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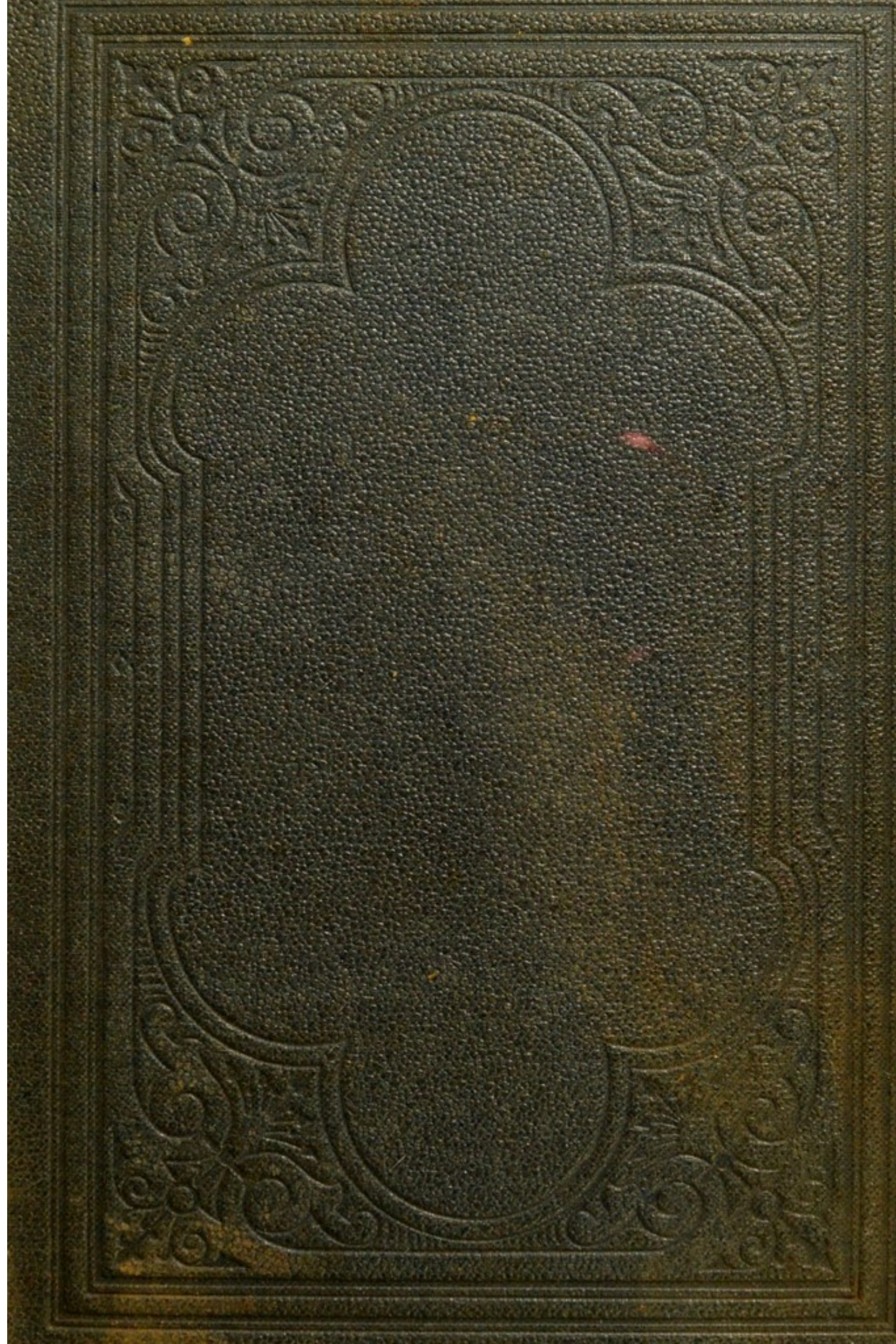
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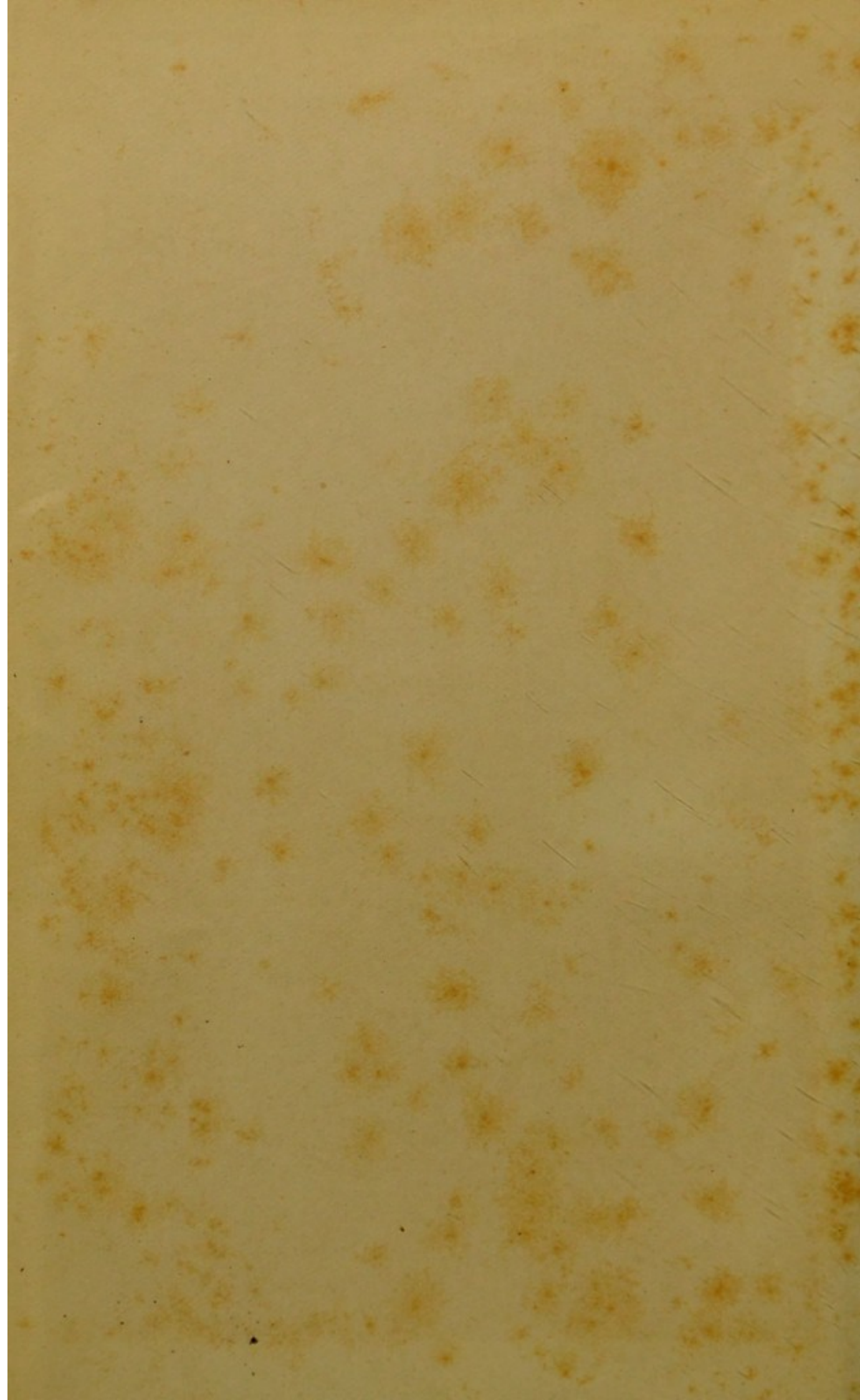


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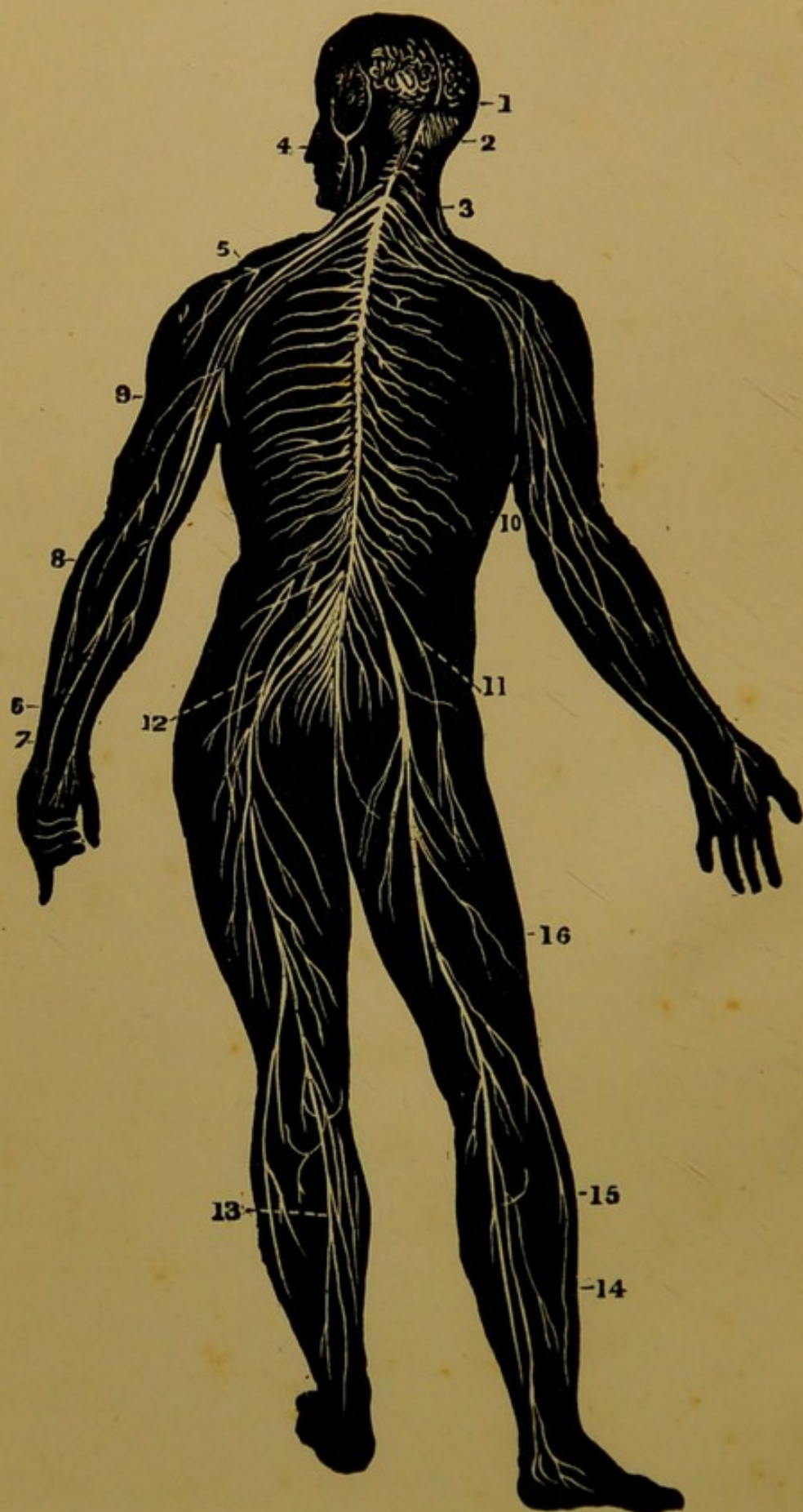
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THE NERVES.

WORKS ON HEALTH;

EMBRACING

1. GOOD HEALTH, AND HOW TO SECURE IT;
2. HEALTH AND ECONOMY IN THE SELECTION OF FOOD;
3. WATER, AND HOW TO APPLY IT IN HEALTH AND DISEASE;
- AND
4. WOMAN: HER DISEASES, AND HOW TO CURE THEM.

By R. B. D. WELLS, PHRENOLOGIST.

OBSERVATORY VILLA, WEST BANK, SCARBOROUGH.

LONDON:

H. VICKERS, 317, STRAND.

MANCHESTER: JOHN HEYWOOD, DEANS GATE.

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GOOD HEALTH

AND

HOW TO SECURE IT.

BY

R. B. D. WELLS,

PHRENOLOGIST,

OBSERVATORY VILLA, WEST BANK, SCARBORO'.

REVISED AND ENLARGED EDITION.

LONDON :

H. VICKERS, 317, STRAND.

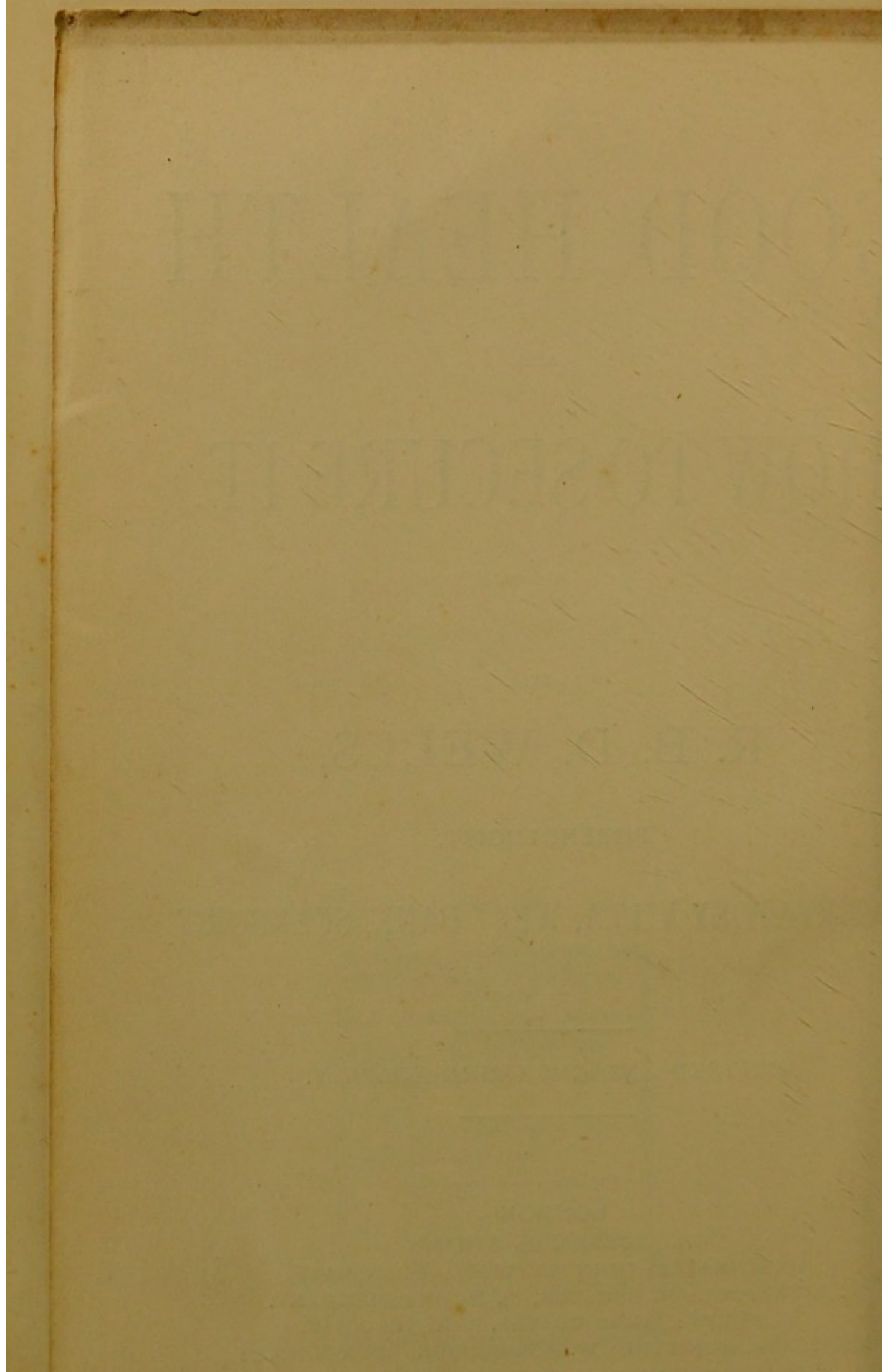
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P R E F A C E .

