorant, because your life is passed in a narrow circle of ideas, and because you are bigotedly blind and pompously callous to the beauties and excellencies beyond you.

"Sir, RESPECT YOUR DINNER; idolize it, enjoy it properly. You will be by many hours in the week, many weeks in the year, and many years in your life the happier if you do.

"Don't tell me that it is not worthy of a man. All a man's senses are worthy of enjoyment, and should be cultivated as a duty. The senses are the arts. . . . You like your dinner, man; never be ashamed to say so. If you don't like your victuals, pass on to the next article; but remember that every man who has been worth a fig in this world, as poet, painter, or musician, has had a good appetite and a good taste."

### DR. JOHNSON AND SAMUEL PEPYS.

Doubtless the attitude towards the pleasures of the table which displeased Thackeray was largely a sham, a mere pretense, though to some extent it was a Puritan reaction from the gross gluttony in which Englishmen indulged in ye olden times, as did the Germans, the Romans, the Russians, the Dutch, and many others.

Dr. Samuel Johnson was an amusing and amazing example of inconsistency in his gastronomic preaching

and practice. To Mrs. Piozzi he remarked that "wherever the dinner is ill got up there is poverty or there is avarice, or there is stupidity; in short, the family is somehow grossly wrong." To Boswell he said: "Some people have a foolish way of not minding, or pretending not to mind, what they eat. For my part, I mind my belly very studiously, and very carefully; for I look upon it that he that does not mind his belly will hardly mind anything else."

Yet on other occasions Boswell heard him talk with great contempt of people who were anxious to gratify their palates. He sneered at gluttons, yet he was one himself. "When at table he was totally absorbed in the business of the moment: his looks seemed riveted to his plate; nor would he, unless when in very high company, say one word, or even pay the least attention to what was said by others, till he had satisfied his appetite; which was so fierce, and indulged with such intenseness, that, while in the act of eating, the veins of his forehead swelled, and generally a strong perspiration was visible." He told Boswell he had never been hungry but once; upon which that biographer comments: "They who beheld with wonder how much he ate upon all occasions, when his dinner was to his taste, could not easily conceive what he must have meant by hunger." Yet he was a man of discernment: he used to descant critically on the dishes which had been at table where he had dined or supped, and to recollect

very minutely what he had liked. According to Mrs. Piozzi, his favorite dainties were "a leg of pork boiled till it dropped from the bone, a veal pie with plums and sugar, or the outside cut of a salt buttock of beef." He surely needed a Parisian education!

The same witness throws a limelight on the doctor's peculiarities by remarking with regard to drink that "his liking was for the *strongest*, as it was *not the flavor but the effect* he sought for and professed to desire."

In other words, strength and quantity were of greater importance to him than quality (Flavor); and in this he was a true descendant of his predecessors, one of whom has left an amazing record of his appetite. The home menus of Samuel Pepys included on one occasion "a dish of marrow bones, a leg of mutton, a loin of veal, a dish of fowl, three pullets, and a dozen larks all in a dish; a great tart, a neat's-tongue, a dish of anchovies, a dish of prawns, and cheese." More astonishing still is the following repast, prepared, as he boasts, by his "own only mayde": "We had a fricassee of rabbits and chickens, a leg of mutton boiled, three carps in a dish, a great dish of a side of lamb, a dish of roasted pigeons, a dish of four lobsters, three tarts, a lamprey-pie, a most rare pie, a dish of anchovies, good wine of several sorts, and all things mighty noble." This dinner, he exclaims, joyously, "was great." It certainly was.

If England is to the present day classed among the

ungastronomic nations, by her own epicures as well as by foreigners, it is due largely to this indulgence in "great" dinners, this regard for quantity—especially of meats—at the expense, usually, of quality and artistic cooking. Generally speaking, the English have been slower than the Italians, the French, and the Germans in discovering the gastronomic importance of the more delicate Flavors developed by the cooking, which is done *con amore*. *Koche mit Liebe* is the title of a German cook book, and there certainly are more housewives in the three countries named who cook for their families "with loving devotion" to their task than there are in England or America.

### THE ROAST BEEF OF OLD ENGLAND.

Too much emphasis cannot, however, be placed on the fact that, while all these things are true, England has nevertheless led the way in some of the most important branches of culinary progress. It is to these branches that I wish to devote this chapter, pointing out the lessons Great Britain teaches us and the European continent. It seems never to have occurred to any writer to do this, which is strange, for the story is interesting as well as important.

To begin with butcher's meats, the English certainly excel in the roasting and broiling of them, as well as in the rearing of the right kind of stock, which is equally important from the point of view of Flavor.

Perhaps it is as foolish to refer to the British as beef-eaters as it is to call the Italians macaroni-eaters and the Japanese rice-eaters, for the humbler classes in England cannot afford beef any oftener than the poorer Italians and Japanese can afford to eat macaroni or rice.

Time was when even the wealthy Britons could not often eat beef or other butcher's meat, especially in winter. Up to the eighteenth century sheep and cattle were killed and salted at the beginning of cold weather and "during several months of the year even the gentry tasted scarcely any fresh animal food, except game and river fish. As to the common people, an old chapbook of the period, entitled 'The Misfortunes of Simple Simon' uses the expression 'roast-meat cloaths' as an equivalent for holiday clothes." [1]

The systematic growing of turnips for the winter keep of cattle made it possible to have fresh meat in winter, too; and at the same time, thanks largely to the efforts of the agriculturist, Robert Bakewell, cattle and sheep breeding began to be done on scientific principles.

Bakewell's aim was to fatten the animals more quickly and to secure a greater proportion and a better

[1] "Good Cheer. The Romance of Food and Feasting." By F. W. Hackwood. This volume contains many interesting details relating to old English customs in the dining-room and kitchen, in homes, inns, and monasteries.

quality of meat. The result of such improvements was that, whereas in 1710 the average net weight of cattle sold in London was 370 lbs., by the time of Bakewell's death (1795) it had increased to 800 lbs., while the average weight of sheep had increased from 28 pounds to 80.

In the last quarter of the eighteenth century the Collins brothers still further improved cattle by breeding for special points, reducing the size of the head and legs and enlarging the useful parts. The shorthorns gradually extended their domain not only throughout the British Isles but to France and other countries. Improvement continued steadily until English beef became the standard for the whole world.

With the rapid increase of population and a decrease in the area of pasture land the time came when Great Britain had to begin to import meats from Australia and South America. At the end of the first decade of this century London alone needed 420,000 long tons of meat a year. Of this, over 122,000 tons came from South America, nearly 106,000 tons from Australasia, about 97,000 tons from continental Europe and North America, and less than 95,000 tons from the United Kingdom itself.

For a very good reason there was for years a prejudice against all imported meats, their use being confined exclusively to the poorer classes who could not afford to pay the higher prices—from three to twelve

cents a pound more—asked for the meat from the home-grown or home-killed cattle.

The very good reason for this preference for the home product was that imported meat was frozen, and the public promptly discovered that *meat which had been frozen had little or no Flavor.*

That freezing spoils the Flavor of meat was known generations ago. Eugen Baron Vaerst, e. g., in his "Gastrosophie," Vol. I, p. 214, calls attention to this fact and explains why the meat should be preserved by chilling it; that is, by hanging it in an icy atmosphere which is constantly kept moving and which kills all germs of putrefaction without actually freezing the meat.

Naturally this process costs more than simple freezing; yet some years ago attempts were made to bring chilled meat from as far as South America and Australia, and after some improvements had been made in the methods of transportation the results were most satisfactory. As one report said: "Part of a quarter that had been purposely sent a considerable distance and then cooked in the ordinary way for the table was found to be tender, full of flavor, and equal to any beef wherever grown." No chemicals were used.

An amusing sequel to the story is told with much gravity in a consular report from Sheffield: "Frozen meat is much preferred by the trade for two reasons: It is cheaper, and *the customers, after having used*

*chilled meats, will not so readily take to the frozen again.*"

The dear dealers, surely, ought to be allowed to have their own way. Why should they pay any attention to the consumer, with his ridiculous predilection for food that has Flavor?

Germany protested violently in 1912 against attempts to introduce frozen meats, and the following consular information regarding another country is suggestive:

"The sale of Argentine frozen meat in Switzerland is not so satisfactory as originally expected, and the large importers are now buying live cattle from that country, importing through Italy, and slaughtering there."

### SOUTHDOWN MUTTON.

English mutton and lamb are as far-famed as English beef, and most deservedly so. The unnamed but well-informed author of the hand-book on Sheep in Vinton's Country Series (London) states the plain truth when he declares that "it was because our forefathers had, during many ages, been careful and skilful breeders of sheep that their descendants were enabled to take the front rank in the world as improvers of these as well as of horses, cattle, and pigs."

The English, undeniably, are in many ways an ungastronomic people, yet when we reflect that they have

given to the world the best butcher's meats—mutton and pork, as well as beef—their claim to rank high among gastronomic nations is established. Think of the important rôle butcher's meat plays in our dietary!

It was not by a mere accident that Great Britain won supremacy in this line, but in consequence of the application of principles of scientific breeding, resembling those to which the Californian, Luther Burbank, owed his startling successes in creating new fruits and vegetables of superior size, tenderness, and Flavor.

It took the combined efforts of several English "Burbanks" to create the ideal mutton chops and joints. The two who deserve the lion's share of praise were Robert Bakewell and John Ellman.

Bakewell came first. Before his day, the fleece was the thing sheep growers were mainly interested in. They wanted as big animals and as much wool as possible.

Bakewell was not interested in wool. What he was after was an improved mutton-producing breed—or rather one which, besides meat, yielded a large amount of fat. That was what the market of his day demanded, in consequence of the way in which mutton was served. The usual practice, we read, "was to put a large joint of fat mutton over a dish of potatoes at the workman's table. The meat went to the head of the family; the potatoes, saturated with the meat and gravy, making a savory meal for the junior members.

Thousands in the manufacturing and mining districts were for many years brought up in this way, so that, in breeding fat sheep, Bakewell had a better warrant than would apply in the present day, when fat is obtained in more palatable and digestible form in butter and its cheaper imitations, and when the working classes, as well as others, prefer to have lean and juicy mutton."

An anecdote in Pitt's "General Survey of the Agriculture of Leicester" (1809) throws further light on the situation: "Your mutton is so fat that I cannot eat it," said a gentleman to Bakewell, who replied: "I do not breed mutton for gentlemen, but for the public; and even my mutton may be kept leaner to suit every palate by stocking harder in proportion and by killing the sheep in time."

Gradually the "public's" taste for mutton became more "gentlemanly." At present the article most in demand is a carcass weighing about twenty pounds per quarter "with a large preponderance of lean flesh."

The change was accelerated by the activity of the Ellman family. Whereas Bakewell had operated with the long-wool Leicester breed, the meat of which was coarse-grained, with little delicacy or Flavor, the Ellmans revealed to the world the superlative gastronomic attributes of mutton yielded by the short-wool Southdowns.

In muttonland the Southdown is what the Bresse is in the chicken world.

In London markets you may find palatable meat cut from the carcasses of the Wensleydale, the Suffolk, the Dorset, the Exmoor, the Irish Roscommon, and other breeds; but the three breeds which are rated highest for epicures are the Southdown, the Welsh Mountain, and the Scotch Black-faced.

Note that all three are mountain sheep. It is to the hill-lands we must go for meat of the finest Flavor. As a rule, we read in the admirable Vinton book referred to, "the fleezy denizens of the mountains and downs were distinguished by the excellence of their mutton, their active habits, necessitated by long journeys in search of the scanty food that was available, conducing to the development of the finest quality of meat."

This point is gastronomically so very important that I will quote also what Professor Tanner wrote on it, as long ago as 1869, in a paper on the "Influence of Climate, etc., on Sheep," published in the "Journal of the Royal Agricultural Society of England":

"The quality of the meat depends upon the lean portion being tender and charged with a rich juice; and these results can only be obtained from an animal of mature age, of active habits, and *fed upon short, sweet herbage.* By activity of body the muscles are brought into exercise, and a healthy growth is the consequence. The food being short and sweet compels the sheep to take plenty of exercise to gather their supplies,

and the herbage being sweet and nutritious, in contradistinction to that which is coarse and immature, renders the meat savory, the gravy dark and rich, and the meat palatable and digestible."

Professor Tanner evidently understood the importance of having the right kind of feed—a subject on which much more will be said in a later chapter, under the head of "Feeding Flavor Into Food."

The Southdown sheep, which have been happily called "small in size but great in value," inhabit a district the characteristics of which explain the incomparable Flavor of their mutton. The South Downs of Sussex, from which they derive their name, "consist of a range of low, chalky hills, five or six miles in breadth, stretching along the coast for a distance of upwards of sixty miles and passing into the chalky hills of Hampshire in the west."

All the Southdown mutton, as a matter of course, does not come from one locality. The breed has been widely spread over the country and also used for crossing; but under similar conditions there is no reason why first-class mutton should not be produced in many localities. Naturally, substitution is practised; and in England, as elsewhere, the consumer is largely dependent on the honesty of his butcher. If the butcher is a wise man, anxious to get rich, he will always provide the best to those who know the difference and are willing to pay for it.

John Ellman devoted half a century to the improvement of Southdown mutton, which is now grown in many English counties. Early maturity has been one of the points aimed at; to-day Southdowns are fit for the butcher at thirteen to fifteen months, and weigh many pounds more than their predecessors did. Some epicures still ask for well-aged meat, but the great buying public "prefer tender, fine-grained meat cut from young sheep."

In some parts of the United States there is a decided prejudice against mutton. No doubt this is due to the fact that many local markets are supplied with the mutton of sheep which are raised chiefly for their wool and yield inferior meat. It would hardly do to throw away the carcases of these animals after they have served their purpose. But surely those who can afford to pay for better meat from "mutton-sheep," ought everywhere to have a chance to do so. Mountains abound in our country, and the breeders can, as already intimated, make sheep perform any function they choose quite *à la* Burbank.

We need men of brains who will let our gastronomic demands guide them to wealth along this line as along so many others. Valuable hints may be obtained in the Vinton book, from which I have repeatedly quoted.[1]

[1] "Sheep: A Practical Hand-book." With chapter on Management and Feeding. 100 pp. Price 1 shilling. London: Vinton & Co., Chancery Lane, Beam's Building. It is one of a series which includes cattle, horses, dogs, poultry, etc.

One more citation from this creamy little book will help to emphasize the statement I have just made:

"At the time of writing the importations of foreign mutton are very large, as they have been for some years. In this way there is an abundant supply of cheap, wholesome food, which, however, lacks the flavor and quality of the home-bred mutton, and those who can afford it will always give a higher price for the latter. The object, therefore, of the home-breeder is to produce the *very best* description of mutton, *for which there is an increasing demand.*"

### WILTSHIRE BACON.

In the restaurants and hotels of France and Switzerland, no less than in those of London, York ham is often served, and York ham at its best is considered by epicures equal to the hams of Prague or Westphalia. But if the English hams must share honors with the products of Germany and Bohemia, when it comes to bacon, Britannia rules the world.

Let not that seem a trifling matter to any one. Bacon —I mean smoked bacon—is one of the most useful and delicious of all appetizers, alone or with other meats. It is a great tonic, too, on account of its exceptional nutritive value. Anemic individuals should eat it every morning; it is beneficial to consumptives whose digestive powers are not too enfeebled; and for nursing mothers it is an ideal food. I remember reading in a

medical journal that the health of babies is often wonderfully improved if the mother eats bacon—*good* bacon, such as one can get in England often and in America sometimes. The drugged, denatured, indigestible rubbish usually sold in the United States as "bacon," is not fit for food. The men who make it or sell it ought to be imprisoned; some day they will be.

In view of the nutritive value of bacon and its exquisite Flavor when properly cured, it seems strange that Continental nations have not learned how to make it, except those which, like Denmark and Sweden, cater for the English market. Canada also caters to this market and Canadian bacon enjoys a much better reputation at home and abroad than that made in the United States, with a few honorable exceptions.

In England, also, bacon was not always appraised at its true value. Dryden, we are informed, "honestly liked the flitch of bacon better than more delicate fare"; but he deemed it necessary to apologize for having "a very vulgar stomach."

Doubtless, in his day, it took a robust stomach to digest bacon, and doubtless, also, it was not so delicate and so well-flavored as it is now. Wiltshire bacon is, like Southdown mutton, the outcome of years of British breeding on scientific and gastronomic principles.

Professor Robert Wallace of the University of Edinburgh tells in his "Farm Live Stock of Great Britain" what happened:

"A great change has within comparatively recent years come over the system of feeding pigs, as well as of curing their carcases. A generation ago it was the custom to kill pigs about two years old, at enormous weights, after the flesh had become coarse. The method of curing left the lean portion gorged with salt, hard, indigestible and uninviting: then it was an advantage to have a large proportion of fat to lean. Now, however, the system of mild-curing renders the flesh sweet and juicy, and all eflorts are directed towards the production of as great a proportion of lean to fat as possible. The large increase of the consumption of fresh pork has also encouraged the demand for young lean bacon; and on the other hand the change of fashion which has put young and tender pork on the market has helped to increase its consumption."

Of the many English breeds the Tamworth has been found the best bacon pig. It is one of the eldest breeds and is nearly related to the wild boar. It benefited by the methods of improvement inaugurated by Bakewell and his pupil, Colling; together with some other English breeds, it has helped to modify, and in some cases has eliminated, the kinds of pigs indigenous to European countries. The Danish curers admit that without the importation of stock from England "their bacon would never have taken such high rank in the world's markets."

In the United States, unfortunately, most of the

breeds are lard-hogs. "Bacon pigs," says Professor Robert Wallace, "fed on Indian corn degenerate into lard-hogs."

Now lard is doubtless a profitable article to raise, both for home use and for export. But in the kitchen the use of lard is an anachronism, since it has become generally known that butter and olive oil and beef suet are far superior to it in the yield of agreeable Flavors. Yankee ingenuity may even succeed in producing really palatable vegetable oils for cooking—a consummation devoutly to be wished, because it will help along the efforts to substitute the bacon pig for the lard hog.

When Julius Sterling Morton was United States Secretary of Agriculture he published a document which attracted much attention. It was based mainly on a communication received from an American official in England who advised American farmers, if they would secure a share of the profitable Danish and Canadian trade in cured bacon of a superior quality, to give up the various American breeds and substitute the British Tamworths or their crosses. That was many years ago, but American bacon is still for the most part what it should not be, although efforts have been made to improve it.

In the "Journal of the (British) Board of Agriculture" (1909-10, pp. 99-107) there is an interesting article on Coöperative Bacon Curing, the author of which

says that the most useful breeds of pigs in the United Kingdom for bacon are Yorkshire and Berkshire breeds. But "a pure breed of pigs is not wanted by the bacon curer. What he wants is a bacon pig, and this is an animal which does not belong to any particular breed."

What is a bacon pig? The same writer answers: "A bacon pig should mature in about seven months and should weigh about 168 pounds. This yields the best and most profitable bacon. A bacon pig, furthermore, must be long in body and deep in side. . . . This form is desirable because it is the side of the hog that furnishes the best and most expensive cuts, and it is necessary to have as much as possible of this at the expense of the other parts."

Bacon curing as an organized industry is not much over half a century old. The Wiltshire cure of bacon is, however, referred to as far back as 1705 by Edward Lisle, in his "Observations in Husbandry." Many years later there came a great expansion of trade in Wiltshire County which made the name world-famed. To this day the bulk of British bacon is cured in Wiltshire fashion in whole sides.

There are about fifty bacon factories in the United Kingdom. While their capacity is not so great as that of the factories in the United States, the treatment and quality of American meat are, as the writer just cited remarks, "much below the standard aimed at in the United Kingdom, and notwithstanding the immense

supplies of bacon which reach our country from abroad, the high price of the home product is on this account maintained."

It must not be supposed that all the bacon offered for sale in England is of superior quality. Sanders Spencer complained some years ago that the Irish bacon-curers were resting on their laurels; that a very large proportion of the pigs found in England "would be looked upon with disgust by the Danes and Canadians and that much of the meat from our home-bred pigs is inferior to a great deal of imported pork."

The temptation to use denaturing chemical preservatives and to smoke insufficiently, or not at all, in order to save weight exists in England as in America and must be combated by the consumer.

Extra choice specimens still come from some English hill farms, and the superexcellence of this bacon is due chiefly to its being skilfully smoked in the old-fashioned smoke house, which cures thoroughly while avoiding the rankness that comes from too rapid curing with very strong smoke. Properly smoked bacon is fragrant, like a flower. The other kind is n't. The test is a very simple one: if the odor makes your mouth water, it is all right.

Not only "hill-farmers" but thousands of others have a chance to get rich by catering to the gastronomic demands of the time for the best bacon, ham, and fresh young pork.

"The modern method of pig feeding has shown," as an expert informs us, "that a combination of separated milk and cereals is by far the best fattening material, and the future of the bacon-curing industry is therefore, to a large extent, in the hands of dairy farmers."

Important information on this point was gathered for the benefit of American farmers by Consul Homer M. Byington, of Bristol, and printed in the "Daily Consular and Trade Reports" for January 4, 1912. Among other things, he wrote that "Wiltshire cured hams and bacon command a higher price than the hams and bacon of any other country. It is therefore of interest to ascertain why this should be so. One of the most prominent experts in the industry has stated that it is almost entirely a question of feeding. The fine breed of hogs kept by the best farmers in Wiltshire, Somerset, and Dorset are fed principally upon skim milk and barley meal. It is claimed by the English producers that American hogs are practically all fed on corn, which, although a perfectly wholesome food, tends to make the hog fat, and a little mellow, whereas feeding by the British method gives a meat beautifully white and as solid as meat need be." Referring to a leading Wiltshire curer, the Consul continues:

"This latter firm, although purchasing 2,000 to 3,000 hogs per week from farmers in the surrounding territory, does not allow any breeder under contract to give his animals refuse for food. The pigs are subject

to an ante-mortem and a post-mortem examination by a qualified veterinary surgeon and medical officer of health. No boracic acid or other injurious preservative is used in curing."

In Germany, where one gets not only hams of the best quality, but excellent roast pork, many others besides farmers have taken to raising pigs. In 1873 there were only 7,124,088 pigs in the country; in 1907 there were over 22,000,000. The number of sheep has decreased in about the same proportion because three hogs can be raised by a peasant where he could not graze one sheep.

Pigs are particularly profitable because they can be fed largely on kitchen refuse and unsalable skim milk and because a pig "will produce a pound of meat from a far less weight of food than will either sheep or cattle."

By "mixing brains with the food," the profits can be enormously increased. Let me ask every American and English farmer to put the following words of England's leading authority, Sanders Spencer, into his pipe and smoke them slowly and thoroughly:

"This selection of a compact, thick-fleshed, and pure quality sire is of even greater importance in the pig department of the farm than in many others, as our object is to breed a pig which is capable of converting a large quantity of food into the largest amount of *fine quality of meat*, and is so formed that the latter is

placed on *those portions of the pig's body which realize the largest price in the market.*[1]

There is a funny story of a farmer who gave his pigs all they could eat one day and starved them the next, in order to have his bacon nicely streaked with alternate layers of fat and lean. In England they seem to have a number of these ingenious farmers; at any rate, in Wiltshire bacon there is always plenty of lean meat. And how delicious it tastes when grilled, or baked in a roasting pan on a wire rack from which the fat drips to the bottom of the pan!

When the bacon is too fat to suit the native connoisseur it is apparently exported to America and sold at fancy prices to people who have more money than knowledge.

Gastronomic demands suggest many opportunities to get rich, particularly along this line. Spencer speaks of the "marvelous increase in the proportion of the inhabitants of the British Isles who now eat pork." Ireland exported nearly $17,500,000 worth of pork products in 1909. The slaughter houses of Denmark deal with over a million pigs a year, largely for export to the United Kingdom, which, in 1911, imported altogether nearly $100,000,000 worth of bacon and other pork products.

In epicurean France pork gains rapidly on other meats and the Germans eat nearly twice as much pork

[1] "Pigs for Breeders and Feeders." London: Vinton & Co.

as they do beef. The figures, in pounds, of the per capita consumption in the Empire for the first three months of 1912 stood in this ratio: Mutton 0.33; veal, 1.54; beef, 7.87; pork, 14.55.

### FAIR PLAY FOR PIGS.

In the United States, also, the demand for pork products is growing. It would grow very much more rapidly were it not for three drawbacks: the custom of denaturing hams and bacon and of marketing the tough meat of old lard-pigs, and the impudent sale to the public of the products of swill-fed hogs that are not fit to eat.

It is impossible to place too much emphasis on the fact that no matter of how fine a breed the pig may be, its meat is spoiled if the feed given it is of an offensive nature. Farm-kitchen refuse is harmless when mixed with milk and greens, but porkers fed on city swill and garbage do not yield palatable meat.

Pigs seldom have fair play. Most farmers lower the value of the pork they raise by not giving the animals fresh air, sunshine, some exercise, and clean sties. In these respects we are not the only sinners. From an admirable editorial article in the London "Times" of June 27, 1912, I cite the following:

"The pig is generally kept in conditions of a grossly unsanitary kind. He is quite a cleanly animal if left to himself, but he is kept in sties which compel him to

wallow in filth all day and to sleep in a horribly confined and polluted atmosphere when he seeks shelter. Nature did not construct him for such conditions, but for an open-air life, and it is not really surprising that he develops swine-fever, which, by the way, is remarkably like the fevers that afflict overcrowded, filthy, and unventilated human dwellings. Cowhouses are regulated, but pigsties are not. Their position, however, is regulated in a way that presses very hardly upon cottagers. It is calmly assumed that pigsties must be dirty and offensive, so instead of insisting that they shall be clean, legislation decrees that they shall be at a distance from dwellings which makes it impossible for a cottager to pay his rent with cheaply raised bacon."

Pigs that are overfed and denied fresh air, sunshine, exercise, and a clean bed cannot possibly yield meat with a tempting Flavor, for such animals are really diseased—as unhealthy as the slum-dwellers in our large cities, whom no cannibal would touch.

The best American ham, as everybody knows, is the Virginia, cut from hogs that roam the woods, live on acorns and beech nuts and are thoroughly healthy.

The attitude of the ancient Britons toward the pig was one almost of reverence, not only because of its utility in the larder, but because it fed on the acorns from the sacred oaks.

In those days all British pork was no doubt similar to the meat of the young wild boar. Civilization, as

The Boar

in so many other things, brought on a temporary deterioration which caused pork to be despised and considered fit only for those who had not the means to buy something better; and it is only now that we are coming to realize fully that the fault was that of the farmers who, by refusing to give the pigs fair play, made it impossible for them to come up to the highest epicurean standard as regards Flavor.

According to high geological authority, the boar, from whom our domestic pigs are descended, was coeval with the extinct species of the mastodon and the dinotherium, and "hence must be regarded as the most ancient of our domesticated animals."

An aristocrat, in other words, is the pig! He is selfish, like most "aristocrats"—that cannot be denied; but he is clean—even his mud baths are taken merely to cool off or to scour his skin. Trainers, moreover, will tell you that he is one of the most intelligent of animals.

Pig brains are good to eat, too—better than calves' brains, but are usually sold as calves' brains because that 's what the ignorant purchaser asks for. And pork, young, tender, and not too fat, is good all the year round, not only in the months which have an R in them.

### GROUSE AND GRILLED SOLE.

Wild boars no longer roam the forests of England. Sportsmen do their pig-sticking in the jungles of India.

But venison in season is still in evidence, and the hare will never be extinct, though he now comes to London chiefly in shiploads from Australia.

The well-informed editor of the "Hors d'Œuvre" department of the "Pall Mall Gazette" gives an amusing glimpse of the situation as regards English and Scotch venison, which he considers a veritable delicacy, preferable to the highly-sauced venison of France and Germany:

"We ought really to eat more venison when in season, but if the ordinary housewife were asked to provide it quite in the ordinary way for an ordinary dinner at home, she would be entirely nonplussed. 'But the butcher does not keep it.' 'Try the poulterer.' 'The poulterer says he can get it at a day's notice.' Why all this fuss? Venison is a national dish; it is not expensive; it is most nutritious and wholesome. Some one ought to 'buck up' the venison market."

Among British feathered animals the best is the grouse, "the only really native game bird of these islands." It comes to London by fast expresses from the North—recently also from Ireland, which would be a finer grouse country, were it not for poachers. For the first days of the season grouse bring easily a guinea a brace in London market, cheaper ones being cold-storage suspects. Later on—thanks to rational methods of game preservation—they pour in daily by the tens of thousands and come down to 8s. or less a brace.

Though never as cheap in the restaurants as partridge is in Germany, grouse is worth its price when cooked in the English way, which preserves all the woodland flavor of the bird.

English farmers have not waked up to the opportunities that lie in catering to the demand for fresh-killed poultry of all kinds. The best restaurants get their supplies usually from France. There is in the Kingdom not even one adult fowl per acre of cultivated land. Here are possibilities of tremendous improvements, for, as Professor Edward Brown of the Ontario Agricultural College has truly said: "Masses of people living under highly artificial conditions must have food high in nutritive elements, easily digested and palatable, in which respect eggs stand first among all natural products and poultry not far behind."

A well-known poulterer is cited as saying in regard to the London markets: "Fat goslings and ducks are in good demand, and the best prices are being given for them. One hundred and fifty years ago tens of thousands of geese and turkeys were reared in Suffolk, Norfolk, Cambridgeshire, and adjacent counties. The numbers now are, in comparison, insignificant. Nevertheless, the industry is one which might be made one of great importance and quite comfortable profits."

A very different situation confronts us when we look at the supply of seafood. Here the British Isles hold their own in competition with any country, and the

methods adopted to ensure a daily supply of fresh fish cannot be too urgently commended to American fish dealers.

One of the most interesting sights in London is Billingsgate market. Fish have been sold here for several centuries, but under changing conditions. No longer will you find here the "fat, motherly flatcaps, with fish-baskets hanging over their heads instead of riding-hoods, with silver rings on their thumbs, and pipes charged with 'mundungus' in their mouths, sitting on inverted eel-baskets and strewing the flowers of their exuberant eloquence over dashing young town-rakes who had stumbled into Billingsgate to finish the night. . . . But the town-rakes kept comparatively civil tongues in their heads when they entered the precincts of the Darkhouse. An amazon of the market, otherwise known as a Billingsgate fish-fag, was more than a match for a Mohock," as George Augustus Sala remarked in his "Twice Round the Clock, or the Hours of the Day and Night in London."

Gone are these amazons who by their abusive speech gave a new word to the English language. Men now monopolize Billingsgate Market, and the joke of it is that these men, as we found them at six o'clock on a September morning, are the very pink of politeness, most courteously ready to answer your questions regarding different fishes, and cockles, and periwinkles, though they know you are not there to buy. Even the

rough, hurrying fish-porters make way for you to pass, and the auctioneers stop to warn you against places where your clothes might get soiled by drippings.

Billingsgate is now entirely given over to the wholesale fish-trade. The smell of it, fish-like but not ancient—for it is a clean place—easily guides you to the spot from the nearest station of the subway's inner circle. The streets near it are wet with the drip of fish-filled boxes, and crowded with wagons that are being loaded with the town's provisions of sea food—strictly fresh every day.

Billingsgate Market being on the water's edge all the fish is unloaded direct from the fishing boats. Processions of porters come from the boats, each with a great box full of fish balanced on the top of his head, on a queerly-shaped, padded, waterproof hat made expressly for this work. The fish are kept cool with loose ice, but are not frozen. The Spanish mackerel with their dark markings and opaline sides offer the most beautiful sight of all, so freshly caught that their colors are as vivid as when they left the water.

Besides these are whitings, flounders, pale-brown sole, halibut, turbot, all shining from the sea, and among the shell-fish may be seen oysters, huge crabs, lobsters, —white flecked dark green ones—periwinkles, and cockles. The latter look somewhat like very small clams, and they are sold cooked, having been separated from their shells by large sieves.

In the best New York restaurants you are not sure of getting fresh fish when you order it. In the best London restaurants you are. Probably some of the fish we saw that morning at Billingsgate was served to us that evening for dinner. I mean sole, of course. We were to be in London only a week on this occasion, and when you are in London a week only it would be unutterably absurd not to eat grilled sole at least once a day, for you cannot get anything equal to it anywhere else in the wide, wide world.