WHEN an author attempts to write a book he should have some special information to impart, something to induce purchasers to read and profit by it, so that the time and money spent upon the production may be *well* laid out. Most people like to have their money's worth; it is right they should, and I can promise my readers that if they put into practice the teachings and course of treatment laid down in this book they will say it is the best value they ever received for their money.

The question might be asked is there any need for another book on the subject of "How to cure and prevent disease?" My experience tells me that there is: previous treatises are either false in their teaching, too bulky and costly, or are written by the advocates of "Drug Medication," which I, in common with many of its practitioners, maintain to be a poisonous and dangerous system.

Books have been written, however, by such men as Drs. Trall, Nichols, and others, which have been a blessing to many thousands of people. The productions of George Combe, O. S. Fowler, and other Health Reformers, may be named as having brought about a complete revolution in the habits, customs, and health conditions of tens of thousands who were previously suffering the penalties of violated laws.

My object in writing this book is to make people still further acquainted with the laws that govern their system, and thus enable them to assist nature in building up a strong and healthy body by means of nature's simple remedial agents, and without the employment of injurious drugs.

PREFACE TO THE PRESENT EDITION.

Previous to writing the First Edition of this work my experience in the art and science of treating diseases had already been very extensive. Since that epoch I have given advice to over sixty thousand patients who were suffering from various kinds of ailments, and it is with pride and pleasure I record the fact that during the last thirteen years I have received twenty-eight thousand letters testifying to the cures that have been effected, either directly by me or through following the instructions contained in my books and lectures. This wider experience enables me to say with confidence that the advice I gave in the previous editions, and which proved so productive of healing results, has been supplemented by valuable additions in the present issue. Scarcely a day passes without some of my old patients calling to thank me for the benefits derived from my advice, manipulations, and directions for home treatment. This is very gratifying, and stimulates to even greater efforts for the relief of suffering humanity. During the last thirty years I have delivered nearly 8000 public lectures in the United Kingdom, one half of which have been upon Health Reform or the Hygienic treatment of disease ; and these lectures have been listened to by tens of thousands of people, who testify that it would be impossible to describe the benefit they have received therefrom. It is my earnest hope and belief that the new matter contained in this book, along with the additional illustrations with which it is accompanied, will render it of still greater service than the editions which preceded it ; and it is therefore with pleasure and confidence that I commend the attentive perusal of these pages to all who seek health and desire to retain it.

INTRODUCTION TO THE FIRST EDITION

The first edition of this work was published in 1840, and has since been reprinted many times. It is now being reissued in a new edition, which has been revised and corrected throughout. The new edition contains many improvements, and is in every way adapted to the requirements of the present day. It is hoped that it will be found useful and interesting to all who read it.

The work is divided into two parts. The first part contains a history of the subject, and the second part contains a description of the subject. The first part is written in a popular style, and is intended for the general reader. The second part is written in a more scientific style, and is intended for the student and the professional man.

The work is a valuable contribution to the literature of the subject, and is one of the best of its kind. It is written by a man of high standing in the scientific world, and is full of interesting facts and information. It is a work that every student of the subject should read, and every professional man should have on his shelves.

The new edition is published by the same publisher as the first edition, and is in every way adapted to the requirements of the present day. It is hoped that it will be found useful and interesting to all who read it.

GOOD HEALTH

AND

HOW TO SECURE IT.

INTRODUCTORY CHAPTER.

THE RATIONALE OF CURING DISEASE.

My observations convince me that there is yet a great deal to be said in favour of the "Hygienic Treatment," which has been previously overlooked; hence the necessity for another book on this subject, which shall bring the blessings of the Hygienic system within the reach of all. The books on the old methods of medical treatment have been miserable failures. I will name several reasons for the failure of the old system. First, its professors too frequently consider that disease is something that should be "killed" by poisonous drugs. This is evidently a mistake, which frequently ends disastrously for the patient. The disease itself is the remedial struggle. It is an effort of the living system to expel injurious substances and recover the normal state. Hence the business of the true physician is to aid and assist this effort by supplying the conditions that will render it successful. Sneezing is an effort of Nature to rid the brain of an accumulation of mucous, and coughing is also an effort to expel the morbid

matter that has accumulated in the lungs—or in other words an attempt of Nature to expel a foe and to heal herself.

When drug doctors are called to patients who have a cough, or who are affected with a frequent sneezing, they generally administer or prescribe chemical and inorganic elements, and substances (poisons) which the living system cannot use, but must resist and expel; hence, instead of assisting nature to expel the foe that has already taken possession, they blindly increase the burden, and assist to weaken the fortifications of life, and if Nature should win the battle by some great effort of constitutional powers, the patient is left so weak and debilitated as to be more than ever susceptible to bodily and mental ailments. The drug practitioner then prescribes cod liver oil and daily doses of medicine. This course has led people almost universally into the practice of *poisoning themselves because they are sick*. If, after all, the patient should die, they attribute it to the will of God, and declare that nothing in the world could have saved him; but if the patient should recover, they attribute his recovery to their own skill and to the virtue of their treatment; but I am of the same opinion as some of the most eminent medical men, who declare that “if patients were left to themselves, had no medicines administered, and were allowed to breathe pure air, that we should have fewer deaths and fewer serious diseases than we now have.”

The Hygienic practitioner uses, as remedial agents, such things only as are normally related to living structures, as air, light, exercise, bathing, diet, rest, sleep, temperature, electricity, animal magnetism, the life-awaker, manipula-

tions, and other agents that will purify, tone up, and invigorate the system. In cases of cough, sneezing, &c., the true Hygienic physician would remove the cause, open the pores of the skin, and cause the morbid matter to pass off through all the excretory functions, so that Nature may have nothing to impede her renovating processes; he would not suppress the vital manifestations and destroy the life forces by poisonous drugs.

The sooner we learn that sickness is caused by a violation of the laws that govern our being, the better will it be for this and future generations.

People should be educated and made acquainted with the laws of life and health, in order that they may know how to ward off disease, and thereby secure a high condition of health and vigour, which we maintain to be the *natural* state of man, of animal, and of *all that lives*; but which can only be secured by adhering strictly to the "health laws." When people are made acquainted with the laws that govern their system, they will see the error of "curing one disease by producing another," or by trying to *cure* disease at all, for by so doing they kill the patient. *Persons*, not diseases, should be cured.

When this happy time arrives, people will not submit to be poisoned by drugs, nor be compelled to submit their children to the blood poison of the vaccinator; they will perceive that medical men formerly made sad mistakes, and killed many thousands of patients by bleeding them to death, a practice which nearly all medical men at present denounce. They are making equally as great mistakes to-day by poisoning people because they are sick, and if any person is so rash as to imply that their mode of treatment

is irrational, he is branded as a "quack" and "impostor," especially if he has not been trained at one of their medical colleges, and secured the same class of diploma as themselves. If he has graduated at some college in another country he is considered unfit to practise in this enlightened nation. Besides, medical men feel bound to stand by each other, and they are protected by the laws of the country, so that if they should kill their patients with their poisonous drugs they are quite safe, and are *licensed* to do it; but if any practitioner outside of their charmed circle should lose a patient by death, they raise the "*hue and cry*" at once that he has *killed* somebody, and they try to get a "case" against him. Skill and experience avail him nothing, even if he has cured thousands, so long as he is not licensed to practise by a class of monopolists.

It is a well-known fact that the old medical system promises what it cannot perform. It is based upon pretension; yet medicine is called a science. It is really empiricism, quackery from beginning to end. It is "try this, try that, try the other thing;" hence people are being continually experimented upon by their doctors until their constitutions are completely undermined. By reading the following pages you will see that, on their own confession, it is the more medicine the more mischief; but the Hygienic system does not pay well enough to support a carriage and pair, neither is it respectable enough, because its practitioners have to work hard, and have to sweat at their work; but whoever knew an orthodox doctor to lower himself so much as to resort to such vulgarity. We maintain, however, that a man has not learned the A. B. C. of the healing art, until he knows that he has to spend and be spent for the good of

his patient; and it is an eternal law that nothing good, great, and lasting can be accomplished without great labour. We are strong advocates of the Water Treatment when judiciously applied, but it is not very efficacious unless it is accompanied by brisk rubbing and vigorous manipulations, which are very exhausting to the operator; hence it will be seen that a doctor who is desirous to cure his patients must not be afraid of hard work.

It is well known that a bath does a great deal more good than a lot of physic, even though it may not be very efficiently given; still it is beneficial to the patient in proportion to its thoroughness.

We give no poisonous expensive drugs, but we work hard to cure our patients, and we succeed.

No wonder that the Hygienic system is spreading rapidly throughout the world, for it accords with Nature—in fact it is Nature's own plan—for when the system is surfeited with morbid matter she forces it out in a crisis or pimples, and expels it through every outlet when she has sufficient strength; but if she has not power enough to do so, we aid her in her great work, and this is the main reason for our success—while the drug practitioner weakens and destroys the vital power. Our *modus operandi* is laid down in the following pages.

Another cause of our success is that we have faith in our treatment, and our patients have faith as well; at any rate they have when they are cured; and we have cured many bad cases when the doctors had given them up as being incurable. Old Physic has no faith; it does not believe in its own prescriptions. Whoever knew a doctor to take his own pills and potions? Perhaps a few of them

do so just to keep up appearances, but the great majority of them depend solely on Hygienic treatment for keeping them in a good state of health. Surely, if it is good for the doctors it would be good for their patients; but no, it would not pay; besides, physic is so much easier applied, and wrapped in so much mystery that heavy prices can be charged for it, even if it costs only one penny per bottle.

There can be no great work done without great faith—faith in God, faith in the healing powers of Nature, and faith in humanity which is made “in the image of God.” In this we follow humbly the example of the Great Physician, who, we are told, could Himself not do many mighty works when there was unbelief.

We have sometimes had patients under our treatment who were highly prejudiced against it, and they would not submit to be cured. Many of them have life-long errors and false notions engraved in their minds. Such persons are very difficult to deal with, and we cannot give them any hope of cure by our system, not merely because they are lacking in *faith*, but because they bring all their prejudice to resist the beneficial results of our healing processes. Still, notwithstanding such deterrent obstacles, vast numbers have been compelled to admit that our treatment has cured them when everything else they have tried has failed; hence we are gradually re-educating the people, and inculcating correct ideas of the true healing art.

We can truly proclaim that health reform has made more rapid strides towards universal recognition than any other great reformatory movement has done in the history of the world in the same period of time.

Very little was known of the Hygienic system till within the last thirty years. When Priessnitz acquired a world-wide fame by the successful treatment of diseases which had baffled the skill of the most eminent physicians of Europe and America, without using a particle of medicine, the world was astonished; medical men could not believe it was honestly done; they supposed he employed medicines "on the sly;" they had him imprisoned for practising medicine without a diploma; but he was set free when the authorities found that nothing but pure water was applied.

Since that time Hydropathic Establishments have sprung up like mushrooms, and the good they are doing is so great as to astonish and bewilder even the most ardent advocates of the Allopathic system.

In some cases of disease the water treatment is not very reliable, and of late other important discoveries have been made—one in particular—that of the "Life-awaker." In cases of scrofula and other affections, where water has failed to cure, this instrument acts like a charm, and thousands have been restored to health by its judicious application; but it is essential that the water treatment should be used in conjunction with it, in order to bring about the highest results.

Some people advocate the Acetic Acid cure, and for some time we tried it, with varied results. We found that it would give speedy relief in neuralgic and other affections; but we discovered that it relieved the pain by benumbing the nerves, and by a violent irritation of the skin, and therefore this treatment is not suited for sensitive natures, neither is it wise to destroy the pain at the expense of the nerves. We have found that the "Life-awaker," combined

with the water treatment, produces better and more speedy effects in cases of paralysis, scrofula, and kindred affections; at the same time, we consider the Acetic Acid cure preferable to drug medication.

Animal Magnetism is also a healing agent of no ordinary power, and our patients find a proof of this assertion when a healthy bathman imparts it in the rubbing and in the manipulations after the bath. This fact has led some people to produce magnetic appliances, for which they charge extortionate prices. These appliances may be beneficial in some cases of nervous affections, weak spines, cold extremities, &c., but they are not a tenth part so beneficial as the magnetism imparted by the manipulations of a strong and healthy bath-man.

Many diseases have their origin in the brain—we might almost venture to say that more than one-half of them hail from that region. Who does not know that grief, fear, over-anxiety, and mental excitement break down the body more speedily than anything else? The nerves are upset by excessive Cautiousness and perverted Amativeness;—consequently the expert Phrenologist is highly qualified to administer both to a mind and to a body diseased. In fact, we maintain that a physician cannot be highly successful unless he is acquainted with Phrenology, and its bearing upon the physical condition. A man with large Cautiousness, small Hope, Firmness, Combateness, Faith, and Destructiveness will not have sufficient spirit and energy to move about and circulate his blood; he will always be looking on the dark side of life, and will be constantly dosing himself with various quack medicines for imaginary ills; he will become dispirited, mopish, indolent, and fretful,

and doctors invariably say that they cannot do such patients any good. The Phrenologist would explain the cause of their ailments, and prescribe treatment in accordance with the mental condition, so as to bring about a cure.

Sleep, rest, and recreation are necessary in order to secure good health. Many people sleep too little, they do not take time to recruit their lost energies,—and at length they become so broken down as to be past repair. The same may be said of the man who is always working and toiling too hard. A good laugh, a light heart, joy and gladness, are not to be despised; for sorrow, over-anxiety, sleepless nights, and constant worry, without intervals of change and time for recuperation, bring many to a premature grave. These subjects will be noticed in the following pages. It would be well to take a lesson from the birds, and try to be happy and cheerful. This state of mind has been happily illustrated by the poet Wordsworth, in the following lines :—

Books! 'Tis a dull and endless strife;
Come hear the woodland linnet,
How sweet his music, on my life
There's more of wisdom in it.