There are some, I know, who place turbot above sole, and others even prefer plaice. Put no faith in such people; they could never be honestly elected to a place on the bench of the Gastronomic Supreme Court. Turbot is delicious, and so is plaice, and so are chinook salmon and our shad and whitefish. Each of these *seems* the best of all fishes while you are eating it; but sole actually *is* the best. How do I prove this? Like the musician who boasted he was the best horn player in the world, I do not prove it; I admit it.

Seriously speaking, there can be no doubt that if a vote were taken on this question among the epicures of Europe, sole would win by a large majority. In Germany the *Seezunge*, or "sea-tongue," is the choicest of marine delicacies, and in France the chef's chief glory is his sole and the special sauce he serves with it. But nowhere is the sole so juicy and flavorful as in England; nor is it disguised there with any sauce, being

served usually right off the grill. Grilled Sole is one of England's great specialties.

Whitebait is another. It is not a distinct species but consists of the fry of herrings, smelts, sprats, sand-eels, weevers, etc. It is supposed to have been first served in 1780. To this day no tourist who likes good things to eat omits a trip to Greenwich to enjoy a dish of whitebait at headquarters in the ship tavern. When Thackeray was there he indulged in these reflections: "Ah, he must have had a fine mind who first invented brown bread and butter with whitebait! That man was a kind, modest, gentle benefactor to his kind. We don't recognize sufficiently the merits of those men who leave us such quiet benefactions. A statue ought to be put up to the philosopher who joined together this charming couple."

Yarmouth bloaters and other cured fish are British specialties relished the world over. But the best of them is Finnan haddock, so named after Findon, a fishing village near Aberdeen where haddock smoking with peat or oak dust has attained perfection. There are flavorless imitations, preserved with pyroligneous acid. The genuine are cured in smoke houses. The condimental value of smoke is illustrated by the fact that while fresh haddock is by no means rated among the finest fishes, finnan haddie is one of the very best of cured fishes.

The Whitstable oyster is still another marine spe-

cialty enjoyed, not only throughout the British Isles as one of the most precious "natives," but also on the Continent. Far away Austria imports only $10,000 worth of oysters a year from all sources, but from Berlin and other German cities come large orders for the best English bivalves. France also takes them, but not on a large scale, as her own oyster production is large.

The best Whitstable oysters—from the coasts of Kent and Essex—are known as royals and cost in restaurants three or four shillings a dozen, which is considerably more than the price charged in our own restaurants. Whether they are worth more is a much disputed point. Most Americans object to what they call the coppery taste in English and Northern European oysters. Paderewski agreed with those who pronounce the English oyster superior to the American. I suggested that he probably had had the "floated" American oysters only. Certainly I have never tasted oysters with a more delicious Flavor than genuine Blue Points, Cotuits and Lynnhavens. The English natives are small, juicy, and fragrant of the sea—great appetizers indeed.

Alas, in England also the sewage plague has cast its blight on the shellfish business. Two decades ago 160,000,000 oysters are said to have been landed annually. In 1911 the number fell forty or fifty millions short of that figure because of typhoid fever and

other diseases traced to the eating of oysters from polluted beds. The importation of American oysters was only at the rate of 100 barrels a week in 1911, as against 2,000 barrels fifteen years earlier.

Of the other British shellfish the periwinkle is much appreciated by the epicurean French who, not satisfied with importing them from England in bulk have also brought them over to plant in their own beds. They are boiled a few minutes in salted water and served with butter as an entrée, usually at the second morning meal.

### COVENT GARDEN MARKET SCENES.

That the English do not live on butcher's meats and marine food alone, is made manifest by a matutinal visit to Covent Garden.

"In Covent Garden a filthy noisy market was held close to the dwellings of the great. Fruit women screamed, carters fought, cabbage stalks and rotten apples accumulated in heaps at the thresholds of the Countess of Berkshire and of the Bishop of Dunham" —such is Macaulay's picture of this market at the close of the seventeenth century. It is still given up entirely to vegetables, fruits, and flowers, but is now clean, orderly, and not especially noisy, as markets go —not so noisy, perhaps, as some of the operas performed in the neighboring Covent Garden Theater, the resort of fashionable society.

In September we found the flower pavilions the most interesting part of the market. Chrysanthemums with rich, deep-colored blossoms were the reigning favorites. Conspicuous among their rivals were the dahlias, gaudy and varicolored, some of them solid as cabbage heads, others strangely-quilled. Bright autumn leaves, recalling New England, attracted our attention. In one spot golden chrysanthemums and melons of exactly the same shade made a beautiful picture.

On the whole the vegetable quarters are not specially interesting, particularly when one has seen the Halles Centrales of Paris. Flowers do not, as in Paris, crowd in among them, nor are the streets picturesque and slippery with many shades of green refuse. The carts are not emptied as they are in Paris, but form each its own stall. All the vegetable pictures are "skied," and are far less attractive than when they lie, in orderly confusion, all over the market streets. Celery, the first we had seen, was enormous, but deep green, instead of white, like ours. Many of the provisions are packed and sold hidden in large round baskets. A perfect tower of Babel, ten baskets in all, is one man's load, carried on his head, but they are evidently empty, as two seem to be as heavy a weight as a man cares to balance when they are full.

George Meredith is quoted as having said to a friend that he would be a vegetarian if he could get his vegetables decently cooked.

There are a few vegetarian restaurants in London, and probably there would be many more if the English knew, as several Continental nations know, the art of cooking greens and roots in a savory manner. Sir Henry Thompson grew enthusiastic over the "delicious characteristic flavor" of English garden peas, picked young and cooked *à l'Anglaise*, which is a better way than any French fashion of cooking them. Vegetable marrow tastes better in England than anywhere else, and the mushrooms are good. But on the whole England has a great deal to learn from France regarding variety and the best ways of growing and cooking vegetables.

Salad plants, in particular, are not appreciated as they should be. Read this wail, for an illustration, from a Covent Garden market report in the London "Telegraph": "Nothing short of a prolonged heat wave induces people to eat liberally of this health-giving vegetable. It was pitiful, yesterday, to see stacks of first-rate lettuce utterly neglected. The very best samples, carefully selected and packed in boxes, realized no more than 6d. per score—a score, by the way, being twenty-two heads. Any amount remained unsold."

Tomatoes are getting to be almost as popular as in America. In England, as elsewhere, there are those who maintain that "no salad is perfect without the inclusion of a little tomato"; and of course the delicious

"love-apples," as they used to be called, are eaten in many other ways, raw or cooked, grilled tomatoes being an English specialty.

That England is a great fruit country no American can admit, however much he may enjoy the luscious hot-house and wall-grown peaches, nectarines, melons, pears, and grapes. Fruit needs, above all things, sunshine, and of sunshine we have a great deal more at home, especially in California. At Covent Garden and in the fruit shops of the metropolis there are indeed some tempting displays, but the prices are apt to stagger the visitor from across the Atlantic, who seldom pays more than a nickel for a peach or two—say two shillings a dozen at most—whereas in England peaches grown in orchards sell at retail for six to ten shillings a dozen, while those grown in hot-houses bring from fifteen shillings ($3.65) to a guinea ($5.11) per dozen. If you told the average Londoner that in New York one can often buy five or six good cantaloupes for a shilling, he would not believe you without an affidavit signed by the Consul General.

It may be said that owing to their cooler climate the inhabitants of the British Isles do not need fruit as much as we do, and that is true. Yet in all climates, seasons, and conditions of the weather fruit is healthful, and its Flavor is a great appetizer and aid to digestion. It is therefore encouraging to notice that strenuous efforts are being made not only to remove the old re-

proach that English grapes and other hot-house products have more beauty than Flavor, but also to raise and import orchard fruits in such abundance as to bring them within the reach of the purchaser of moderate means.

The growth of the banana trade strikingly illustrates this point. In the first years of this century this sweet and nutritious fruit was seldom seen in English markets. To-day there is a whole fleet of steamers occupied exclusively in bringing bananas from the West Indies and elsewhere to British ports. The change was greatly accelerated by the shrewdness of the importers, who freely advertised the merits of their goods in the newspapers, citing sample recipes for cooking them from a little book which is offered free.

This method of educating the public to try new foods and dainties doubtless has a great future. The Germans have a saying: *Was der Esel nicht kennt das frisst er nicht*, which politely translated means "the public must be taught to eat things it does not know."

A decade ago one seldom saw any grapefruit in England. It was Mrs. John Lane who taught Londoners the art of enjoying this most wholesome and palatable fruit—the queen of the citrus tribe. Its juice is the most marvelous combination of sour, bitter, and sweet in existence, and its charm grows on you from day to day. Mrs. Lane induced her greengrocer to keep some in stock, but ere long he confided to her

that they were "bloomin' sour" and mostly a dead loss, for customers never bought them more than once. "They 're forever asking me how to eat 'em," he said, "and how should I know!"—here he wiped his hands hesitatingly on his apron—"but if I could tell 'em how, why the trade would be grateful; anyhow, I 'd be."

So Mrs. Lane wrote a little pamphlet in which she explained the secret of serving grapefruit sweetened in such ways that all may enjoy it. It is entitled "The Forbidden-Fruit or Shaddock; or Grapefruit, How to Serve and How to Eat It." (John Lane, Vigo Street, London.)

Doubtless this pamphlet had much to do with increasing the number of grapefruit eaters in Britain, now said to be very large. It is well to know that there are many varieties, and that some are far inferior to others; so if you eat one and it does not please you, don't be rash and say you do not like grapefruit. Try the other kinds. The best are neither too sour nor too bitter, and they have a "wild" fragrance as exquisite in its way as the marine tang of live oysters. When you get one of these you need none of the sugar, or the liqueur, or maraschino cherries nearly always served with grapefruit. Just peel off the yellow skin, cut the fruit lengthwise, separate the sections with your fingers, remove the membranes, and you have a pile of pulp resembling so many crab tails, which dissolve in the mouth and flood the palate with ambrosial Flavor.

Oranges are good, but grapefruit is as superior to them as sour cherries are to sweet.

One of England's chief claims to gastronomic distinction is that her orchards include plenty of sour-cherry trees. A common French name for tart cherries is *cerises anglaises*, which seems to indicate that they are an importation from England.

Epicures, from the ancient Lucullus, who introduced the sour cherry into Europe, to Paderewski, who eats no others, agree that, *thoroughly ripened*, it is far superior in Flavor to the sweet cherry, besides being more delicate, melting, digestible and wholesome. On a warm day nothing—not even a glass of lemonade or limeade—is so agreeably refreshing as a handful of Early Richmonds, Morellos, Montmorencys, or Baldwins.

A British expert claims that "despite the sunshine and climate of France, the quality and flavor of cherries grown in England are much superior to those of the foreign fruit."

Of no product of his island is the Englishman more boastful than of his strawberries. Big they certainly are, and beautiful; also fragrant after a few days of sunshine. Freshness, which is of such great importance in the case of these berries, is secured by growing them in enormous quantities within a twenty-mile radius of London. They are picked early—often by the light of lanterns—brought to the city, and deliv-

ered to families for breakfast a few hours later. Usually they are carefully graded, and you get what you order and pay for, be it "specials," "firsts," or "seconds."

After all, the big strawberries, however luscious, are seldom so fragrant as the little French *fraises des bois*, or strawberry of the woods. These are imported to some extent; yet a writer in the London "Telegraph" remarks that "if home-growers were to market tiny specimens with ambrosial flavor there would be no sale for the fruit, nor would the wild strawberry of our hedgerows be appreciated by the pampered gourmets of London." If this is true, something must be wrong with these same pampered gourmets. Perhaps the wild berries are less fragrant than in France. In Oregon, as you drive along wood roads and fields, the air is heavy with the fragrance of wild strawberries. But the richest perfume of the kind I ever inhaled was, strange to say, in the far north—the Norwegian city of Molde, where two bowls of strawberries on the table made the hotel dining-room smell like an Oriental rose garden. It was in Norway, too, that I ate the best sour cherries I ever tasted.

The fame of the British gooseberry has crossed the Atlantic, the jam made from it being purchasable in all the larger grocery stores throughout the United States and Canada. The gooseberry is indigenous to Great Britain, where it flourishes particularly well be-

cause it does not need or desire much sunshine. This is doubtless the reason why the British berry is superior to the American. I have read in a London journal that "American visitors are highly appreciative of the flavor of English gooseberries, as those of their own country are not nearly so good. In hotels largely frequented by Transatlantic guests there is quite a brisk demand for the fruit, especially the large yellow 'sulphur' berry and the 'white lion.' As judges of fruit Americans are proverbially keen, and their selections are usually worth following."

### MARMALADES, JAMS, AND BREAKFASTS.

In the matter of bottled condiments, sauces, walnut, mushroom, tomato and other catsups, diverse pickles, and biscuits in endless variety (of which, as of the bottled things, millions of dollars' worth are exported annually), Great Britain is also preëminent; and what is particularly commendable is that British products for export are usually made as conscientiously as those for home consumption. You can buy them in a Japanese village, and be as sure of their excellence as if you got them in London.

Gladstone was a great believer in jam. He constantly urged his countrymen to eat more of it and induced a number of them to go into the manufacturing business. Some of these lost money because the thing was overdone for a time.

While good jams and jellies are made in many countries, in the matter of marmalade, Scotland has a virtual monopoly so far as superexcellence is concerned.

Open an American cook book and you will find that the directions for making orange marmalade begin with the words, "Take one dozen oranges and four lemons," and end with the information that when bitter marmalade is desired the bitter can be obtained by soaking the orange seeds overnight and adding the water drained from them to the other ingredients.

A marmalade thus obtained is better than no marmalade at all, but it is far inferior to the British product, which is made of special varieties of oranges.

Inquiries having come from firms in the United States, the authorities in Washington asked Commercial Agent, John M. Carson, to find out the secret of the superior Flavor of Scotch marmalade.

The information he obtained is so instructive that I must quote it, in part, from the "Daily Consular and Trade Reports" of February 17, 1911:

> British marmalade is produced from sour oranges and sugar. The best-known firms use almost exclusively the Seville (Spain) bitter orange, which has comparatively little pulp and consists mainly of rind, the substance most desirable for the making of good marmalade. Messina and Palermo "bitter" oranges, although not considered as good as those of Seville, are also used, but command a much lower price. With the exception of a very few firms who buy and "pulp" oranges at Seville and ship the pulp to England for preparation and canning by English

factories, marmalade manufacturers buy the raw material in open market. London, Liverpool, Manchester, and Hull are the principal orange markets. The grower ships his product to his agents or to orange brokers or auctioneers, and it is then put up for sale to the highest bidder on a given date, in lots of scores, hundreds, or thousands of boxes, very much like wheat and other produce are sold in their respective exchanges, with the exception that in the case of oranges there are no "future sales," nor are "reserve" prices made.

Oranges being perishable, and their attractiveness and freshness continuing for so short a time, the brokers accept the highest bids made on the day of sale and never reserve the fruit for future offerings. The sales are held regularly on what are known as "market days." The character, quantities, qualities, and nativity of the fruit are made known to the trade by catalogue several days in advance, consequently the auctions are always well attended and the bidding spirited. The London Fruit Exchange is located in the eastern section of the city in a large structure known as the "Monument Building." More than $12,000,000 per annum is the amount required to pay for the oranges sold in the English market, the great bulk of the sales being by public auction. Apples are sold in like manner, the aggregate annual sales averaging in value $10,000,000. The great Covent Garden market, in the heart of London, buys its supplies of fruits at the regular auction sales held at the London Exchange, and in turn the retail dealers are supplied from Covent Garden. . . .

The law requires that marmalade shall be composed of orange and sugar exclusively, and if any other substance is employed, no matter for what purpose, the manufacturer is liable to a heavy fine. It is generally conceded that the law is observed by English manufacturers. Fruit preservers as a rule use refined cane sugar, which they buy in the open market.

Orange marmalade has made Scotland famous

throughout the gastronomic world, which seems odd in view of the fact that the country is too far north to raise oranges.

We shall see in the last chapter that the appreciation of bitter marks a higher stage of gastronomic culture than the liking for sweets or even for sour. The best orange marmalade is always bitter, and to this it owes not only much of its agreeable taste but its value as a tonic, the rind of the bitter orange being a valuable stomachic. It is therefore not strange that although there are many makers of this delicacy, the home demand often exceeds the supply, and that the new crop always is eagerly looked forward to. It has been claimed, with some show of reason, that British sturdiness is largely a result of the national custom of having bitter marmalade regularly served with breakfast.

Breakfast! That word suggests another great service Britannia has done the gastronomic world. Nothing could be more irrational for normal persons than the continental habit of eating only bread and butter for breakfast and then having a second, heavier breakfast—*déjeuner à la fourchette*—at eleven or twelve o'clock to interrupt the morning's work in its full tide. Far better, both economically and hygienically, is the English way—which fortunately we have adopted—of having a substantial breakfast, and then nothing more till lunch time, the best hour for which is one o'clock, as most of us know instinctively.

A healthy person ought to have a good appetite in the morning, after a night's rest, and gratify it. Lunch should be light, and dinner, more substantial than breakfast, should begin not later than seven for persons who retire at an hour conducive to longevity—that is, an early hour.

### RESTAURANTS, CAKES, AND PLUM PUDDING.

As a rule, British inns and restaurants serve food as badly cooked as it is in American "hash houses," if not more so. I have had experiences with meat pies and sausages, with several kinds of pastry and with tasteless vegetables that quite recalled the Arizona days before Fred Harvey came from England—as related in the first chapter of this book—to civilize our Southwest.

Adulteration of foods is largely practised, and many of them are denatured by the use of chemical preservatives, although in these respects there has been considerable improvement since the "Lancet" exposed "the appalling state of the food supply" and fearlessly gave the names and addresses of hundreds of manufacturers and tradesmen who sold adulterated articles.

It was hoped that with the introduction of motoring there would come a revival of the good old coaching inns; but nothing of the sort has happened. According to the gastronomic editor of the "Pall Mall Gazette" what the touring motorist gets is "probably an Amer-

ican preserved soup which tastes like boiled blankets, a few sardines, stale and too long opened, a joint which has either been overcooked or under-done, a sodden pancake with no suggestion of the real thing, and a piece of cheese which is obviously non-British. And for this he is charged at least five shillings. . . . On the Continent one can get an excellently cooked and served meal for half the price."

While the English are thus their own severest critics, they do not hesitate, when brought to bay, to present the other side of the shield. In commenting on the Exhibition of the Cookery and Food Association in 1912, the London "Telegraph" called attention to the fact that "typical dishes are served to perfection every day on innumerable English tables"; and the writer just quoted, referring to the fact that France, Austria, Hungary, Italy, and Switzerland had sent over experts to show how things are done in their countries, goes on to say that "it might humbly be suggested that our own cooks might show the foreigners something. Few cooks, other than English, can cook whitebait satisfactorily; the same applies to Irish stew, steak, and kidney pudding with larks and oysters, to liver and bacon, to tripe and onions (no, not *tripe à la mode de Caen*), to a really good devil, and above all, to curry, wet or dry. . . . It is really about time that the British cook asserted himself."

A German lexicographer calls attention to the fact

that the United Kingdom has contributed at least half a dozen words to the international dining-room language: Beefsteak, roast beef, Irish stew, mock-turtle soup, pudding, and toast. He might have added marmalade and cakes. A firm in Germany once offered a thousand marks for a good Teutonic equivalent for "cakes"; with what success I do not know.

It is not strange that Continental manufacturers are so much interested in these British cakes and biscuits. They are favorites the world over because of their crispness and good Flavor, and the exports of them amount to about £1,400,000 a year.

Seven million dollars! Is there a better guide to wealth than gastronomy, the art of preparing and serving appetizing food?

Plum pudding is another profitable product of British manufacturing skill.

Though it has been traced to a Teutonic origin (*Pflaumen-grütze*) it is now characteristically Anglican, and the plum (*Pflaume*) has disappeared. In that monumental compendium of English philological erudition, Murray's "New English Dictionary," we read as one of the definitions of Plum: "a dried grape or raisin as used for puddings, cakes, etc.," and the editor adds: "This use probably arose from the substitution of raisins for dried plums or prunes as an ingredient in plum-broth,—porridge, etc., with retention of the name plum for the substituted article."

Considering the national liking for this pudding it is not surprising that the word plum for this favorite was retained, for "plum" also stands for tit-bit, or a good thing in general. As long ago as 1660 devotion to this dish was amusingly illustrated by these words in a mock sermon: "But there is your Christmas pye and that hath plums in abundance. . . . He that discovered the new Star in Cassiopeia . . . deserves not half so much to be remembered, as he that first married minced meat and raisins together."

Until a few years ago the English housewife always boiled her own plum pudding. To-day she can buy it if she desires. It is made by machinery; hundreds of thousands of pounds are shipped to other countries annually; and it is claimed that this kind is as a rule superior in Flavor and digestibility to the home-made. It was during the Boer war that the export business received its first great impulse, thousands of pounds being sent to the soldiers in Africa to give them a taste of the Christmas dinner at home; and now the pudding is made in such large quantities that the United States Government has begun to take cognizance of it in official reports. In the "Consular and Trade Reports" (1911) Commercial Agent, John M. Carson, had a two-page communication from which I cite the following:

The extent and magnitude of the trade may be inferred from figures furnished by one of the several large manufacturers. In order to be prepared to meet the demand for their product,

manufacturers begin active operations as soon as the new crops of raisins, currants, and other required fruits appear in September. All the constituents of plum pudding, which do not include plums, are prepared and manipulated by elaborate and expensive machinery. Currants are washed and stems removed, raisins are stoned, nuts are shelled and ground, oranges and lemons are peeled, the peel candied and cut up, eggs are beaten, and all other ingredients prepared by machinery. The manufacturing firm alluded to, in order to supply their trade this season, used the materials and quantities given below.

| | Pounds. | | Pounds. |
|---|---|---|---|
| Currants | 145,800 | Sultanas | 48,330 |
| Sugar | 101,250 | China ginger | 3,510 |
| Peel | 72,360 | Spices | 1,440 |
| Suet | 72,360 | Almonds | 400 |
| Bread crumbs | 72,360 | Milk, gallons | 948 |
| Flour | 54,000 | Rum, gallons | 948 |
| Raisins | 48,330 | | |

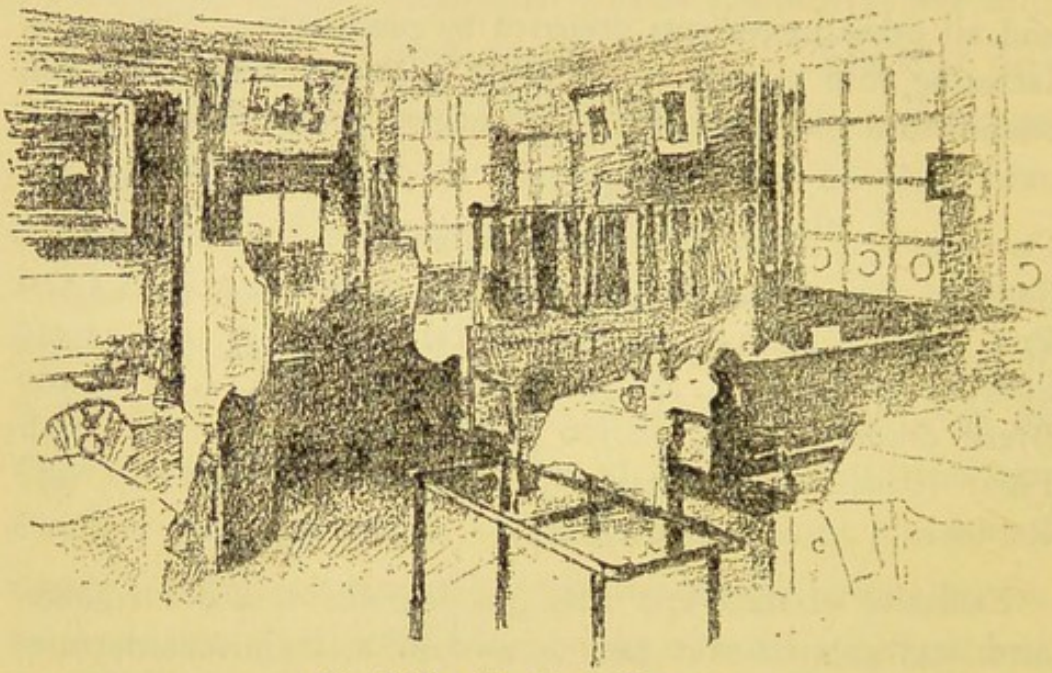
Exclusive of milk and rum, the ingredients above enumerated aggregate 620,140 pounds used by a single manufacturer in supplying plum pudding to meet the demands of the Christmas season of 1910, the number of puddings furnished aggregating 250,000. There are three or four other London manufacturers each of whose output perhaps equaled that described, and there are a large number of smaller establishments in which plum pudding was supplied for home and foreign consumption.

The pudding is put up in packages weighing one to five pounds each and securely packed to insure preservation and safe transportation. Properly prepared and packed the plum pudding of England, with ordinary care on the part of the housewife, will retain its virtues for a year or more.

Plum pudding has the evil repute of being indigestible. An English friend informs me that while it cer-

tainly is so if boiled only three hours, as is usually done, it becomes as digestible as good bread if boiled seven hours. It is then compact and yet brittle.

Still another profitable branch of the art of preparing appetizing food is that of the cheesemaker. If im-



Ye Olde Cheshire Cheese

itation is the sincerest form of flattery, the English makers of Cheddar cheese have been flattered as few mortals have; for in the United States, as well as in Canada and Australia, most of the cheese made is of the Cheddar type. There would thus be no cause for exporting Cheddar, even if England had any to spare; nor is much of the Cheshire sent abroad, its fragile nature making it unsuitable for exportation, which is to be regretted, because in the opinion of Dr. Voelker, shared by many epicures, Cheshire is the finest

flavored of British cheeses. It is made from milk which is perfectly sweet, and to this its special aroma has been attributed. For the third of the three best-known varieties of British cheeses—Stilton—there is a considerable demand for the tables of foreign epicures, as it exports well.

Stilton is a blue-molded cheese, which is manufactured of unskimmed milk in a way similar to the methods of making the French Roquefort and the Italian Gorgonzola. Like those, it owes its piquant Flavor to the mold, which is artificially spread throughout the cheese in diverse ways.[1]

Every American tourist who visits London goes to take a meal at Ye Olde Cheshire Cheese, made famous by Dr. Johnson and Oliver Goldsmith, and for three centuries the haunt of literary men, including Dickens and Thackeray. Toasted cheese—cheese bubbling in tiny tins and tasting like Welsh rarebit—was the original specialty of this place and is still served unless you prefer a wedge of uncooked Cheshire. But what ultimately made this place renowned throughout the world was its lark pudding.

Fortunately it is lark no more but pigeon pudding; at least, so it was frankly called when I ate it in September, 1912. What else it is compounded of no one knows but the proprietor and the cook, who guard the

[1] For details regarding British cheeses see "Cheese and Cheese Making," by James Long and John Benson. London: Chapman & Hall.

HAUNCH OF VENISON, 3/6. This day at 6 o'clock.

## Friday, 13th September, 1912.

# *BILL OF FARE.*

READY FROM 12 NOON TO 9.30 P.M.

| | s. | d. |
|---|---|---|
| SIMPSON'S FISH DINNER, consisting of three kinds of Fish | 3 | 9 |
| Dinner from the Joint | 2 | 6 |
| Dinner from one Special Dish | 2 | 6 |
| Dinner from one Special Dish, with Joint to follow | 3 | 0 |
| Dinner from two Special Dishes | 3 | 6 |

THE ABOVE PRICES INCLUDE VEGETABLES, CHEESE†, BREAD AND BUTTER, AND SALAD.

## Joints, 2/6

SERVED FRESHLY COOKED AT THE FOLLOWING HOURS.

FROM 12.0 TO 9.30 — Saddle of Mutton, Roast Sirloin of Beef

1.0 — Saddle of Mutton. Roast Sirloin Beef; Boiled Beef; Forequarter Lamb; Roast Loin of Pork

5.30 — Boiled Beef, Roast Sirloin of Beef. Saddle of Mutton

6.0 — Saddle of Mutton, Roast Sirloin of Beef, Forequarter Lamb

7.30 — Saddle of Mutton

6.0 — **Haunch of Venison, 3/6**

THE ABOVE PRICES INCLUDE VEGETABLES, CHEESE†, BREAD AND BUTTER, AND SALAD.

## Soups.

| | s. | d. |
|---|---|---|
| **Turtle**, clear or thick | 3 | 0 |
| **Green Pea** | 1 | 6 |
| **Scotch Hotch-Potch** | 1 | 0 |
| Ox Tail, clear or thick | 1 | 0 |
| Thick Mock Turtle | 1 | 0 |
| Clear Mock Turtle | 1 | 6 |
| Julienne | 1 | 0 |
| Macaroni | 1 | 0 |
| Gravy | 1 | 0 |
| Vermicelli | 1 | 0 |
| Tomato | 1 | 0 |

NOTE.—IF SERVED WITH JOINT OR SPECIAL DISH TO FOLLOW, 6d. LESS WILL BE CHARGED FOR EACH OF THE ABOVE.

## Fish.

| | s. | d. |
|---|---|---|
| Boiled Salmon and Lobster Sauce | 2 | 6 |
| Boiled Turbot and Lobster Sauce | 2 | 0 |
| Curried Turbot | 2 | 0 |
| Fried Turbot | 2 | 0 |
| Sole Souchet | 2 | 0 |
| Salmon Cutlets and Piquant or Indian Sauce | 2 | 0 |
| **Curried Prawns** | 1 | 6 |
| **Fresh Herrings and Mustard Sauce** | 1 | 0 |

FRESHLY COOKED SALMON AND TURBOT (THE WHOLE FISH) SERVED DAILY FROM 12 NOON TO 9.30 P.M.

| | s. | d. |
|---|---|---|
| **Fish Pie** | 1 | 0 |
| **Fish Balls or Cakes** | 1 | 0 |
| Fried Whiting | 1 | 0 |
| Whitebait | 1 | 6 |
| Stewed Eels, Port Wine or Parsley and Butter Sauce | 1 | 6 |
| Fillet of Sole, Fried or Boiled | 2 | 0 |
| Sole, Fried, Grilled or Boiled | 2 | 0 |

NOTE.—IF SERVED WITH JOINT OR SPECIAL DISH TO FOLLOW, 6d. LESS WILL BE CHARGED FOR EACH OF THE ABOVE.

| | s. | d. |
|---|---|---|
| **Plain Lobster** | 2 | 6 |
| **Lobster Mayonnaise** | 3 | 6 |
| **Lobster Salad** | 3 | 0 |
| **Salmon Mayonnaise** | 2 | 6 |

**WHITSTABLE NATIVE OYSTERS, 3/- per dozen.**

THE CHEDDAR AND CHESHIRE CHEESES SERVED HERE

**HAUNCH OF VENISON, 3/6. This day at 6 o'clock.**

## Special Dishes, 2/6.

**HAM AND PEAS.** **HASHED VENISON.**

**STEWED NECK OF LAMB AND PEAS.**

Curried Chicken — Chicken Marengo — Haricot Mutton
Fricassé Chicken — Stewed Pigeon — Curried Fillets of Mutton
Stewed Rump Steak — Stewed Kidneys

THE ABOVE PRICES INCLUDE VEGETABLES, CHEESE† BREAD AND BUTTER, AND SALAD.

## FROM THE GRILL (15 to 30 minutes.)

| | s. | d. |
|---|---|---|
| Mutton Cutlets, Tomato or Piquant Sauce | 2 | 6 |
| Rump Steak | 2 | 6 |
| Grilled Fowl and Mushroom Sauce | 3 | 0 |
| Porterhouse Steak | 4 | 6 |
| „ „ for two | 7 | 6 |
| Mixed Grill—Chop, Kidney and Sausage | 2 | 6 |

THE ABOVE PRICES INCLUDE VEGETABLES, CHEESE†, BREAD AND BUTTER, AND SALAD.

| | | | | | |
|---|---|---|---|---|---|
| 10 mins. | Chump Chop | 1 | 6 | Two Kidneys | 1 3 |
| | Loin Chop | 1 | 3 | 10 mins. **Lamb Chops** | **2 6** |

## Game.

**PARTRIDGES 5/- each.** **GROUSE 5/- each.**

## Vegetables.

**NEW PEAS, 6d. per portion.**

Beetroot. 3d. — Tomato, Plain, 3d. — Tomato, Grilled, 4d.
Cucumber, 3d.

## Sweets.

| | | | |
|---|---|---|---|
| **Tapioca Pudding** | 6d. | Prunes and Rice | 6d. |
| Mixture of Fruit | 6d. | Apple Pie | 6d. |
| Orange Fritters | 6d. | College Pudding | 6d. |
| Apple Fritters | 6d. | Sweet Omelette | 1/- |
| Madeira Jelly | 6d. | Lemon Pudding | 6d. |
| Damson Pie | 6d. | St. Clair Pudding | 6d. |
| | | Rum Omelette | 1/6 |

## Ices.

Strawberry Cream — 9d.
Pineapple Water — 9d.

## Sundries.

| | | | |
|---|---|---|---|
| Anchovy Toast, Fish or Paste | 9d. | Anchovies, Plain | 6d. |
| Macaroni with Cheese | 6d. | Poached Eggs on Toast | 9d. |
| Macaroni with Tomatoes | 6d. | Sardines on Toast | 9d. |
| Welsh Rarebit | 6d. | Bloaters Roes on Toast | 9d. |
| Buck Rarebit | 9d. | Stewed Cheese | 6d. |
| Scotch Woodcock | 1/3 | Red Currant Jelly | 3d. |

Olives 6d.

## Tea and Coffee.

Tea, per cup, 6d. — Tea, per pot, 1/- — Coffee, small cup, 4d., large, 6d. — Cream, 3d.

## Dessert.

**PEARS, 6d. each.** — Almonds and Raisins, 9d. — **APPLES, 3d. each.**

ATTENDANCE, 3d EACH PERSON CHARGED IN THE BILL.
FINE OLD TAWNY PORT, 8d PER GLASS.
BASS & CO 'S PALE ALE ON DRAUGHT

**WHITSTABLE NATIVE OYSTERS, 3/- per dozen.**

OBTAINED FIRST PRIZE AT THE DAIRY SHOW 1911.

secret carefully. Kidney and steak and oysters are hinted at, and diverse strong spices are certainly in it.

We entered the kitchen, but did not see the immense bowl that holds enough for sixty or seventy people, according to the booklet of ninety-two pages which tells the story of this eating place. Nor did we test the assertion that you can have two, three, or four helpings of the "pie" if you chose.

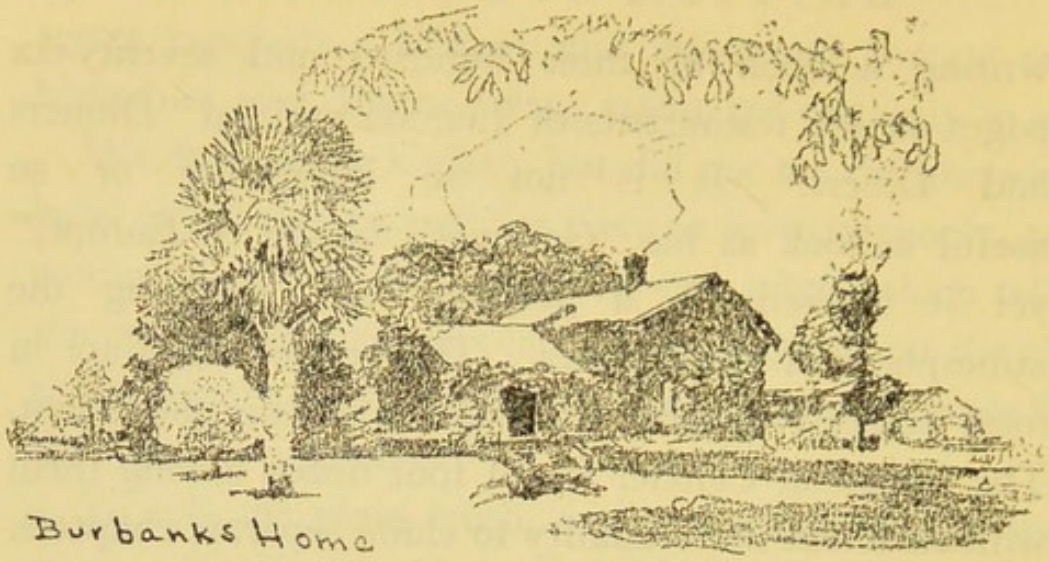
To tell the plain truth, one was quite enough and more. Never in all my wanderings—not even in Spanish countries where cayenne pepper is the staff of life—had I put into my mouth a mess so peppered and otherwise overseasoned as this same fiery pigeon pie. And the taste lingered for hours, giving me time to call back to memory all that I had read about the condimental atrocities of the Middle Ages, when the porpoise, the whale, the seawolf made favorite dishes; when potatoes were seasoned with nutmeg, cinnamon, pepper, lemon, sugar, and rosewater; and meats were maltreated even more barbarously.

Quite as English as the Cheshire Cheese, and more up to date, is another London restaurant which all Americans visit—Simpson's, where joints are wheeled to you on little tables and you choose the particular cut you want. A glance at the bill of fare herewith reproduced will interest those who have never had a chance to compare English with American menus.

Colonel Newnham-Davis accomplished the task of

writing a book of three hundred and seventy-six pages on the restaurants of London entitled "Dinners and Diners." It is not so interesting or so useful a book as his "Gourmet's Guide to Europe," yet it succeeds in a gossipy way in giving the atmosphere of these places. The best of them are in most respects frankly Parisian in cuisine and menu. The epicurean Colonel found four dozen among them with sufficient individuality to claim separate chapters. Since the second edition of this book appeared (1910), some of the old houses have disappeared and many new ones of the highest class have been opened. At all of them you can get, besides French dishes, such British specialties as turtle, ox-tail, and mulligatawny soups, venison, rabbit, or veal and ham pies, and, with your fish and meats—hot or cold—all the fiery gherkins, chow-chow, and diverse pungent sauces and catsups you may desire.

While these sharp condiments are for the most part special products of British ingenuity which cannot be duplicated elsewhere, it is likely that they will be less in demand in the future than they are now. They were invented to go with cold meats chiefly, and to give zest and varied Flavor to the monotonously recurring joints. But this monotony is disappearing; the number of national dishes is multiplying rapidly; and, altogether, "there is now," as a London journal has remarked, "a cult of cookery in England such as has never been before."




# XI

## GASTRONOMIC AMERICA

IN the preceding pages I have neglected no chance to expose our shortcomings, not with any muck-raking intentions but in order to show in how many ways we could profit by following the example set by European nations.

It is now time to raise our flag and do a little patriotic boasting. There is a gastronomic America as well as an ungastronomic America; we have unequaled opportunities for producing the best of nearly everything, and if we utilize those opportunities, recognizing the all-importance of Flavor in food, in its various stages from the field to the grill and the table, we can easily become, within a few decades, a

leading—perhaps even *the* leading—gastronomic nation.

In the present chapter and the following one I purpose to dwell on some of the delicacies for the enjoyment of which at their best Europeans must come to America.

### SWEET CORN AND CORN BREAD.

Probably the most characteristically American thing a summer visitor from Europe will see in our dining-rooms is the eating of green corn off the cob. To be sure, he might see the same thing in visiting the Hindoos or South Africans; but they are imitators, we the originators of this delectable habit.

In saying "we" I mean Americans in the broadest sense of the word, including the red Indians. It was they who first cultivated corn, in the central part of our hemisphere. From there it came north, and Columbus took it to Europe, whence it reached the other continents. They call it maize in Europe, mealies in South Africa. In England "corn" means wheat, in Scotland oats, those being their principal crops respectively. In America the main crop still is, as it was twenty centuries ago, Indian corn, which therefore is of all things edible the most thoroughly American. Three cheers for corn!

In Italy, two-thirds of the rural population subsist mainly on corn, which is, however, eaten nearly always as polenta (mush), alone or with cheese, fish, or meat;

whereas we have on our tables an almost endless variety of corn and corn products.

The red man set the example. He ate green corn. He made a mush of ripe corn, pounding it, either parched or unparched, into a coarse meal. He mixed it diversely with pumpkins, nuts, berries, and other foods. Succotash is an Indian name which we borrowed from him, together with the dish it denotes—beans and unripe corn cooked together. The site of Montreal was once an Indian cornfield. In the "dreadful winter" of 1620-21 the colonists in Plymouth bought "eight hogsheads of corne and beanes" from the Indians, who taught them "bothe ye manner how to set it and after how to dress and tend it."

Yet the most imaginative Indian could never have dreamt of how amazingly their successors on the soil would multiply the uses of corn, for the table and for countless industrial uses. We now have cook books concerned solely with corn foods.

Mark Twain's appetizing list of the American dishes he missed in Europe, to which reference was made in the first chapter of this book, includes five made of corn: pone, hoe-cake, green corn on the ear, green corn cut from the ear and served with butter and pepper, and hominy. Among those he surely would have mentioned also, had he happened to recall their merits at the moment, are samp, gruel, hulled corn, or lye hominy, Indian pudding, hasty pudding, pop-corn, succo-

tash, Boston brown bread, griddle cakes, johnnycake, mock oysters, cream of corn, Kentucky corn dodgers, and cornmeal gems.

Welcome as all these specialties and many others are on American tables—fried mush and hominy are particularly to be commended to those who know not how tasty they are for breakfast, or as a dinner course, occasionally, in place of the everlasting potatoes—none of them—not even genuine pone—is quite so luscious as green corn.

It may not be "elegant" to eat sweet corn off the cob, but that is the only way to get its full Flavor. There is delicious fragrance in the juicy cob, too, and in the bosom of your family it is permissible (and decidedly advisable) to suck it. Sugar cane and oranges are not the only things that are best when sucked.

American horticultural ingenuity has achieved wonders in developing varieties of sweet corn with new refinements of Flavor. A few years ago C. D. Keller, of Toledo, Ohio, originated a new kind which he called the "Howling Mob," which "peculiar but apt name," in the words of Mr. Burpee, "refers to the vociferous demand for the ears when Mr. Keller takes them to market."

Great, indeed, is the demand in American markets, homes, and hotels for green corn, and much ingenuity has further been expended in rearing early and late varieties so as to make the season as long as possible.

Between the early Malakoff, from Siberia, and the late Country Gentleman, there are dozens of desirable varieties the characteristics of which are described in the catalogues of our seedsmen. The last-named has long been considered the sweetest of all kinds, but the new Golden Bantam is a formidable rival. Its color, which makes it look like ordinary field corn, is against it, but those who have once tasted it, sing its praises forevermore.

It is related that the Rev. Sidney Smith's parishioners did not want him to visit America for fear that the allurements of canvasback duck might tempt him to remain. Sweet corn, also, might have alienated his patriotic affections. Covent Garden, to be sure, sometimes offers so-called green corn, but England has too cool nights and not enough sunshine to develop the Flavor of this vegetable.

Even in America, where it grows to perfection, pains must be taken if one wants to get that Flavor at its best. All who have lived in the country agree with Dr. Wiley's dictum that "there is only one way to eat Indian corn. That is to go out just before sun-up and harvest the ears, and have them boiled for early breakfast. To people in cities who have never eaten freshly harvested Indian corn, such an experience would be a revelation."

Not only do corn cobs that are kept a day or two before eating lose much of their precious fragrance, but,

as the same eminent chemist informs us, "corn which is perfectly sweet and delicious at the moment of harvest, has been found to lose half of its sugar within twenty-four hours."

Those who find sweet corn indigestible do not know how to eat it. If a sharp knife is pressed on each row of kernels the skin—which is the indigestible part—is cut and remains on the cob.

While the demand for sweet corn is ever on the increase and fortunes are made by those who grow or handle the best—that is, the most agreeably flavored—sorts, the foods made of ripe dried corn are not eaten so generally as they ought to be, at least in the Northern States.

It is desirable that everybody should know the interesting reason for the fact, known to all, that the South is more addicted than the North to the eating of dishes made of corn.

That reason is very simple: corn bread in the South is made of meal which has more Flavor than the meal sold in the Northern States, and is therefore more appetizing and wholesome.

Why is its Flavor better? Because it is made of ground corn from which only the indigestible hulls have been removed by bolting, whereas in the making of meal for Northern markets, the millers remove also the germ which contains the fat and most of the Flavor of corn, besides its most important mineral contents.

They have contrived a diabolical machine known as the "degerminator" for the special purpose of bolting out the germs, that is, the very heart and soul, of the corn.

If I add that, in the words of Dr. Charles D. Woods, Director of the Maine Agricultural Experiment Station "from the manufacturer's standpoint the removal of the germ does not represent a loss, as it is used for the manufacture of gluten feeds—so important for live stock—and corn oil, which has many industrial uses and is used to some extent as a salad oil and as a culinary fat"—the reader will begin to suspect one reason why the millers market cornmeal from which its most valuable constituent has been removed.

But there is another reason for this dastardly crime and that is that "the germ lowers the keeping quality of the meal because its abundant fat easily becomes rancid."

In other words cornmeal made for sale in the North is denatured deliberately in order that the miller and the grocer may not run the risk of having a few sacks of it spoil on their hands occasionally! The consumer is not considered at all.

Ungastronomic America has meekly submitted to this outrage, largely because the facts of the case are not generally known. Gastronomic Americans, whose numbers are increasing rapidly, will insist on their rights, refusing to buy cornmeal from which most of

the Flavor has been eliminated, and the North will in time eat as much corn bread as the South.

Personally, I agree with those who think it even more tasty than wheat bread. The only advantage wheat has is that, with yeast or baking powder, it can be made into a lighter and more porous loaf; but this advantage can be neutralized by baking the corn bread in thin cakes; and corn bread thus made is far more digestible than loaves of wheat bread as ordinarily made in America. A good quality of it is also much more easily and more quickly made at home. Soldiers and campers prefer it, partly for this reason. "It has been said," writes Dr. Woods, "that johnny cake is a corruption of journey cake, and that corn bread was so called because it could be so easily prepared on the road." [1]

### GRIDDLE CAKES AND MAPLE SYRUP.

Our breakfasts, more than other meals, are made delectable by diverse corn dishes. Corn flakes, properly made are more flavorful than any others, and of all the varieties of griddle cakes, so dear to the American palate, none quite equals those made of corn. If these are at present seen less frequently on bills of fare than are wheat, rice, or buckwheat cakes, it is because of the way in which cornmeal is usually deprived of what most appeals to the palate.

[1] "Food Value of Corn and Corn Products." Farmers' Bulletin No. 298, Washington, 1907.

Griddle cakes made of wheat are widely known as flannel cakes. I have never eaten any woolen stuff, but I imagine it might taste a good deal like the average "flannel" cake, though it would be much lighter. The French and German pancakes are far superior to our wheat cakes; but even to these I prefer the American corn griddle cakes, for which the whites of egg have been beaten stiff and added gradually; and I bask in the proud consciousness that my preference is thoroughly patriotic.

The liking for buckwheat cakes is to me a mystery and always has been, although as a boy I used to eat them with rich sausage gravy, which made them palatable. Buckwheat cakes are not eaten so much as they used to be, so maybe I am not alone in disliking them. For the gratification of those who do like them I quote from the New York "Sun" a characteristically American communication from "Middle Aged":

I saw in a store window to-day a sign "New Buckwheat," so I know people still eat buckwheat; but I doubt if it is as much eaten as it was in years back, say in the days when I was a youngster.

We always had buckwheat cakes for breakfast. Mother, sometimes father, used to stir the batter the night before in a curious tall, round, straight sided, brown earthenware pot with a handle on it, which was sacredly reserved for that purpose. I have never seen anywhere at any time another pot just like that one; and then it was set in just the right spot by the kitchen stove, for the batter to rise through the night.

In the morning they thinned this batter out just a little with

water and then they fried the cakes; in our house on a long double griddle that covered two stove holes and on which you could cook two or three cakes at a time.

Every morning in winter we had those buckwheat cakes, light as a feather, and with them we always had sausages or pork chops; and such sausages and pork chops I have never seen since. Sausages, not as you see them nowadays as big around as a cigar and filled with some sort of pasty material, but big sausages stuffed with meat chopped coarse and that burst open when you fried them as if anxious to reveal to you their delightful, savory richness—I hope it is given to you to be able to recall such sausages; and pork chops from pigs country raised on nearby farms, a delight to the taste and always tender.

Whichever we had that morning, whether sausages or pork chops, we ate the sausage or the pork chop gravy on the cakes. Really the recollection moves me. My smiling mother—Heaven bless her!—never stinted me on the cakes; she gave me all I could eat. My father when I asked him for another sausage would sometimes ask me good-naturedly if I did n't think I had had enough; but he always handed over the sausage. And now, if you won't think I am quite a pig, I would like to say that I used to eat the last plate not with gravy but with butter and molasses on them; later we came to have syrup. And this sort of breakfast never did me any harm. There is a popular delusion that the ostrich has the hardiest of all stomachs, but really his would not for a moment bear comparison with that of the growing, outdoors boy.

The serving of sausages and pork chops with griddle cakes is not so customary as it used to be; usually the cakes, whether wheat, buckwheat, rice, or corn, are now eaten with some kind of syrup.

The syrup served with our griddle cakes is as characteristically American as the cakes themselves, or as

the endless variety of cereal breakfast foods, one or the other of which nearly every American eats daily, with cream and sugar, and which foreigners know nothing about.[1]

Strictly speaking, a syrup is "the direct product of the evaporation of the juice of a sugar-yielding plant or tree without the removal of any of the sugar," whereas molasses is "the saccharine product which is separated from sugar in the process of manufacture." Commercial "syrup" is usually a mixture of syrup, molasses (of which there are many grades) and other things. Much of it is injurious to health, and housewives who wish to see nothing unwholesome on their breakfast tables should read what Dr. Wiley has to say on this subject, on pp. 472-482 of his "Foods and Their Adulteration."

The sap of sugar cane and sorghum is usually good and safe, besides being American. Even more so is the sap of the maple.

George Washington and Bret Harte were not more thoroughly and exclusively American than is the *Acer saccharinum*, or sugar maple tree. Europe nor any other continent has aught to match it. The sugar made from its sap is one of the delicacies discovered by the American Indian. The early white settlers

[1] "Cereal Breakfast Foods" is the title of Farmers' Bulletin No. 249, which tells about their composition, variety, digestibility, cost, adulteration, etc American magazines thrive on the advertisements of breakfast cereals.

learned from him how to make it, and for many years it was the only sugar they had. It was "dark and ill-tasting" compared with the best modern product.

In their appeal to the sense of taste all sweet syrups are alike. It is their fragrance, their Flavor, that makes us prefer some kinds to others. The Flavor of maple syrup has been much improved, and is still being improved, by perfecting the methods of tapping the tree, gathering the sap, boiling it, and storing the sweet product.

Uncle Sam has not neglected this important branch of national gastronomic industry. His chemists have been at work to ascertain the causes of the souring of the sap under certain conditions, and to explain why the later runs do not have so pleasant a Flavor as the earlier ones. They have found it in the action of micro-organisms.

While I was writing this chapter I received from Washington Farmers' Bulletin 516, a brochure of 46 pages in which the making of maple syrup and sugar is fully discussed, with detailed directions for securing the best-flavored product.[1] As in the making of butter, many things have to be done and many avoided to get the best results, but they are worth the trouble.

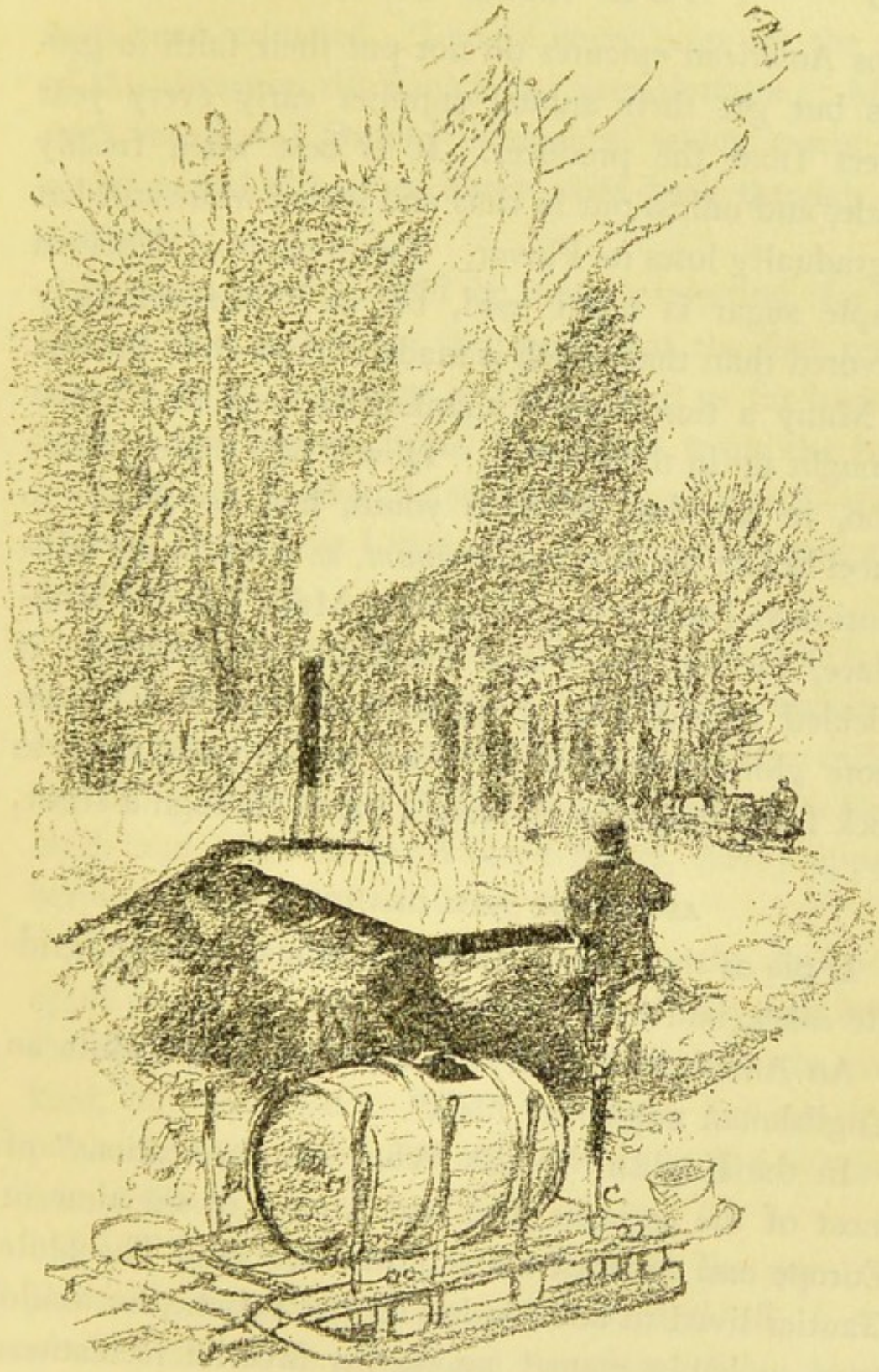
The demand for genuine maple sugar is great, and would be much greater still if adulteration were not so

[1] "The Production of Maple Syrup and Sugar." By A. Hugh Bryan, Chief Sugar Laboratory, Bureau of Chemistry, and William F. Hubbard, Forest Assistant, Forest Service, 1912.

much practised. In 1910, according to the U. S. Census Reports, the maple syrup production of the country was 4,106,418 gallons, and in addition to this there were made over 14,000,000 pounds of maple sugar.

In that year Ohio led all the States in the production of maple syrup, followed by New York, Vermont, Pennsylvania, Indiana, Michigan, Wisconsin, and New Hampshire. In many other States it can be made in paying quantities. Farmers are advised to attend to this industry as a source of extra income. In the Bulletin just referred to, attention is called to two important economic considerations: "The season of production comes at a time of the year when little or no other work can be done on the farm, thus allowing the aid of the family and farm help for the boiling and manufacture. Moreover, since the sugar bushes as a general rule are situated on hilly country that would not be suitable for any other crop, these two items could hardly be placed at a high value in a table of costs."

Every farmer who lives in a State and region where the sugar maple prospers should secure Bulletin 516 through his representative in Washington. By attending strictly to the matter of delicate Flavor, not only can the industry be enormously increased at home but foreign markets can easily be won. Adulteration must, however, be severely curbed. Under present condi-



The sugar bush.

tions American epicures do not put their faith in grocers but get their annual supplies early every year direct from the producer. It is best when freshly made, and unless put in cans and sealed while still hot it gradually loses its Flavor. Syrup made of dissolved maple sugar is often used, but it is less delicately flavored than that which is made at once from the sap.

Many a time have I thanked Heaven that I was brought up in the country. How I pity those persons who, in the days of their youth, had no chance to kneel before an *Acer saccharinum*, as I did in my Missouri days (only a few miles from Mark Twain's birthplace, by the way) and drink in the nectar as it trickled through the spout into my mouth. It was more glorious even than it was some years later to suck fresh Oregon cider from a barrel through a straw.

### APPLE PIE AND CRANBERRIES.

Is pie as thoroughly American as maple syrup, griddle cakes, and corn bread?

An American is likely to answer "Yes," while an Englishman might say "No."

In the English "Who's Who" the "recreations" of most of the eminent men and women of the time in Europe and America are referred to. Had Théophile Gautier lived to be included in that volume, he would have probably named among his favorite recreations "reading the dictionary," to which he is said to have

been much addicted. I could never quite see the fun of this diversion till I made the acquaintance of Murray's wonderful Oxford dictionary, which traces the meaning and history of every word back through the centuries.

Nothing, surely, could be more interesting, for instance, than to read in this work that the first reference to apple pie, so far as known, was as far back as 1590, when Greene, in his "Arcadia," wrote the line: "Thy breath is like the steame of apple-pyes"—thus proving himself, as I may add, an epicure as well as a poet and a lover.

On another page we read: "The *pie* appears to have been at first of meat or fish; doubtful or undefined uses appear in 16th century; *fruit pies* (also called, especially in the north of England and Ireland, in Scotland, and often in the United States, *tarts*) appear before 1600, the earliest being Apple-Pie."

Were these apple pyes the same as the American apple pie of our day? I doubt it. If they had been, the Britons of our time certainly would make the same kind, but they don't. Their substitute for our fruit pie is the tart, which has only one crust and is otherwise different.

Even if it could be proved that we got our fruit pie from England, shape, contents, and all, I still would claim it as a national American dish—American by right of conquest, improvement, and country-

wide use. Millions of American families eat it daily, at lunch or at dinner. The poet Emerson even ate it at breakfast, and when a guest refused it, he was surprised and exclaimed: "What is pie for?"

You can make a fruit pie in the American style in Great Britain or on the Continent, but you cannot duplicate its excellence, for the simple reason that European fruit is rarely as tasty as American fruit.

It must be admitted that in the making of a light, digestible crust most American cooks could learn a lesson from foreign pastry cooks, who would advise them, among other things, to partly bake the lower crust or glaze it with white of egg before the fruit is put in. But, after all, the Flavor of the fruit is the all-important thing, and in that the American pie is supreme.

The Rev. Henry Ward Beecher, in his eloquent sermon on apple pie, exclaimed: "But, oh! be careful of the paste! Let it be not like putty, nor rush to the other extreme and make it so flaky that one holds his breath while eating, for fear of blowing it away. Let it not be plain as bread, yet not rich like cake."

Has ever an English divine paid such attention to pie? No; the apple pie is ours, as much as our flag.

But alack and alas, the apple pie is often insulted and maltreated in its own bailiwick by being over-seasoned. Beecher called attention to the fact that

"it will accept almost every flavor of every spice," and he mentioned nutmeg, cinnamon, and lemon as among those which it is permissible to use.

"Permissible," yes, but most inadvisable. You may say it is a matter of taste, and that you have a right to put as much nutmeg, cinnamon, or lemon extract into your pie or your apple sauce as you please. If you make it for yourself and your family, yes; but not if you make it for a restaurant. The spices named are penetrating and monopolistic; even in small quantities they obliterate the natural Flavor of the apple, or at least modify it in a way obnoxious to those true epicures who like their fruit dishes *au naturel*, just as they like prime cuts of butcher's meats without obtrusive sauces, and sausage mild-flavored, without the screaming sage or too much pepper.

Nutmeg is the spice with which our apple pie is most frequently alloyed. An alloy is defined as "anything that reduces purity or excellence." If you put nutmeg into apple pie or sauce, you make it taste always the same, be it made of European or American fruit or of this or that variety of apples. Now, to an epicure the best thing about apple pie or sauce is that when served without spice *it retains the peculiar Flavor of the kind of apple it is made from.*

To go to your grocer and buy "cooking apples" is almost as bad as to ask for "cooking butter." The best butter and the best apples should always be used

in the kitchen—if you can afford to buy them. If you cannot, eat oatmeal and prunes.

To those who have refined palates it makes a world of difference whether their apple pie and sauce are made of "cooking apples" or of Gravensteins, Red Astrachans, Newtown Pippins, or Spitzenbergs. Each variety—and dozens of others might be named—has its own special charm; and the same is true of pies and sauces made of other fruits.

In the baking of pumpkin pie, which, next to that made of apples, is perhaps the most characteristically American pie, mace (which is derived from the covering of the nutmeg seed) or some other spice, is not only permissible but commendable; while mince pie, which we borrowed from the English but eat probably oftener than they do, is such a jumble of condiments—sugar, raisins, currants, almonds, apples, lemon and orange juice and peel, molasses, suet, quince jelly, and other things *ad libitum*—that it makes little difference what you add in the way of mace, cloves, cinnamon, ginger, or other spices within reason. Time was when caraway seeds, saffron, rosewater, ambergris, and other impossible things were added. As made now, mince pie is as agreeable to most palates as it is indigestible. I am told it can be made so as to be easily digestible, but I "hae ma doots."

Some years ago mince pie was dignified by being made the subject of a political squabble in Washing-

ton. Dr. Wiley wanted a definition of "normal mincemeat," and thirty manufacturers were summoned to testify. Evidently some of these manufacturers were making mincemeat without the chopped meat which is an essential ingredient of the best home-made article, for they engaged a trained lexicographer, Prof. C. D. Childs, of the University of Pennsylvania, to prepare a treatise on mince pie, in which it was demonstrated that mincemeat does not necessarily contain meat.

The definition in Murray's Oxford Dictionary is "a mixture made of currants, raisins, sugar, suet, apples, almonds, candied peel, etc., and sometimes meat chopped small; used in mince pies"; which shows that in England, also, meat is not always an ingredient. It is only fair to consumers, however, that the law should compel the manufacturers to print the ingredients in each case on the label. Mince pie with meat is certainly better than mince pie without.

Perhaps I erred in saying that pumpkin pie is, next to apple pie, the most characteristic American pastry dish. It certainly is not more so than cranberry pie.

The cranberry is not exclusively American, like maple syrup, terrapin, and canvasback duck, for it grows in some parts of Europe; but it remained for American epicures to discover its rare gastronomic merits. It took genius to do this, for in its natural wild state the berry is excessively astringent and acid.

But it had a Flavor that made an irresistible appeal and invited further cultivation. Particularly agreeable is the *Oxycoccus erythrocarpus*, a variety which grows in the mountains of Virginia and Georgia. The European berries, though they used to be abundant in England, were neglected because of their inferior Flavor, and England now imports cranberries in large quantities from the United States, as do France, Italy, and Germany, chiefly for tarts.

Cape Cod is now the chief camping ground of the cranberry. It has been doubled in size by cultivation, and its Flavor improved by enriching and draining the soil, and in other ways. The annual production is about three million bushels. Thanks to the growing demand for them, bog lands which were worth $5 an acre now sell at $300 to $700 per acre.