And hark! how blithe the throstle sings;
He, too, is no mean preacher,
Come forth into the light of things,
Let Nature be your teacher.

She has a world of ready wealth,
Our hearts and minds to bless;
Spontaneous wisdom breathed by health,
Truth breathed by cheerfulness.

Our object in writing this book is to lay down such simple rules of health that people may be their own physicians. We do not seek to gain patients by its publication,

for we have already so much work on our hands that we do not want to increase our responsibilities. We have no medicines to advertise, and we would rather have people read our books, treat and cure themselves, than that they should come to us for treatment.

It may be thought that we have said some very hard things about the doctors. We do not wish to implicate them all, neither should we like to say that they are always to blame for giving their patients nauseous medicine. We feel thoroughly convinced that in the majority of cases if one doctor will not give his patients medicine, they will go to another who will, and the honest doctor would lose his practice; hence the people would rather pay heavily to be dosed with medicine, than give an honest physician a reasonable fee for telling them how to cure themselves, which, in plain language, is bribing them to be dishonest.

We are acquainted with a number of honest men in the faculty who are noble-hearted, generous, self-denying, and hard working. Such men we admire, and would encourage them in their great work; but alas! there are too many of the other sort, who know very little about disease or its treatment, but they believe in giving plenty of physic, right or wrong. Such men generally think they know more than anybody else. They adhere to the old prescriptions given in medical works, and do not bother themselves about studying each case separately; hence they treat their patients in a haphazard sort of way. Such men are not fit for physicians, but so long as they have secured their diploma we suppose that there is no remedy but to allow them to go on with their work of destruction. But we trust that the contents of this book will help the people to heal

themselves, and thereby secure more health and happiness, and add to the length of their days. Patients who take to the baths reluctantly, and from necessity, follow them ever after for enjoyment. The happiest moments of our lives are those of our ablutions. It is a time of inspiration; life looks brighter, hope is renewed, and many a knotty problem of existence and business perplexity is solved or dissolved by soap and water.

We do not hope to convert all classes of persons to a belief in, and practice of, the Hygienic treatment. It is too much trouble for indolent and dirty people, the majority of whom wish to sit still and get well without effort or self-denial. They would rather take physic and purge themselves nearly to the edge of the grave than resort to Hygienic measures and be restored to a high condition of health. It requires, no doubt, considerable will-power and spirit for a person to take a cold sponge-bath on rising from a warm bed; but this is one of the surest means of warding off colds and other diseases. Neither do we expect to convince gourmands that they should be abstemious in eating and drinking, for such people seem to live to eat, instead of eating to live. We have done our part in giving the information here contained, and, having done so, our highest reward will spring from a consciousness of having laid down rules, which, if adhered to, will be a blessing to mankind.

HISTORY OF MEDICINE.

The English and other civilised nations are at length awakening to a consideration of the all-important question of Health. Every intelligent person is aware that life is of very little value without it, for no great undertaking can be carried into successful execution unless accompanied with a good stock of vitality. The very happiness, well-being, and greatness of nations depend upon the health and vital stamina of their inhabitants. Unfortunately, from the beginning man has suffered the penalties of broken physiological laws; and his sicknesses and maladies have resulted in the rise of a class of persons who have given their attention wholly or in part to the discovery of methods for the relief or cure of the sick. Writers on Therapeutics generally admit that the art and practice of medicine first became a profession among the Egyptians. Until recently, however, the origin of the Healing Art has been enveloped in impenetrable obscurity. During the winter of 1872-3, Ebers, the German archæologist, whilst residing in the vicinity of Thebes, learned from an Arab of the existence of a papyrus scroll of extraordinary interest, which had been found some fourteen years previously, concealed amongst the bones of a mummy. For a considerable sum of money Ebers obtained this mysterious scroll from the Arab. It consisted of a long sheet of time-stained papyrus, extending to sixty feet, and nearly a foot broad, and was in excellent preservation considering its great age. Returning speedily to Leipsic with his literary treasure, Ebers began to decipher the strange-looking characters, and he has now given the result of his labours to the world in the startling announce-

ment that the work is, without doubt, one of the long-lost Six Hermetic Books of Medicine. The age of the manuscript was ascertained by the forms of the characters, by a calendar which was found in the scroll, and by the occurrence of the names of kings, all indicating that the writing was done in the year 1552 before Christ, or as far back as the time of Moses. The writing was inscribed to the god Thoth, or Thuti, who was the first Hermes, and this confirms the belief that it is the oldest medical book in the world; because it is on record that King Hermes, surnamed "Trismegistus," or thrice-great, translated from engraved tables of stone, long before buried in the earth, certain sacred character-writing respecting the divine art of healing. The reputation of King Hermes was very great in the middle ages, when he was styled the "father of chemistry," and his very name, as preserved in our word "hermetical," is synonymous with secrecy. The Egyptians held the books of Hermes in the highest veneration. They were forty-six in number, and contained rules for the guidance of the king, and treatises on astronomy, cosmogony, geography, priesthood, and medicine. Six of the books related to medicine, and what makes the discovery of Ebers the more important and remarkable is the fact that scrolls had previously been found treating on all the other subjects. By the aid of chromo-lithography an exact representation of the medicine scroll has been published, with notes by Ebers, and a translation of some portions of the hieroglyphs. This ancient book treats of the medicines to be used for alleviating various diseases. It is not our purpose to notice it further here, but we may refer the curious reader to an illustrated review of the work in the *Phrenological Journal* for September, 1876.

It should be remembered that in Egypt and in most of the earlier nations, the priests were the practitioners of the healing art; but later on, medicine was, as the phrase is, "elevated to the dignity of a distinct profession." Why this was so has long been a puzzle to historians, theologians, and physicians. Perhaps the decline of the spiritual character of the priesthood was a prime cause of this separation and declension of the healing part. There can be no doubt that there is the most intimate and sympathetic connection between the physical and spiritual conditions of human beings, and these states or conditions act and re-act upon each other. The Egyptian priests recognised the fact that the body could be greatly influenced through the mind; consequently, they practised the healing art by means of magical incantations which influenced the body powerfully through the imagination; and, consequently, the success or non-success of the priests in healing depended largely upon the amount of faith, credulity, or superstition in their patients. I think that the true physician should be able to "minister to a mind diseased," as well as relieve the body of disease. The physician is the right person to heal the soul as well as the body, and no physiological teacher can be of the highest service to his fellow-man who does not understand the laws that govern man's whole nature—physical, mental, and spiritual. Among the early Jews the priests were physicians, who not only cured leprosy and other diseases, but enforced sanitary regulations, personal cleanliness, and dietary restrictions in order to prevent disease. The genius of Hippocrates, the Grecian physician, and of Æsculapius, first caused medicine to be regarded as a science, and their descendants were the priests of the

temples, and the temples were the hospitals to which the sick were brought and where the priests performed the mysterious rites and ceremonies, which there is reason to think were as necessary to inspire them with power to heal as to impart confidence to the patient. The temples were located in the most salubrious places, and near hot springs, and frequent ablutions were recommended to the sick, than which there is no safer and more certain curative agent.

Dr. Trall, in treating of the history of medicine, remarks:—"We have no knowledge that Æsculapius, or his immediate successors, ever conceived the idea of curing diseases by drugs administered internally. Ablutions, bandages, fomentations, ointments, mechanical support, and the application of balsamic and astringent herbs, with the occasional use of wine and other stimulating substances, constituted their whole and their ample *materia medica*, and these were all employed *externally*."

It is curious to trace the origin of the rival medical systems and schools. In the temples erected to the honour of Æsculapius, who in course of time became deified as the God of Medicine, the patients were accustomed to record the particulars of their cases, what diseases they had, and how they were removed. In this way the temples were gradually converted into schools of medicine, and rival schools arose, whose leaders acquired repute in proportion to their sagacity or selfishness. One school professed to be philosophical, being guided by reason as well as experience; while another school professed to be guided solely by facts and observations. Thus arose the opposing medical sects, the Dogmatists and the Empirics, who long cursed the world with their contentions, and whose influence is

not yet extinct ; for, at this day, there are many physicians who follow wherever theory leads, regardless of facts and consequences, and another set of practitioners who are merely routine imitators, without either originality or rationality.

Another great name in the annals of medical philosophers is Pythagoras, who was, in the sixth century, the pioneer of a class of scholars who studied philosophically the structure, functions, and diseases of the human body. Pythagoras established a school at Crotona, to which students resorted from many parts of Greece and Italy. One of his followers, Herodicus, is considered to be the inventor of gymnastic exercises, which the Greeks justly regarded as an essential part of the healing art. Hippocrates was a pupil of Herodicus, and reflected great credit upon his preceptor. Hippocrates travelled much, and studied medicine with such untiring industry and skill that his works became text books for many ages, and even to this day his leading doctrines are extensively practised.

The leading principle of the teaching of Hippocrates has been called a rational empiricism : or a careful observation of facts and a practice based upon their legitimate consequences. His principal proposition was the existence of a controlling and sustaining principle of vitality for the whole body, and a special vital power in each organ. The doctrine of crises originated with Hippocrates. He noticed that fevers generally culminated or terminated at particular dates, which times he called "critical;" and he further observed that there is a tendency in all diseases to cure themselves by external eruption or local evacuation.

His practice was consistently based upon these observations ; modern physicians have, unfortunately for humanity, disregarded or forgotten these fundamental truths of the medical art, but happily they are now revived in the water treatment. His medicines were derived wholly from the vegetable kingdom ; the horrid metallic and spirituous compounds which have killed so many patients were then happily unknown. The following quotation shows a striking analogy between the leading idea of Hippocrates and the practice of Hydropathists:—

“The great principle which directed all his operations was the supposed operation of Nature, in superintending and regulating all the actions of the system. The chief business of the physician is to watch these operations ; to promote or suppress them according to circumstances, and perhaps, in some rare cases, to attempt to counteract them.” “The tendency of this mode of practice would be to produce extreme caution, or rather inertness on the part of the practitioner ; and we accordingly find that Hippocrates seldom attempted to cut short any morbid action, or to remove it by any decisive or vigorous treatment. Considering the state of knowledge on all subjects when he lived, it must be admitted that this plan of proceeding was much more salutary than the opposite extreme, and that it had likewise the good effect of enabling the practitioner to make himself better acquainted with the phenomena of the disease, and, by observing the unaided efforts of Nature, to form his inductions with more correctness, and to determine to what object he ought more particularly to direct his attention.”

Since the days of Hippocrates medical men have introduced chemicals into their preparations, and at the present

day mineral poisons are administered to an alarming extent, and they do considerably more harm than good ; in fact, if no medicines at all were used, and patients were left to themselves, surrounded with an abundance of fresh air, supplied with natural food, and with a qualified attendant to look well after the cleanliness of their bodies, there would be far less sickness and death in the land than at present. The fact is, there is a great deal too much conservatism and routine in the medical profession ; and their influence is so powerful that they have succeeded in getting laws passed for their especial protection, and to prevent other persons from administering to the relief of disease and pain amongst the community, even if they possess a better insight into the nature and treatment of disease than the diplomatised practitioner. Orthodox medical practitioners are licensed to practise by the State, and if they kill their patients no law can touch them ; but if an irregular practitioner should lose a patient by death, an inquest is held upon the body, and every power is brought to bear to inculcate the unfortunate man as having caused the death of his patient. Until the English people arouse themselves and shake off this medical tyranny, they cannot be said to enjoy freedom, and they will still be compelled to take nauseous and poisonous drugs instead of employing rational curative agencies. Not only is there this absurd and wicked monopoly in the treatment of disease, but laws have actually been passed making compulsory the impartation of disease, as in the case of the Vaccination Acts. Against such laws there is arising in this land a righteous rebellion, and conscientious parents prefer to suffer repeated fines and imprisonment rather than bow the knee to Baal, or cause

their dear children to pass through the fire to Moloch. The enactment of bad laws of this character is calculated to bring law into contempt, and therefore all good citizens should strive to purify the statute book from all unjust and oppressive enactments, especially those that tend to deteriorate the health of the community. We do not think the language of Professor Newman is too strong when he says, "The compulsory vaccination law is an usurpation of unjust power, as well as in itself a monument of drivelling stupidity."

The medical art has made such progress that the nostrums prescribed in former ages seem to us incredible. Imagination could hardly conceive of more disgusting and horrible concoctions than were formerly used as medicines. Amongst these were spiders, wood-lice, earth-worms, mummy powder, vipers infused in wine or pounded up in a confection, raspings of a dead man's skull, the moss growing on a dead man's skull, and other revolting substances. A medical book, published under the authority of the Royal College of Physicians, contained this extraordinary prescription:—"Essence of man.—Take the body of a young man newly killed (some say red-haired), cut it into quarters, and digest in spirits of turpentine in a sand bath for twenty-four hours." As an illustration of how these absurd medical traditions linger amongst ignorant people, it may be related that at a comparatively recent date a woman consulted a Gloucestershire doctor for jaundice, and told him that by the advice of her neighbours she had been taking a decoction of wood-lice for its cure. The doctor was not wiser than the woman, for there was in his shop a bottle labelled "Milleped. Prep.," which contained, accord-

ing to these abbreviations, a preparation of millepedes or wood-lice.