The darker the berry the richer the flavor. Once upon a time I wrote a book on Romantic Love and Personal Beauty in which I tried to prove that brunettes are more beautiful than blondes. I am not sure that I succeeded—there are certainly some ravishing exceptions!—but in the matter of foods there can be no doubt that as a rule the dark are finer than the light colored.

Does not Boston, the center of American culture, give its name to brown bread, and does not Boston prefer dark eggs to the anemic white ones favored in New York? Does any one who has had the good sense to

buy "rusty" oranges and grapefruit deny that they are sweeter and more fragrant than the light yellow ones? Ask any epicure if he does not think the second joint of a fowl is more savory than the white meat. Bread which has a deep brown crust is more tasty than pale crumb. Crackers toasted brown are more appetizing than crackers untoasted. English rusks, German zwieback, Italian breadsticks, are they not all brunettes? Do not all vegetables, fruits, and berries darken as they ripen and develop their flavor?

The darkest cranberries therefore are the ones you want to buy. And be sure that your cook in preparing cranberry sauce or jelly presses the pulp through a sieve to remove the indigestible skins. It is only when they are cooked whole and candied with an equal weight of sugar that the skins may be left on them.

### TURKEYS, GUINEA FOWL, AND GAME.

Cranberry sauce is in America associated inseparably with turkey, and the turkey is another of our gastronomic specialties.

Benjamin Franklin argued that the turkey—which is surely a finer bird than the eagle, less vicious, and infinitely more useful—should have been adopted as the emblem of the United States, for it is a truly indigenous and national bird. In Franklin's day "the log cabin of the pioneer was surrounded by these birds, saluting each other in the early morning from the tree-tops."

Those were gala times for hunters and epicures, when wild turkeys used to fly in flocks of hundreds!

They owe their name to the notion, once current, that they came to Europe from Asia. But it is now established beyond doubt that they are aboriginal Americans. It did not take the Spaniards long to find out their value, for, little more than a quarter of a century after Columbus discovered this Continent, they took some of the birds across the sea to their own country and thence the turkey soon made its way to other parts of Europe. Records show that in England, in 1541, the turkey was enumerated among the dainties, while in 1573 it had become the customary fare of the farmer.

"The turkey is beyond doubt one of the finest presents the New World has made the Old," wrote the best-known of French epicures, Brillat-Savarin; and in his "Physiologie du Gout" he has a chapter in which he proudly relates how he shot one of these birds. It was in 1794; he was visiting a friend at Hartford, Connecticut, who took him out hunting one day, after having treated him on the previous evening to a dinner one course of which consisted of the entirely American corned beef, which the eminent epicure found "splendid."

They shot some fat tender partridges and seven gray squirrels, "which are highly esteemed in this country"; then he had his chance at the turkey,

BRILLAT-SAVARIN

bagged it, took it back to Hartford and had it cooked for some guests who kept exclaiming: "Very good! Exceedingly good! Oh, dear sir, what a glorious bit."

Though he had a high opinion of his own judgment in matters gastronomic, Brillat-Savarin was much pleased when a friend of his, M. Bose, who lived in Carolina, contributed to the "Annales d'Agriculture" of Feb. 28, 1821, an article which confirmed his own judgment as to the superiority of the American turkey to the bird as reared in France, attributing this superiority to the fact that the American turkey roamed the woods freely and thus gained a finer Flavor than the domesticated bird has.

Unfortunately, it took American poultry raisers several generations to realize the full significance of this fact. All was well so long as there were plenty of wild turkeys, the flesh of which was of perfect savor, especially during the autumn, when they lived largely on pecan nuts. All was well, too, so long as the farms were few and scattered, and there was interbreeding of wild and domesticated birds. But the time came when the turkeys degenerated, owing to excessive inbreeding and too close confinement. It is only within a few years that farmers have begun to heed the advice that "it is better to send a thousand miles for a new male than to risk the chances of inbreeding," and to restore to the turkey his forest freedom.

"While our present-day turkeys are classed as 'do-

mestic fowls.' they are rather semi-domestic when compared with other poultry," writes T. F. McGrew.[1]

It is this semi-game quality of the best turkeys that make them so dear to the epicure. Brillat-Savarin's verdict is that the turkey, "though not the most tender, is the most tasty of all the farm fowls,"—and few will disagree with him.

For the benefit of the rapidly growing number of farmers who increase their income by raising turkeys, I will cite the words of an expert which sum up the philosophy of the subject:

> The flavor of all turkeys raised by careful farmers within five or six years is much finer than in the run down stock raised by old fogy farmers. The improvement in flavor has also been accompanied by an increase in size and tenderness. This is due to the admixture of the strain from wild turkeys from Canada and the South and the Southwest and to the modern system of keeping the birds out of doors as much as possible and giving them opportunities for getting plenty of mast and the seeds of wild and cultivated plants and pure water from brooks and streams kept clear from noxious plants and sewage.

Birds thus reared bring fancy prices—a point to which I shall recur in the next chapter under "Feeding Flavor Into Food."

It has been customary for a long time for patriotic persons to send to the President of the United States

[1] "Turkeys: Their Standard Varieties and Management." Farmers' Bulletin, No. 200.

choice turkeys for the Thanksgiving and Christmas dinners. Woodrow Wilson received one in December, 1912, from Kentucky which weighed forty-three pounds and had been nurtured "as befits a King Gobbler," on sweet chestnuts, with celery and pepper to improve its Flavor.

The Guinea fowl is another bird which must roam wild to do well, and which consequently has a gamy Flavor, like the semi-domestic turkey. Though not an aboriginal American, it has become acclimated. It is an African cousin of the turkey.

In his useful treatise on "The Guinea Fowl and Its Use as Food" (Farmers' Bulletin No. 234), Dr. Langworthy states that in Jamaica and some other regions the Guinea birds "have gone back to their wild state and are hunted in their season as game birds. They are also well known as game birds in England, where large flocks are sometimes kept in game preserves."

On the continent they are more domesticated and are raised in large numbers for the markets of France, Austria, and Germany. What we want in our markets, however, is not the domesticated Guinea fowl so much as the half-wild. We have plenty of other good barnyard birds, including the savory squab, but we are woefully short of game, and the Guinea fowl, more than the turkey, comes to the rescue. While the mature bird has its own gamy Flavor, the chicks resemble young quail, and the eggs are a good deal like the highly

valued plover eggs. Even the domesticated birds retain a surprising number of their wild traits and on this bird, therefore, we may have to depend largely for our game of the future.

To the deplorable condition of our present game market I referred briefly in the chapter on Germany, where they do things so much better. In New York, quail (so abundant until a few years ago) are now imported from far-away Egypt, and grouse from Scotland, while prices have gone up like rockets.

In Louisiana alone it was computed that over 4,265,000 game birds were killed in the season 1909-1910. Mrs. Russell Sage's generous gift of $150,000 secured Marsh Island as a refuge for the wild fowl. Others have helped the cause, and the Government's efforts are thus summed up in Circular No. 87 of the Bureau of Biological Survey:

> For purposes of administration the bird reservations are grouped in six districts: (1) The Gulf district, including 10 reservations in Florida, 4 in Louisiana, and 1 in Porto Rico; (2) the Lake district, including 2 in Michigan, 2 in North Dakota, and 1 in Wisconsin; (3) the Mountain district, including 12 in the Rocky Mountain States, South Dakota, and Nebraska; (4) the Pacific district, including 3 in California, 4 in Oregon, and 8 in Washington; (5) the Alaska district, including 8 reservations; and (6) the Hawaiian district, including 1 reservation. Wardens are stationed on the more important reservations and the National Association of Audubon Societies . . . coöperates actively with the Department of Agriculture in protecting the birds.

There is a special periodical, the "Gamebreeders' Magazine," devoted to the task of replenishing our stock of wild animals, which was for so many generations one of the chief assets of Gastronomic America. There are also Breeders' Associations which are planning to make American game, feathered and unfeathered, abundant once more. No one can ever bring back the large flocks of wild turkeys, the pigeons that darkened the skies, the herds of countless buffaloes; but we can at least bring back in part our former abundance of some kinds of game by following European methods.

The Government is also ready to help by supplying, without charge, birds to be liberated and allowed to multiply in various places. Our native birds are, of course, best adapted for this purpose, but what can be done with imported birds is shown in Farmers' Bulletin No. 390, in which Henry Oldys of the Biological Survey tells the interesting story of how the Chinese and English pheasants have been made to feel at home in Oregon and in other States, where they have become permanent additions to the game list.

"Deer Farming in the United States" is another valuable Farmers' Bulletin (No. 330), by D. E. Lantz. Its object is thus summed up:

> As a result of the growing scarcity of game animals in this country the supply of venison is wholly inadequate to the demand, and the time seems opportune for developing the indus-

try of deer farming, which may be made profitable alike to the State and the individuals engaged therein. The raising of venison for market is as legitimate a business as the growing of beef and mutton, and State laws, when prohibitory, as many of them are, should be so modified as to encourage the industry. Furthermore, deer and elk may be raised to advantage in forests and on rough, brushy ground unfitted for either agriculture or stock raising, thus utilizing for profit much land that is now waste. An added advantage is that the business is well adapted to landowners of small means.

Mr. Lantz is convinced that, with favorable legislation, "this excellent and nutritious meat, instead of being denied to 99 per cent. of the population of the country, may become as common and as cheap in our markets as mutton."

### LOBSTERS, SCALLOPS, CRABS, AND FISHES.

Every inch an American is the *Homarus Americanus*. There are not so many inches of him as there used to be, but that makes him none the less precious. The Pilgrim lobsters "five or six feet long," ascribed to New York Bay in the days of Olaus Magnus, are now classed as a myth, but four-foot lobsters (measured from the tip of the claws to the end of the tail) have been caught. Such a giant weighs about thirty-four pounds.

The American lobster was originally found only on the eastern coast of North America. These lobster grounds some seven thousand miles, including the curves of the shore, were the finest the world has ever

seen. In Canada alone a hundred million lobsters have been captured in a year.

In one respect the lobster differs strangely from other creatures of sea and land. Like the eel, he is a scavenger of the deep, but while the eel is often offensive to the taste because of this feeding habit, the lobster is always sweet. "Nothing could be more offensive to the human nostril," writes Dr. Francis Hobart Herrick,[1] than the netted balls of slack-salted, semi-decomposing herring, which are commonly used as bait on the coast and islands of Maine, but by the wonderful chemical processes which are continually going on in the laboratory of its body, the lobster is able to transmute such products of organic decay into the most delicate and palatable flesh."

Were it not for this alchemistic marvel the most plutocratic restaurants in the United States, especially those which cater to the persons who sup after the theater, would never have become known as Lobster Palaces. The lobster served in these places, plain boiled, broiled, *à la Newburg*, and in other ways, is one of those characteristic American foods which foreign epicures not only envy but enjoy, though they cannot have our crustaceans as fresh as we do.

It has been well said that "the story of the lobster in its progress from the fisherman's pots on the Maine

[1] "In his beautifully illustrated and valuable "Natural History of the American Lobster." From Bulletin of the Bureau of Fisheries, 1909.

coast to the grills and silver chafing-dishes on Broadway is the whole story in miniature of the high cost of living under an artificial economic condition." The lobsterman gets a little over ten cents a pound. "The wholesaler doubles the price, the retailer trebles it, and in the end the restaurant-keeper marks it up 1,000 per cent. above the first cost, charging patrons $1.50 a portion for what the lobsterman was paid a tenth of that sum."

To this extortion I, for one, refuse to submit. In the market you can buy a lobster for one quarter to one-third the price charged in most restaurants. You can make sure he is alive—never buy a dead lobster, though they say he is safe to eat if his tail is curled and springs back when pulled. To kill him by plunging him in boiling water may seem cruel, but is no more so than other ways, and is certainly infinitely less so than the usual way—which should be forbidden—of letting him perish slowly in a barrel, or on ice.

Canned lobster is a food a wise man avoids, though, to be sure, he runs perhaps no greater risk in eating it than in consuming many other things, tinned or untinned. Millions of dollars' worth of canned lobsters, crabs, and salmon are eaten every year.

A new American delicacy hails from Canada: lobster rarebit, a compound of certain parts of the lobster which had previously been thrown away as waste by the canners. The annual output of canned lobster by the Eastern Provinces of Canada now amounts to about

ten million cans, worth about $3,000,000. Lobster rarebit, which is said to be a highly appetizing delicacy, easily digested and nourishing may, it is believed, in time equal the money value of canned lobsters. Consul Frank Deedmeyer, of Charlottetown, gave these details at the time when lobster rarebit was first introduced:

> Canned lobster, as known to the trade, consists of the meat taken from the claws and the tail. The whole of the body proper is now rejected by the packers, and it has heretofore been used in the maritime Provinces of Canada as a fertilizer. In the rejected portion is found a crescent-shaped meaty layer to which the tail is attached and the liver. Lobster rarebit is a compound of this meaty layer, of the liver, and of the roe, to which some spice is added. The first named of the components used is the fattest part of the crustacean; the liver, glandular, is large and retains a high percentage of bile. The number of eggs found in a lobster is estimated from 5,000 to 40,000, according to size. The three ingredients are mixed in these proportions: Six-tenths meat, three-tenths liver, and one-tenth roe.

While the efforts to propagate the Atlantic lobster have met with scant success on the Pacific Coast there are other marine delicacies to console those who dwell on the shore from Southern California to Washington and British Columbia; among them the abalone of Catalina, which makes delicious soup, the razor clam and monster specimens of other clams in Washington waters, oysters, huge crabs, and above all, crawfish.

In Oregon, the crawfish abounds in creeks and rivers,

ALL POTATOES SERVED WILL BE CHARGED FOR

# MONDAY, JANUARY 6, 1913

## SOUPS

Mock turtle ..... 30
Chicken, creole ..... 25
Scotch broth ..... 25
Cream of asparagus ..... 25
Consomme, duchesse ..... 25
Paysanne ..... 25
Tomato ..... 25
Mutton ..... 25
Consomme, hot or cold ..... 25
" cup ..... 15
Oyster ..... 25
Clam chowder ..... 25

## FISH READY

Boiled live codfish, oyster sauce ..... 40

## OYSTERS

Lynnhavens ..... 30
Blue Points
Buzzards Bays
Cotuits
On the shell ..... 25
Oyster cocktail ..... 30
Fried in batter ..... 50
Pan roast ..... 40
Roast in shell ..... 40
Escaloped in shell ..... 40
Stewed ..... 30
Fried ..... 40
Box stew ..... 40
Astor House oyster flip ..... 40
Au gratin ..... 50
Pickled ..... 30
Steamed ..... 40
Broiled ..... 40

## CLAMS

Little-Neck clams stewed ..... 30
" steamed ..... 35
" clam cocktail ..... 30
Little-Neck clams roasted ..... 40
" fried ..... 40
" on shell ..... 25
Clam broth ..... 25
Clam fritters ..... 40
Soft shell clams, steamed ..... 35

## SHELL FISH

Plain lobster ..... 90
Lobster croquettes ..... 75
Deviled lobster ..... 75
Lobster à la Newburg ..... 1 00
Broiled lobster ..... 1 00
Baked lobster, stuffed ..... 75

CHICKEN PATTY ..... 40
FRIED SCALLOPS ..... 50
DEEP SEA SCALLOPS WITH BACON ..... 50
OYSTER PATTY ..... 35
WITH BACON ..... 60

## ENTREES

Beef a la mode, bourgeoise ..... 40
Fricassee of veal with mushrooms ..... 50
Whole spring chicken en casserole, asparagus tips ..... 1 50
Irish stew with vegetables ..... 40
Loin of fresh pork, apple sauce ..... 50
Lobster patties, Maryland ..... 60
Calf's head, vinaigrette ..... 50
Apple fritters, rum sauce ..... 30

## ROAST

Beef ..... 50
Leg of mutton ..... 40
Roast beef sandwich, hot ..... 45
Lamb, mint sauce ..... 75
Suckling pig, apple sauce ..... 50
Fillet of beef ..... 70
Ham, Champagne sauce ..... 50
Turkey, cranberry sauce ..... 65
Philadelphia chicken, half ..... 75
Pork, apple sauce ..... 50

## BOILED

Corned beef and cabbage ..... 40
Mutton, caper sauce ..... 40

## VEGETABLES AND RELISHES

Fried sweet potatoes ..... 20
Potatoes, boiled ..... 10
" baked ..... 10
" mashed ..... 10
" julienne ..... 20
" French fried ..... 15
Onions, boiled ..... 15
Spinach ..... 20
Macaroni, plain ..... 15
" au gratin ..... 25
" napolitaine ..... 20
" a la Montgelas ..... 30
Olives ..... 20
New string beans ..... 30
Stewed tomatoes ..... 15
Beets ..... 15
Fried egg-plant ..... 30
Cold slaw ..... 20
Radishes ..... 10
Celery ..... 25
French peas, naturel ..... 30
French string beans ..... 30
Succotash ..... 20
Mashed turnips ..... 10
Cabbage ..... 15
Cauliflower 30 au gratin 40
French artichokes ..... 50
Canned asparagus ..... 30
" Lima beans ..... 25
" sweet corn ..... 20
" green peas ..... 25
" string beans ..... 25
Fonds d'artichauts farcis ..... 75
Pin-money pickles ..... 10
Pickled onions ..... 20
Pickled English walnuts ..... 25
Chow chow ..... 10
Stuffed mangoes ..... 15
Chili sauce ..... 10
Chutney sauce ..... 15

**Cigars Served in Sealed Envelopes with Price Marked Thereon**

## TO ORDER

Small steak ..... 60
Sirloin steak ..... 1 10
Extra sirloin steak ..... 2 00
Small tenderloin steak ..... 60
Porterhouse steak ..... 1 50
Squab guinea-hen ..... 1 75
half ..... 90
English mutton chop ..... 50
Mutton chops ..... 40
Sweetbreads ..... 75
Philadelphia chicken broiled, half .. 75
Squab ..... 75
Jumbo squab ..... 90
Stuffed squab ..... 1 00

## COLD

Roast beef ..... 50
Ham ..... 40
Pork ..... 40
Corned beef ..... 40
Tongue ..... 40
Lamb ..... 75
Roast turkey ..... 60
Half roast chicken ..... 75
Veal ..... 40
Leg of mutton ..... 40
Baked pork and beans ..... 35
Pate de foie-gras ..... 1 00
Lamb's tongue ..... 40
Sardines ..... 40
Crackers and milk ..... 20
Crackers and half and half ..... 30
Crackers and cream ..... 40
Rice and milk, bowl ..... 25
Rice and cream, bowl ..... 40
Graham wafers and milk ..... 25
" " half and half ..... 35

## SALADS

Lobster ..... 75 Chicken ..... 60
Celery ..... 40
Potato ..... 25 Chicory ..... 40
Watercress ..... 30 Shrimp ..... 50
Spanish or Bermuda onion ..... 30
Lettuce ..... 25 Romaine ..... 25
Cucumber ..... 25
Tomato ..... 25
Escarole ..... 40
Mixed (2) kinds ..... 40 (3) ..... 50

## PUDDINGS AND PIES

English plum pudding, hard and brandy sauce ..... 25
Apple tapioca pudding, claret sauce ..... 15
Steamed plum dumpling, rum sauce ..... 15
Peach pie ..... 15
Pumpkin pie ..... 15
Apple pie ..... 15
Boston cream puffs ..... 10
Mince pie ..... 20
Cold corn starch pudding ..... 15
Hot or cold rice pudding ..... 15
Snow pudding ..... 15

## SWEET DISHES

Rice cake ..... 10
Wine cake ..... 10
" with ice cream ..... 25
Cream cake ..... 10
Charlotte russe ..... 15
Cream meringue ..... 15
Macaroon glace ..... 30
Meringue glacee ..... 25
Meringue panachee ..... 30
Ice cream, strawberry ..... 20
" coffee ..... 20
" vanilla ..... 20
" chocolate ..... 20
" French ..... 25
" Neapolitan ..... 25
Biscuit Tortoni ..... 30
Nesselrode ..... 30
Lemon water ice ..... 20
Roman punch ..... 25
Siberian punch ..... 25
Blanc mange ..... 15
Honey in comb ..... 20
Currant jelly ..... 20
Farina jelly with cream ..... 20
Champagne jelly ..... 25
Soft vanilla custard ..... 15
Soft vanilla custard frozen ..... 25
Cup custard ..... 15
Brandy peaches ..... 50
Bar-le-Duc jelly ..... 40
Banana jelly ..... 20
Brandy jelly ..... 20
Orange jelly ..... 20
Tarts ..... 10

## CHEESE

Swiss ..... 15
Cream ..... 20
Camembert ..... 20
Roquefort ..... 25
Imperial ..... 15
Neufchatel ..... 15
English ..... 15
Brie ..... 20

## FRUIT

Grape fruit ..... 40 half .. 25
Malaga grapes ..... 25
Concord grapes ..... 25
Baked apples & cream, each 15
Oranges, each ..... 10
Apples, each ..... 10
Bananas, each ..... 10
Apple sauce ..... 15
Pear ..... 10
Stewed prunes ..... 15
Stewed rhubarb ..... 15
Preserved figs ..... 30
with cream ..... 40

## TEA, COFFEE ETC.

Cup of coffee ..... 10
with cream ..... 15
Pot of coffee ..... 25
Demi-tasse coffee ..... 10
Pot of chocolate ..... 25
Pot of cocoa ..... 25
Cup of tea ..... 10
Pot of green tea ..... 20
Pot of Oolong tea ..... 20
Pot of Japan tea ..... 20
Pot of English breakfast tea ..... 20
Pots of tea with cream ..... 25
Glass of milk ..... 10
Glass of cream ..... 20
Buttermilk ..... 10

Lunch Bill of Fare of a Popular New York Restaurant

varying in size with the volume of the river. One of my favorite amusements as a boy used to be to sit on the bank of a creek taking care of several lines, to the ends of which were tied pieces of meat. No net was needed; the crustaceans were so abundant and so hungry that they refused to let go when lifted out of the water, and often I landed six or more fastened to the same piece of meat. Our favorite picnics were those for which we took along no food—only a kettle and a handful of salt. The crawfish did the rest. They are more tender and succulent than lobsters, and even more delicate in flavor.

St. Louis disputes with Portland the honor of being the greatest crawfish-eating center in the United States. The Mississippi River crawfish has made St. Louis famous among epicures. Until a few years ago, the "Republic" of that city informs us, "the waters around St. Louis on every side fairly swarmed with this fresh-water relation of the lobster. Every pond, slough, and back water was full of them. All the creeks and pools were their homes. Their little mud 'chimneys' dotted the creek bottoms and lined the banks of the ponds and sloughs. Hundreds of joyous St. Louisans struck out for the open on every holiday, armed with a pole, a few pieces of liver, and a dip net, bent on their capture. They caught so many that they brought them in by the sackful. Thousands of the little crustaceans were eaten every day of the season. From April until after

the snowfalls of November every real St. Louisan ate a few crawfish every week."

In 1910 this abundance had diminished to such an extent that a mandate was issued by the State Fish and Game officials which put a stop to angling in the city's waters. The crawfish multiplies so rapidly, however, that it will doubtless soon replenish the waters, and once more there will be parts of St. Louis and other cities where the evening air will be "laden with the unmistakable odor of boiling crawfish."

Of the great variety of crabs peculiar to our waters the one which most appeals to epicures is the "soft shell," which, when very soft, is eaten skin, bones, and all. But wait—there is another kind, still more delicate and toothsome—the oyster crab. It dwells within the mantle chamber and feeds on the juices of the oyster. No wonder it tastes good. Fortunately, it is not one of the many enemies of the bivalve, being quite harmless. Its scarcity, combined with its diminutive size, makes it a luxury comparable to the old Roman millionaire's dish of nightingale tongues.

A foreigner looking at an American bill of fare is struck first of all by the number of ways in which oysters are listed: raw, stewed, fried, steamed, baked in the shell, scalloped, creamed, and so on; and by the fact that the locality from which the oysters that are served raw are supposed to come is named—Blue Point, Shrewsbury, Rockaway, Buzzard's Bay, Cape Cod,

Norfolk, Saddle Rock, etc. In this matter there is, to be sure, much deception. It has become customary, in particular, to give the name of Blue Point to any small oyster, and to call any kind of large size a Saddle Rock; while many a worthless floated oyster masquerades under the name of the juicy and delicious Lynnhaven.

The oyster cracker, and the soda cracker in general, is an American specialty which Europeans will doubtless adopt some day as tasty, nutritious and easily digested additions to the dietary. As sold now, in dust and moisture-proof packages, they will easily find their way to foreign stomachs.

Clam chowder, steamed soft clams, and raw Littlenecks are among the delicacies an American misses in Europe.

As for our scallop, Paderewski thinks it is the best edible thing America produces. Many other epicures doubtless agree with him.

As seen in our markets the scallop is simply the abductor muscle of the bivalve. The remainder of the body is thrown away or used as fertilizer, though much of it is tender and of fine Flavor. Nor is this wastefuless the only cause for complaint. The best scallops are small; they are expensive, and the dealers, knowing that by soaking them they can bloat a pint of them till they fill a quart, subject them to this "freshening," which as thoroughly takes all the marine Flavor out of them as "floating" takes it out of the oyster. In this

condition, too, they spoil sooner and become dangerous to eat. I agree with F. Powers that "a man who soaks scallops and then offers them for sale should be imprisoned."

The scallop dredgers were among the first to take advantage of the new parcel post, which enables them to send the unspoiled mollusc to any one within a reasonable distance.

Concerning our fishes it is easy to say that the finest-flavored are the shad, the whitefish, the Chinook salmon, the rainbow trout; but when you happen to be eating a baby bluefish or a Spanish mackerel just out of the water, you may change your mind for the time being; you are sure to do this, also, if you happen to be in New Orleans and eat fresh pompano as prepared by a Creole cook. The sheepshead, the smelt, the catfish, the sturgeon, the halibut, are excellent; and so is the swordfish, which is far too little known among gourmets. Its flesh might be more tender, but it has a fine Flavor, suggesting a combination of salmon and halibut.

It is for the cod, however, that I wish to plead most earnestly. Some persons (usually persistent smokers, or individuals whose sense of smell is not well developed) maintain that the cod is "tasteless." As a matter of fact it has a subtle but most delicious Flavor which, when the fish is fresh, reminds me of the flesh of crawfish.

At present (1913) the cod enjoys the advantage of being the only fish, with the exception of trout, that can be bought alive in the markets of New York. "Live cod," when listed on restaurant menus, is in great demand. It is not always equally good, however, because much of the "live cod" is really live hake, which is far inferior in Flavor. The substitution of haddock for cod is less objectionable. Much of the salted and dried fish which goes into the typically American codfish balls, is also cod in name only. Dealers who use benzoate of soda or other chemicals to preserve it, give elaborate directions for soaking them out. It is needless to say that this soaking process also takes out all the Flavor.

### VEGETABLES STEADILY GAINING GROUND.

Historians are usually so deeply interested in all the petty details of politics that such trifles as the food which keeps us alive gets no attention at all. Macaulay was a laudable exception. Another is Macmaster. In the first volume of his "History of the People of the United States" he remarks that a century ago tomatoes, cauliflower, and eggplants were not to be found at the corner grocery; oranges and bananas were a luxury of the rich; and there were no cultivated varieties of strawberries or raspberries. Of apples and pears there were plenty, but "none of those exquisite varieties, the result of long and assiduous nursing,

grafting, and transplanting, which are now to be had of every greengrocer."

In Boston, at that time, "beef and pork, salt fish, dried apples and vegetables, made up the daily fare from one year's end to another." "The wretched fox grape was the only kind that found its way to the market, and was the luxury of the rich." "Among the fruits and vegetables of which no one had then even heard are cantaloupes, many varieties of peaches and pears, tomatoes and rhubarb, sweet corn, the cauliflower, the eggplant, head lettuce and okra."

To-day, how different the situation! In the catalogues of the seedsmen more than fifty kinds of vegetables are listed, and of each kind a dozen, or several dozen, distinct varieties are offered for sale. Yet these varieties represent only a very small proportion of the vast number that have been created.

In his instructive book on Plant Breeding, L. H. Bailey has a chapter on one of the most deserving of American originators of new varieties of vegetables, N. B. Keeney, of Leroy, New York. Mr. Keeney was at one time raising sixty-five varieties of garden peas and sixty-nine of beans, thirteen of the latter of his own originating, including the stringless kinds which have been introduced throughout the country by Mr. Burpee, and which are one of America's greatest achievements in plant development. The Professor was told by Mr. Keeney that fully three thousand varieties and forms

of beans had been discarded by him as profitless!

In the same volume Professor Bailey informs us that the date of the first fruit book is 1817. "In 1845, nearly two hundred varieties of apples were described as having been fruited in this country, of which over half were of American origin." In 1872 the number of varieties described was 1823, and in 1892 American nurserymen offered for sale 878 varieties of apples.

Among the vegetables which have been varied and improved by American breeders are the squashes, pumpkins, sweet potatoes, rhubarb, celery, corn, lettuce, tomatoes, watermelons, cantaloupes, cucumbers, potatoes, and eggplants.

One vegetable, Brussels sprouts, has not been improved but greatly impaired by some man (whether an American or a European I do not know) who crossed it with cabbage, making the sprouts larger but less finely flavored and also less digestible.

As I wrote of tomatoes, which are of American origin, in the chapters on France and Italy I have only a few words to add.

It is an odd fact that although we can claim this succulent vegetable as one of the New World blessings, it was in the Old World, in the Mediterranean countries that its gastronomic value was first fully realized. In the United States, as in England and Germany, there seems to have been a prejudice against it because of its

belonging to the same family as the deadly nightshade.

Much ingenuity has been expended in creating new varieties and prolonging the season. It is a most unfortunate circumstance that some of our most important vegetables are killed by the slightest frost. This is true of squashes, pumpkins, potatoes, beans, cucumbers, melons, and tomatoes. Knowing that Luther Burbank had succeeded in making apple-blossoms frost-proof, I once asked him to please do the same for tomatoes. He shook his head and replied that that was beyond his powers, because of their semi-tropic origin and habits.

Yellow tomatoes are not so much used (except for preserves) as they deserve to be. They have a very fine Flavor of their own. In regard to red varieties, it may be well to warn the breeders not to go too far in their efforts to create "beefsteak" varieties by reducing the seed pulp to a minimum. It is in that pulp that the richest Flavor is found, and the seeds do not appear to be indigestible.

Like the tomatoes, celery belongs to a family of poisonous plants and was also for a long time considered poisonous, which is doubtless the reason why it is only within comparatively recent years that it has come so much into demand. To-day it is raised all the way from Florida to Michigan, where it flourishes, particularly in the muck-bed area.

Celery is not indigenous to our soil. It has been

used in Europe for centuries, but in the kitchen rather than as an ornament of the dining-room. In Italy, France, Germany, it is treated as a pot-herb, for flavoring stews and soups, the unbleached plant being preferred because of its more powerful Flavor; but all celery tops and leaves are useful for this purpose; they certainly do much to give zest to soups and stews.

So far as known England was the first country to appreciate the charm of blanched celery. In a book called "The New World of Words," published by a nephew of Milton in 1678, we read that "Sellerie is an herb which, nursed up in a hot-bed and afterwards transplanted into rich ground, is usually whited for an excellent winter sallad."

We also use it to some extent as a salad, but it needs no vinegar for pungency, and most of us prefer to eat the stalks plain, *cum grano salis*. Few who eat it this way know that it is much more digestible if the stalk is broken in pieces and the fiber stripped off. Stewing softens the fibers. Cooked *au jus*, celery is almost better even than raw. If I had the choice of a dozen vegetables at dinner, I would more often than any other choose celery *au jus*.

Raw celery is seen so much more frequently on the table in this country than in any other that it may be virtually considered an American specialty. Nowhere else is it so crisp and tender, or so eagerly craved. It is a nerve tonic, and we need nerve tonics.

While melons are not indigenous to America, many of the choicest varieties of cantaloupes and watermelons are creations of our growers. Nowhere in the world will you find anything to surpass in sweetness and fragrance the Emerald Gem, the New Spicy, or the Rocky Ford, most luscious of all.

The New World's most important contribution to other countries, so far as nutritive value is concerned, is the potato. How Ireland and Germany, in particular, could have ever got on without this vegetable, it is difficult to imagine.

Sweet potatoes also are of American origin. They have been slow in making headway in Europe because they do not, like the white potato, grow in almost any soil and climate. Farmers' Bulletin No. 324 is devoted to sweet potatoes. Its author, W. R. Beattie, of the Bureau of Plant Industry, remarks that "as a commercial truck crop the sweet potato would be included among the five of greatest importance, ranking perhaps about third in the list. As a food for the great mass of the people living in the warmer portions of our country the use of this crop is exceeded by hominy and rice only." In the Philippine Islands it is at certain seasons almost the only food available for the lower classes. There are many varieties, the soft, moist kinds being richer in Flavor than the others. These are preferred in the South where a mealy sweet potato would not be eaten.

### THE FRUIT EATERS' PARADISE.

Many a time, in contemplating the conditions described under the heading of "Ungastronomic America," have I wished I lived in Europe; yet, every time, my gastronomic allegiance to the Stars and Stripes is cemented again by the contemplation of the glorious fruits we produce. This feeling is the stronger because I had the rare good fortune to grow up in an Oregon apple orchard. Oregon apples gave me my college education, and my sturdy health, too, for nothing is more wholesome than apples, and from my eighth to my eighteenth year I ate more apples than anything else. In our orchard of many hundreds of trees there were scores of varieties, some of which I would no more have thought of eating than a raw potato. Not that they would not have found a ready sale in any market; but at home they were rejected because of their inferiority in Flavor to the Gravenstein, the Red Astrachan, the Baldwins, the Northern Spy, Yellow Newtown and Green Newtown Pippins, Winesap, Roxbury Russet, White Winter Pearmain, Swaar, Seek-No-Further, and the Rambo, juiciest of cider apples and good to eat out of hand.

We also used to peel and cut up apples for drying. Very few people know the most delicious way to eat apples. We knew it. Turn the wheel of the peeler round two or three times; that removes the skin; then

keep on turning till all the pulp has peeled off into your left hand. Raise your head, drop into your mouth the pulp of the apple and you will know the meaning of the word Flavor. And the best of it is that if eaten that way, raw apples are not indigestible for anybody.

Thirty-two years after these glorious feasts had come to an end I was pleased to get for review E. P. Powell's delightful book, "The Country Home," [1] and to find that that eminent connoisseur's ideas regarding the best American apples coincided in the main with my youthful convictions. I cannot too strongly urge my readers to get that volume and enjoy Mr. Powell's remarks—written *con amore* as well as with the knowledge of an expert—on the kinds of apples, pears, peaches, plums, cherries, and other fruits which it is most advisable to raise on American farms, and what is the best way to do it. Strawberries, gooseberries, currants and blackberries have a chapter to themselves, for of all these there are distinct American varieties—and under the heading, "Tons of Grapes," the author gives pages of appetizing information about the fruit which, next to apples, is a prime article of diet. He shows how you can manage to have grapes six or seven months every year, and tells what are the best varieties to grow. Every farmer and owner of a country home should raise grapes. "It is cheaper and better food than meat and vegetables, and they never tire of it. I recommend that you go out

[1] New York: McClure, Phillips & Co., 1904.

before breakfast and sample a half-dozen sorts; repeat the experiment before dinner, and if the digestion is poor, take nothing else for supper."

Grapes are nothing if not American—that is, some grapes are. They are indigenous to the soil, growing wild nearly everywhere, from the extreme south to the banks of the Androscoggin in Maine, where I have often picked them.

A curious and important difference between grapes in America and in Europe is noted by Professor Bailey in his "Sketch of the Evolution of Our Native Fruits." The American grape—that is, the ameliorated offspring of the native species, "is much unlike the European fruit. It is essentially a table fruit, whereas the other is a wine fruit. European writings treat of the vine, but American writings speak of grapes." Yet it was not till the middle of the nineteenth century that "the modern table use of the native grape began to be appreciated and understood."

That grapes were not brought from Europe to America is absolutely certain. Long before Columbus, there came across the sea Leif, who, in the words of Justin Winsor, "found vines hung with their fruit, which induced Leif to call the country Vineland." In New England, Edward Winslow wrote in 1621 that "here are grapes, white and red, and very sweet and strong also."

Professor Bailey's book is largely devoted to the men

who improved American fruits—men who, as he justly intimates, deserve commemoration quite as much as persons who are distinguished in military operations. But while we, as a nation, have reason to feel proud of the achievements of these men, a great deal more remains to be done. Professor Bailey does not say which of our Eastern grapes he considers the best, but I am sure he would agree with me that the Delaware has a finer Flavor than any other kind, and of the four chief American grapes the Delaware is the only one "which gives any very strong evidence of foreign blood." This point has been disputed; but it is certainly true that "the types we grow are yet much inferior to the Old World types." Our Concords, Niagaras, and Catawbas, in particular, are capable of great improvement in the matter of Flavor. Fortunes are in store for growers who will take the hint.

It is well to bear in mind that there are varieties, such as the Iona, Eldorado, Brighton, Worden, Hayes, and Lindley, which, though not to be found in our wretched markets, are delicious. They are enjoyed by owners of country residences and their guests, even though city folk are unaware of their existence.

Altogether, the American grapes have given rise to some eight hundred domestic varieties, about one hundred of which may be found listed in catalogues.

Flavors cannot be transplanted. European grapes grown in America get a different "taste," and the wines

made of them have not the same bouquet. A few exceptions there are, notably the muscatel grape, which is almost as delicious in California as it is in Spain. But as a rule it is a waste of money to attempt to duplicate European fruits. Many millions have been spent in vain efforts to do this. To succeed, we must be American.

Long ago we learned to enjoy our game and our many varieties of distinctive sea foods of unique Flavor. Our native vegetables, wild nuts, fruits, and berries, we also appreciated, but these still offer limitless opportunities for improvement of their qualities—a proceeding which pays better than importing things European. Our nuts, among them the hickory, pine, and black walnut, are delightfully racy of the soil. They, too, are as American as the Indians, and wherever possible their intermarriage with our domesticated fruits and berries is a consummation devoutly to be wished.

Our wild crab-apples, for instance, of which there are five types, while excessively sour, have a superabundance of flavor. By transfusing their blood into the domesticated apples we can eliminate the excess of acid and give to many of our big apples a richer aroma.

The persimmon is one of our native fruits of unlimited possibilities. Heretofore, our markets have been supplied chiefly with the Japanese kaki, raised in California or Florida. It is a delicious fruit, but there are native varieties which in the opinion of some are even

finer than the Japanese. Ordinarily the wild American persimmon is as sour and astringent as a crabapple, fit only for the 'coon and the 'possum. But there have been enthusiasts whose belief in the future of our persimmon amounted to a passion. One of these was Bryant, "whose zeal as a cultivator and whose interest in fruit-growing were almost as great as his poetic enthusiasm." To Professor Bailey he expressed his belief that the finest persimmons of the future would be grown in the alluvial meadows of southern Indiana.

While the persimmon is as delicious as the banana, the demand for it has not been so great as it will be when the public learns that this fruit has the finest Flavor and is most wholesome when it looks like an overripe tomato which no one would buy. An Italian pushcart man used to smile when he saw me approaching. He knew I would pick out those which were so soft that they could be taken home only in a paper box. "Ah, you know, you know!" he used to say, pleased that his best things were not left on his hands by the uninformed multitude.

As a boy I used to enjoy hugely the May apple—a plum-shaped fruit growing on a low plant. What was my indignation when, some years later, I began to study botany and found in Professor Asa Gray's text book a description of that fruit, ending with the words: "Eaten by pigs and boys." I promptly made up my

mind that if adults do not relish this luscious fruit they have something to learn from pigs and boys.

Another Southern fruit, abundant in Missouri, which greatly pleased my boyish palate, was the pawpaw. Professor Bailey says that most people do not relish its flavor, nor does he believe that it will be possible to awaken much interest in this fruit. Mr. Powell, on the other hand, pays it a high tribute. He sees "no reason why this delicious fruit, a sort of hardy banana, should not be grown everywhere in our gardens."

Those are the words of an epicure. I am sure the pawpaw has a great future. To many it may be an acquired taste, but so are olives, and the most appetizing of all table delicacies, Russian caviare. I thank my stars that I always took naturally to such things; it has added much to the pleasures of life. So far as pawpaws are concerned, it will be easier to persuade skeptics to try to learn to like them if they are told that their juice is considered by medical men a great aid to digestion. Papain is much used as a substitute for soda mints.

### GOVERNMENTAL GASTRONOMY.

It is safe to say that in no other country has the Government done so much as ours has to advise and aid those who raise foods and those who prepare them for the table. In the preceding pages reference has been made to dozens of Farmers' Bulletins and other publi-

cations containing the results of experiments, made at the cost of many millions of dollars, with a view to informing the public on those matters. Every State and Territory now has its own Agricultural Experiment Stations. Primarily, the aims of these stations are of course agricultural and economic; in the last analysis, however, what are all the Bulletins issued by them but so many lessons in national gastronomy?

A few years ago the Department of Agriculture boldly invaded the kitchen itself, providing excellent lessons in the arts of preparing and preserving good food, in such bulletins as "The Care of Milk and Its Use in the Home," "Bread and Bread-making," "Food Customs and Diet in American Homes," "Care of Food in the Home," "Economical Use of Meat in the Home," "Preparation of Vegetables for the Table," "Composition and Digestibility of Potatoes and Eggs," "Cereal Breakfast Foods," "Food Value of Cottage Cheese, Rice, Peas, and Bacon," "Cheese and Its Economic Uses in the Diet," "Varieties of Cheese," "Fish as Food," "Sugar as Food," "Beans, Peas, and Other Legumes as Food," "Poultry as Food," "Use of Fruit as Food," "Nuts and Their Uses as Food," "Canning Vegetables in the Home," etc.

For farmers, truck gardeners, and those who market foods, there is a still longer list of Bulletins, Circulars, Experiment Station Reports, and other Government publications. To mention only a few of them:

"Potato Culture," "Sheep-feeding," "The Sugar Beet," "Asparagus Culture," "Marketing Farm Produce," "Care of Milk on the Farm," "Ducks and Geese," "Rice Culture," "The Apple and How to Grow It," "Grape Growing in the South," "Home Fruit Garden," "Home Vineyard," "Cheese-making on the Farm," "Cranberry Culture," "Squab Raising," "Meat on the Farm: Butchering, Curing, Etc.," "Importation of Game Birds and Eggs for Propagation," "Strawberries," "Turkeys," "Canned Fruits, Preserves, and Jellies," "Cream Separators on Western Farms," "Raspberries," "Tomatoes," "The Guinea Fowl," "Cucumbers," "Maple Sugar and Syrup," "Home Vegetable Garden," "Celery," "Poultry Management," "Sweet Potatoes," "Onion Culture," "A Successful Poultry and Dairy Farm," "Bees," "A Successful Hog and Seed-Corn Farm," "Manufacture of Butter for Storage," "Butter-making on the Farm," "Facts Concerning the History, Commerce and Manufacture of Butter," "The Cultivation of Mushrooms," and many more.

These valuable monographs were prepared by experts, mostly specialists, women as well as men. Distributed free when first published, they are afterwards sold at cost price, usually a nickel apiece; few of them cost more than a dime. Full lists, with prices and general instructions can be obtained by sending a postal card to the Superintendent of Documents at Washington. There are separate price lists of documents re-

lating to agriculture, dairying, food and diet, irrigation, soils, wild animals, fishes, health and hygiene, poultry and birds, etc.

In addition to all these documents there are many papers in the *Daily Consular and Trade Reports* containing valuable information on foreign foods and methods of marketing, gathered by the Consuls at the Government's request.

The supplying of information on everything relating to foods is only one phase of the Government's gastronomic activity. Another consists in calling attention to neglected edible plants. On this subject one of the experts of the Bureau of Plant Industry says:

> What we call weeds are no more so than other plants that we term vegetables. Weeds are vegetables, and our so-called vegetables were once upon a time no more than weeds. The classification results from a matter of habit. We are slaves of habit, and because we are so it has not occurred to us that we could eat anything but just the old list of vegetables our ancestors have eaten for generations. But now we are having our eyes opened and are beginning to peer into fence corners and back yards and wild pastures for new and wonderful foodstuffs that we have heretofore regarded as just weeds. It is a bit mortifying that because of this preconceived idea we have let most nutritious and valuable foodstuffs go to waste under our very eyes, while perhaps we were wailing that we had little to eat and that vegetables were too expensive and so on.

Among the plants thus neglected, but which, if properly improved and marketed, would enrich truck farmers, are yellow dock, dandelions, milkweed, golden

thistles, mallows, purslane (recommended by Thoreau), poke shoot, red clover, sorrel, hop shoots, yarrow, leek, and lupines.

A third gastronomic function of our Government is the importing of foreign fruits and vegetables that promise to add agreeable variety to the American dietary. For this purpose experts are sent to all parts of the world to find and bring home new plants which are then acclimated in accordance with the latest scientific methods.

David Fairchild, one of these gastronomic explorers, has repeatedly given in the "National Geographic Magazine" fascinating glimpses of the activity of the Bureau of Plant Industry in this direction. What he says about the date is particularly suggestive.

Search through the deserts of the world has revealed the fact that the dates of our markets are only one or two kinds of the vast number of varieties known to the Arabs and others whose principal food is the date. "Those we prize as delicacies are by no means looked upon by the desert dwellers as their best." The search has brought to light, among other desirable kinds, "the hard, dry date, which Americans do not know at all, and which they will learn to appreciate as a food, just as the Arab has."

In 1906 no fewer than a hundred and seventy varieties of dates had been introduced, and many of these are now growing successfully in Arizona. The time

will come when we can have the choice of as many different kinds of dates in our markets as we have now of apples and pears. And this experiment with dates is, as Mr. Fairchild says, something that "private enterprise would not have undertaken for decades to come."

Experiments by the Bureau of Plant Industry are being carried on also in Porto Rico, the Philippines, Hawaii, and the Panama Canal Zone. It makes one's mouth water to read what Mr. Fairchild writes, for instance, of the mangosteen. There are at least fifteen edible species. "It has a beautiful white fruit pulp, more delicate than that of a plum, and a flavor that is indescribably delicate and luscious, while its purple-brown rind will distinguish it from all other fruits and make it bring fancy prices wherever it is offered for sale."

The mango has for many years tried to secure a place in our markets, but the specimens supplied—usually from worthless seedling trees—have given it a bad name.

The Government office of Pomology has been cultivating the infinitely superior Mulgoba mangoes of East India, "fit to set before a king," and will probably, ere long, add this to the list of marketable delicacies. In India there are mangoes of all sizes and flavors, some of which Americans of the future will no doubt enjoy.

The United States Government has, furthermore, gone into the business of creating entirely new fruits, and valuable varieties of nuts, particularly pecans, on which the Department of Agriculture has specialized. Great improvements in corn, wheat, and other cereals have also been made at the Government's Experiment Stations, not to speak of stock breeding, some of which has a gastronomic value. Nearly every volume of the "Year Book" of the Department of Agriculture has a chapter or two on this subject, and some of the papers have been reprinted separately.

Probably the two most important of the new creations are the tangelo and the citrange—new names for new fruits which seem destined to become as common in our markets as oranges, lemons, limes and grapefruit.

The tangelo is a hybrid of the tangerine orange and the pomelo (grapefruit). There are several varieties. It is described as being sweeter than the pomelo, but more sprightly acid than the tangerine. It has the loose "kid-glove" skin of the latter fruit. "The characteristic bitter flavor of the pomelo is considerably reduced but remains as a pleasant suggestion of that popular fruit." I have had no opportunity to try this novelty, but Professor Bailey pronounces it "an excellent dessert fruit and an interesting and valuable acquisition."

Of the citrange, also, there are several varieties, the Rusk, Willits, and Morton. They are the outcome of

an attempt to combine the hardiness of the worthless trifoliata orange (*citrus trifoliata*) with the sweetness of the common orange. The Morton is very near to a sweet orange; while the Willits makes a good drink and replaces the lemon for culinary purposes. The Rusk "makes a very delightful citrangeade, a good pie, and excellent marmalade and preserves. For the latter uses it may ultimately be grown extensively."

### BURBANK'S NEW FRUITS AND VEGETABLES.

As a creator of new plants useful to mankind as superior foods, or because of their beauty, no man is the peer of Luther Burbank, of Santa Rosa, California. In the words of David Starr Jordan, president of the Leland Stanford University, "Luther Burbank is the greatest originator of new and valuable forms of plant life of this or any other age." "He is all that he has ever been said to be, and more," says Professor Bailey of Cornell University, America's chief authority on horticulture; and the leading foreign botanist, Hugo de Vries, of Amsterdam, admits that "in all Europe there is no one who can even compare with Luther Burbank. He is a unique, great genius."

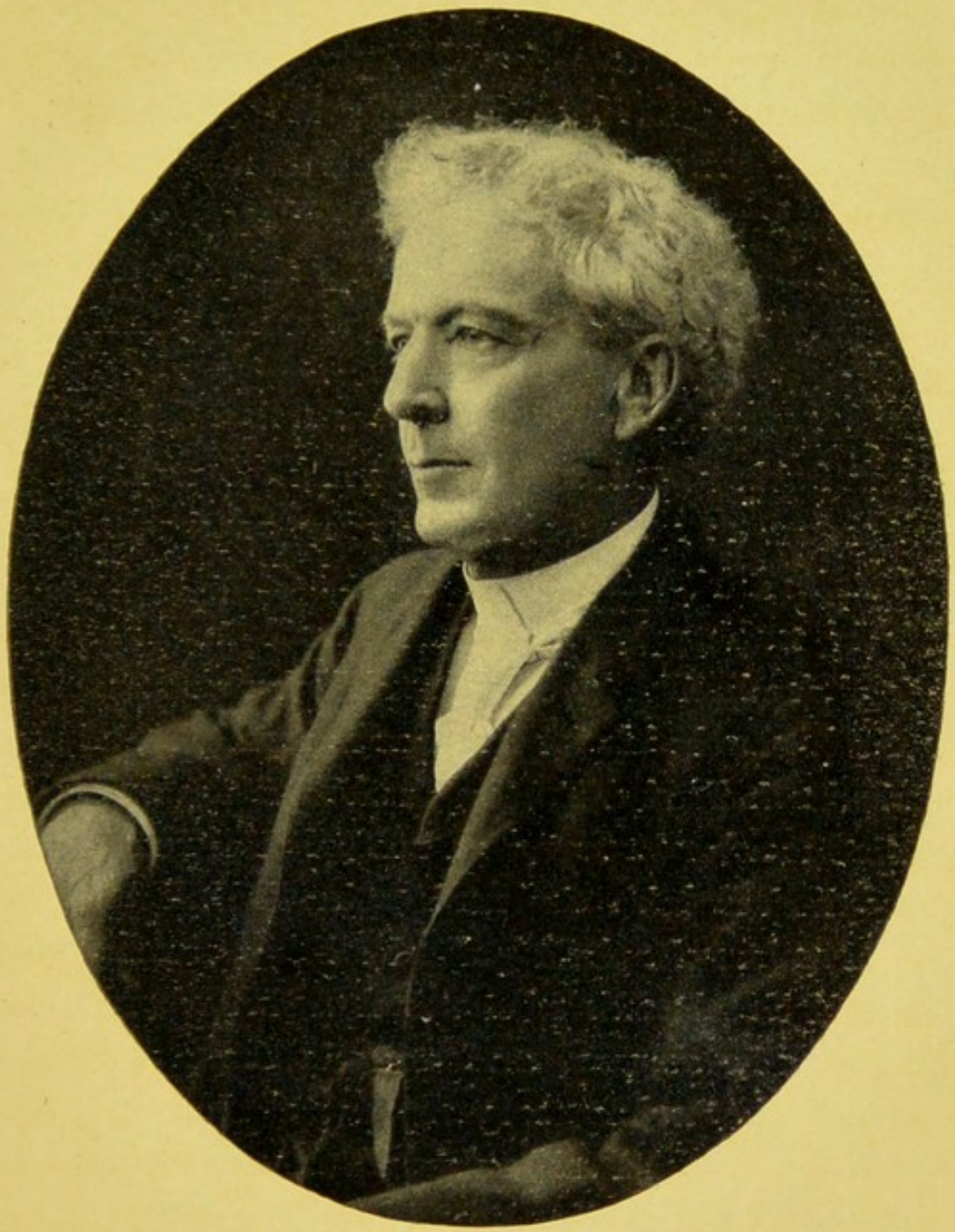
That last sentence explains Mr. Burbank's supremacy. He has, it must be admitted, enjoyed unique advantages. The climate of California has been in his favor, enabling him in some cases to raise more than one crop in a year and to operate on a larger scale than

any one else has ever done. Of fruits alone, for instance, he has had under test at one time "300,000 distinct varieties of plums, different in foliage, in form of fruit, in shipping, keeping, and canning qualities, 60,000 peaches and nectarines, five to six thousand almonds, 2,000 cherries, 2,000 pears, 1,000 grapes, 3,000 apples, 1,200 quinces, 5,000 walnuts, 5,000 chestnuts, five to six thousand berries of various kinds, with many thousands of other fruits, flowers, and vegetables."

Such advantages, however, would not have enabled Mr. Burbank to make his marvelous improvements along all the lines hinted at in the quotation just made.

The world owes these choice gifts to the fact that he is a genius, an artist, an epicure, and an enthusiast, as well as a plant breeder.

"The most obvious truth which strikes one when he attempts to make a reflective or historical study of the improvement of our native fruits, is the fact that in nearly every case the amelioration has come from the force of circumstances and not from the choice or design of men. . . . What has been called plant breeding is mostly discovery; or, in other words, so far as the cultivator is concerned, it is accident," writes Professor Bailey, in his "Sketch of the Evolution of Our Native Fruits." In another of his books, "Plant Breeding," after stating that in 1892 American nurserymen were offering 878 varieties of apples, he adds that "it is



LUTHER BURBANK

doubtful if one in the whole lot was the result of any attempt on the part of the originator to produce a variety with definite qualities."

These remarks apply to the methods of plant breeders in general. But there are exceptions, and Luther Burbank is the most important of them by far. True, he also had to rely on accident, such as the discovery of a California poppy with a small crimson spot, which he gradually enlarged till the whole flower was crimson; and it is for the purpose of taking advantage of lucky "accidents" that he raises plants in such unprecedented numbers. But chance is only one of his assets. He has in his mind a mental pattern, which "is made just as real and definite as the pattern of an inventor, or the model of a sculptor," as his biographer remarks.

In other words, his imagination conjures a fruit improved along a definite line in Flavor, color, size, or keeping quality, and he then proceeds to hybridize till he has achieved the ideal he has in his mind, though it may take a decade or longer to do it.

In one of Mr. Burbank's bulletins there is a picture of John Burroughs sampling the "Patagonia" strawberry in its originator's garden at Santa Rosa. In this berry Mr. Burroughs discovered "a wonderful pineapple flavor" and pronounced it the most delicious strawberry he had ever tasted. It is claimed for it that it is an exceptionally good keeper, and that it can be freely eaten by those with whom the common acid

strawberries disagree. It is the result of a full quarter of a century's patient experiments. For twenty years Mr. Burbank had, as he frankly admits, tried in vain to improve on the finest berries in the market. Knowing that all our best strawberries have descended wholly or in part from one of the Chilian varieties, he got one of his collectors in Chili, some years ago, to send him seeds of wild strawberries from the Cordillera and from the Coast regions. Among the plants which grew from these seeds he found some that promised to be of great value when crossed with the best American and European strains. With his usual Edisonian patience, he experimented until "among the very numerous seedlings under test was found this unique berry, which was at once recognized as the grand prize."

In this little genealogical tale we have an excellent illustration of that "judgment as to what will likely be good and what bad" which, in the words of Professor Bailey, is "the very core of plant-breeding," and in which "Burbank excels." The Burbank bulletins give many similar instances; and in view of the fact that his rivals and others have belittled his labors, it is proper that he should plead his own cause. His bulletins call attention to some of the results of his methods as compared with those of other plant-breeders. Here, for instance, is a fact for his detractors: "Nearly 95 per cent. of the new plums introduced since 1890, now catalogued as standards, originated on my own farms,

although nearly four times as many new varieties have been introduced by other dealers. Most of the introductions of others are not now generally even listed."

The Burbank plum, which was introduced less than twenty years ago, is now perhaps more widely known than any other plum, the world over; but, he says, "hundreds of better plums have since been produced on my experiment farms."

The Burbank potato is now the universal standard in the Pacific Coast States and is gradually taking the lead in the Middle West. It originated at Mr. Burbank's home place in Massachusetts in 1873, and was subsequently much improved by him in California. As H. S. Harwood remarks in his admirable book on the career and the achievements of Mr. Burbank, "New Creations in Plant Life" (the Macmillan Co.), "he has had four main objects in view in the work: A potato with a better flavor, one with a relatively larger amount of sugar, one that will be a larger size and all of the same uniform shape and size, and one that will better resist diseases and be a larger yielder than any potato now known." In all these points he has succeeded; never, anywhere, have I eaten potatoes so mealy, so digestible, and, above all, so rich in Flavor as Burbank's. When first introduced in California, in 1876, "old potato growers would have none of it, because it was *new* and because it was white. You will have to hunt a long time to find red potatoes *now*," writes Mr.

Burbank. J. M. Eddy, Secretary of the Stockton Chamber of Commerce, stated in 1910 that in San Joaquin County 4,750,000 bushels, or 95 per cent. of the entire output, were Burbank potatoes; and according to the U. S. Department of Agriculture the Burbank potato is adding more than $17,000,000 to the farm incomes of America alone.

"Corn is America's biggest crop. To add only one kernel to the ear of corn means a five million bushel crop increase.

"In the best corn States, corn grows from eight to ten feet high, and bears an average of slightly less than two ears to the stalk.

"During the past summer Luther Burbank, on his Santa Rosa experiment farm, has grown corn sixteen feet in height, bearing thirty-two ears to the stalk."

These statements are cited from the prospectus of the Luther Burbank Society issued in the year 1912, relating to the twelve superbly illustrated volumes to be published in which the Burbank discoveries or inventions (nearly 1,300 in all) are described with full directions as to how his methods can be applied on every farm, in every fruit orchard, in every truck or home garden, to the delight and profit of thousands.

One of Mr. Burbank's absolutely new creations is the *pomato*. It is the evolution of the potato seedball, heretofore absolutely useless, except for experimenters. "It first appears," says Mr. Harwood, "as a tiny green

ball upon the potato top, and develops as the season progresses into a fruit the size and general shape of a small tomato. . . . It is delightful to the taste, having the suggestion of quite a number of different fruits and yet not easily identified with any particular one. . . . It is fine eaten raw out of the hand, delicious when cooked, and excellent as a preserve."

Some years ago Mr. Burbank wrote in regard to his new plants that every one "has proved better than those known before in some new quality, in some soils and climates. All do not thrive everywhere. Please name one good fruit or nut that does."

The last two sentences are directed at those of his critics who triumphantly point to cases of failure of his new products in this or that locality. Judgment has to be used; "certain varieties which are a success in one locality may be, and often are, a complete failure a few miles distant, or near-by on a different soil or at a different elevation."

The Burbank Crimson Winter Rhubarb has been offered by unprincipled dealers in the cold Northern States, though they must have known that it could not prove successful there. For this new type the claim is made that it is the most valuable vegetable introduced during the last quarter of a century. So many fortunes have been made with it in California and Florida that it has been named "The Mortgage Lifter." The chief forester of the Government of South Africa reports that

at Cape Town, where all other rhubarbs had been a failure for two centuries, the Burbank Crimson Winter variety proved to be a complete success. Yet Mr. Burbank now has a still further improved variety, the Giant, which excels the original Crimson Winter Rhubarb "at least 400 per cent."

The list of delicacies for which American—and foreign—epicures are indebted to this inventor includes many other vegetables, berries, fruits, and nuts. He has not only improved the Flavor of the blackberry, but taken away its thorns. He has created a genuine new species by uniting the blood of the blackberry with that of the raspberry. The phenomenal berry now in such great demand on the Pacific Coast, was evolved from the dewberry. Burbank's Himalayan yields four times as much by weight as any other berry, and keeps twice as long; hence it has become "the most profitable shipping berry."

Everybody likes quince jelly and marmalade, but it remained for Mr. Burbank to create the pineapple quince, which can be eaten out of hand like an apple. For his improved cherry fabulous sums have been paid in Eastern markets—over three dollars a pound in one case.

"Cauliflower is only cabbage with a college education," said Mark Twain's Pudd'nhead Wilson. What Luther Burbank is doing besides creating entirely new fruits and vegetables, is to give the older ones a

college education. He has grown, to cite his own words, "several millions of new fruits . . . in the constant effort to eliminate faults and substantiate virtues."

Burbank's Formosa plum blends at least fifteen different varieties in its origin. It is "unequaled in quality," free from all disease, and keeps remarkably well. Another of his new plums is practically without a pit, while a third has the flavor of a Bartlett pear. Into another he has bred "a delicious fragrance, so powerful that when left in a closed room over night the whole apartment will be delightfully saturated with the odor." The new Nixie plum has, when cooked, the flavor and appearance of cranberries. It is described as "the forerunner of a wholly new class of fruits," and as having an "almost incomparably delicious" flavor, which it owes to the blood of the wild Sierra plum.

Some of Mr. Burbank's prunes excel the best of the French; and his plumcot is another of the entirely new fruits he has given the world. In creating this, he bred together a wild American plum, a Japanese plum, and an apricot, making a fruit which differs in flavor, color and texture from any other kind. There are already several varieties of it.

Of his successful experiments in "educating" nuts three may be mentioned. He has made chestnut trees bear at the unheard-of early age of a year and a half;

he has created a "paper shell" walnut; and, what is more remarkable still, he has removed from the walnut the disagreeably bitter inside skin which makes it indigestible because of the tannin in it.

Grapes have not been neglected. In the summer of 1911 I asked him if he would not undertake to educate some other grapes grown in California to the level of the Muscatels and at the same time give the Muscatel a thicker skin to make it better able to stand transportation to the East. He answered in a letter dated July 25, that he was "at work on several of the California grapes to give them better flavors, thicker skins, and better keeping qualities; and," he added, "I assure you that I am having good success. They are not yet ready to send out."

The Newtown Pippin is one of the finest apples, but he has a descendant of it which is a far better bearer and has "an added aromatic fragrance." There are improved peaches, too; also, many beautiful flowers new to the world; but of flowers this is not the place to write.

Is it not strange that this unselfish wonder-worker, whose object is not to make money (except for the purpose of enabling him to go on with his experiments), should have met with so much hostility? Yet he declares that the greatest inconvenience or injustice he has met is not misunderstanding, prejudice, envy, jealousy, or ingratitude, but the fact that purchasers

BURBANK'S SPINELESS CACTUS

are so often deceived by unscrupulous dealers who, misusing his name, foist upon the public hardy bananas, blue roses, seedless watermelons, and a thousand other things, including United States Government thorny cactus for the Burbank Thornless.

On this point Mr. Burbank has reason to write with a feeling of mingled pride and resentment. In 1896 the first scientific experiments for the improvement of cactus as food for man and beast were made on his farms. Eight years later, when these costly experiments were crowned with success, the Department of Agriculture spent $10,000 in searching for a thornless cactus like those already produced by Mr. Burbank. The result was a failure; the "spineless" cactus sent out were not spineless, not safe to handle or feed to stock, while the fruit was "seedy and poor."

The Burbank improved cactus, on the other hand, is free not only from the long spines but from the even more harmful microscopic spicules. It is therefore "as safe to handle and as safe to feed as beets, potatoes, carrots or pumpkins." The new thornless varieties will produce a hundred tons of good feed where the average wild ones will yield only ten tons of inferior fodder. It can be grown on millions of acres of deserts where no other edible vegetation can be raised, and as it is possible to produce a thousand tons of feed on a single acre, the imagination conjures up the time when beef will once more be as abundant, as good, and as

cheap as it was in the days of unlimited pasturage.