The vagaries of the medical profession are endless. There has of late been a

HYDROPHOBIA "SCARE,"

and many doctors seem to have gone crazy over Mons. Pasteur's supposed remedy for rabies, or the bite of a mad dog. So frightened have people become that if bitten by a healthy dog they fear an attack of hydrophobia, and surely enough their very fear sometimes produces the disease. The latest supposed antidote to this malady is the mongrel kind of vaccination practised by M. Pasteur. It is said that this eminent professor inoculates live rabbits and other animals with the virus from mad dogs, and then uses the marrow from the spine of these tortured creatures with which to inoculate persons bitten by rabid specimens of the canine race; and it has been seriously proposed that every man, woman, and child, should be vaccinated with this dog-virus as a preventive of hydrophobia. Can medical madness go further? Pasteur's plan for curing hydrophobia has an amusing likeness to the prescriptions for this disease in by-gone ages. Thus the fat of a seal, mixed with the marrow of a hyena, was recommended for both inward and outward application. Other remedies were hyena's liver, the liver of a young puppy, the dried liver of a boar, to be drunk in wine, the tail of a field mouse, burned and beaten into dust, but, to be efficacious, the tail must be cut off a live mouse. So Pasteur's experiments with dog poison are all performed upon living animals. Unicorn's horn was highly esteemed of old in the treatment of hydrophobia, but the difficulty was to get the genuine article, just as in the

present day the puzzle is to get "pure vaccine lymph." It will be seen that Pasteur's idea is like that of Jenner, who introduced vaccination, under the mistaken supposition that the infusion of one poison into the system would keep out another, which of course is altogether delusive and dangerous. Small-pox cannot be "stamped out," as the phrase is, by vaccination, it is more likely to be stamped in, seeing that the vaccine virus is only a modified form of small-pox matter. It is not surprising, therefore, that M. Pasteur has signally failed to cure the patients who have travelled long distances in many cases to receive his treatment. And it should be noted that he does not even profess to cure patients who are actually suffering from hydrophobia; so that his system is wholly conjectural and, in fact, downright quackery. Yet so great has been the commotion made about this new nostrum, in the hope of propping up the tottering fabric of vaccination, that deputations have been sent from other countries, and, alas! even by the English Government, to investigate and report upon the subject of Pasteurism. Fortunately public faith in it has been shaken by its admitted failure, because it is impossible to give a guarantee that those persons who are said to have been "cured" by his marvellous treatment would otherwise have died of canine madness. Just the same delusive claim is made for vaccination, which gets the credit for saving people from small-pox when they in all probability would not have had the disease if they had not been vaccinated. Again, it is claimed that vaccination mitigates the virulence of small-pox, and prevents "marking" or "pitting." When a patient is "marked" with small-pox it is the fault of the attendant doctor, for

nothing is easier than to temper the light so as to prevent disfigurement. It is always the faces of small-pox patients that are "marked" from being exposed to the light; the rest of the body, being covered, is not marked. The cause of small-pox is filth, and its cure must be sought in cleanliness. The town of Leicester is a remarkable proof of this truth. There are thousands of unvaccinated children in Leicester, the anti-vaccinators being in a considerable majority on the Board of Guardians, yet thanks to the absence of vaccination, and the strict enforcement of sanitary measures, there has been hardly a case, and no death from small-pox for several years. Keighley, Dewsbury, and other towns afford similar confirmation of the truth that the foundation of health is purity, and that implanting one disease to prevent another is a mere medical superstition. Macaulay, and other historians, relate the dreadful devastation made in the Middle Ages, in this country and on the Continent, by the plague and other scourges which have now happily disappeared, at least from our favoured land. Certain Continental cities are still visited periodically by the plague and the cholera, or rather these fatal epidemics are bred in their midst in consequence of the insanitary surroundings of the people, even the wells of water being poisoned by imperfect drainage. The comparative healthiness of the inhabitants of our "tight little island" is mainly owing to the improved habits of the people, including greater temperance in eating and drinking, better food, more vegetables and fruit, and less salt meat, healthier houses, and proper drainage, and a plentiful supply of pure water. I have no doubt that if these improvements go on, and the insane practice of vac-

cination be discontinued—as it certainly will be by the bulk of the people when it ceases to be “compulsory”—small-pox will in another generation be as unknown amongst us as the plague, the black death, the sweating sickness, leprosy, cholera, and other ravages by outraged Nature. It is to be hoped that the inoculation of human beings with poison from rabid animals will never be sanctioned by the Government of this country, nor any countenance given by the State to the promulgation of such a delusive and dangerous doctrine. I rather expect that at no distant day the legislative endowment of vaccination will be withdrawn, and then this pestilential empiricism will fall into the limbo of bygone medical abominations.

We could relate many instances of patients having died in consequence of the ignorance and inattention of their chartered medical attendants. Need we remind the reader that only a few years have passed since the barbarous practice of bleeding was universally followed by regular medical licentiates; and there can be no doubt that tens of thousands of patients were bled to death. There is not in the book of history a more humiliating and sickening page than that which records the nostrums and chicanery of the medical profession. Some of the foremost and most conscientious members of the faculty have not been sparing of their denunciations of endowed quackery. Sir John Forbes, late Court Physician to the Queen, says of drug medication, “In a considerable proportion of diseases, it would fare as well or better with patients if all remedies, especially drugs, were abandoned;” and he adds that “things have come to such a pass (in physic) that they must either mend or end.” Sir Astley Cooper declared that “The science of medicine

is founded on conjecture and improved by murder." Professor S. St. John, M.D., is of opinion that "all medicines are poisons." Doctors seem to have been killing their patients while experimenting to cure their diseases.

Now it is not the disease that we seek to cure, but the patient. Disease is simply Nature's attempt at a remedy ; something is wrong in the system, and Nature tries to expel it ; the foolish physician attempts to thwart Nature's efforts, but the wise physician aids her by using Nature's appliances. No wonder that quackery has abounded. We cannot blame sufferers for distrusting those who only torture them. Adam Smith was of opinion that "The great success of quacks in England has been altogether owing to the real quackery of the regular physicians." This is the reason why our chief hope of medical reform is from an educated people, and not from the medical profession itself. Professor Gregory, of Edinburgh, one of the greatest and most genial of men, told a class of his pupils that "Ninety-nine out of every hundred medical facts are medical lies ; and medical doctrines are for the most part stark, staring nonsense." Dr. Rainage, F.R.S., was of opinion that "The present system of medicine is a burning shame to its professors." The celebrated French Physiologist and Pathologist, Mons. Magendie, in addressing his class, said, "Gentlemen,—Medicine is a great humbug ! I know it is called science. Science, indeed ! it is nothing like science. Doctors are simply empirics when they are not charlatans." We could quote the opinions of other celebrated foreign and English practitioners to the same effect. What a fearful mortality this medical empiricism causes amongst children ! Dr. Reid has said that "more infants are destroyed every

day by the pestle and mortar (and the lancet of the vaccinator) than in ancient Bethlehem fell victims to the Herodian massacre." Dr. Abernethy, who was as clever in his treatment as he was rough in speech, said, sarcastically:—"There has been a great increase of medical men of late years, but, upon my life, diseases have increased in proportion." The more doctors and drugs, the more disease and death. The celebrated Dr. Baillie, who had a very large and fashionable practice, declared, after forty years' experience, "I have no faith in physic;" and on his death bed he exclaimed, "I wish I could be sure that I have not killed more than I have cured." We could fill hundreds of pages with lamentations and confessions about the failure of Old Physic. It is a far pleasanter pursuit to record the encomiums of the rational system of Hygiene.

Professor Carson says:—"Water is the best diaphoretic we have." Professor Clarke asserts that "Pure cold air is the best tonic the patient can take." Of course I need hardly say, in passing, that while water is the best curative agent it is also the natural drink of man. Next in power to water and air as means of cure must be placed abstinence. Over-feeding is the cause of nine-tenths of stomachic and liver complaints. As water cure is a stomachic, and invariably increases the appetite, a caution is needed lest the patient take more food than is necessary. Remember that every mouthful of food you eat beyond Nature's requirements is so much rubbish in the system, clogging the delicate machinery, and it has to be got rid of with a waste of energy. The principle of the water treatment is founded in Nature, and the very arguments used against it are those that tell most powerfully in its favour. An

anecdote will relate this. An incredulous doctor of the drugging tribe was ridiculing the water treatment, and asked triumphantly how it was possible that an external application could affect the bowels and cure pain within. A sensible old woman who was a listener replied, "Why, doctor, by the same reason that getting wet feet and clothes may give you the gripes within."

BODY AND BRAIN.

We have already alluded to the close connection that exists between body and brain. The action between the two is reciprocal, for the brain influences the body as much as the body influences the brain. To all appearance the brain feeds upon the body, and seems to make no return; but in reality the brain is the force which controls not only the mentality but the bodily movements. The effect of the mind upon the body is illustrated in the old saying, "Conceit can kill, and conceit can cure." There was once a practical joke perpetrated to prove this. A class of medical students agreed to meet a healthy acquaintance one after another and condole with him on his sickly appearance. To the first enquiry after his health he said, with a laugh, that he never was better. When the next person made the same inquiry, with many indications of concern, the reply was less confident; and as the third, fourth, fifth, and sixth students accosted him, telling him that he positively was looking very ill, and had better prepare himself for a severe illness, the man really began to feel alarmed, and becoming sick was taken to the hospital, where the students had hard work to convince him that he

had only been hoaxed. This man's bodily organism was acted upon solely through his mind. We have seen a lady vomit in the street entirely from emotion caused by a child being run over. Dr. Fayer, an English physician practising in India, relates a striking case of a native who was brought to him suffering, as it was supposed, from the bite of a poisonous snake. The man was completely prostrated with fear when taken to the hospital, and he became insensible and was thought to be dying; but when the snake was produced and it turned out to be quite harmless, the symptoms of poisoning disappeared, and the man left the hospital in a few hours perfectly well. Another instance of the action of the mind upon the body occurred in Cornwall. An old gentleman who was afflicted with gout had always to be wheeled to church. One Sunday there was an alarm that the Spaniards had landed, when the congregation hastily dispersed, and the gouty old gentleman astonished his friends, who had left him in the church, by taking to his heels, to all appearance perfectly cured of his complaint.

PHRENOLOGY EXPLAINS THESE APPARENT MYSTERIES, by showing that each organ of the body employed in its nourishment or action has, in the brain, an organ which presides over that particular function. Take an illustration. The organ of Alimentiveness controls the appetite, and is increased by indulgence and moderated by abstinence. Those who have Alimentiveness large, have the best appetites and most power of digestion. The dangers of dietary indulgence are manifold—the relish and enjoyment of food is lessened; a morbid action of the appetite is induced; the blood is corrupted, and that opens the door to every bodily ill that flesh is heir to. Many other exam-

ples might be given to show that body and brain are Siamese twins, inseparable in their actions, enjoyment, and suffering. There is another organ in the brain called Vitativeness, or love of life, and those patients in whom it is large we have observed recover most quickly, while those who possess the organ small have less hold on life, and are less likely to recover. The lesson we would draw from this is the importance of developing the entire being, so that body and brain may help each other in the battle of life and not fight against one another. No organ shows this connection more distinctly than Amativeness, possibly because in this age of fast and gross living no organ is so much abused. It is believed that the liver, heart, and lungs, &c., have their allotted portions of brain as sentinels, guides, and reservoirs of electrical action. If Phrenology be true, the same reasoning will apply to the animal creation. Exactly so, and various proofs might be adduced in proof of our position that brain and body are co-partners. There is a familiar illustration in the saying that "a cat has nine lives." Some animals have immense hold on life; others part with their vitality readily. As a general rule, the broad-headed animals which have a large base of brain are tenacious of life; while the narrow-headed animals with a smaller stock of vitality, become an easy prey to the first-named class. The lion, tiger, wolf, hyæna, cat, shark, &c., have broad heads; and the sheep, rabbit, pigeon, &c., have narrow heads. The shark tribe are made to kill, and the sheep tribe to be killed. Compare the conquering Roman head with the typical Christ-like head, the fighting man with the man of peace. We know plenty of Quakers with broad heads; but this only confirms our theory, for they are

truly fighting men, with this difference—that their combativeness is controlled by benevolence, and finds vent in combating moral evil and overcoming business obstacles. Thus,

ONE ORGAN OF THE BRAIN MODIFIES ANOTHER, and this is a further reason against one-sided education. Neglect an organic faculty and it will become inactive and die out. The Quakers' objection to music in the days of Penn and Fox became antipathy to the "concord of sweet sounds" in the next generation; and now when some Quaker boys and girls are set to learn music, they prove but dull scholars; the musical faculty will have to be re-created and it will take longer to accomplish this than it has taken to destroy it. It is easier to pull down than to build up. Parents, take warning from this; cultivate your children all round and all over, so that they may be able to enjoy life in its fulness, and in the same degree to benefit humanity.

When the laws of life and health are taught and universally practised, a bad-tempered, bigoted being will be a rare exception, and it will then be considered shameful if not criminal to be sick. What a bright and happy prospect—a real millenium is opened up in view of the possibilities of human improvement and advancement by attending strictly to the laws of Hygiene! Not that we advocate cramming children with knowledge; on the contrary, we consider Mrs. Wesley to have been a wise mother when she decided to develop the bodily and affectionate nature of her children until they were seven years old, believing that age to be early enough to begin cramming their minds with the perplexities of orthography. It is a great and growing evil in our schools, both public and private, that too much time

is spent on brain work, and too little in bodily exercise and recreation. The Romans appropriately named their schools "gymnasia," because muscular exercises formed their leading feature. Our schools and colleges will continue to be fundamentally defective until remodelled upon the basis of health as the foundation of mental culture.

THE DANGER OF OVER-WORKING THE BRAIN.

Then in adult life, so great is the strain of the mind, from competition, late hours, &c., that over-working of the brain is a fruitful cause of illness. Brain sweat is more exhausting than bodily sweat. We see the over-worked daily labourer live on to a good old age, but never the over-worked mental labourer. Excitement of all kinds is injurious to longevity, chiefly from the fact that it makes heavy demands upon the nervous power which is centred in or governed by the brain. We could name scores of sad instances within our own experience of men and women breaking down prematurely under the excessive drafts made upon the brain, through business worry, anxiety, excessive study, and sexual indulgence. Who has not noticed how sudden news either of joy or sorrow affects the appetite, the colour and the strength? Truly it is said in Sacred Writ that "Hope deferred maketh the heart sick;" and if the heart become sick if blessed Hope be gone past recovery, then the unfortunate one may indeed be pitied, for he endures hell upon earth.

THE IMPORTANCE OF RECREATION.

From these considerations it will be seen what an important bearing the question of recreation has upon the health of a community. The repeal of the Corn Laws may, as Mr. John Bright says, have made our industrial population many thousands of tons heavier; and the abrogation

of the embargo upon innocent recreation would make the hearts of the people a thousand times lighter. One way in which people may become happier is by having every child taught to sing. Only those who can sing know the joy and benefit to mind and body to be derived from this cheap, innocent, and healthy amusement which conduces to

PEACE OF MIND AND INCREASES HEALTH AND HAPPINESS.

Lastly, the action of the mind upon the health is seen in the consolation imparted by a clear conscience ; for this peace of mind and purity of heart, with love to God and all mankind, constitutes the crowning excellence of life. There can be no enjoyment in the highest sense where hatred, envy, malice, and all uncharitableness exist. These evil feelings really poison the blood, and make not only their unfortunate victim unhappy, but also those who should be near and dear to them. It is on record that sudden and violent anger in a mother has so poisoned her milk as to cause the death of her sucking babe. I need say little more to indicate the intimate connection that exists between body and brain. Health is a large ingredient in what the world calls "talent." A man without health may be a giant in intellect, but his achievements will be those of a dwarf. On the contrary, when a man has a good circulation, a well-balanced brain, excellent digestion, and bulky sinews, in short, "a sound mind in a sound body," he may set failure at defiance.

Every person should devote one or two hours' daily to physical exercise. Children especially ought to have several hours of physical recreation every day, if possible in the open air, and be permitted to associate with other children. Some foolish parents keep their children shut up in their own houses or premises and forbid intercourse with other

children for fear their own should become contaminated. This restrictive policy is both ridiculous and cruel, for unless children associate freely with juveniles of their own age they are apt to become too serious, thoughtful, mopish, coy, and anti-social. Even if the children of the neighbourhood are a little rough, association with them will do more good than harm by promoting health and happiness and developing the sweetest charms of child-life.