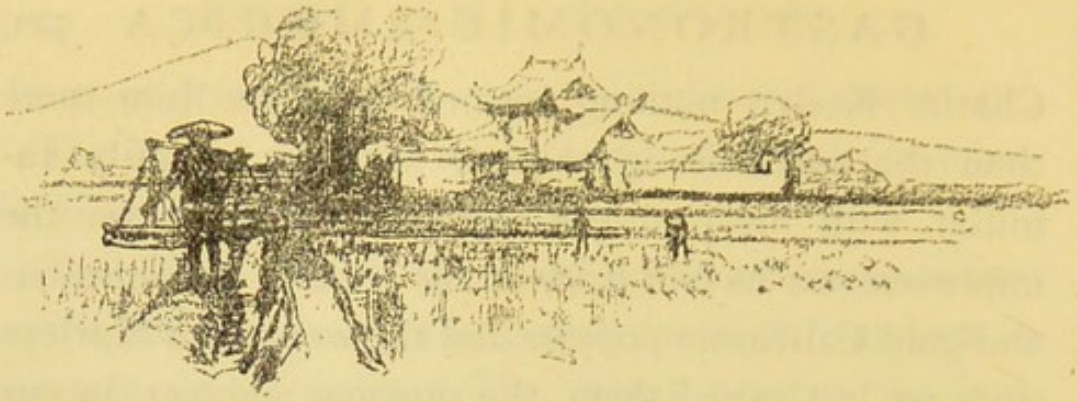
The leaves or slabs are valuable as food for other farm animals, including poultry.

The fruit, also, is produced in enormous quantity and is likely to become as important in our markets as bananas and oranges. The cactus bearing the best fruit is not yet quite spineless, but the fine bristles on the fruits are easily removed with a small whiskbroom before picking. Burbank's 1912 Spineless Cactus bulletin lists more than a dozen varieties cultivated for the fruit, and fifteen varieties raised for forage.

The cactus fruit "can be produced at less than one-tenth the expense of producing apples, oranges, apricots, grapes, plums, or peaches." There is never a failure in the crop, and the fruit can be stored like apples. It will oust the injurious "fillers" and adulterants now used by manufacturers. Excellent jams, jellies, syrups, marmalades and preserves can be made of cactus fruit at a minimum cost. For candies and for pickling, also, it can be used to advantage, and "the juice from the fruits of the crimson varieties is used for coloring ices, jelly and confectionery. No more beautiful colors can be imagined."

Mr. Burbank takes a keen delight in his new plants, and like other artists, he likes to know that you really see and feel what he has done. When we visited him in the summer of 1909, in company with John Burroughs and the California poet,

Charles Keeler, nothing seemed to please him more than the proof we gave that we were actually familiar with his creations, by our comments on the improvements he had made in his crimson and crimson-and-gold California poppies and the wonderful Shirleys since we last raised them, the previous summer, in our Maine grounds. I felt like Parsifal in the enchanted garden. We had a chance to stroke the spineless blackberry and cactus, and to taste various kinds of berries and fruits more luscious than any that mortals have eaten since the Garden of Eden was destroyed.



# XII

## COMMERCIAL VALUE OF FLAVOR

### PALATABILITY DECIDES PERMANENCE.

LUTHER BURBANK is, as already noted, an epicure. No one enjoys his new products more than he does, and in his bulletins he never omits to call attention to the "added aromatic fragrance" or the delicious flavor of his improved fruits.

What I wish particularly to call attention to now, however, is that he fully realizes the *commercial* value of Flavor. He holds, as Mr. Harwood wrote in 1905, that "it is highly important in the production of a new fruit or vegetable to make it preëminently palatable, for, in the last analysis, *it is palatability that decides the permanence of any new food.* If palatability be eliminated as a factor, then mankind is prone to consider the food,—no matter what its form or character,—a medicine, to be taken because it produces certain necessary results."

When I informed him that I was writing a book on Food and Flavor he sent me a long letter, dated December 18, 1912, from which I take the liberty of citing the following illuminating paragraphs:

"I am very glad that you have taken up the subject of flavor in food. It is a far more important matter than most people believe. Color and flavor both aid digestion very materially, most especially flavor, and my work from the first has been among food and drug plants to obtain pure, pleasing flavors (and in flowers, fragrance) and I have been as successful in that line as in any other line of work.

"Vegetables—like celery, cabbage, cauliflower, carrots, turnips, beets, lettuce, peas, beans, sweet corn and especially artichokes, have not only had ill flavors, but have been lacking in sweetness. These can be just as readily added as form, size or color. Even the pot herbs need attention fully as much as anything else, and they will take a lot of time.

"Take savory, sage, or any other herb seedlings, four out of five of them will have a poor flavor, while the fifth will have the most delicious odor, flavor and fragrance. Sometimes only one in a hundred or so has this delightful combination. It is simply a matter of selection to produce these herbs so that all will have the delightful flavor of the single individual.

"It is astounding that more attention has not been placed on this line of plant improvement, though until

my work commenced in this line some twenty-five years ago, no one seems to have thought that these changes *could* be made.

"I have only outlined briefly the almost infinite number of improvements that could be named, not only in the plants named, but in all other plants as well as fruits; in which people recognize flavors most quickly.

"It is almost necessary to knock a man down before you can convince him that there are differences in flavors of herbs and vegetables, or that such things as coffee, cinnamon and other plants can be improved in this respect."

### EATING WITH THE EYES.

The object of this whole book is to furnish a "knock-down" argument as to the overwhelming importance of securing the best flavors in food and to demonstrate at the same time that commercially the richest Flavor pays best.

A few years ago Professor J. L. Henderson of the Harvard Medical School astonished newspaper readers by saying that the needed food for one person costs only ten cents a day and that the rest we spend goes largely for flavor.

Had he made this remark some years hence he might have said "goes *chiefly* for flavor." At the present time, unfortunately, not a few purchasers of foods are guided to a considerable extent by appear-

ance. Dr. Wiley has written trenchantly on the widely prevalent habit of "eating with the eyes"—of selecting articles of food for their size and color instead of their flavor. Inferior or imitation butter, for example, is artificially colored and the ignorant consumer meekly buys it. The epicure buys butter for its Flavor and the dealer cannot deceive *his* eyes. To him, in the words of Dr. Wiley, "the natural tint of butter is as much more attractive than the artificial as any natural color is superior to the artificial. There is the same difference between the natural tint of butter and the artificial as there is between the natural rose of the cheek and its painted substitute. The dairymen of our country are honest and honorable and evidently do not clearly see the false position in which the practice of coloring butter puts them. When the dairymen of the country understand that *the naturally colored products will bring the highest price on the market* and appeal more strongly to the confidence of the consumer it is believed the artificial coloring in butter will be relegated to the scrap pile of useless processes." Natural butter is yellow in May and June; but whoever buys yellow butter at other times in the belief that it is fresh is a greenhorn. Even harmless coloring matter, like carrot juice, is objectionable, because it makes the butter spoil sooner.

George K. Holmes, Chief of the Division of Foreign Markets, contributed to the Year-book of the Depart-

ment of Agriculture for 1904 an article entitled "Consumers' Fancies" which gives some curious illustrations of the stupid underrating of the all-important Flavor. To cite one of them: "Although it may seem that it is positively not worth while, to say nothing of money, to buy a *nut* except to enjoy its flavor, yet to taste is assigned only 25 per cent., while 50 per cent. is given to the eye, the remaining 25 per cent. going to the convenience of cracking the shells."

Judges at county fairs have been known to allow 20 points on looks and only 15 on the flavor of foods. They knew that city folk are easily fooled by appearances. On this point Mr. Holmes remarks: "In the city, a large city especially, the appearance of an apple is everything and taste nothing, unless the purchaser was once a country boy and enjoyed the freedom of an orchard." And again: "City-bred people, who have little knowledge of the origin and real character of food and food products, such as the country man has, and who have no childhood's acquaintance with the good things of the farm, are especially liable to suggestion; they are governed largely by appearances in their selection of farm products and are *easily deceived by the trick of a false name or a false ingredient in a prepared food.*"

One of the standing jokes in our comic papers concerns the "hayseed" who comes to town and buys a "gold brick." If the farmers edited comic papers, they

would have a standing joke about the city folk who buy their showy products, leaving them the best flavored, which may not appeal to the eye.

It is not true, however, that all the showy fruits are insipid and all the small plain fruits full-flavored. The delicious Winter Nellis pear is not nearly as pretty to look at as the Bartlett, yet it is quite as popular, while the Bartlett is as luscious as it is beautiful and often imposing in size, especially on the Pacific Coast. Among the apples in our markets, also, some of the biggest and most beautiful are the best to eat.

It cannot be denied that there is *something* to be said in favor of "eating with the eyes." Women naturally want the apples and oranges, the berries and vegetables, and the viands on their tables, to look pretty and inviting. Nor is there any reason why they should not have their way. The eye and the palate can be reconciled by breeding fruits and vegetables that combine good looks with agreeable flavor.

Luther Burbank has done the world a tremendous service by originating the luscious fruits and vegetables briefly referred to in the preceding chapter, but perhaps his greatest achievement is the demonstration that there is virtually no limit to obtaining fruits of any size, form, or flavor desired, and that the good looks and flavor can be amalgamated at pleasure with shipping and keeping qualities. He himself is preparing many pleasant surprises of this kind beside those I have re-

ferred to, and hundreds of others are profiting by his example and following his methods.

### SCHOOL GIRLS AS PURE FOOD EXPERTS.

Three girls in a Massachusetts Normal School in 1904 accidentally launched a new kind of pure food movement which is of historic importance, as it puts to shame the dilatory methods of Federal and State Governments.

They missed their lessons one day, after feasting at a surreptitious midnight spread on "strawberry" jam. Their chemistry professor, Lewis B. Allyn, advised them to analyze a can of the same preserves to find out what there was in it that could have made them ill. They did so, and found that the jam contained no strawberries at all but was made of apple sauce, ether, grass seeds, red ink, and salicylic acid.

It *looked* all right; but what is food for the eye is often poison for the stomach. That was the important lesson this incident was destined to teach the inhabitants of Westfield, Massachusetts.

Peter Clarke Macfarlane, who tells the whole story grapically in "Collier's Weekly" for January 11, 1913, writes:

> From that day forward the girls in the chemistry class began to qualify as pure-food experts. They examined the canned goods, the preserves, the medicines, and foods of every kind that came from the stores of Westfield into the homes in

which they lived. The housekeepers were appalled to find the sort of thing they had been putting upon their tables. And the grocers were somewhat appalled, but much more annoyed. It is very disturbing, no doubt, to have the canned goods you make the most profit on, the ones that bear the very handsomest lithographs, returned almost in wheelbarrow loads because of some fussy girls stewing chemicals in a laboratory. I leave it to any one if it would not be annoying when a grocer is working energetically to build up trade in a new line of chocolate which he can sell in larger packages for less money than chocolate was ever sold before to have a miss still wearing her hair in braids say right out loud in the store for every one to hear:

"Pooh! I analyzed that in class. It is thirty per cent. cornstarch. That is why you can sell it cheaper than real chocolate. And it has potash in it, too, which turns to suds when you add water, and that 's what makes it look so deliciously creamy and frothy when you pour it into the cups. No suds in my chocolate, thank you!"

Professor Allyn, under whose guidance this epoch-making crusade was undertaken—a crusade which should and could be carried on in every town throughout the country—was elected a member of the Board of Health. Opportunity was given housekeepers and all others who suspected foods of being adulterated, to have them examined by the two hundred schoolgirls and their professor. The results were placed on exhibition in the Board of Health Museum. In this way Professor Allyn taught tradesmen that it does not pay to handle impure goods when once the public is enlightened as to the difference between what *looks* good and what *is* good.

The Westfield Board of Health now publishes a list of foods which it considers pure. With that list in hand it is safe to go a-marketing. Offending manufacturers and dealers have been converted to the old doctrine that honesty is the best policy, and the plan, altogether, has worked so well that hundreds of letters have come to the secretary of the Board of Health, asking "How can we give our town a pure-food standard like Westfield?"

One of the methods Professor Allyn adopted to teach the inhabitants of Westfield the folly of "eating with the eyes" was to buy a can of peas, open it in presence of an audience, and pour in some hydrochloric acid, a test for copper. Then he inserted a gleaming butcher knife and when he drew it out a few moments later it was coated with copper.

Not all dye stuffs used for coloring canned or other foods are as objectionable as copper, but most of them are undesirable because, as Dr. Wiley has pointed out, they make it possible to conceal inferiority of material or lack of freshness. In "Good Housekeeping" for February, 1913, Dr. Wiley had an article headed "Danger in Vivid Green Vegetables" in which he pointed out that after a delay of six years the Remsen Food Board ratified his conclusions that the sulphate of copper used to give the unnatural bright color to canned peas, beans, and spinach is injurious to health and should not be allowed in foodstuffs. "It must have been a bitter pill

to swallow," he adds, "for were they not appointed in the hope that Wiley would be reversed on all points?"

Another pure-food expert has given an amusing recipe for making a bottle of maraschino cherries:

"Take a cherry and remove the stone. Get the color out by holding it over the bleaching fumes of sulphur. Remove a portion of the fleshy part of the fruit to leave mostly fiber. Then inject some artificial sweet substance to give it a 'body' and a sugarlike quality. Dye it with a brilliant red coal tar dye. Put it in a bottle, and sell it to a greenhorn."

A greenhorn is defined in the dictionary as "a person who is easily imposed upon." You prove yourself a greenhorn if you go into a grocery store and buy glasses of preserved fruits and vegetables dyed in brilliant rainbow hues such as no honest fruit ever exhibits. You show yourself a greenhorn if you buy canned peaches for their shape. Peaches picked and halved before they are ripe retain their shape beautifully. If you want to eat with your eyes buy this kind by all means. Peaches picked and halved when the sun has ripened them on the tree have Flavor; this kind is for those who eat with their mouth.

Many of us are not greenhorns. We would buy more California peaches in winter if the cans had a label with these words on it: "These peaches were picked ripe; they may look a little mushy, but they are much pleasanter to eat than those which are picked un-

ripe to make them keep their shape. Try them and note the difference."

Fortunes are in store for canners wise enough thus to recognize the commercial value of Flavor and to educate the public in this simple way, as well as by advertising in the newspapers and magazines. A consumer who has eaten some of the flavorsome ripe peaches will come back for another can—or a dozen cans—much sooner than one who has eaten the hard insipid halves of unripe peaches.

### PENNYWISE DEALERS AND PINEAPPLES.

Herbert J. Webber relates in the "Yearbook of the Department of Agriculture" for 1905 that when the department's pineapple-breeding experiments were started, the question of what varieties to cultivate gave considerable trouble. Many growers insisted that the red Spanish was by far the best variety, because of its adaptability to open field culture, freedom from disease, and *good shipping qualities*. Others contended that "as varieties existed that were of *far better quality and flavor*, the market should be educated to demand these better so-called fancy fruits."

The words I have italicized indicate a difficulty which confronts us—a problem of vast and national importance, the chief impediment to our getting the best varieties of fruits, imported as well as domestic, and of vegetables, too, into our markets. While some

dealers are sufficiently astute to realize that sales are multiplied tenfold if the best fruits and vegetables are offered, the ruling majority are so pennywise as to think only of the shipping and keeping qualities. It is not too much to say that these short-sighted dealers have entered into a conspiracy to suppress the best varieties because their greater delicacy and juiciness make them more perishable.

The story of the pineapple illustrates this point. In the Far South, where this luscious fruit grows, its fragrance at the time of ripening pervades the whole neighborhood. In our markets the pineapple's perfume is so faint that you have to flatten your nose against it before you get any at all. The reason is that these "pines" not only are usually of an inferior sort, but that they are picked and shipped before they are ripe.

Bananas picked green ripen gradually and become sweet. Not so pineapples. What happens when they are picked unripe is told in a Bulletin of the Hawaii Agricultural Experiment station (1910) kindly forwarded to me by one of the officials after I wrote an article on the subject for the New York "Nation":

> A study of the ripening of pineapples has disclosed the fact that the sugar content of the fruit is derived exclusively from the leaves of the plant and does not increase after the fruit has been removed from the plant. If pineapples are picked green and allowed to ripen the sugar content at complete ripeness is the same as it was when the fruit was removed from the plants. An analysis of the fruit shows that they contain no substance

which can be changed into sugar during the ripening process. Fruits picked too green and allowed to ripen, therefore, *lack greatly in sugar content and in flavor.* The sugar content of green fruits, or fruits ripened after being picked too green, is about 2 or 3 per cent., while that of fruits ripened on the plant ranges from 9 to 15 per cent.

The words in italics give the gist of the matter. "Pines" picked and shipped unripe never get their full Flavor, and its unique Flavor is the one thing that makes a pineapple desirable, for its nutritive value is slight, and sweets and acids can be more conveniently and cheaply obtained in other ways.

Here is a description of the pineapple at home: "The most delicious fruit to be found in Brazil is the pineapple. Northerners who eat this fruit weeks after it has been picked in its green state have only a faint idea of its sweetness, lusciousness and delicious flavor. Here the pineapple is picked when the tropical sun has perfected its chemical work, and the fruit is ready to melt in the mouth. It would be an affront to nature to sprinkle sugar upon it when sliced. It is mellow, overrunning with juice, and of incomparable flavor."

Luther Burbank has tried to cultivate a "pineapple Flavor" in other fruits, and when John Burroughs found it in his new "Patagonia" strawberry, he was much pleased. It is, indeed, such an exquisite fragrance that one would imagine the importers and dealers would think of it, above all things, as a bait to allure purchasers. But no; most of these gentlemen attach,

as we have seen, chief importance to keeping and shipping qualities.

The consequence of this pennywise policy is that about one-tenth as many pineapples are sold in our markets as would be if the Commercial Value of Flavor were fully recognized.

The canners, it is instructive to note, have benefited by the mistake of their competitors. They wait till the fruit is ripe and flavorsome before they tin it, and that is the reason why the luscious Hawaiian canned pineapple suddenly sprang into such great favor. In connection with this fact it is interesting to read Dr. Wiley's testimony that "canned fruits properly preserved retain their natural aroma and flavor better than any other form of canned food."

The rapidity with which the public discovered the excellence of this Hawaiian product indicates that fresh pineapples also will gain enormously in favor if the dealers will only supply the "fancy" kinds in abundance and at reasonable prices.

What the enlightened public wants is not only Flavor, but variety in Flavor. Pomologist William A. Taylor of the United States Bureau of Plant Industry has penned a maxim which dealers cannot ponder too much. "Attractive diversity in appearance and quality stimulates a demand for fruit among consumers." Yet, as another Government expert attests, "there has for many years been a strong tendency in the American

fruit trade to urge fruit-growers to reduce the number of varieties in their commercial plantations." The results we see in our markets. Of the dozens of choice sorts that are described in the catalogues of nursery and seedsmen only a fraction are offered to consumers.

### SUCCESSFUL PEACH-GROWERS.

The condition into which those pennywise dealers who are indifferent to Flavor and oppose variety have brought our peach market is a national disgrace and a gastronomic calamity. Most of the Southern peaches sent North seem now to be of two or three kinds and those not of the best. To be sure, it makes little difference what kinds are sent, for all are equally spoiled by being picked, like the pineapples, before they are ripe. California peaches melt in the mouth like ice cream—if eaten in California. In the East they used to contrast with Atlantic Coast peaches by their leathery consistency and lack of Flavor, due to the fact that they had to be picked unripe to stand transportation. To-day they contrast less, because Eastern peaches also are so usually picked unripe.

In the peach-growing business, under present conditions, "the proportion of failures to successes is at least as ten to one," according to Erwin F. Smith. The proportion might be reversed if this expert's advice, as given in "Peach-Growing for Market" (Farmers' Bulletin No. 33), were generally followed by farmers.

The most important point he makes is that the peaches to be marketed successfully must not only have size, color, and firmness enough to stand shipment, but also superior flavor.

It was by leaving his peaches on the tree till the sun gave them that superior flavor that one man I know of became rich. He had an orchard about twenty miles from New York and when the first crop had thoroughly ripened he picked a wagonload to take to the city. He never reached it. Every basket was sold before he had gone a mile, and all the other loads were thus disposed of to his neighbors, although he charged the full New York retail prices. The middleman's usual share of the plunder remained in his own pocket.

What would you think, Mr. Farmer, or Mr. Business-Man-Who-Wants-to-Live-in-the-Country, of buying a twenty-two-acre tract of worthless pasture land, putting it into peaches, and getting therefrom in twelve years a profit of $44,000?

It can be done, and it has been done. The very interesting and instructive story was told in detail in the Philadelphia "Saturday Evening Post" of September 10, 1910, by Forrest Crissey. It is the story of J. H. Hale, of Glastonbury, Connecticut. One day he came across an old native seedling peach tree, loaded with sweet wild fruit that had a delicious flavor and melted in his mouth. While he was eating one of these peaches, the thought came into his mind: "If this

stony old hillside will grow such peaches as these, wild and without cultivation, what is to hinder its producing a splendid crop of choice, cultivated peaches?"

There was nothing to hinder; the trees were planted, and when they bore fruit he put up a sign reading: "Headquarters for Hale's Peaches. Peaches Ripened on the Trees." When he began to market them in the cities he sorted them into three grades, charging fancy prices for the best. These and other details of his method helped; but the great secret of his success was painted on his sign: "*Peaches Ripened on the Trees*"—a sign which proved that he understood the Commercial Value of Flavor, which made him a millionaire.

Apples, fortunately, do not need to ripen entirely on the tree. They can be picked before they are ripe and get their full flavor in the cellar. Cold storage makes them keep longer still—unfortunately, I feel tempted to say, for this tempts the middleman to hold them for higher prices till they have become mealy and lost much of their aroma. Many of the apples sold in our markets in winter are over a year old. They will not be after the consumer rises to assert his right to Flavor. The English are more alert. I most earnestly call the attention of American apple-growers and eaters to the following sentences from an article in the *Consular and Trade Reports* (April 5, 1911), explaining why Australian apples have an advantage in English and other European markets over American fruit:

"Cold storage extending over a period of six months is not the best means of preserving the flavor of a fruit. On the other hand the Australian and Tasmanian crops being six months later than the American, the fruit comes direct from the orchard with its original flavor almost unimpaired."

At the Illinois Experiment Station the important fact was demonstrated that mature apples keep much better in cold storage than immature apples (Farmers' Bulletin No. 193).

The new method of pre-cooling fruit, especially peaches and oranges, gives much hope for the future. Two illustrations in the "Yearbook of the Department of Agriculture" for 1909 illustrate this point. One pictures peaches as handled and delivered in New York by the old method—the small, pallid, leathery, flavorless things we all know and groan over. The other shows red, ripe peaches, luscious to the eyes and the palate alike. Pre-cooling does it; for if this method is used, "the fruit may be left on the trees to attain a greater degree of maturity, thus assuming a much better quality."

### FORTUNES FROM BANANAS AND ORANGES.

When other fruits have vanished, the banana is always for sale, even in the smallest village fruit stores. But it was not always so. A few decades ago the banana was a rarity in the United States and a luxury.

How did it happen to get its present vogue? Was it because the public discovered that there is a great deal of nourishment in this fruit—that millions in the tropics live on it? Not in the least; I doubt if one banana-eater in a hundred knows or cares whether or not it contains even as much nourishment as a cucumber or a watermelon. What has given the banana its great vogue is simply and solely its delicious Flavor. In its Flavor lies its commercial value; its Flavor has put money—often a fortune—into the pockets of hundreds of thousands of planters, shippers, and wholesale and retail dealers. There are whole fleets of steamers for carrying bananas to American ports, and other fleets carry them to Germany, to England, to France, and other European countries. In Germany, 320 tons supplied the demand in 1899; in 1911 the imports exceeded 30,000 tons, and the demand grows like an avalanche.

Banana flour, made from the dried fruit, also has a great future as a breakfast cereal. A few years ago a new source of profit was opened. Have you ever eaten any "banana figs"? If not, try them at once; they are deliciously sweet, and they can be freely eaten by those who have to avoid figs because of their innumerable small seeds. Within a few years seven factories sprang up in Jamaica, all of them coining money by making and exporting "banana figs" as well as "fig bananas," which differ from the others in being dried whole.

In 1912 the people of the United States consumed over six *billion* bananas, or more than five dozen for every man, woman, and child, the value of them exceeding fourteen million dollars. Yet this enormous demand is a trifle to what it will be when the public has learned how to eat them. Few know how delicious they are fried, or cooked in other ways. As for raw bananas, most Americans still eat them with the eyes, selecting those which are bright yellow (or red) and unspotted, ignorant of the fact that the most luscious by far are those that are spotted or almost black; the pushcartmen sell them at a cent apiece, or two for a cent. These are not rotten, but simply ripe, as long as they are white inside. They are much more digestible, too, than the unspotted ones. To make them still more so, follow the advice of "Tip" of the New York "Press," who writes:

> I have had men and women tell me they could n't eat bananas at all without suffering from indigestion, and to them I always pass on the recipe told me by a great lover of the fruit who said that invariably he scraped off the little fuzz remaining on the banana after the skin is peeled off. Before he began to do this the fruit disagreed with him; afterward he ate as much of it as he pleased.

Unlike bananas, the citrus fruits—oranges, lemons, and pomelos (grapefruit) have no nutritive value worth talking about. You might eat a hundred of them a day and—well, if they did n't kill you they

would n't keep you alive either. Consequently the fortunes made by growing annually twenty million boxes of these much-coveted fruits and distributing them throughout the country, once more attest the Commercial Value of Flavor. And in the long run the best flavored are sure to survive, even though for a time greenhorns may be fooled into buying inferior kinds because of size or color.

### MELONS, HONEY AND FLAVORING EXTRACTS.

It would be interesting to know how many million dollars American farmers earn every year by raising melons. The Rocky Ford district in Colorado alone ships about 1,500 carloads of cantaloupes, and these are but a drop in the bucket. Nobody would dream of buying melons for food; their commercial value is entirely a matter of Flavor. And in proportion as the Flavor was improved has the raising of melons become more profitable. Time was when the old-fashioned "mushmelon" was tolerated; but compared with the choice varieties of cantaloupes now in the market it was but one remove from the pumpkin. Many insipid melons still find their way into our markets, but gradually they will be eliminated; and the sooner this is done, the better it will be for the dealer's purse as well as the consumer's palate.

The manufacturer who advertises that "there is only one way to make a cigarette permanently popular and

that is to make it permanently good," knew what he was talking about. In that respect there is no difference between cigarettes and foodstuffs. Read what is said on this point in Farmers' Bulletin 193: "An explanation of the popularity of the Rocky Ford melons is that they are well graded and usually uniform in quality. As Mr. Blinn explains, the Rocky Ford cantaloupe is a product of years of systematic selection, and it requires the same methods to maintain its excellence as were employed in its development. Without care in selection of seed, the natural tendency to vary will soon cause a good strain of Rocky Ford melons to revert to an undesirable type."

Sweet as honey are the best cantaloupes; yet how different! The sweetness in them is the same, for there is only one kind of sweet in the world. What makes them differ is the Flavor. Were it not for its Flavor, there would be no honey in the market, for sugar is a much cheaper sweet. Thanks to its Flavor, honey is worth to the beekeepers of the United States $20,000,000 a year. New York State alone has 30,000 beekeepers, and it is said that "even when eggs sell at 50 cents a dozen the hen stands below the bee as a payer of dividends." And bees need no expensive feed; one man says he has not fed his in twenty years.

Twenty millions a year is a goodly sum, yet it is a mere fraction of what honey will yield when its merits for diverse uses are more generally understood. There

are many varieties of it, their Flavor depending on the fragrance of the flowers from which the bees collect them—clover, linden, sage, horsemint, buckwheat, magnolia, etc., but all are agreeable to most persons. American children would hail with delight the Swiss custom of eating honey with their bread and butter, and it would do them good, for honey is one of the most wholesome sweets—much more than most of the candies the boys and girls buy. It is nutritious, too, a tablespoonful having the same food value as an egg. But beware of adulterations!

Some of the best cakes and confections are made of or with honey. Girls often make their own fudge—why not all their candies? The manufacturers would still prosper even if one-half the girls should take to making their own sweets; some of these men are millionaires; and what made them so is the fact that they realized the Commercial Value of Flavors. The sale of plain, unflavored sugar is also profitable, but the percentage of gain is not nearly so great as in the case of candy.

Flavoring extracts have been called an American specialty; for while they are used considerably by foreign cooks and bakers, ours are much more addicted to their use. The most popular of all the flavoring extracts is vanilla; its home is Mexico, and we take nearly all the vanilla beans harvested there; but that does not cover the demand. Many firms get rich by making

imitation vanilla and other flavors. Some of these are strong medicines. The safest place to eat vanilla ice cream is at home where you know it is made of the deliciously fragrant bean and not of coal tar products.

Most appetizing, also, is caramel, or burnt sugar, for flavoring desserts. Liqueurs are used, and nuts, but most desirable and wholesome of all are the flavors made of fruit. Think of the commercial value of these fruit flavors—natural or artificial—to thousands of druggists whenever the weather creates a demand for soda water!

### OPPORTUNITIES FOR WOMEN.

Many women make a comfortable living by utilizing their inherited or acquired knowledge of the kind of flavoring that will make certain cakes and candies sell briskly. Along these lines there are unlimited opportunities for commercial gain.

Many novelists have coined large sums by exploiting local color in their tales. There is such a thing as local flavor, too, which awaits the attention of the women or men bright enough to utilize it. Wild fruits and berries, for instance, abound all over the country, many of them being peculiar to one region. These can be used for imparting their flavor to various fruit syrups, jams, and jellies. In the future, thousands of women will doubtless earn a competence by sending to the city markets preserves with such novel and appetizing local

flavors. Some are already doing it, and they have found a demand at the women's exchanges usually far in excess of the supply.

The delicious loganberry, now so plentiful on the Pacific Coast, is hardly known in the East. Here is a grand opportunity; and why has no one thought of the commercial possibilities inherent in the luscious mulberry—an incomprehensibly neglected delicacy? There is the salmonberry, too, and other good things of the West, notably in Alaska, which has been called "preeminently a land of small fruits and berries." The flavor of most of the Alaskan berries was found to be excellent, by Walter W. Evans.[1]

Alaska's gold mines will ultimately be exhausted, but the commercial value of the rich and unique flavors of these fruits and berries will endure. Excellent preserves can be made of the wild "Oregon grape," as well as the service berries, unknown in the East. The dry salal berry of Oregon and Washington might be educated and turned to use; and there are many others.

### FEEDING FLAVOR INTO FOOD.

The present chapter might be made as long as this whole book is, for the Flavor is what determines the commercial value of nearly all foodstuffs. I know a young woman who makes deliciously flavored

[1] "See Bailey's "The Evolution of our Native Fruits" for useful hints along these lines.

butter and has no trouble in disposing of it for a dollar a pound. Thousands of persons who do not like the butter they can buy are now eating peanut butter, which has the full flavor of the nut. The commercial value of this is shown by the fact that in 1911 a million bushels of peanuts were converted into "butter." Fortunes await those who will manufacture almond "butter," because almonds not only have a more delicate flavor but are more digestible than peanuts.

Storage eggs are quite as nutritious as fresh eggs; the sole difference is in the Flavor; and those of us who can afford to do so, gladly pay twice as much to get the better flavor.

In the preceding chapters I have frequently called attention to the greater commercial value of the best-flavored foods—as in the case of the Bresse chickens, Wiltshire bacon, Southdown mutton, Westphalian ham, Hungarian flour, full-cream cheeses, etc. For a full list see the index under "Commercial Value of Flavor." In this chapter I will call attention to only one more way of increasing the value of things we buy to eat. It is perhaps the most important of all methods—one which points the way to many large fortunes.

Once when I crossed the Atlantic westward on a German steamer the supply of eggs, calculated for nine or ten days, gave out on the fourth because nearly everybody on board was ordering them constantly. They

were the best eggs I had ever eaten. The head steward, on being questioned, explained that they came from a farm where a special kind of feed was given to the hens. The farmer had fed that Flavor into the eggs.

At once it flashed on me that great and profitable industries might be built up along that line and I wrote an article about it for *The Epoch*. That was more than two decades ago. At that time there was not the same interest there is now in dietary questions. More recently, the Department of Agriculture has taken up the matter and in several of its bulletins reference is made to experiments in feeding both unpleasant and pleasant flavors into food.

At the North Carolina Experiment Station, in 1909, hens were fed for two weeks on onions, the result being so strong an onion flavor in the eggs that they could not be used. A week after discontinuing the onions, the hens again laid eggs of normal flavor.

Milk and butter are similarly spoiled when the cows eat wild garlic or quantities of turnips. Everybody knows, too, that some kinds of ducks are not fit to eat because of the fish they live on. In Egypt a locust diet makes poultry unfit to eat, and sometimes there are in our markets chickens that are unobjectionable except for an insect tang which mars their flavor. Pork from pigs fed on garbage is spoiled by a worse tang.

On the other hand, most animal foods can be improved by feeding desirable flavors into them. Grouse

are best in blueberry season, and the flavor of all game varies with its feed. Kongo chickens fed on pine-apples are said to be a morsel fit for the gods. Belgian partridges owe their excellence to the beetroot they feed on.

Mexican pigs are often fattened on bananas. They must make prime pork. In the chapter on England I noted that it is chiefly the excellence of the feed (skim milk and barley) that determines the superior flavor and commerical value of Wiltshire bacon.

In the good old times, before our forests were destroyed, the beechnut was the principal food for swine.

"The hogs which are fattened by eating the beechnut and acorn produced a species of pork of a peculiar and very highly prized flavor," writes Dr. Wiley. "The celebrated hams and bacons of the southern Appalachian ranges were produced from the variety of hogs known as the razor-backs fattened on mast, namely, the chestnut, beechnut, and acorn." Yams (belonging to the sweet-potato class) also help to flavor these southern pork products.

The ham and bacon which made Virginia beloved of epicures helped also to make the neighboring Baltimore one of the country's gastronomic centers. In the days when canvasback ducks and diamondback terrapin were abundant Baltimore was the gourmet's headquarters. There were terrapin palaces in those days, in Baltimore

and Philadelphia, as now there are lobster palaces in all our large cities.

It has been stated frequently that the canvasback and red-head ducks and the diamondback terrapin owe their superior flavor to the food they have in common, the so-called wild celery, which grows in abundance in Chesapeake Bay. Now, this "wild celery" is no celery at all; it botanical name is *valisneria*. A correspondent of the Philadelphia "Ledger" has, moreover, cast doubt on the claim that it is the *valisneria* grass that so agreeably flavors these birds and turtles. He found the ducks feeding greedily on the seeds of a species of pondweed, *potamogeton pectinatus*. Tasting these seeds he found a distinct flavor of celery and became convinced that it was this and not the *valisneria* that gave the bird its peculiar flavor. The point ought to be settled by scientific experts, for if this sportsman is correct in his surmise, the efforts that are being made to breed and multiply these ducks need not be confined to Chesapeake Bay, as that pondweed is also abundant along the big lakes which separate us from Canada.

Why should not farmers cultivate this weed in ponds and improve the flavor of the ordinary domestic duck? The flavor imparted by the *potamogeton*—or the *valisneria*—is so rich that when a canvasback is cooked it needs no dressing, not even salt.

An American consul in Mexico calls attention to the fact that the rivers and lagoons of that country "liter-

ally swarm with turtles." "The wastes of water hyacinth are simply alive with them." These turtles, he says, are fat and fine of flesh and under careful handling would give a good return to the man who undertakes to ship them to the United States. "There is a small swamp turtle called the 'pochitoque,' which is of extremely fine flesh and flavor. It is found in great numbers in the swamps and lands that are annually overflowed in the State of Tobasco and is *very similar and quite equal to the famous diamondback turtle.* This also could be readily shipped to northern markets. It is not quite so abundant as the river turtle, but would find ready sale at fancy prices in view of the diminishing supply of the diamondback."

In these days, when there is so much complaint about all trades and occupations being overcrowded, it is strange that no one should have the sagacity to see the commercial value of catering to the demand for fine turtles. Sea and pond farming of all kinds holds in it a greater promise of wealth than all the world's mines. Terrapin-growing will be one of the great industries of the future.

It is worth noting that the old Roman epicures already had their ponds for rearing fishes of superior flavor as well as aviaries for feeding flavor into birds. Nero's fish pond was discovered in 1913. Lucullus and Apicius had aviaries in which thrushes and blackbirds were fattened for their tables on a paste made

with figs, wheaten meal and aromatic grain. But such things were only for the very rich. What we want, and will get if we insist on it, are delicacies for the million.

Most if not all animal foods can be improved by feeding desirable flavors into them. In Farmers' Bulletin No. 200 the well-known poultry expert, T. F. McGrew, says that those who grow turkeys for a fancy market give them chestnuts and celeryseed during the last few weeks of fattening. Such feeding, he adds, imparts *a flavor which makes the meat worth from nine to twelve cents a pound more* than that of ordinary turkeys. Yet "*to grow the best is quite as easy and but little more expensive than to grow the poorer grades, and the profit gained is almost double.*"

Could the commercial value of Flavor be more triumphantly demonstrated? If the best costs but little more to produce than the poorest, why not cater to the million and make millions? Why pay so much attention to breed when, as another expert, S. M. Tracey, attests (Farmers' Bulletin No. 100), "management and feed are more important than breed"?

We have over a hundred varieties of chickens, but the best of them, improperly fed, are not so good to eat as inferior varieties that have had the right kind of feed during the last two or three weeks. That hogs, too, and other animals, need to have fancy feed only a few weeks to give them a flavor that commands a high price,

is a matter of extreme importance from an economic point of view.

Producers of meat—and other foods—would make much more money if, instead of offering the poorest that people will buy at the highest price, they supplied the best at the lowest price. Other merchants discovered this truth long ago.

### FARMERS, MIDDLEMEN, AND PARCEL POST.

Thousands of families in Germany and France have been able for years to indulge in the luxury of getting daily pats of fresh butter, as well as new-laid eggs, freshly-killed chickens, and succulent vegetables straight from the farmer's garden, thanks to the parcel postman. We, too, now have a parcel post and many look on it as a means of lowering the cost of living. It is that, no doubt; but it is more important from another point of view: it enables those who are fastidious as to what they eat to dodge the greengrocer who tries to foist on them farm produce which is not fresh and flavorsome; as well as poultrymen who refuse to heed the demand for fresh-killed fowls.

New plans for bringing the consumer into direct contact with the producer are discussed in the press every other day, and there is a great deal of talk about "eliminating the middlemen." Some of these undoubtedly ought to be ousted. There is no need of having four kinds of them—transportation agents, wholesalers, job-

bers, and retailers. Some of these could be dispensed with, especially those who speculate in food products. To make war on retailers is an excusable proceeding, because of their frequent extortionate charges; yet we could not get along entirely without them. Not all of us can deal directly with the farmer, and those of us who do so are sure to find some day that he has sold his last turkey or his last head of lettuce—and then we have to fall back on the grocer or the butcher. Without the latter, where would we get some of our meats? If he is honest and knows his business, as he usually is and does, he is a specialist in the judging, handling, and cutting of meats. For this knowledge, and for the opportunity he gives us to buy any kind of meat we want at any time, he deserves to be paid, and well paid.

The chief trouble about the retail middlemen is that there are too many of them. They declare that there are more failures in their trade than in any other, and no wonder. In the fierce struggle for existence they resort to all sorts of tricks to deceive customers—an evil of which enough has been said in these pages.

If one-half of these retailers could be transferred to the country, to become growers of food instead of distributors, there would be few failures and the cost of living would be reduced. There is no doubt whatever that the ever-rising price of foodstuffs is due chiefly to the alarming increase in the number of consumers, with

a corresponding decrease in the number of producers.

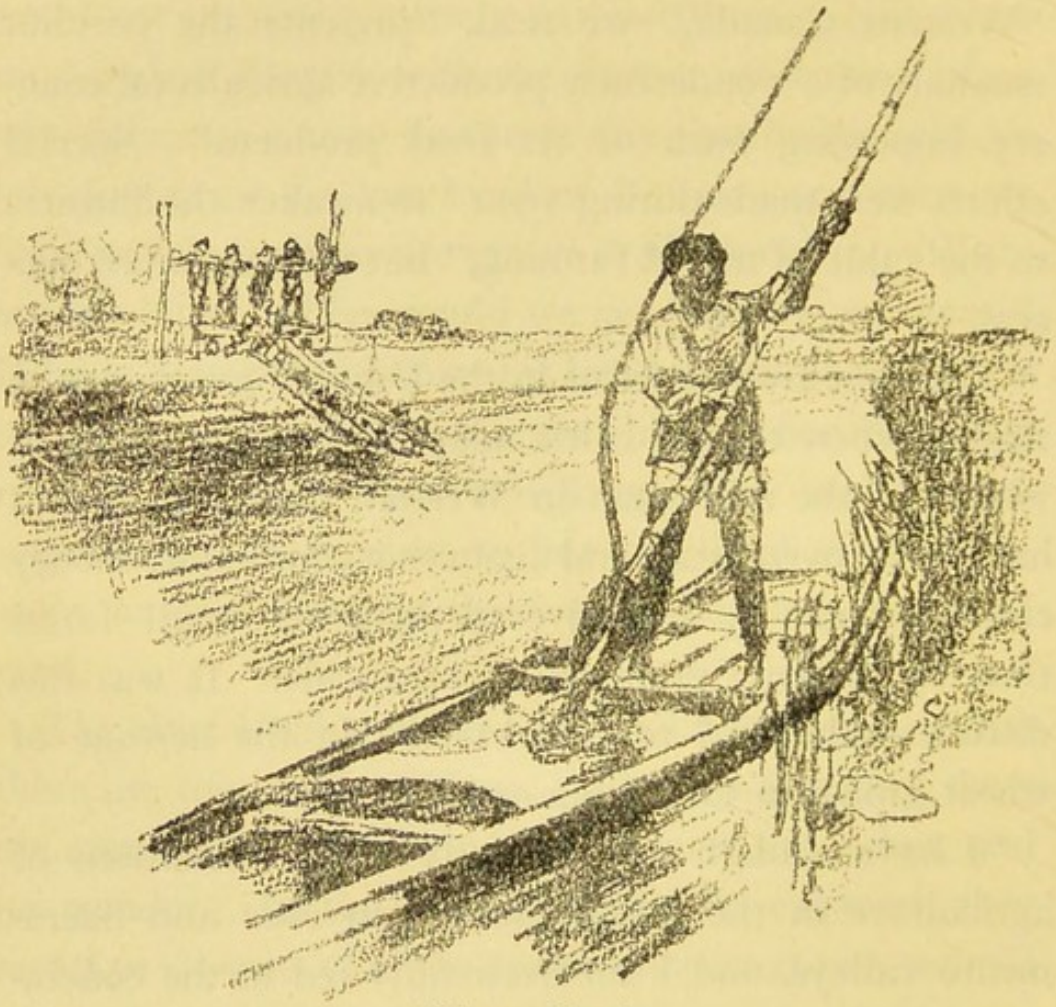
Particularly unfortunate is the disinclination of farmers to raise vegetables and small fruits for the market, or even for their own tables in many cases. "Western Canada," we read, "presents the peculiar anomaly of a wonderfully productive agricultural country importing most of its food products." Special efforts were made during 1911 "to awaken the farmers to the value of mixed farming," but without much success.

The same trouble exists in the United States, even in regions where the soil is less adapted for the growing of wheat by the mile than in Western Canada. Yet it has been proved again and again that much more money can be made by intensive methods on small farms than by growing grain on a large scale. It was this discovery that led to the decrease in the acreage of wheat grown in California and Oregon.

"I have made a careful study of the conditions of agriculture in the Santa Clara, San Jose and Sacramento valleys, and I am irresistibly led to the conclusion that the great ranches must be broken up into small holdings before permanent prosperity can come to the farmers of the Pacific Coast," remarks Professor Isaac Roberts, Dean of the College of Agriculture, Cornell University, in an admirable little book published by the Orang Judd Company. It is entitled "Ten Acres Enough," and is just the book for those who feel in-

clined to leave the overcrowded cities and lead a busy but prosperous life in the country.

To realize what could be done to increase this country's natural resources, read Professor F. H. King's



Chinese Canal

article in the "National Geographic Magazine" for October, 1912, describing China's wonderful system of canals for transportation, drainage, irrigation, and fertilization, with the aid of which a population of 400,000,000, tilling a region not a third as large as the United States, has subsisted for thousands of years.

We need not go as far as China, however, for a good example. The market gardens of Paris, to which reference was made in Chapter VII, convincingly prove the commercial wisdom of intensive farming and of providing city folk with the tenderest and most flavorsome vegetables, berries, and fruits. We have too much "long-distance food" (canned or frozen); what we want is short-distance produce.

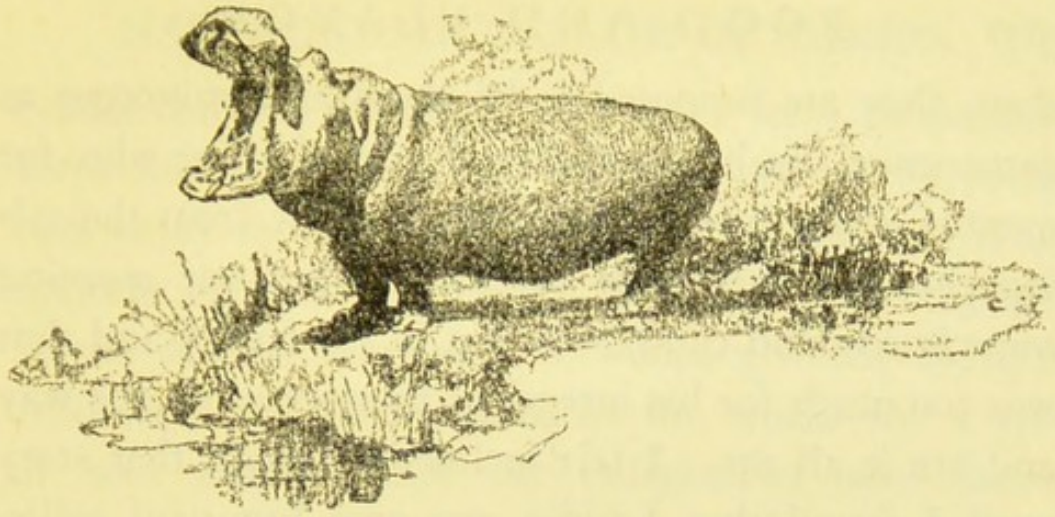
Paris is the model for us; it enjoys what Professor Ferrero, in *Le Figaro*, has rightly called the ideal condition, being a city fed by fresh supplies from the adjacent country. Our aim should be to make each of our large cities a "hub" connected by thousands of spokes with suburban market gardens.

In these gardens women as well as men can find employment; it has been claimed that their careful truck farming in garden and field shows better results than the work of men.

Short-distance farming increases profits by decreasing transportation charges. A vivid illustration of future possibilities is given by an expert in these words: "Long Island is about the size of Holland. Its population is about the same. The produce taken out of the soil in Holland is twenty-one times that which is taken from the soil of Long Island. If Long Island were brought under proper cultivation it alone would produce the larger part of the vegetable products required by the six millions of people in New

York City and vicinity." The retail middleman and the parcel post would in that case suffice.

At present the big profits in the food business go chiefly to the gambling middlemen—the jobbers. This must be changed. Possibly the prices will not become lower; but if the method just suggested is carried out, the quality (flavor) of the food we eat will be vastly improved and the profits will go to those who deserve them—the market gardeners. Let us do all we can to make their work as alluring and profitable as possible in order to greatly increase their numbers. To the lowering of the cost of food we ourselves can largely attend by stopping our sinful waste and taking to heart the methods taught in the preceding pages of economizing in our food without lowering its nutritive value or diminishing its pleasurableness.



# XIII

## GASTRONOMIC VALUE OF ODORS

### SWEET, SOUR, SALT, AND BITTER.

IN the London "Zoo" one day, as we were nearing the bear den, we heard the most heartrending cries on the part of one of its denizens. It sounded as if some bruin were being murdered or vivisected. In reality, the wails and tears were all due to the fact that one of the animals "wanted more"—more of the jam which an attendant was distributing to his charges in turn by the spoonful. That bear had a particularly "sweet tooth"; but is not bruin proverbial for his love of wild honey? It is a *casus belli* with many a swarm of bees.

If you wish to make a horse love you, let him take cubes of sugar from the palm of your hand. As for

dogs, they are supposed to be about as carnivorous as carnivorous can be; yet I have heard of a dog who, for months, daily brought a basket of meat from the village butcher and never touched it; but one morning some horehound candy was put in the basket and that was too much for his integrity; he stopped on the way and ate it all up. I felt inclined to doubt that story until I found that Laddie, my own beautiful collie, invariably was much more eager for sugar than for meat (with the possible exception of imported Lyons sausage). Candy and sweetened cream are his ideas of ambrosia and nectar.

To make friends with cows and sheep you need salt. With a few handfuls of it in your pocket you can soon make them leave the richest grass and come crowding around you when you take your daily walk in the fields. We ourselves crave salt in food, but we do not lick it eagerly as some domestic as well as wild animals do. In Central Africa, however, where it is a luxury hard to get, men and women devour it with the same zest that our youngsters show for candy.

So far as I know, no animal likes sour things; plain water would be invariably preferred to lemonade. Cows and pigs, to be sure, eagerly eat apples, and other fruits, and so do horses; they eat them though they be sour; but if you give them a whole bushel, they pick out the sweet ones first.

The liking for sour things is a human attribute.

School children are often more eager for a pickle than for a stick of candy; and adults as well as the young ones enjoy tart or sub-acid fruits of all kinds. What could be better than a pie or a tart made of green gooseberries or sour currants? I would give all the confectionery and sweet cakes in the world for a tree of sour cherries. Of the delights of sour salads I wrote at length in the chapter on French supremacy.

Bitter herbs are eaten sometimes by browsing animals, but I doubt if they would select them by choice. The liking for bitter foods and drinks is not only a human attribute; it is a specifically epicurean trait. How very much better Scotch marmalade made of bitter oranges is than marmalade made of ordinary oranges! Slightly bitter also is the best pomelo. Bitter almond is a favorite flavoring for cakes and candies. The best of all salads, escarole and the endive tribe in general, are bitter. Bottled "bitters" are widely used as appetizers.

Physicians of all periods have agreed that bitter substances increase the appetite. Professor Pawlow considers them the strongest of all stimulants to a jaded palate. He inclines to the belief that "bitters not only act directly on the gustatory nerves in the mouth, but that they also act on the mucous membrane of the stomach in such a way that sensations are generated which contribute to the passionate craving for food."

A COMEDY OF ERRORS.

While thus admitting the gastronomic and therapeutic value of bitters, I must nevertheless call attention to the fact that their allurements, as mere sensations of *taste*, are not considerable. We would not care so much for Scotch marmalade as we do were it not for the pungent fragrance of the Seville orange which accompanies its bitter taste; or for the bitter grapefruit were it not so highly perfumed. Hops are valued for their tonic bitter but still more for their agreeable odor, without which beer, for instance, is a flat failure. We never eat quinine for fun, because it has no fragrance to modify its intense bitter; nor, for the same reason, would we use strychnine as a condiment even though it were as harmless as sugar.

Now, what is true of bitter, is true also of all other sensations of taste—salt, sour, and sweet. Considered as mere sensations of taste they have no great gastronomic value—not great at any rate when compared with the sensations of smell. On this point I need not dwell, as I discussed it briefly in Chapter II under the headings of "An Amazing Blunder" and "A New Psychology of Eating," in which I pointed out that there is only one unvarying kind of sour and one unvarying kind of sweet and that all the varied and countless pleasures of the table are due chiefly to the sense of smell which enables us to enjoy them if we

breathe out through the nose while munching our food.

To this day it seems almost incredible that it should have remained for me to make this extremely important discovery; yet all my researches have failed to bring to light a psychologist who anticipated me. My surprise abated somewhat at the time when the theory was first announced that mosquitoes are responsible for malaria. Having just read Humboldt's travels in South America and Stanley's "Darkest Africa," I remembered that both of these writers had come within an inch of the truth, yet missed it completely. The case of Stanley is really comic. Emin Pasha had informed him that he "always took a mosquito curtain with him, as he believed that it was an excellent protector against miasmatic exhalations of the night." Now, how in the world could these "miasmatic exhalations" (which were held responsible for malaria) have been kept out by a mosquito net when, as Stanley does not fail to note, the same air "enters by the doors of the house and under the flaps and through ventilators to poison the inmates"?

Just as in this case the fixed idea that bad air (*malaria*) must be responsible for the disease obscured the truth, so the undeserved homage bestowed on the sense of taste blinded those who wrote on this subject, including Brillat-Savarin.

In his "Physiology of Taste" he has a chapter on the senses in which he beats around the bush in the most

ridiculous way. He knew that if you have a cold, or hold your nose while eating, "no flavor is perceived in anything that is swallowed"; yet from this he inferred that "all sense of *taste* is obliterated," although the simplest experiment would have shown him that a cold does not affect the sensations of sweet, sour, salt, bitter, alkaline, or metallic in the least; and after several pages of argumentation he comes to the absurd conclusion that "there is no complete perception of taste unless the sense of smell have a share in the sensation," and that, in fact, "smell and taste form only one sense, having the mouth as laboratory with the nose for fireplace or chimney." You might as well say that sight and hearing form only one sense.

Dr. Charles Henry Piesse, member of the Royal College of Surgeons, is another author who came within half an inch of the truth, yet missed it. He wrote a little volume, "Olfactics and the Physical Senses," which is full of interesting facts and suggestions. Two citations, the first from "The Art of Perfumery," written by Dr. Piesse's father, the second from "Olfactics," will show "how warm" these two men got in their search, as the children say in their play.

To the unlearned nose all odors are alike; but when tutored, either for pleasure or profit, no member of the body is more sensitive. Wine merchants, tea brokers, drug dealers, tobacco importers, and many others, have to go through a regular educational nasal course. A hop merchant buries his nose in a pocket, takes a sniff, and then sets his price upon the bitter flower.

The odors have to be remembered, and it is noteworthy here to remark with what persistence odors do fix themselves upon the memory; and were it not for this remembrance of an odor, the merchants in the trades above indicated would soon be at fault. An experienced perfumer will have two hundred odors in his laboratory, and can distinguish every one by name.

When the breath is held the most odorous substances may be spread in the interior of the nostrils without their perfume being perceived. This observation was first made by Galen. It has been frequently remarked that odors are smelt only during inspiration; the same air, when returned through the nostrils, always proving inodorous. But this is true only when the odor has been admitted from without by the nostrils, for when it is admitted by the mouth, as in combination with articles of nutrition, it can be perceived during expiration through the nose.

Yet this man, who thus came so near the truth, missed it as widely as all the others! Throughout his books he talks as if *taste* were "it." The number of "different tastes, or flavors" is, "of course, unlimited," he says; whereas, let me say it once more, there are only six tastes: sweet, salt, sour, bitter, metallic and alkaline. Again, he remarks that "the importance of possessing a pure and cultivated sense of taste is very great in certain trades and professions, as, for instance, the occupation of a wine-taster, a tea-taster, a coffee-taster. These persons are all gourmets; the word gourmet signifying a taster." Wrong, from beginning to end. Coffee, tea, and wine "tasters"—the men who sample these articles to adjudge their commercial value—are guided entirely by their Flavor,

that is, their appeal to the sense of smell; while epicures owe nine-tenths of their enjoyment of food to that sense and only one-tenth to the sense of taste.

Even Professor Dr. Gustav Jäger, the famous apostle of "all-wool for man's wear," missed the mark. He wrote a book, "Die Entdeckung der Seele," in which he tried to prove that smell is really the most important of our senses, the olfactory nerve being in fact the seat of the soul! Yet this ardent advocate entirely failed to see the truth I have set forth in this book—the fact that to the sense of smell we owe most of the countless pleasures of the table, with all their important digestive and hygienic consequences. Just like all the other misguided writers on this subject, he speaks of differences in *taste* between lobster and crawfish, or between the eggs of hens, ducks, geese, and so on, although it is the nose and not the tongue that enables us to tell them apart.

### HOW FLAVOR DIFFERS FROM FRAGRANCE.

Throughout this volume I have used the word Flavor as if it were virtually synonymous with odor, fragrance, aroma. Strictly speaking, it is not, for taste usually enters as an ingredient; but from a gastronomic point of view the taste is usually so subordinate that it is almost negligible. To say it once more, we hardly enjoy vinegar unless it is fragrant, and while we like the taste of sugar we gladly pay from five to thirty

times as much for it when it is flavored and sold as candy.

In the great Oxford Dictionary two definitions of the word *flavor* are given. It means, in the best literary usage, either a smell, odor, aroma, pure and simple; or it means "the element in the taste of a substance which depends on the coöperation of the sense of smell."

If asked for my own definition I should say that "*flavor is the odor of a substance as perceived in breathing out through the nose while we are eating, and usually accompanied by a sweet, sour, salt, or bitter taste.*" This distinguishes *flavor* from *fragrance*, which we perceive in *breathing in* through the nose; as, the fragrance of a rose or a violet—and this is not accompanied by a taste.

A strawberry has both fragrance and flavor. Persons who cannot eat strawberries may still enjoy their fragrance, which is subtler and more delicious than the flavor. We must try to overcome the foolish prejudice against "smelling at things" (apples, oranges, etc.) at table; for the fragrance of foods also stimulates the appetite and thus helps digestion. When quinces or "pomegranates" (melon gourds) are ripe I often carry one in my pocket, so that I may enjoy its exquisite and beneficial fragrance after meals.

Cantaloupes, pineapples, pomelos (grapefruit), ripe peaches, and some apples and plums are fruits with a

fragrance which is even more delicious than their flavor. In other cases—particularly cherries and pears—the flavor is much more important; and in some instances the fragrance is positively disagreeable while the flavor is exquisite.

This is true of the durion. Dr. Paludanus informs us that "to those not used to it, it seems at first to smell like rotten onions, but immediately they have tasted it they prefer it to all other food." The great naturalist, Alfred Russell Wallace, says of it in his great work on the Malayan Archipelago that "the more you eat of it the less you feel inclined to stop. In fact, to eat durions is a rare sensation, worth a voyage to the East to experience."

I remember reading in the London "Telegraph," many years ago, an editorial, presumably by Sir Edwin Arnold, entitled "The King Is Eating Durions." It described His Majesty as being so completely absorbed in this task that his subjects had orders, on penalty of death, not to disturb him even if war should suddenly be declared. The natives give it honorable titles, exalt it, make verses on it. Cannot our Bureau of Plant Industry acclimate this gastronomic marvel somewhere within hailing distance?

Tobacco is one of those things the fragrance of which is more agreeable than the flavor. The time will come when smoking will be given up and tobacco simply burnt, like incense. That will make it harmless, al-

though it will still be as offensive to some as to others it is delightful.

### IMPORTANT FUNCTIONS OF THE NOSE.

1. "The fate of innumerable girls has been decided by a slight upward or downward curvature of the nose," wrote Schopenhauer; and Pascal declared that if Cleopatra's nose had been but a trifle larger the whole political geography of this planet might have been different. Owing to the fact that the nasal organ occupies the most prominent part of the face, Professor Kollmann remarks that "the partial or complete loss of the nose causes a greater disfigurement than a much greater fault of configuration in any other part of the face." Of all our features the nose has always been considered the most aristocratic, as well as an important condition of beauty.

2. No less important is the nose as a condition of beautiful speech and song. Jean de Reszke, the greatest tenor and vocal teacher of our time, goes so far as to say that "la grande question du chant devient une question du nez." Unless the stream of tone, when we speak or sing, goes through the nose it lacks beauty and resonance; yet with consistent stupidity we have bestowed the word "nasal" on the sounds produced when the nose is *not* used as a resonator or "sounding board!" To fully comprehend the important musico-philological function of the nose in giving beauty and variety

to tones, read Chapter III of Prof. G. H. Meyer's "The Organs of Speech."

3. The nose is a sort of funnel for warming the air before it enters the sensitive lungs.

4. It is, furthermore, an apparatus for filtering the air on its way to the lungs, which is done with the aid of fine hairs and *cilia* in the nostrils. Persons who breathe through the mouth have at the age of thirty a gramme of dust in their lungs which they can never get rid of. Mouth-breathing is a cause of catarrh, of unrefreshing sleep, of snoring. Moreover, in the words of Dr. T. R. French, "the habit of breathing through the mouth interferes with general nutrition. The subjects of this habit are usually anemic, spare and dyspeptic."

5. The nose is a sentinel, warning us not to tarry where the air is malodorous and dangerous to health.

6. Lavender water, eau-de-Cologne, attar of roses, and other perfumes are, as everybody knows, effective in curing headaches and resting the tired mind. The "Scotsman" tells an interesting story of Sir William Temple's visit to the India House of Amsterdam where he and his companions were exalted by the tonic effect of the spices and aromas about them. John Evelyn proposed to make London the healthiest and happiest city in Christendom by planting all around it hedgerows of sweetbriar, rosemary, jasmine, etc. The feeling of relief which delights us when we leave the city and step

out of the railway car comes from the natural fragrance of the trees, herbs, and flowers. This fragrance makes us breathe deeply, and deep breathing is the greatest of all tonics, as well as a preventive of colds and consumption. A gardener has written of the "thrilling" fragrance of sweet peas, and it is not too strong a word; I myself have often been thrilled by their fragrance, or that of lilies, pinks, or hyacinths wafted across the garden like sweet concords of music.

About ten million dollars a year is the amount spent in the United States on perfumery. The best perfumes are still, and always will be, the natural ones, made in the Riviera and Roumania. Grasse, in southern France, alone uses 1,200 tons of roses, 200 tons of jasmine blossoms, and nearly as many tons of violets every year. Of chemical imitations of the natural perfumes Germany produces annually about $12,000,000 worth. When we try to guess the amount of perfumery the world needs for toilet powders, sachets, dentifrices, and soaps, we realize what an important part the nose plays in commerce. The nation's candy bill exceeds a hundred million dollars a year; and candy is perfumed sugar. The value of the world's annual tobacco crop is about $200,000,000, and the appeal of tobacco is, of course, chiefly to the nose. Some dolt wrote, many years ago, that if you blindfold a smoker he cannot tell the difference between good and bad tobacco. He was evidently anosmic—one of a considerable number

of persons whose sense of smell is not developed. To normal smokers the value of a cigar lies in its fragrance, and it is their superior fragrance that makes the product of Cuba the most costly of all cigars.

7. The seventh and most important function of the nose is the one which—*mirabile dictu*—it remained for me to discover—the function of perceiving and enjoying the countless varieties of flavor that are developed in the food we eat. To what I have already said in proof of this assertion let me add that the nerves of taste are affected by liquids, and those of smell by gases; and the flavored air we breathe out while eating is certainly not liquid!

### EDUCATING THE SENSE OF SMELL.

Dr. Piesse errs in saying that the sense of taste can and should be educated. It needs no educating; sweet is distinguished from sour, salt and bitter from the earliest infancy, and that is all there is to it.

The sense of smell, on the other hand, can and should be educated systematically. Kant's reason for saying that it is not worth cultivating was that, in populous regions, particularly, there are more disagreeable than agreeable odors. He might as well have advised against educating the eyes and the ears because in our cities there are more offensive sights and sounds than agreeable ones. An educated sense of smell objects to malodorous surroundings and therefore prompts sani-

tary reforms. Much has been done in this direction since the days of Kant. The next reform will be to absolutely demand clean, sweet air in schools, theaters, and concert halls.

The principal reason for educating the sense of smell is to protect us against the danger of eating spoiled food, and to enable us thoroughly to enjoy the countless pleasures of the table—dwelt on in this book—on which a good appetite depends. The significance of this was understood by Shakespeare when he wrote:

> Now good digestion wait on appetite
> And health on both.

Ants are the most intelligent of all insects. Their antennæ are organs of smell and so much is their world a world of odors that, as Sir John Lubbock ascertained, an ant accidentally born without antennæ seemed to be as helpless as a blind person among ourselves. Many mammals are greatly dependent on this sense, and there was a time when a large part of the human brain was assigned to its perceptions. More and more the impressions of sight gained on it. The process has gone too far; we must once more strengthen and develop our olfactory nerves and encourage the expansion of the olfactory region in the brain.