NATURE AND HUMANITY GOVERNED BY LAW.

How marvellous is the structure of the human body! The highest wisdom and genius are displayed in the formation of its various organs, and the greatest mind can conceive of nothing more perfect or better adapted to the purpose for which it was designed. Let us consider for a moment the wisdom and constructive skill displayed in the formation and arrangement of man's organs of digestion, circulation, respiration, and excretion. Each of these sets of organs is located in the right place, is made of the right kind of material, and is of the precise form and size best calculated to subserve the desired purpose. The digestive apparatus is a very important part of the human system, and forms a study of peculiar interest. The circulatory system is no less wonderful, while the respiratory and excretory organs, which serve the purpose of purification and renovation, fill with amazement the intelligent mind which contemplates them closely. No one can study the

anatomical structure and physiological functions of the human system in all its departments without being deeply impressed with the order and adaptation that reign throughout the whole; and no less deep must be the conviction that it is the work of some great, All-wise, and All-powerful Intelligence. Every part bears proof of design, and shows that it was formed for a particular use. Every part gives evidence of laws to govern its action, and the character of its organisation evidences that it was intended to be used in accordance with that design, and in consonance with those laws. The sentient world in common with the physical world is governed by law, the violation of which causes pain, and its obedience pleasure. Science has demonstrated the fact that the entire universe is regulated and maintained by an established system of laws; and man, the *acme* of creation, is generated and developed in accordance with law. Each organ of man's body, moreover, is subject to a special law. If a man violates natural law, whether it be enacted in Nature in the physical globe, in his own body, or in his spiritual being, he sins against his own soul, and damages himself whether he knows it or not. The more frequently a man violates the laws of his being the more sickly will he become, for sickness is invariably caused by the violation of law either by the sufferer or his progenitors. Many persons imagine that sickness is a special or providential visitation, and that it is God's way of chastening His creatures. There is partial truth only in such a supposition. If bodily suffering can be averted by obeying God's laws, then it is impious to charge such evil to His good providence. This ascribing of sickness and premature death to Providence has killed millions.

Health is either governed by law or it is not: if thus governed, it is cause and effect; therefore, health is both a duty to God and to ourselves.

The laws of health are comparatively few and simple, so that most persons are capable of understanding and practising them. These laws have been frequently and voluminously expounded, but, unfortunately, few writers have displayed them in a way to make them easily comprehended. The profession of medicine, or the healing art, on the other hand, has such numberless and complex rules and directions that they defy the profoundest talent and the study of the longest and most assiduous life to thoroughly comprehend them.

The object of this book is to sweep away all these man-made obstacles to the retention and recovery of health, and to exemplify that an All-wise Providence has endowed man with intellect and reason so that he may obey the laws of his being, and co-operate with his Creator in producing a healthy balance between body and brain, and thereby develop and perfect his nature. Just as the

PENALTY OF BROKEN LAW IS SUFFERING,
so the reward of obedience to Nature's laws is enjoyment, that is happiness, which is our being's end and aim. We have met with many well-meaning persons who believed or imagined that all their ailments were direct interpositions of Divine Providence. Here is an illustration. A local preacher, and class-leader, in the town of B., who was looked upon as being a model of Christian purity was invited to a banquet, and having large Alimentiveness he partook freely of alcoholic drinks, and on returning home at midnight he fell into a ditch, where he helplessly remained

for some time. When sobered he went home, and in ignorance of the laws of health kept on his wet clothes and dried himself before the hot kitchen fire. Next day he was rheumatic. The doctor was called, who administered medicines, but the patient got worse, and had a serious attack of rheumatic fever. His minister came to pray with him, and he talked about it having pleased God to afflict their brother. Now this man's affliction was no special act of God, but just the natural result of his own misconduct. Such piety is worthless and misleading. It reminds one of Tom Hood's saying that "some people think they are pious when they are bilious." Mankind, in consequence of their artificial and self-indulgent habits, are liable to a thousand-fold more ailments than the animal and vegetable kingdoms. If we went into a garden in spring-time or summer and saw a plant drooping, we should look for the cause, and try, by digging about it and watering it, to remove the cause of its decay; we should consider it very irrational to attribute the withering of the plant to some occult influence of the stars. Again, when an animal becomes sickly we look for the cause, and are not satisfied until we have found the reason of its derangement. Then why, when men are sickly, should they say that it is God's doing? We will give another illustration to show that sickness is brought on by our own fault. In the town of O, lived a blooming lady, who was so healthy and cheerful when she got married that she might be said to have taken a long lease of her life. A fortnight after her marriage a banquet was given in honour of her wedding, and she was of course present and arrayed in what is called "full dress," that is, with a low-breasted dress, bare

arms, thin shoes, and gauzy garments. After dancing for some time in the vitiated air of the heated room she went out into the open air for a few minutes to cool herself, although she was steaming with perspiration. The result was, her system became chilled, a cold and then fever ensued, and after four days irrational treatment by ignorant doctors, she died. Her friends in lamenting her loss used the usual cant phrases to the effect that it had pleased God to take away this fine young woman in the prime of life; that she was too good to live; and that God's ways are inscrutable. They attributed her death to Providence, but every person of discrimination will see that it was the direct result of her own misdoing. She had violated God's laws, that was the cause; and the effect was cold—fever—death. Similar ignorance of physiological laws may be observed when sickly people express their surprise that they do not get well quickly. They have probably been breaking the laws of health all their lifetime, and then, when Nature breaks down, they expect to mend in a moment what it has taken years to mar. I am often asked by patients, "How long shall I be in getting cured?" My answer is, "That will depend upon circumstances." Constitutions differ. Some people possess a wonderful power of recuperation, and will recover from an ordinary ailment in a day or two under judicious treatment; others of weak vitality, and with whom disease has made greater inroads, will need from one to six months' treatment; and in chronic cases, or tubercle of the lungs, a much larger period must elapse before the system can be renovated. Some patients are fidgety, fretful, and irritable, which failings have a deleterious effect upon the system, and greatly

retard recovery. Others are hopeful and cheerful, and place infinite confidence in the treatment employed for their restoration to health. This of itself lifts a heavy load from the heart, and causes the blood to circulate more freely through the system, thereby conducing to speedier recovery. Another class of patients refuse to regulate their diet according to hygienic requirements, and unless strong and indigestible food be given to them while under treatment, they procure these objectionable articles elsewhere, and thus retard their progress. Obedient patients who conform to necessary dietetic regulations find their progress towards a perfect cure rapidly promoted.

A SOUND CONSTITUTION THE BEST INHERITANCE.

The most precious inheritance is a sound constitution. No gifts of fortune will compensate for constitutional unsoundness. The best thing, therefore, that can happen to any person is to be born with a well-balanced nature, that is with brains and body healthy, and all the faculties working harmoniously. If a child inherits a weak, delicate organisation, it will inevitably be subject to ailments more or less throughout its lifetime. It is extremely difficult, if not impossible, to make a sickly, stunted shrub of humanity grow into a strong, stalwart, robust individual. When people are well begotten the current of their life glides along more smoothly than when, to use Shakespeare's phrase in the mouth of Richard the Third, they come into

this breathing world "scarce half made up." Storms of snow, and hail, and rain may beat upon those who inherit strong constitutions, but will not hurt them, because they have sufficient vitality and warmth within to ward off the cold and wet from without. Life is no battle to such persons, but it is beautiful and full of promise. If every human being were born aright there would be less sin and crime in the world, less clashing of interests, less envy, hatred, malice, backbiting, and slandering; less tearing down of other people's reputations, business, homes, and happiness, in order to build up one's own good fortune from the ruins. It is a lamentable fact that most minds are warped and crooked in some direction; they are born with the consequences of the sins of their forefathers, and disease, crime, and death find them an easy prey. The bodies and brains of too many people are sluggish by inheritance; they are clogged and crippled, and refuse to act; hence life is one long battle, and they have many temptations to withstand and many ailments to guard against. A remarkable and most impressive illustration of the law of transmitted tendencies to

CRIMINALITY AND PAUPERISM

was recently met with in a certain part of America where pauperism was found to be exceptionally prevalent. An investigation was instituted into the cause, and the discovery was made that amongst the paupers certain names recurred with surprising frequency. This led to an investigation of the genealogies of these families,—no easy matter, for the tendency of poverty and crime is to break up and disperse families, and from moral and physical causes of degeneration such lineage has

a tendency to die out. It happened, however, in a particular family that physical vigour preserved them, and its evil destiny was traced through six generations. Some seventy years ago a child of shame was left to the mercy of a rude world, and in course of time she became the mother of a long line of criminals and paupers, who have cursed the country ever since. Of the 900 descendants of this unhappy girl, who was begotten in shame and abandoned in childhood, a great number became idiots, drunkards, paupers, and outcasts; and no less than 200 of the more vigorous were criminals. Thus one neglected child cost the country thousands of pounds in the expense and care of criminals and paupers, besides the untold damage she inflicted, through her descendants, on property and public morals. It is the duty of the State to do all it possibly can to remove temptations to crime and bad living; but, alas! we know that thousands of drunkards and smokers are yearly made by the laws which afford inducements to the sale and use of those poisonous articles, alcohol and tobacco. There is also reason to believe that the State-endowed quackery of vaccination predisposes to disease every child whose blood is thus poisoned, or imparts criminal and lustful tendencies more or less strong. It is almost impossible to impress too strongly upon parents and teachers the truth that hereditary tendencies are all-powerful, and that there is little hope of training those aright who have a bias from their birth in the wrong direction.

CHEERFULNESS CONDUCTIVE TO HEALTH AND HAPPINESS.

What an infinity of misery would be prevented if parents faithfully observed Nature's laws ! Much may be done by careful nursing and training, but no after-skill or care can undo the evil of vicious generation. Mothers, have you ever thought what a blessed influence simple cheerfulness may have upon your offspring ? Cultivate cheerfulness, therefore, if only for your own sake, for, as the wise man says, " A merry heart doeth good like a medicine." We know how difficult it is to bear up under the depressing influences of frequent childbearing, and the thousand and one cares of home and family. Attention to a few sensible rules of diet, dress, ventilation, bathing, &c., will do much to banish gloom and brighten your existence. Not mothers alone, but every one would be the better for knowing what constitutes the secret of happiness. It is not gold, nor fame, nor power, nor fine clothes, nor luxurious food. Happiness is wholly internal ; it is a state of the mind, to which, of course, health of the body is largely conducive. Perhaps it may be truly said that health is the first condition of happiness, and health—which is very much under our own control—is mainly dependent upon temperance. If you would be happy cultivate a spirit of content, live temperately, keep out of debt, be active in mind and body with some congenial employment ; and, as Madame de Stael said, " you will be happy provided that you feel you are making progress towards some object worthy of attainment."

CAUSES OF DISEASE.

The philosophy of disease is as little understood as the philosophy of health. We have said that the primary cause of disease is an hereditary lack of vitality of a perverted nature. Next to hereditary taints come the hardly less deadly evils entailed on humanity by ignorance and vicious conduct. Impure air is certain to produce disease, so will dirty habits, bad food, and everything which destroys the nervous energy. Every vice is the parent of disease, and their name is legion. Over-eating and drinking, and the abuse of Amativeness, are three of the principal causes of disease, and they are all remedial. Of the latter fearful vice we have treated in our work entitled "Vital Force," the perusal of which we recommend to every parent and all persons who have come to years of discretion. The loss of nervous force from sexual indulgence leads to a craving for stimulating foods and drinks, and these in turn provoke the generative organs, and so the round of mischief is complete. Other causes of disease are unsuitable dress, stooping habits of body, want of out-door exercise, poisonous drugs, &c.

In studying to discover the causes of disease too little attention has been paid by medical men to the influence of the nervous system. It is true that the blood is the life, and most diseases spring from the blood; but the secret and invisible influence which predisposes to disease resides in the electricity of the nerves. Electricity is the starting point, and from thence the malign influence is communicated to the blood, from the blood to the flesh, and lastly to the bones, and when disease gets to the bones, it may be

said in common phrase to be "all up" with the man. Disease begins in the finest, and ends in the grossest particles of the system. In considering the philosophy of disease, therefore, we shall find that here, as in other departments of knowledge, the unseen and invisible power is more potent than that which is tangible to the senses. It has been already remarked that the brain is the fountain of the nervous system, and from the brain millions of invisible messengers go forth to all parts of the body on their electrical business. The nervous system is based on, toned by, and invigorated with the electrical influence which pervades all nature, and which is believed to be the very life and motive power of the universe. When a man's nerves are unstrung he is not fit for much. And how does he recover nervous energy? By rest, then by exercise, especially in the open air, by friction upon the body, and other ways of imparting tone, life, vitality,—in short, nervous electricity. Not only is disease caused by a failure of electrical power, but also when the electricity of the system is thrown out of balance. There must be harmony or there cannot be health.

PLANETARY DISEASES.

By this term is not meant diseases of the planets, for we don't think the planets are ever sick, though their volcanoes, if they have any, may vomit, but we mean diseases supposed to be produced or influenced by the planetary orbs. Astrological pathology is probably as old as the world. Men have always had some belief in planetary influences. The pyramids of Egypt are said to have

been built in exact accordance with solar and stellar laws. We read in Holy Writ that "the stars in their courses fought against Sisera." If the stars fight against some men they may favour others. When the terrible plague decimated the people of Europe and Asia in the Middle Ages, it was attributed either to a visitation of the Almighty or to planetary influence, perhaps the appearance of a comet. The French Academy of Medicine, which was regarded as the most learned body of men in the world, when called upon to explain the cause of epidemics, propounded a theory of planetary ethology, in other words, that these dreadful diseases were owing to the peculiar position of the sun, moon, Jupiter, Saturn, and all the other then known planets. Probably could they have foreseen the discovery of more planets and planetoids, they would have been able to account for the multiplication of diseases in modern times. These wise medical men said there was something extraordinary in the conjunction and perihelion of the heavenly bodies which produced devilish diseases. On this baseless foundation they elaborated the so-called mysterious science of medical astrology, the absurd details of which will be found in "Hecker's Epidemics of the Middle Ages." When the plague subsided this medical planetary epidemic disappeared also; but it has of late been revived, after having slumbered 300 years, and certain would-be medical philosophers have published their reasons for believing that epidemic diseases are owing to planetary influences. If they are right then hygiests are wrong. It is possible that changes in the condition and relative position of the planetary bodies may influence the wind, rain, heat, and cold on the earth, but any other

planetary influence must be secondary through the operation of terrestrial laws. Variable weather affects human beings whose spirits rise and fall more or less, with the barometer. Some persons can foretell rain and changes in the weather from their rheumatic and other pains. The causes of epidemics are bad personal habits and insanitary surroundings, and the remedy must be sought, not in the stars and planets, but in temperance, mental and moral purification, and physical invigoration. As Shakespeare says ;—"It is not in our stars but in ourselves that we are underlings."

ATMOSPHERIC INFLUENCES.

Sudden atmospheric changes, as from heat to cold, and *vice versa*, predispose sensitive persons to disease. There is an old adage which says, "When the wind is in the east, 'tis neither good for man nor beast." This arises chiefly from the fact that the east wind has a tendency to dry up the moisture of the body and prevent the humours from passing out of the system so freely as would accord with the requirements of health. This explains why, when the wind is in the east, many people are subject to bronchitis, coughs, colds, and kindred disorders, which are usually preceded by a chilly sensation, first down the spine and then all over the body. These chills debilitate the system by checking perspiration and closing the excretory functions, thus causing the humours to accumulate in the blood and fly to the weakest parts of the body. When the lungs are weak bronchitis will be the result. It is said by some

writers that this unpleasant disorder is induced to a great extent by indigestion, which is partially true ; yet the fact is undeniable that bronchitis is most prevalent when the wind is in the east ; so also are catarrh, chilly extremities, asthma, &c. Some people are so sensitive to the effects of the east wind that they are compelled to change their place of abode during the time of year when these searching winds prevail. This is the chief reason why wealthy families migrate to Italy or the South of France in winter and early spring. Those whose circumstances do not permit of their going to the Continent of Europe betake themselves to Torquay and other places in the South of England which are well sheltered from the bleak east wind. Sensitive poor people who cannot leave home suffer immensely at these periods, and life to them is scarcely endurable. On the other hand, those who possess very robust constitutions can withstand the east wind, and even feel inspirited by it, as Charles Kingsley seems to have been when he wrote his celebrated "Ode to the East Wind." Those who are injuriously affected by easterly winds should smear over the body a little olive oil or glycerine and rub it well into the skin. This will lubricate the outer covering of our bodies and help to neutralise the drying and other effects of these distressing winds upon the system. Foggy weather has a tendency to depress the spirits ; windy and stormy weather affects corns and causes the joints to indicate the presence of rheumatism to those whose bodies are subject to it ; whilst clear, bright, and sunny weather seems to impart new life and vigour to every organ of the body ; hence it is the duty of every health reformer to teach people how they may best counteract the

deleterious effects produced upon their health by atmospheric and other conditions.

It is said that the germs of disease—and more especially of *cholera* and kindred disorders—are conveyed in the atmosphere. This may be true, but it does not alter the fact that those who live a truly hygienic life are very seldom affected thereby. The treatment recommended in these pages is specially adapted for counteracting any evil effects which may arise therefrom.

UNHEALTHY OCCUPATIONS

are a fertile source of disease, and persons employed in them seldom endure with impunity many years' exposure to their malign influence. A man's occupation or mode of life cannot but have a material effect upon his bodily health. Parents would do well to bear this fact in mind when selecting employments for their children. Health ought to be the first consideration, and the amount of wages secondary. Employments may be unhealthy from various causes, such as the inhalation of dust, working in dark and ill-ventilated rooms, monotony of employment and hopelessness of improvement. In many trades morbid matters are introduced into the system. Millers, stonecutters, needle polishers, knife grinders, workers in cotton mills, mattress makers, bakers, &c., are subject to affections of the heart and lungs from this cause. Painters, gilders, workers in lead, arsenic, mercury, and other poisonous minerals sustain more or less injury from the nature of their avocations. The makers of certain drugs used as medicines find their absorp-

tion very hurtful ; so do snuff and cigar makers. The mixing and using of paints produce " Painter's colic." This and other complaints may be mitigated by washing out the stomach once or twice weekly on returning from work, and partaking of a very light meal. Stomach washing certainly takes away some of the gastric juice, and therefore several hours will be required to produce a sufficient supply to digest a hearty meal.

Lecturing, preaching, addressing public meetings in overheated and badly ventilated, or cold and draughty rooms are so injurious that few public speakers can long withstand the strain upon their system produced by these unhealthy influences. The lecturer on Phrenology is exposed to more than ordinary danger to health, because in addition to nightly lectures to crowded audiences, he is confined by day to a small and inconvenient ante-room, examining heads and giving advice on health at the risk of his own. These causes predispose to bronchitis and kindred affections. It is to be regretted that the architects of our public halls do not make ample provision in the way of healthy and convenient ante-rooms, well lighted and free from draughts, with perfect ventilation and acoustic properties in large assembly rooms. Some of our theatres are a disgrace to the country and to their lessees from their general unhealthiness and the miserable provision in the dressing rooms, &c., for the actors and actresses.

Amongst the healthiest occupations are those of farming and gardening. Those who till the soil follow one of the oldest employments and the one most conducive to long life, provided that the indoor habits and surroundings were improved, for, unfortunately, the sanitary provision, sleeping

accommodation, &c., in the houses of small farmers and agricultural labourers, as well as their dietetic habits need a thorough reformation.

Fishermen, sailors, soldiers, blacksmiths, cattle dealers, carpenters, &c., ought to be healthy men, and when they are not so the cause is owing more to ignorance and bad personal habits than to anything injurious in their occupation. The most unhealthy trades are those that generate dust, consequently phthisis, or tubercular consumption of the lungs is prevalent amongst artizans who are employed in dusty occupations. From a series of observations made on the relative healthiness of trades, it appears that cases of this disease ranged from 80 per cent. amongst flint makers, to 69 amongst needle polishers and file cutters, to 35 in type foundries, 40 per cent. amongst stone cutters, 36 with cigar makers, and only 17 per cent. amongst ordinary labourers.

INACTIVITY, A CAUSE OF DISEASE.

Inactivity is another common cause of low vitality and disease. Indolent persons have sluggish blood; their vital fluid does not pass through the lungs with sufficient force and frequency to generate warmth and nervous energy; hence they become dull, torpid, languid, morose, melancholy; in short, bad-tempered and selfish, a trouble to themselves and to all around them. This stagnant state of the blood is the cause of cold feet, and that chilliness of the system which makes invalids creep close to the fire, and shut out every breath of fresh air. The result is only to make bad worse. No sickly person will ever get well by

coddling. If an invalid has not sufficient strength to take open-air exercise, let him exercise gently in-doors with the windows open, for a few minutes at a time. Persons who are too feeble to go out should have the windows and doors thrown open for a few minutes, wrapping themselves in blankets or other warm clothing, during which time they should breathe copiously and deeply, filling the lungs full at each inspiration and emptying them well out at every expiration, so as to move the abdomen freely while breathing; this will have a tendency to warm them and to throw off through the pores of the skin that which is wasted in the body. People die because they are short of breath, that is to say, they do not inhale sufficient oxygen to burn up the carbon of the system, consequently the fire of life goes out. If you exclude oxygen from a fire in your grate, the fire will go out; so it is with the fire of life; hence deep and copious breathing through the nostrils is essential to revitalise the blood and to warm up the system. Frequent ablutions and out-door exercise are also highly beneficial. Strong persons should engage in vigorous exercise daily for several hours, such as walking, running, rowing, singing, digging, &c. Take pattern from Mr. Gladstone, than whom no man works harder with body and brain. Picture the great statesman with his coat off, felling a tree. Probably it is a decayed one, or it obstructs the view and the sunshine, and must come down; still it is a tough job, but blow after blow falls on the big trunk, until the tree begins to quiver, and presently falls; and the man who has wielded the axe feels all aglow, recreated, pounds of effete matter thrown off, and hundreds of pounds of energy stored up in the revitalised blood. That is the way to enjoy life. Inertia

is the bane of life, and activity the antidote to a thousand ailments. Just reflect for a moment that there are from 14 to 28 lbs. of blood in the body of a man, and this blood should pass through the lungs every $3\frac{1}{2}$ minutes, in order to become revitalised by the oxygen of the atmosphere, and thereby impart warmth and energy to the system. Slothful and inactive persons do not pass their blood so frequently through the lungs, consequently it becomes stagnant and diseased. Some ladies give themselves up to inertia and sit poring over their troubles, real or imaginary, until the venous blood accumulates in their legs; and because they do not take sufficient exercise to assist Nature in forcing the blood freely through the system, it remains stagnant, and produces ulcerated and bad legs; or the stagnant blood may accumulate in another part of the body, producing abscesses, ulcers, and kindred disorders. The law that healthy life cannot be enjoyed without activity pervades both animate and inanimate Nature, and it is impossible for it to be violated with impunity; thus if you take two bars of polished steel and allow one to lie idle, but place the other in a machine, which do you think would last the longer? Probably you will say that the bar which was being worked would wear out first. No, the bar that is resting will soonest disappear, through the influence of rust; while the bar that is in use will be well oiled, and, being kept bright with friction, there will be no sensible decay. Rust consumes faster than labour wears.

QUACKERY.

What is quackery? The dictionary definition of a quack is—"A man who pretends to medical knowledge which he does not possess." This is our charge against those so called "regular practioners" who, notwithstanding they possess college diplomas, resort to practices which prove that they pretend to have a knowledge of the art of curing and preventing disease which they do not possess. Each school of medical men thinks the members of all rival schools to be quacks. It reminds one of the clergyman's definition of orthodoxy in religion—"Orthodoxy is my doxy, and heterodoxy is other men's doxy." Charles Dickens when writing on this subject of quackery said, "We define a quack to be a man who trades upon the false pretence that he can benefit the health of the community. Such a man may be justified by all the colleges on earth in ordering us every day of our lives the blister repeated, a draught every four hours, and the pills to be taken at bedtime. For his blisters, his draughts, and his pills, if they sap the foundation of life—as in the hands of many a practioner they do—we denounce him as a quack."

The honest and intelligent hygienic practitioner, uses no vile drugs and compounds that would injure the system, but he employs nature's mild and effectual remedial agents and hereby assists Nature to expel the impurities and to bring about a healthy condition of body, without weakening or injuring any part thereof, thus proving that his teachings are in accordance with Nature's laws, and hence opposed to quackery in all its phases.

THE TRICKERY OF QUACKERY.

When we observe the many methods by which people are willingly gulled out of their money and health by quacks, it reminds us of the satirical saying of Hudibras, that, "the pleasure is as great of being cheated as to cheat." There would be no quacks if there were no gudgeons. Quacks, like the proprietors of gambling dens, lead their victims on step by step until both their health and money disappear. The quack trade will flourish so long as foolish people put faith in nostrums instead of obeying the laws of health. Practitioners who promise sudden cures are not to be relied on. The healing process must be slow to be sure and lasting. If sick persons were wise they would have nothing to do with those who advertise pills and potions. We know several cases of poor sufferers who have been swindled out of many pounds of hard earned money for dangerous quack medicines and "advice" which were worthless. The real remedy for these evils is to instruct the people in the principles of the healing art and hygiene so that they may practice temperance in all things to keep in health, and resort only to Nature's remedies for recovery when they are sick.

THE HOT WATER CURE.

Of late years public attention has been drawn to the marvellous curative power of warm and hot water. For many years we have advised warm or hot water drinking for coughs, indigestion, and kindred disorders. Many serious cases of constipation have been cured by simply

drinking a tumbler or two of warm water on rising. Bilious headaches have also been relieved by sipping hot water. The great statesman Burke, whenever he found himself indisposed, ordered a kettle of water to be kept boiling, of which he drank large quantities, sometimes four or five quarts in a morning, without any mixture or infusion, and as hot as he could bear. A pint of water was put into a basin and he drank it with a spoon, after the manner of taking soup. When the first pint was finished a second pint of hot water was put into the basin, and imbibed in the same way. This was repeated until he had taken the quantity desired. Warm water, he said, would relax and nauseate, whilst hot water was the finest stimulant and the most powerful restorative in the world. He considered it to be a sovereign remedy for bodily complaints, and not only took it himself but prescribed it to every ailing person who came in his way. Hot water drinking is very beneficial in nearly every case of disease, and it cannot be too highly recommended. Those who would avoid being sickly should partake of a glass every morning, and those who are ill may take it in rather large quantities until their ailments are relieved or disappear. The physiological and curative action of hot water may be thus explained. The stomach and other viscera have, by means of internal nerves, connection with all other parts of the body. Effects produced upon the nerves of the viscera will ameliorate pains caused by disorders in every part where there are nerves, in other words, throughout the entire body, from the head to the heels. It is well known that pure water is a powerful diluent. It readily dissolves sugar, salt, &c., and when heated the diluent power of water is greatly increased, for

it will then dilute acids, alkalies, &c., while it is free from any irritating property. There is no other liquid to which living organisms take so kindly, or the excess of which can be disposed of so readily and harmlessly. Liebig says that a person may drink 20 pints of water with impunity, allowing an interval of 20 minutes between each pint, and at the end the secretion from the kidneys will be almost pure water, indicating that there is little or no impurity left in the blood that the kidneys could eliminate. Of course we do not recommend excessive drinking of water, either hot or cold, and only mention this to show how safe a drink water is, provided too much be not sent into the stomach at one time. Should vomiting occur, the draught should be repeated until the stomach is cleansed. In sea-sickness the retching will be relieved by drinking hot water.

SLEEP.

As most persons spend about one-third of their lives in sleep, it is of the utmost importance that the time should be passed under the best possible conditions for inducing health.

The need for sound sleep is as imperative as the necessity for food, indeed Nature's cry for sleep is often louder than her plea for nourishment. The best rest comes from sound sleep. Given two persons of the same age and equally good constitution, the one who sleeps the soundest will be the most moral, healthy, and efficient. Sleep has a wonderful effect in removing irritability of temper, peevishness, and uneasiness, and it is the surest restorative to an over-worked brain, a weary body, or a troubled mind.

Shakespeare sums up the recuperative power of sleep in one of his verse lines when he says that sleep "Knits up the ravelled sleeve of care." Sleep will often remove headache and relieve heart-ache ; it will bind up a broken spirit and bury sorrow in oblivion. There is hardly a nervous disorder that sleep will not lessen or remove.

Here we see the value of the beneficent provision of sleep, "tired nature's sweet restorer." During sleep Nature makes an effort to restore the balance and equilibrium of the body and the brain and she may be assisted or thwarted in these efforts by man's wisdom or ignorance. Sensitive persons are known to enjoy the soundest and most refreshing sleep when they lie parallel to the electrical currents of the earth, that is, with the head of the bed to the north. The windows of bedrooms should be kept slightly open at the top during the night. There is no fear of taking cold, especially if the bed is not in a direct current of air, nor is the night air injurious ; in towns night-air is purer than the air in the daytime. A fire in a bedroom will improve the ventilation, provided ingress is allowed to the outside air ; otherwise it will do more harm than good. We seldom get pure air to breathe in-doors. Air which has been breathed once is robbed of the best part of its oxygen, and in place thereof, a poisonous gas (carbonic acid), is generated. No room is fit to sleep in which has not a free current of air, because air once breathed is unfit to be breathed again until purified.