The way to do it has been dwelt on repeatedly in the preceding pages. I have taught several persons who were partly anosmic to learn after a short time to dis-

tinguish between different foods that had previously "tasted" alike to them; they simply followed my advice of breathing out *slowly and consciously* through the nose while eating. Keep those two words—particularly *consciously*—in mind. Never eat in an absent-minded way; and if you are a host or a hostess, *please* do not tell your guest interesting stories at the moment when he is trying to do justice to the good things you have placed before him!

Children should be told every time they bolt their food or candy that the pleasure of eating lies not in the swallowing of it, but in keeping it in the mouth as long as possible and breathing out through the nose. That will make epicures of them, able to tell good food from bad and thus escape many an illness.

How acute the sense of smell can be made is shown by the fact that it will perceive and distinguish the 1,300,000th part of a grain of attar of roses. It is said that the inmates of an asylum for the blind, whose other senses are sharpened by the loss of sight, can tell on entering a dining-room what viands are on the table.

*De gustibus non est disputandum.* True; we are all entitled to our likes and dislikes; but many "differences of taste" are simply differences in development and acuteness of the sense of smell. To those in whom this sense is blunted, sweet (unsalted) butter may *seem* insipid; but should they maintain that it *is* insipid?

To Turner a man once said he could not see in nature

such colors as he used on his canvases. The great painter promptly replied: "Don't you wish you could?"

Epicures are usually born with a keen sense of smell. Once, in crossing a bleak pass in the Alps, I said to my companion: "I smell an orchid!" After considerable search we found it—a tiny blossom—some ten feet from the road. That orchid explains why I have written this book.

### COFFEE, TEA, AND TEMPERANCE.

A general educating of the sense of smell may not solve the temperance problem, but it will be a great help.

It would be a blessing if every liquor saloon in the country could be closed. Most of the whiskey and other strong drink sold—at an enormous profit—in these places is adulterated in ways which often make it infinitely more harmful than the pure article would be, under any circumstances. But the unadulterated is an evil, too, because it is usually drunk in excess.

It has been said of the native African that he wants something with a "bite" in it and is not satisfied with a drink that does not go down his throat "like a torch-light procession." But the African is not alone in this peculiarity. There are many thousands of whites who want their whiskey or rum "fiery" above all things; and they want it that way because their sense of smell

is not educated to appreciate the higher qualities of liquors—their fragrance, or "bouquet."

"It is a fact," as a well-known mixer of fancy drinks once remarked, "that there are very few good judges of liquor. It is a very old chestnut to set out whiskey when brandy has been called for, and not one in ten can tell the difference. There are few people who can distinguish between high and low priced wines."

The difference between the best wines and the poorest lies chiefly in this, that the best have a maximum of bouquet and a minimum of alcohol. The bouquet is exhilarating, like the alcohol, yet is perfectly harmless. On the bouquet depends the commercial as well as the gastronomic value of wines almost entirely. Now, while some persons who are addicted to strong drink may be hopeless cases, there are thousands who might be saved by teaching them that by educating their sense of smell to the appreciation of bouquet they can get infinitely more pleasure from a refined sort of indulgence than from the bestial alcoholic intoxication which is followed by nausea, headache, by nights and days of misery, by poverty and deadly diseases.

Drunkenness and gluttony are no longer respectable, or even semi-respectable, and further progress in the same direction may be hoped for through efforts at reform along the lines I have indicated. A true epicure would no more dull the edge of his appetite for future pleasures of the table by over-indulgence in food

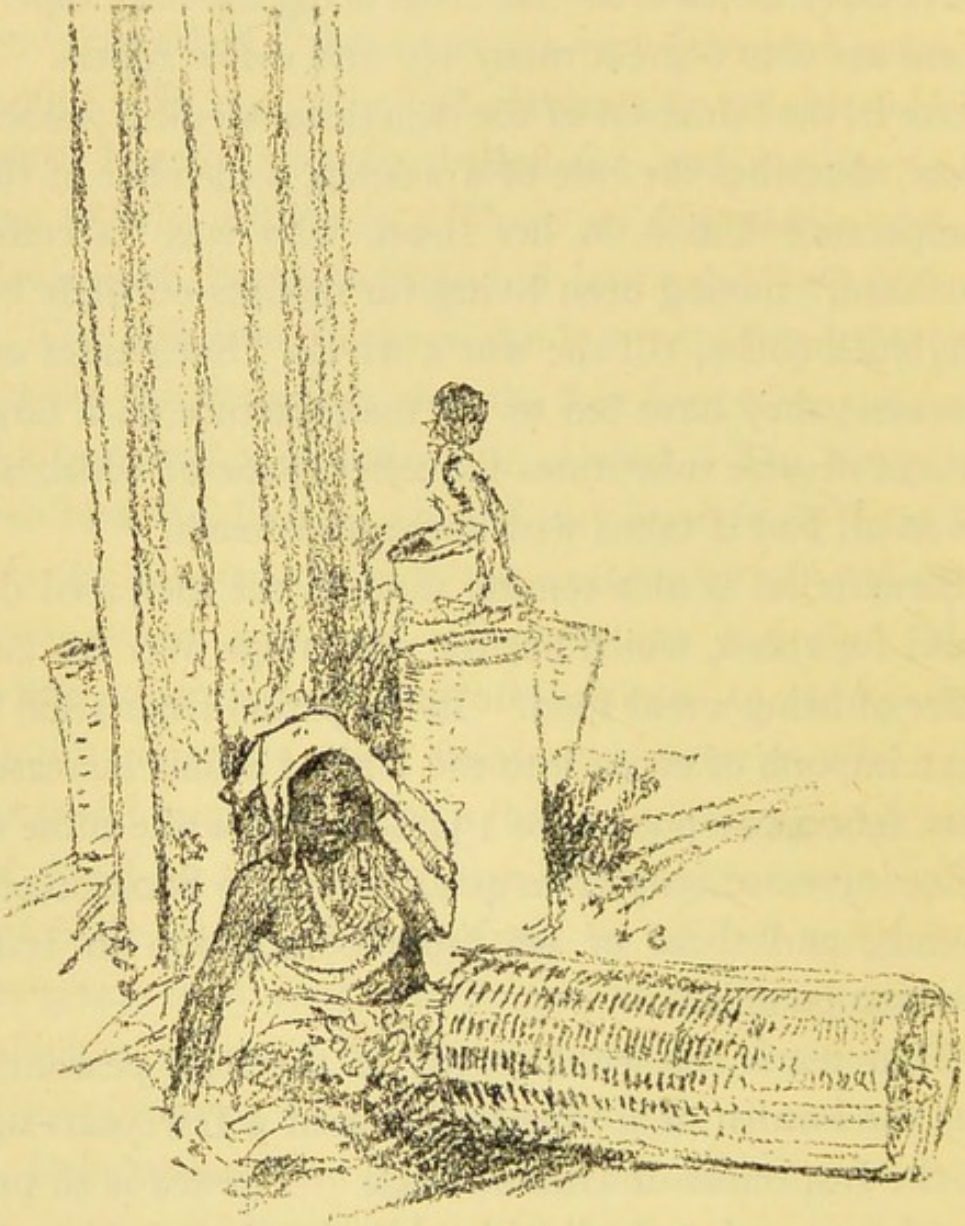
or drink than a barber would think of whittling kindling wood with his razor.

Whiskey drinkers are far from being the only topers. There are also a great many tea and coffee topers. A writer in the "Journal of the American Medical Association" describes the case of a woman, a member of the Temperance Union in her town, who was "a coffee drunkard," having been living for months on little beside black coffee, till she was a wreck. Such cases are common; they have led to the manufacture on a large scale of diverse substitutes for coffee, some of which are not at all bad if taken with sugar and cream.

Some relief is also coming through the increased demand for cocoa, which has the advantage over tea and coffee of being a real food. In the period from 1888 to 1911 imports of cocoa into the United States increased from 6,600,000 pounds to 134,000,000, while those of coffee increased only from 404,000,000 to 800,000,000 pounds, and those of tea from 68,000,000 to 104,000,000 pounds.

That tea is the worst enemy of the Irish peasantry was the burden of a blue book issued a few years ago by the Inspectors of Irish schools. "The tea is so prepared for use that the liquid, when drunk, has the properties of a slow poison. The teapot stewing on the hearth all day long is kept literally on tap; the members of the family, young as well as old, resorting to it at discretion."

It is not only among the peasantry and the city slums that improperly made tea does its deadly work.



Javanese Tea-picker and Porter

Among the well-to-do, in all countries, it is far from being in all cases, as it is supposed to be, "the cup which cheers but not inebriates." The strong coffee-colored four-o'clock tea served in English and American homes

is a gastronomic atrocity; it is bad for heart, nerves, and stomach. In the United States, in nine cases out of ten, the tea served is an inky fluid, bitter as gall, and devoid of fragrance.

When our Government forbade the importation of artificially colored teas, Consul West wrote from Japan that the planters were induced by this measure to "make greater efforts in future to *improve the flavor* rather than the color and the appearance" of the tea.

The Flavor is, indeed, the one thing to be considered in raising high-class tea; also, in preparing it. The art of brewing a good cup of tea consists in making it in such a way as to secure a maximum of fragrance and a minimum of the tannin, which is bad for the digestion, and the theine, which is a nerve poison. The rules for making tea may be found in any good cook book. The main points are that the water should never remain on the leaves more than from three to five minutes, and that the teapot should be thoroughly heated because it is only at the boiling point that some of the volatile properties of the leaves, on which the aroma depends, can be properly extracted. A little sugar to sweeten it is permissible; it does not alter the flavor. Milk or cream do; wherefore tea-drinkers who are epicures and like to enjoy the unique fragrance of different kinds of tea, reject them.

The commercial and gastronomic value of coffee is determined by the amount of the aromatic volatile oil

which develops in the process of roasting. This fragrant oil is called caffeone. But coffee also has another active principle, an alkaloid called caffeine, which has a strong effect on the vascular and nervous systems and is used as a medicine. Now, the art of making good coffee consists in eliminating, as far as possible, the effects of the caffeine while developing those of the caffeone. To the caffeine are due the wakefulness and digestive disturbances caused by coffee; while the flavorsome caffeone produces the harmless exhilarating effects.

Coffee-roasting is a science which every housewife should study and practise; its neglect accounts for the fact that one so seldom gets a fragrant cup of coffee. The grinding should be done just before the coffee is prepared, and it should be drunk at once. Families having plenty of storage room should buy coffee by wholesale as it improves with age and yields a more mellow beverage. Dealers do not favor this storing because the beans lose weight thereby. Wash the beans before roasting them, and you will have the material for brewing a good cup of coffee.

An effort is being made in Europe to substitute for coffee and tea a beverage which, while having their refreshing effect, contains so small a proportion of the alkaloid substance as to be comparatively harmless, namely maté. In Argentina the use of the maté leaf has increased enormously in recent years, the annual

consumption averaging nearly twenty pounds per person, and in Paraguay it is even as high as twenty-nine pounds per inhabitant. North Americans and Europeans have taken to it much more slowly, owing, it is said, to the crude way of preparing the leaves—the drying of them over an open fire, which gives them a smoky flavor. But it is claimed that superior methods of preparation will make maté a powerful rival of coffee and tea, all the more as it is much cheaper. A pound of it makes five times as many cups as a pound of coffee; and, unlike tea leaves, the maté leaves can be used for a second infusion without impairment of the quality.

In beverages, as in foods, Flavor is the decisive factor. The natural flavor of maté seems to be as agreeable as that of tea or coffee, but it is apt to be marred by the suggestion of smoke just referred to. If this can be eliminated, and if it is true that maté, though containing less caffeine than either tea or coffee, is even more stimulating and sustaining, then "Paraguay tea" seems destined to be the domestic beverage of the future.

# INDEX

# INDEX

## A


Adulterated and denatured foods, 14-39, 40, 66-116, 351, 441, 528.
Alaskan berries, 546.
Alcoholic drinks, 575.
Alligator pears, 240.
Allyn, L. B., 528.
America, Gastronomic: specialties, 3; traditions, 4; missionaries, 5; most important problem, 42; progress, 181; cooking in schools, 182; electric, on battleships, 201; fat in diet, 224; in Paris, 258; sausages, 348; fruit, 432; breakfasts, 440; chapter XI; corn, sweet, and corn bread, 451; griddle cakes and maple syrup, 459; pies, 466; cranberries, 471; turkeys and game, 473; game, 478; seafood, 480; New York lunch bill of fare, 484; fishes, 489; vegetables gaining ground, 490; fruit eaters paradise, 496; Burbank's new fruits and vegetables, 509.
America, Ungastronomic: 3-39; causes, 11; quick-lunch, 61; denatured food, 66-116; cold-storage poultry, 69; oysters spoiled, 86; dyed meats and fish, 103; butter, 105; unwilling to take pains, 107; vegetables, badly cooked, 124; use of condiments, 143; indifference to superior cooking, 164; wasted food and flavors, 211; poultry for eggs only, 223; dissonant salads, 243; bad influence on Paris, 259; bread, 288; cheese, 304; frozen fish, 362; slaughter of game, 366; prejudice against mutton, 408; bacon, 410.
Appendicitis, 51.
Appetite, and gastric juice, 55, 99; for girls, 56, 179; cheese as appetizer, 303; Shakespeare on, 573.
Apples, 468, 496, 518, 538.
Artichokes, French, 238.
Austria, 374, 375, 381 (see Germany).


## B


Bacon, 66, 97, 232, 409, 549.
Bailey, L. H., 491, 498, 501, 510.
Bakers, 291, 373.
Bakewell, R. G., 400.
Baltimore, 549.

Bananas, 433, 539.
Beecher, Henry Ward, 468.
Beef: embalmed, 15; extracts, 123; roast, 130; fresh or chilled vs. frozen, 401.
Beer and Brewers, 35.
Benzoate of soda, 31.
Berlin, 89, 342, 356, 359, 371, 381.
Berries, 435, 516, 546.
Beverages, 575-581.
Billingsgate fish market, 424.
Birds, in Italy, 334 (see game).
Bismark, 351.
Bitter (see taste).
Boar, wild, 82.
Bones, for soup, 214.
Borax, 25.
Boston, 193, 472, 491.
Boys as cooks, 173.
Brains, fried, 318, 421.
Bread: Boston brown, 49; American, 67, 287; salt in, 142; French, 285; crust vs. crumb, 286; toasted, 290; corn, 457; the diabolical degerminator, 459; German and Austrian, 373.
Bresse, poulet de, 69, 220.
Brillat-Savarin, 61, 219, 343, 474, 563.
Broiling, 129.
Bryce, A., 290.
Buckwheat cakes, 460.
Burbank, Luther, on educating escarole, 235; artichokes, 239; frost-proof apple blossoms, 493; genius and advantages, 509; mental pattern, 511; new fruits and improved vegetables, 512-521; corn, 514; nuts, 517; grapes, 518; enemies, 518; cactus, 519; garden, 520; commercial value of flavor, 522; combines flavor with beauty, 527; imparting a pineapple flavor, 534.
Burpee, W. A., 233, 234, 455.
Butter: American, 105; sweet vs. salt, 112; how the best is made, 292; sweet vs. sour cream, 294, 387; fishy flavor in, 298; versus mutton fat, 405; artificially colored, 525; spoiled by strong feed, 548.

C

Cactus, thornless, 519.
California, 432, 513, 515, 531, 536, 555.
Campbell, Dr. H., 46, 49, 287
Canada, 410, 481, 555.
Candy, 21, 33, 62, 544.
Carême, 160 163, 218, 378.
Casserole cooking, 148-9
Cassidy, H. P., 33, 38, 67.
Caviare, 257, 502.
Celery, 494.
Cereals, 141, 262.
Chafing dish cooking, 150.
Cheese: with salad, 243; as an appetizer, 303; American, 304; various European countries, 305; French, 306; cooked in place of meat, 328; German, Swiss and Dutch, 385; English, 446.

Cherries, 435.
Chicago, 172, 182, 200, 202, 362.
Chickens (see poultry).
Child, Theodore, 147, 199.
China, intensive farming, 556.
City-bred people, easily fooled, 526.
Clark, Mrs. Champ, 168.
Cocoa, 577.
Codfish, flavor of, 489.
Coffee, 575.
Cold storage, 69, 72, 83-86, 538.
Commercial Value of Flavor: smoked hams and bacon, 104, 414; sweet butter, 113, 302; profitable chickens, 220; sausages, 349; fish ponds, 360; best cheese the most profitable, 387, 393; consumers and chilled meat, 402; demand for good poultry, 423; cakes, 443; maple syrup, 463; turkeys, 476; Burbank on, 522; Chapter XII; flavor decides permanence, 522; natural butter, 525 where pure food pays best, 529; opportunities in pineapples, 532; tree-ripened peaches, 536; fortunes from bananas and oranges, 539; melons and honey, 542; women and local flavor, 545; feeding flavor into food, 546; doubling farmyard profits, 552.
Condiments, 28, 124, 140, 142, 354, 448, 469.
Cook books 146.
Cooking: "plain," 11; science of savory, 117; flavor as guiding principle, 119; main object of, 121; soup, 122; boiling, 122; vegetables, 125; steaming, 129; broiling, 129; roasting, 130; gravy, 130; frying, 132; combining meat and vegetable flavors, 134; stewing, 134; cook books, 146; paper-bag, 148; casserole, 149; a noble art, 152; way to a man's heart, 153; vs. divorce, 155; factory and shop girls, 156; royalty in the kitchen, 158; American society women as cooks, 168; does it pay? 169, 173; future of, 171; school girls like it, 171; by boys and soldiers, 173; traveling schools, 176; in English schools, 177; in American, 181; fascination of, 184; lessons and the farm, 186; economics, 190; fireless cookers, 191; community kitchens, 197; electric, 200; an exact science, 204.
Cooks: social caste of, 154; improved by praise, 165; earn more than teachers, doctors, and clergymen, 169; boys and soldiers as, 173; divine beings, 310.
Copenhagen, 355.
Corn, sweet, and corn bread, 451 (see bread); Burbank's improved, 514.
Covent Garden market, 429.
Crab-apples, 500.
Cranberries, 371, 471.

Crawfish, 371, 483.
Cream, sweet or sour, for butter, 294, 387; in cheese, 388.

D

Darwin, 61, 191.
Dates, 506.
Dealers, pennywise, 390, 532.
Deer, 366; farming, 479.
Delicatessen stores, 341.
Denatured foods, 66-116.
Denmark, 176.
De Reszke, Jean, 569.
Dickens, 4.
Dish-washing, 157.
Domestic science, in schools, 181; and farm work, 186.
Ducks, canvasback, 549.
Dumas, A., 212, 214.
Drunkenness, 576.
Dutch cheese, 390.

E

Eating: a new psychology of, 61; teaching the art of, in schools, 187; talking about, 340; with the eyes, 524.
Eggs, 547, 566.
Electric cooking, 200.
Eliot, C. W., 42.
Ellwanger, 146, 216, 373.
England: inns and steamers, 4; sauces and meats, 145; cook books, 147; royalty in the kitchen, 158; cooking lessons for men, 173; cooking in schools, 177; electric cooking, 201; need of variety, 207; wastefulness, 211; poultry, 221; market gardens, 279; mushrooms, 281; sardines, 315; beef dripping, 318; monotony in diet, 395; gluttony, 397; roast beef, 399; cattle-breeders, 400; Southdown mutton, 403; Wiltshire bacon, 409; grouse, 421; markets, 423, 429; fish and oysters, 423; vegetables, 430; fruit, 432; berries, 435; marmalades, jams, 437; breakfasts, 440; special dishes, 442; plum pudding, 443; cheese, 446; abuse of condiments, 448; pie, 466; tea, 577.
Epicurism, 53, 189, 576.
Escarole, 232.
Eyes, eating with the, 524.

F

Factory and shop girls, 156, 183.
Fairchild, D., 68, 506.
Farmers, hints for (see governmental gastronomy, and commercial value of flavor).
Farming, intensive will solve food problem, 553-8.
Fat, importance of, in diet, 224; how digested, 225.
Fireless cookers, 151, 172, 191.
Fish: dyed, 66; storage, 67; smoked, 103, 344, 427; in Paris market, 275; fried, in Italy, 316; live, brought to kitchen, 355; ponds, in Germany, 360; frozen, 361; in London market, 423; sole, 426; American, 489.

Flavor: superlative importance of, 40-64; helps the stomach, 53; creates an appetite, 56; why we eat chicken, 79; in butter, 105; guiding principle in cooking, 119; chief value of vegetables, 124; extending the flavor of meat, 134; from cheap cuts of meat, 137; condiments, 143; art of varying, 153; test, vs. vegetarianism, 142; fat, a source of, 388; in British meat, 399; little, in frozen meat, 402, or fish, 360; in codfish, 489, local, 499; decides value, 522; Burbank on, 522; what we spend most money on, 524; in nuts, 526; farmers and city greenhorns, 526; variety in, 535; fruit and cold storage, 539; in bananas and oranges, 540; in melons and honey, 543; extracts, 544; value of local, 545; feeding it into food, 546; how it differs from fragrance, 566; an aid to temperance, 575; "bouquet," 576.

Fletcher and Fletcherizing, 11-53, 63, 227.

Flour, 320, 373.

Food and Drugs Act, 31.

Food problem solved by intensive farming, 554-8.

Food, soft, 50; adulterated, 14-39; denatured, 65-116; raw, 118; enjoyable plain, 52; importance of variety, 206; cheap nourishment, 190; (see meats, vegetables, fruits, cooking, pure food, etc.); why cost increases, 554.

France: poule de Bresse, 69, 220; marketing poultry, 74; cook books, 147; respect for cooks, 155; society women in the kitchen, 156; kings as cooks, 159; culinary supremacy, 210-238; lessons in economy, 211; stock-pot, 212; soups, 212; sauces, 215; poultry, 220; use of vegetables, 243; restaurants, 244; fruit, 247; culinary word language, 253; Russian and American influences, 255; provincial flavors, 262; central market place, 267; fish, 275; marketing, 277; market gardens, 278; mushrooms and truffles, 280; fancy fruits, 284; bread, 285; bakers, 291; best butter how made, 292; cheese, 303; learned from Italy, 309; olive oil, 311; fondness for pork, 417; intensive gardening, 557.

Freezene, 17.

Frogs, 310.

Fruits, canned, 31; raw, 117; in France, 285; England, 432; United States, 496; Burbank's improved, 517; cold storage, 538; pre-cooling, 539; (see apples, peaches, etc).

Frying, 132, 316.

G

Game, in Germany, 365; England, 421; United States, 478.
Garlic, 264, 336.
Gastronomy: Preface, 43, 61, 64, 189-190, 231, 260, 394, 502, 526.
Geese, 344, 368.
Genius and kitchen problems, 161.
Germany: cook books, 146; traveling cooking schools, 176; peasants and vegetables, 177; use of French words, 253; butter, 301; cosmopolitan cuisine, 339; delicatessen stores, 341; sauerkraut, 343; sausage and smoked ham, 345; live fish in kitchen, 355; fish ponds, 360; game and geese, 362; Berlin market, 371; bread, 373; menus on land and sea, 378, 382; cheeses, 385; opposition to frozen meats, 403; pork, 416; parcel post, 553.
Gladstone, 43, 437.
Gluten, 320.
Gluttony, 52, 188, 397, 576.
Gooseberries, 436.
Governmental Gastronomy, 502.
Grapefruit, 433.
Grapes, 497, 518.
Gravy, 131.
Greenhorns, 530.
Griddle cakes, 459.
Grieg, 341.
Grill, 130.
Guinea fowl to replace game, 477.

H

Hale, J. H., 537.
Ham, smoked, 66, 97, 351.
Hamburg, 358.
Harland, Marian, 151, 157, 167.
Harvey, Fred, 5.
Hawaiian Pineapples, 533.
Hawthorne, Hildegarde, 241.
Hayward, H., 114, 116, 298.
Herrick, Christine Terhune, 151, 167.
Hill, J. M., 167.
Holland, cheese, 390.
Honey, 14, 543.
Hors d'oeuvres, 256.
Howells, W. D., 328.
Hungary, 374.
Hunt, C. L., 132, 137.

I

Indians and vegetables, 452, 462.
Italy: cook books, 147; cradle of modern cookery, 309; olive oil, 311; sardines, 314; fried foods, 316; macaroni, 319; cheese in place of meat, 328; abstinance, 329; birds, 334; garlic, 336; tomatoes, 337.

J

Jäger, G., 566.
Jams, 437.
Japan, 304, 325, 579.
Johnson, Samuel, 396.

K

Kant, 61, 572.
Kellogg, J. L., 89.
Kitchen: society women in, 157, 169; royalty in, 158; private, vs. community, 197; electricity in, 200.

L

Lakey, Alice, 21, 105.
Lane, Mrs. John, 433.
Langworthy, C. F., 132, 137.
Lemons, 231, 541.
Lettuce, 233.
Lobsters, 480.
London: markets, 423; restaurants, 441 (see England).
Looking down on others, 165, 205.

M

Macaroni, 319.
McCann, A. W., 35, 38.
Magazines, helpful, 186.
Malaria, 563.
Mangoes, 507.
Maple syrup, 462.
Marketing, in Paris, 266; Berlin, 371; London, 279, 423, 429.
Mark Twain, 3, 367, 452, 466, 516.
Marmalades, 437, 562.
Marriage and food, 153.
Mastication, 49.
Maté, 580.
Maxwell, W. H., 171.
Meat: economical use of, 137; eating in the future, 139; less nutritious than cheese, 330; smoked (see smoked); frozen, 76, 402 (see beef, mutton, &c).
Melons, 494, 542.
Men: blameworthy, 13; way to heart of, 153; in kitchen, 159-163; medical, 166; as cooks, 173.
Mexico, 5, 531.
Middlemen, 553.
Milk, 107, 548.
Mitchell, M. J., 151.
Munich, 379.
Murray, 126.
Mushrooms, 280.
Mutton, 82, 403.

N

Naples, 326.
Napoleon, 51.
Netter, G. G., 34.
Newnham-Davis, Col., 216, 262, 265, 311, 448.
New Orleans, 239.
Norway, 436.
Nose, seven functions of, 569.
Nuremberg, 349.
Nuts, 500, 508, 517.

O

Odors, gastronomic value of, 63, 559-581.
Oleomargarine, 110.
Olive oil, 228, 311, 315.
Oranges, 541.
Oregon, 8, 483, 546.
Osmosis, 81, 82, 91.
Oven taste, 131.
Oysters, 86, 428, 487.

P

Paderewski, I. J., 158, 164, 259, 285, 435, 488.
Palatability (see flavor).
Pancake, French, 246.
Pancreas, 225.
Paper-bag cookery, 148.
Parcel Post, 553.
Paris restaurants, 244 (see France).
Parloa, Maria, 127.
Pasteurized cream, for butter, 298.
Pâté de foie gras, 370.
Pawlow, Prof., 55, 225, 290, 561.
Pawpaw, 502.
Peaches, 68, 530, 531, 536.
Peanut butter, 133.
Pears, 527.
Perfumery, 570.
Persimmon, 500.
Petite marmite, 250.
Pickles, 343.
Philadelphia, 550.
Physicians and cookery, 167.
Pies, 466, 560.
Piesse, C. H., 564.
Pigs: wild boar's meat, 82; for bacon, 411; fair play for, 418; dairy farming and, 415; (see pork, ham, bacon).
Pineapples, 532.
Pleasures of the table, 41-64.
Plum pudding, 443.
Plums, 512, 517.
Pork, increasing popularity of, 417.
Portland, Ore., 10.
Potatoes, 320, 495, 513.
Poultry: cold storage, 69-74; future of, in America, 72; marketing in France, 74; undrawn, horrors of, 76; why do we eat? 79; French varieties, 220; turkeys and guinea fowl, 473; feeding flavor into, 546, 552.
Powell, E. P., 198, 497.
Preservatives, chemical, 28-39, 40, 351.
Psychology of eating, 61.
Pure food experts, school girls as, 528.
Pure Food laws, 31, 34, 342, 352.

Q

Quince, Burbank's improved, 516.

R

Raw foods, 30.
Restaurants: in Paris, 244; Munich, 379; Berlin, 381; London, 447.
Rhubarb, Burbank's 515.
Rice, 67.
Roasting, 130.
Rogers and Gray, 300.
Romans, ancient, 309, 551.
Ronald, Mary, 146, 167, 317, 318.
Rorer, Mrs., 167.
Rossini, 163.
Ruskin, 42.
Russia, 55, 226-256, 283.

S

Sage, Mrs. Russell, 478.
St. Louis, 486.
Sala, G. A., 424.
Salads: digestive value of sour, 224; dressing for, 224-232; best varieties of, 232-241; fruit, 242.
Salt, 142, 560 (see taste).
Sardines, 314.
Sauces, 142, 215.
Sauerkraut, 343.
Sausages, 345.
Scallops, 488.
Schoolgirls as food experts, 528.
Schools: cooking in, 171, 177, 181; teaching the art of eating, 187.
Scotch marmalades, 437.
Sewage and oysters, 87, 428.
Sicilian cooking, 310.
Smell, sense of, 61, 63, chapt. XIII.
Smoked meats and fish, 66, 97, 245, 344, 350, 414, 427.
Snails, 276, 310.
Soldiers as cooks, 173.
Sole, 426.
Soup, 123, 212.
Sour (see taste).
Spain, 147, 230, 336.
Spices (see condiments).
Steaming, 129.
Stewing, 134.
Stock-pot, French, 211.
Strassburg, 370.
Strawberries, 435, 511.
Sweet (see Taste).
Switzerland, 374, 386.
Syrup, 461.

T

Table d'hôte, philosophy of, 58.
Tangelo, 508.
Taste, sense of, 59-64, 559-566.
Tastes, quarreling about, 574.
Tea, 575.
Terrapin, 549.
Thackeray, 53, 265, 394.
Thomspon, Henry, 125, 136, 152, 207, 323.
Toast, 290.
Tobacco, 568, 571.
Tomatoes, 236, 337, 431, 492.
Truffles, 280.
Turkeys, 473, 552.

U

Urbain-Dubois, 147.

V

Variety, 118, 206, 535.
Veal, 372.
Vegetables: raw; 117; value of, lies in flavor, 124; how to cook, 128; combined with meat, 134; as separate course, 243; in Paris market, 268; mostly water, 279; in London, 430; United States, 490; gaining ground, 490; weeds as, 505; improvable, 523; dangerous colors in canned, 530.

Vegetarianism, 141.
Venice, 324, 328.
Venison, 365, 422.
Vinegar, 32, 62, 224, 227.

W

Wallace, R., 410.
Warner, C. D., 5.
Washington State, 10, 483, 546.
Webster, E. H., 106, 294, 300.
Weeds as vegetables, 505.
Wiley H. W.: on badly cooked food, 5; "honey," 14; poison squad, 24; condiments and chemical preservatives, 28; canned fruits, 31; Referee Board, 36, 39; cold storage decreases palatability, 72; drawn poultry, 80; fresh poultry, 84; oysters, 91; butter, 113; soup stock, 123; vegetables, 124; meats as condiments, 140; vegetarianism, 141; oil, 229; mushrooms, 282; fresh fish, 361; syrup, 462; mince meat, 571; eating with the eyes, 524; colored butter, 525; dangerous coloring matter, 530; canned fruits, 535; flavor in pork, 549.
Wilson, Mrs. Woodrow, 169.
Wine, bouquet of, 576.
Wives, and cooking, 153, 182.
Women: are they to blame? 11; as writers of cook books, 167; social caste of cooks, 154; queens and society women in the kitchen, 158; having an appetite, 179; beauty and olive oil, 230; commercial opportunities for, 545 (see wives, schools, cooking, etc.).
Wright, H. S., 167.

RECORD OF TREATMENT, EXTRACTION, REPAIR, etc.

Pressmark:

Binding Ref No: 3157

Microfilm No:

| Date | Particulars |
| --- | --- |
| MAY 98 | Chemical Treatment |
| | Fumigation |
| | Deacidification Renaissance 1&2 |
| | Lamination |
| | Solvents |
| | Leather Treatment |
| | Adhesives |
| | Remarks |