If two persons who sleep in one room will weigh themselves on retiring and again on rising, they will find their weight to be at least a pound less in the morning than at night ; and sometimes the loss of weight will amount to

two pounds ; averaging a pound of waste matter nightly exhaled from the lungs and through the pores of the skin, consisting of carbonic acid and decayed animal substance, which becomes diffused in the air and absorbed into the bed-clothes. When this acid is again breathed into the lungs it literally poisons the blood and causes a lassitude and inertia to pervade the body. This shows the importance

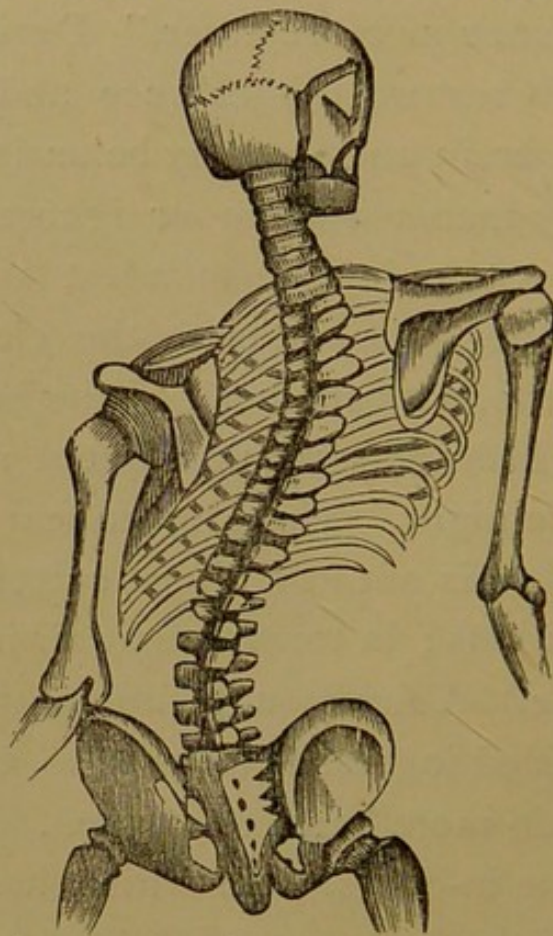


Fig. 2.—Curvature of the Spine, caused by lying in a bad position in bed, and other unhealthy postures in sitting, reading, &c.

of having bedrooms thoroughly ventilated by night and day, and the sheets, blankets, and mattresses exposed for several hours to the purifying influence of the sunshine and pure air.

Those who wish to enjoy refreshing sleep should avoid taking suppers. Three meals a day are better than four, and two are better than three, especially for dyspeptics and those who take but little physical exercise.

Place the body in a straight position in bed, so as to avoid curvature of the spine, as seen in cut, Fig. 2 ; and, unless you want to poison your blood, do not put your head under the blankets.* The fewer hangings round the bed the better, because they obstruct the free circulation of the air, and harbour dust. A brisk walk before retiring to bed is an excellent sedative.

Thousands of brain workers die for want of sleep. Nothing sooner brings on madness than want of sleep. We have already hinted that sleep repairs the waste which the working hours have caused, and rebuilds the body. The man who sleeps little will wear out quickly. The poet Shelley, speaks of "Death and his brother Sleep;" but sleep is not like death, or only so in outward semblance. Waking exhausts the body, sleep repairs it. Men need on an average eight hours sleep in twenty-four. Women and children require a little more,—ten hours. A man of Lymphatic Temperament will need more sleep than a man of Nervous Temperament, because the latter has a greater power of recuperation. A nervous man acts quickly in everything ; he works and wears out fast, and he gets repaired fast. It is no economy to rob yourself of sleep ; yet an unnecessary amount of sleep is injurious. Day labourers and those who do not exercise their brains much can do with six to eight hours sleep.

SLEEPLESSNESS.

In proportion to the blessing of sleep, so is the bane of sleeplessness or "Insomnia." The victims of this distressing and exhausting affliction are sometimes tempted

to try doubtful and dangerous methods of obtaining sleep, such as the use of laudanum, chlorodyne, and other narcotics and opiates. The cure of sleeplessness must be sought in hygienic treatment. There should be sufficient vigorous out-door exercise to produce in the body that degree of weariness which makes rest a welcome pleasure. It is possible to overdo exertion, and then the body and mind are too exhausted for repose. The bed must be clean and moderately springy, the room well aired, but not too warm; and there should of course be a mind at ease and a clear conscience. The wet compress around the body has a soothing effect, and a hot and cold foot-bath before retiring conduces to an equable circulation, and attracts the blood from the head to the extremities, to the relief of congestive feelings in the head, which are often the cause of sleeplessness. Never retire to bed with cold feet, and in winter draw on an extra pair of socks if necessary.

Many curious methods have been employed to induce sleep. Some of these deserve mention as they may be found helpful to the sleepless. Macnish coaxed himself to sleep by repeating some well-known rhyme until the monotony produced the desired unconsciousness. Combing and brushing the hair has the desired soporific effect with some persons. Dr. Elliotson records the case of a lady who was sent to sleep by her husband rubbing the soles of her feet. John Philips the poet had a similar experience. Some people produce sleep by closing their lips when they lie down and by drawing the breath hard enough through the nostrils to produce an audible sound, and by listening to this sound the mind is withdrawn from distracting thoughts and refreshing sleep produced. One who is very active in

mind and body assures us that the habit of going to sleep almost instantly has in his case been acquired by fixing his mind on vacancy, or, as it were, looking steadily upwards into the profound depths of space.

SLEEPING TOGETHER.

It is not healthy to sleep with a diseased person, both on account of the bad emanations from the body, and because the restlessness of a sick person is apt to disturb the rest of a bedfellow. Consumption has been known to be communicated by sleeping with a consumptive person. Two healthy persons may sleep together without injury when they are of nearly equal age, but it is not well for young and old to sleep together. Married couples, between whom there is a natural affinity, and when one sex is of a positive and the other of a negative nature, will be benefited by the magnetism reciprocally imparted; but, unhappily, such cases of connubial compatibility are not common.

EARLY RISING.

Conflicting opinions prevail respecting the merits of Early Rising. The old saying runs—"Early to bed and early to rise, makes a man healthy, wealthy, and wise." But the hour for retiring to sleep must necessarily be regulated by the nature of the employment and the hours in which it has to be performed. Farmers, gardeners, and labourers who can only work by daylight will do well to

retire and rise early. It is wrong to awaken children suddenly in the morning, or until they have slept as long as Nature requires. Awakening should be natural, not sudden and startling. At the same time, when thoroughly awake, and the time has arrived for getting up, it is best not to lie thinking about it but turn out promptly. Whatever hour a man goes to bed should regulate the time when he gets up. So long as perfect regularity is observed, the hour at which he retires to rest is of secondary importance, provided sufficient sleep be taken to rest and recruit one's energies.

COLD FEET.

One of the commonest causes of sleeplessness is cold feet. When the feet are cold the head is usually too hot, and if we would be healthy we must keep the feet warm and the head cool. Cold feet are the bane of many women, rendering them miserable when awake and sleepless during the night. The application of hot water bottles is but partially effective. Tight boots prevent the free flow of arterial blood through the feet and conduce to chilliness in those parts. One of the best antidotes to cold feet is vigorous outdoor exercise. When sufficient exercise cannot be taken to produce warmth, the feet may be placed in water, as hot as can be borne, for ten minutes, then taken out and immersed in cold water for about five seconds, wiped dry and rubbed with the bare hands until quite warm and dry. On retiring to bed put on a pair of cotton socks wrung out of cold or tepid water and draw over them a pair of dry thick lambswool stockings, and even a second dry pair

may be donned if one is not sufficient, and keep them on all night. Wash the feet in cold water on rising, and rub them briskly with the bare hands. If the hands are also cold, or the skin very dry and inelastic, a pair of cotton gloves may be wrung out of cold water, over which dry woollen gloves may be drawn and kept on all night, and bathe the hands freely in cold water on their removal in the morning. If the feet and hands become very cold after the morning bath, a little vaseline or glycerine may be smeared over them and rubbed well in. This will have a tendency to ward off cold and prevent chills in these parts.

PRODUCE WARMTH BY EXERCISE.

If you are cold, warm the blood by physical exercise, work the arms in various directions, and draw the legs up and down for five or ten minutes. This will ward off many an attack of the "blues." That exercise is best which makes you breathe deeply and copiously. People who are only "half alive" take only half breaths; they only breathe with the upper part of the lungs, while the lower part lies exposed to the ill fumes that arise from the stomach. When such take a long breath in bad air it is a source of irritation, causing them to cough, and this further inflames the lungs, leading most certainly, if continued, to ulceration and consumption. All consumptive people should habituate themselves to breathe copiously, and should exercise freely with the dumb bells, the chest expander, and other gymnastic apparatus. Let Nature guide you in the matter of exercise. Look at the little children who are at play nearly

all the day in the open air of the country. They would seldom ail anything were it not for the want of baths, fresh air at night, or from the poisoned lancet of the vaccinator. Those children are invariably weakly and sickly who are kept closed up within doors, smothered with an overabundance of clothing, fed upon dainties, and not allowed to exercise in the open air. Such children grow up delicate, like hothouse plants, and they are often precocious and always short-lived. Some mothers give cordials and soothing draughts to their children while teething. These compounds are very injurious to the constitution of children. See, again, the lambs sporting in the fields in spring-time. What ails them? Nothing; they are healthy, and therefore happy.

HOW ATHLETES ARE TRAINED.

Trainers of athletes make a study of the laws of health, and the best modes of getting their men into a condition of physical perfection. Boxing tries a man more than any other kind of exercise. It calls into play every muscle of the body, and there are more than 500 of them. There is not only hard work in boxing but hard blows. The trainer of a prize fighter insists on a certain dietary and a regular course of exercise, and when his instructions are observed they never fail to put his man into good "condition." The food is plain, beef or mutton without fat or seasoning; stale bread, or dry toast, and weak tea without sugar. He makes him get up early in the morning and go to bed early at night, and take plenty of exercise. Only nature's medicines are used. If the man in training has a weak place

in his body the trainer sets to work to strengthen it. He tries his man as a tuner does a piano and brings every note into perfect tune. If he has not flesh enough he puts more on him ; if he has too much he takes some off ; and he can, from experience, do this with the utmost accuracy, so as to bring forth his man on the appointed day weighing exactly the specified number of pounds. Now, what will put the prize fighter into first-rate condition will do the same for everybody, and the course of training may be summarised in the words "avoid that which is evil, cleave to that which is good." Many people seem to think that fats, gravies, and rich food are essential to health and strength. There cannot be a greater mistake. If such things were health giving, surely they would be allowed to those who are being trained for rowing, running, and boxing ; but the trainers of such persons will not permit these objectionable things, knowing that those who take them become bloated, get short of breath, and are incapable of enduring great exertion. Dogs that are being trained for coursing and hunting are not allowed to eat fat meat ; they are fed upon the lean ends of legs of mutton, and every particle of fat is denied them. There is sufficient carbon and oily matter in natural food to support human life. Those who take greasy substances are made bilious, and from becoming filled with humours they are depressed in feeling, and have a crop of morbid growths in their system in the form of oil sacks, commonly called grubs or pimples. Those who feed upon hog's flesh are heavy, sluggish, hoggish, sleepy, and gross, and are liable to scrofulous affections. This mode of dietary may be modified to suit all classes and all ages. It costs little and is worth much.

FAT PEOPLE.

It is a remarkable fact that the majority of people wish to gain in weight and flesh, and many consider that their health depends upon their increasing in bulk, just as though human beings were like cattle, valuable in proportion to their heaviness. Horses and cattle intended for hard work are not allowed to get fat. Men of endurance and force, who accomplish hard tasks in the study, the laboratory, the field, and the counting-house, are generally wiry and hardy, with little or no superfluous fat. As a rule thin people work the hardest and live the longest. In truth, fat is a disease, consequently fat people are seldom really healthy, and are never suited for laborious and continuous work. Still there is a happy medium between leanness and corpulence. Beauty of appearance is undoubtedly enhanced when there is sufficient fulness of flesh to cover all angularities. To "get thyself in flesh," as Romeo advised the poor apothecary, you must work moderately, eat slowly, sleep soundly, avoid worry, and look on the sunny side of life. That obesity or over fatness can be reduced is proved by the case of the "Claimant." Sir Roger Tichborne weighed 26 stones before his imprisonment; at the end of his term he weighed a little over 16 stones, and had improved in health and appearance. Prison life, though unpleasant, has its advantages, inasmuch as it is conducive to health and longevity, which is owing to the fact that the life of prisoners is judiciously regulated in regard to diet and exercise. A prisoner gets wholesome food and not too much of it, so that he cannot get over fat, and he eats nothing between meals.

Prisons are warmed and ventilated on scientific principles and kept scrupulously clean. If people who enjoy their liberty would live more like prisoners in this respect there would be less need of prisons. It may be interesting for all persons, whether suffering in health or otherwise, to know as near as possible what the normal weight should be when considered in the light of nature. Of course the weight of different persons will vary with their stature. A well-formed, healthy man, whose height is 5 ft. 6 in., should weigh 145 lbs.; a man of 5 ft. 10 in. should weigh 169 lbs.; and the normal weight of a man 6 ft. tall, is 178 lbs. Anything over and above these weights is not a sign of health nor conducive to longevity. A man attains his normal growth by the time he is twenty-five years of age, and if he is in a healthy condition, he is then as heavy as he ought to be in any period of his existence. Every pound gained after this age is composed chiefly of fat, or an extra burden to be carried through all the labours of life. The heart has more difficulty in circulating the blood, respiration becomes more thick and difficult, and the whole system is handicapped by a weight which makes active movement difficult. The heart jumps and throbs as though it would burst whenever any rapid uphill or upstairs movements are attempted, and very few fat people live to a ripe old age. Those who would avoid the pains and penalties of becoming too fat should avoid drinking alcoholic drinks, eat no fats or greasy food, partake of very little sugar, or anything that is very sweet. The majority of fat people say that they would gather flesh even if they lived on nothing but bread and water, but experience teaches that when a horse is too fat, less food and more work soon

reduces his flesh. This implies that every fat person who would reduce his weight should eat and sleep less, work harder, and guard against such articles of food as have a tendency to fatten him. ———

CONDITIONS OF GOOD HEALTH.

There can be no health without activity, temperance, cleanliness, and contentment. No faculty can be enjoyed unless it be used, and it cannot be efficiently used unless it be healthy. Every healthy man is a busy man. Steady strength or energy is a sure sign of health; spasmodic energy is a symptom of disease. Throw physic to the dogs and care to the winds. There is philosophy as well as poetry and music in that capital song "Life is a River."

O life is a river, and man is the boat
That over the surface is destined to float;
And joy is a cargo so easily stored,
That he is a fool who takes sorrow on board.

There's plenty of sunshine, then why choose the shade?
Half the clouds that come o'er us our own fears have made.
Then sail right ahead into health's smiling bay;
Nor run from your course to meet sorrow half-way.

I ask not for gold. Are there virtues in wealth
So dear to the heart as contentment and health?
O give me but these, nought can add to my store;
Without them, though riches are mine, I am poor.

In order to be healthy and happy we must not despise the little things of life. Life is made up of moments, and health and happiness are built up from atoms. Every moment, when awake, we must either be doing something to create health, or avoiding something which would cause disease. Just as pence make pounds, and grains of sand lofty mountains, and drops of water the unbounded ocean,

so a little neglect may breed great mischief, little pains make serious illness, and momentary faults life-long miseries. A strong restraining power is necessary to get through life pleasantly, with freedom from carking care and a broken-down constitution. Health is in the first place a gift of Nature, and it cannot be too highly prized, both for its own sake and because it is the foundation of wealth and happiness. By wealth, we do not mean merely gold, houses, and land. There is a wealth of appreciation as well as of possession. You view with rapture the beautiful landscape, and for the time being it is yours; nor is your enjoyment marred with the anxious thoughts which often trouble the owner of the estate. You cannot enjoy that which causes you care. Nature's gifts of air and sunshine are perfectly enjoyable because we have no concern about them. So health to be perfect must be unconscious health. Your body should not trouble you; every part of its complex and wonderful machinery works so smoothly and harmoniously in health that you forget you have a body. The healthy man enjoys his food, his labour, his pleasure, and his rest. His sleep is so profound that he does not even dream. Dreams are usually signs of derangement of mind or body. Our idea of a healthy man is—one who is at peace with himself, with his Maker, and with all the world. Alas! such happy beings are few and far between; but to deny that there are such, or at any rate the possibility thereof, would be to doubt the Divine goodness, and that man is made in the image of God. Lay it down as a golden rule that

MUSCULAR EXERCISE IS INDISPENSABLE

to greatness and happiness. No person should expect to become great or eminent without a world of work; and the

great art of life is so to blend bodily and mental exercise as to get the greatest possible benefit and enjoyment from both. It is not work but worry that kills people. The sickly man cannot enjoy life. He may be surrounded with the beauties of nature, yet he calls the earth a waste, howling wilderness, notwithstanding that God when He made the world pronounced it "very good." The healthy man, on the contrary, enjoys all things in nature, the song of the birds, the beautiful trees and flowers, the sunshine, and even the rain; he finds—

Books in the running brooks,
Sermons in stones, and good in everything.

All eminent men have laid the foundation of their superiority by hard work during the early and middle portions of their lives. Those who study unduly and neglect the body are seldom found in the front ranks in the battle of life. They may make a commotion at college, and then settle down into humdrum people; they "go up like a rocket and come down like the stick." Moreover, it is a physiological law that proportionately more blood is sent to the brain than to any other part of the body, but what is singular is that pressure upon the brain suspends the action of the mind, while pressure upon no other portion of the body does this. Mentality, therefore, depends upon vitality; and if you would nourish the brain you must nourish the body. That the brain performs the highest functions of our nature admits of positive confirmation, when we reflect that the size and conformation of the brain correspond with the characteristics of the mind, and that the severance of any nerve before it reaches the brain

destroys its power of conveying impressions to and from the brain. Every throb of the heart produces a corresponding pulsation in the brain and the mind ; and every state of the brain is reciprocated throughout the entire body and mind. There is, consequently, the most intimate relationship between body, brain, and mind, and neither of these can be affected for good or evil without influencing the others in a corresponding degree.

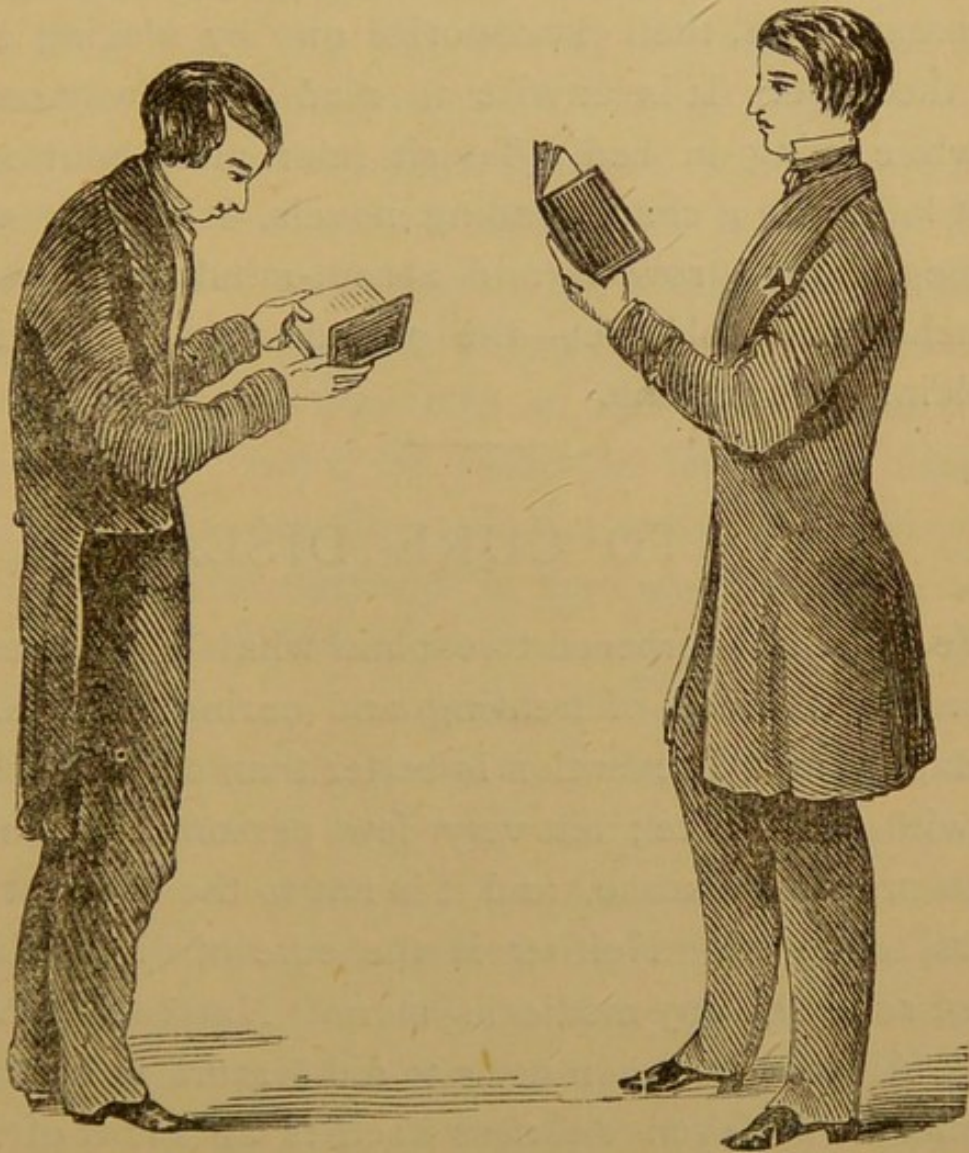


FIG. 3.

[Unphysiological Posture in Reading.]

FIG. 4.

[Healthy Posture.]

READING.

Many persons read far too much and too long, and generally in an unhealthy position. You should vary your posture both when reading and writing. Reading may be done equally well, after practice, while walking up and down your room. It is also well to read aloud, both for the sake of lung exercise and to improve pronunciation and articulation. Writing also may be done standing; if you have no desk breast high, then extemporise one by placing a chair upon the table. It is unwise to read in railway carriages and while lying in bed. To sit hour after hour reading whilst lolling in a chair, reading novels, is a sure way to become dreamy, drowsy, and absent-minded; no wonder, headaches and cold feet—the prelude to colds and other complaints—supervene.

HOW TO CURE DISEASE.

We must now proceed to explain what is the best and most rational mode of treating and curing disease. The old adage that “Prevention is better than cure” will apply here with great force; but very few persons take sufficient care to prevent disease, and it is not to the interest of the doctors to do so. Neither is the cure of disease accomplished solely by any medical system. Nature does her own work. All that man can do is to aid Nature in her restorative efforts; for even sickness itself is an effort of Nature to rid the system of morbid and diseased conditions of body. When Nature is left alone to cope with disease, the struggle is brief in proportion to its violence; but when the disease

has been of long standing, it gets such a firm hold that it is very difficult to eradicate it from the system. Nature generally throws off diseased matter in the form of a crisis, sometimes by vomiting, diarrhœa, or sweating, and sometimes by way of papulæ or pimples, as in small-pox. There are millions of pores in the skin which are the outlets for the waste that is continually going on in our bodies. Every healthy man throws off from two to three pounds of waste matter daily. A large portion of this waste is thrown off through the pores of the skin by way of insensible perspiration ; another portion is passed off through the bowels and intestines ; some by the exhalations and some in the urine. In every healthy person the waste matter is expelled in one or other, or in all of these ways ; but sometimes Nature is overpowered and is unable to throw off these effete matters. The physician should then step in and aid Nature in her restorative efforts ; but if we resort to blistering, bleeding, drugging, &c., we weaken still more the fortifications of life, and throw great obstacles in the way of a cure. Sickly persons often take pills and other nauseous medicines, which in many cases become enveloped in a coat of mucous to prevent them doing injury, and then they are passed out by the usual processes, or they are retained in the system, and have a tendency to slime up the stomach and intestines. It is said that some persons take so much medicine and poisonous drugs into their systems that the greater portion of their stomachs is thus slimed up with morbid matter which retards the process of digestion. At such times the tongue is furred, and a general feeling of inertia pervades the body. When these morbid matters have accumulated in the system there is a tendency to drive them out, and

every cold, fever, inflammation, or fit of coughing, is an effort of Nature to get rid of that which acts as an intruding and irritating substance in the system. Some medical practitioners administer sedatives, anti-spasmodics, and poisons; while others give alkalies and acids; but every system of treatment which does not aid Nature in her grand work of restoration is injurious to the body. Disease consists of exhaustion and impurity; hence a rational mode of treatment may be summed up in three words—purification and invigoration. We shall see hereafter what this means.

COLDS.

A cold is the forerunner of many diseases; and if people would cure a cold as soon as it is contracted, they would avoid a great deal of pain and misery. A cold is very easily cured when the right treatment is applied.

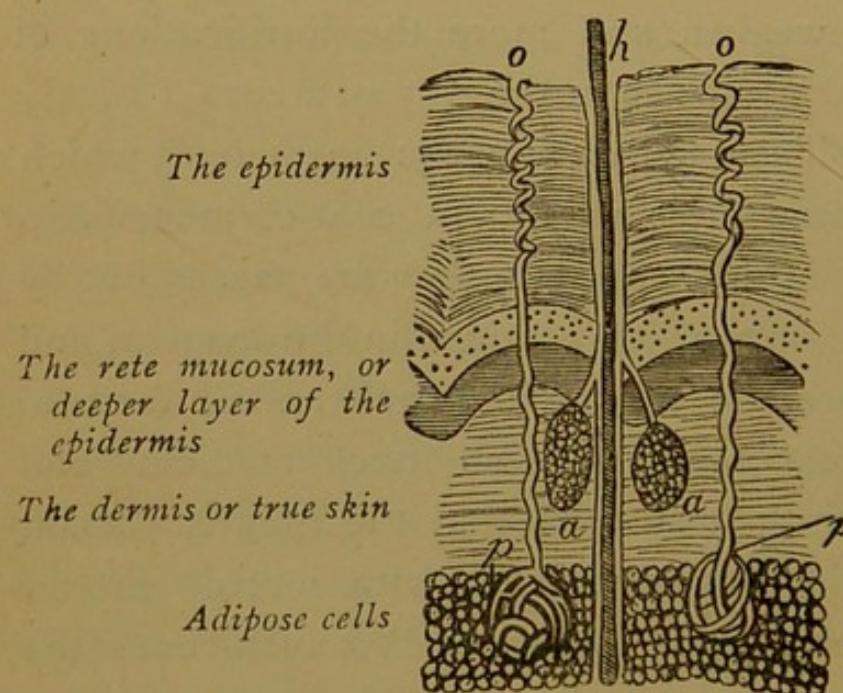


FIG. 5.

[Pores of the Skin, greatly magnified, showing the Perspiratory Ducts.]

a.a. Roots of the hair and sebaceous glands; *h.* Hair and its sheath; *p.p.* The coiled ends of a sweat gland; *o.o.* The pores or openings of the sweat glands.

We ought first to explain what a cold is. We may here state that there are millions of pores, or little holes, which pervade the skin. They are so numerous and so near together that you cannot put between them the point of the finest needle; and if all these pores and their coiled ends were straightened out and laid end to end they would make a tube from eight to ten and a half miles in length. The hair is an appendage of the skin, and, like it, has a fibrous substance and epidermis. Each hair rests in a tiny socket, at the bottom of which is a papilla or root, connected with which are the subaceous glands which supply the hair and skin with oil, and lubricate the skin so freely in health as to keep it soft and flexible. Brushing and rubbing the skin freely causes these glands to secrete and distribute the oil so profusely as to give tone and vigour to the skin, ward off colds, and prevents the covering of the body from shrinking or becoming lifeless. These pores are for the purpose of carrying off in the form of perspiration much of the refuse matter of the system. When a man is in a healthy condition, these pores allow the morbid matter to escape unimpeded; but when these pores are closed up, as is frequently the case, by chills, draughts, dirt, and other causes, this waste matter cannot then escape; it is therefore retained in the blood, producing what is called a "cold." Hence a cold is caused simply by the closing of these pores of the skin. The waste matter is then retained in the blood, and it is carried to the various parts of the body, throwing too much labour upon the heart, liver, kidneys, and other organs. The liver in turn either becomes gorged or enlarged, or it passes off a greater quantity of bile into the gall duct, whence it passes into the duodenum. In many cases it

passes into the stomach, where it curdles the food which may be contained therein. This fact is proved in the following manner. The morning after a cold has been contracted let the patient drink $1\frac{1}{2}$ pints of warm water, and then insert a flexible tube into the stomach, when a large quantity of yellow bile or curdled food will be brought up through the tube. When this bile is allowed to remain in the stomach, the food which is eaten while it remains there will be converted into phlegm, or a kind of slime, and passed up the œsophagus by the contractions of the stomach, instead of being sent down into the intestines. When this phlegm or slime has been passed up the œsophagus as far as the throat, it then causes an unpleasant feeling of irritation, and it is either coughed up and spat out or allowed to pass down the bronchial tubes into the lungs, thereby producing bronchitis, inflammation, or some kindred ailment. Hence the inference is clear that whenever a cold has been contracted this offending matter should be washed away from the stomach by means of the stomach tube (which will be hereafter explained). The pores of the skin must also be opened, otherwise a serious attack of bronchitis, inflammation of the lungs, or asthma may be the consequence.

Some people take cold more readily than others. In general the predisposition to a cold is in proportion to the weakness of the vital functions. Anything, therefore, that tones up the system will prove protective from this troublesome and dangerous ailment. Why do we take cold? The answer is, because the perspiration has been suddenly checked, and the body has become chilled by damp garments or cold air. But the predisposing causes, as already

shown, are a disordered state of the body, either from eating gross food, bad digestion, want of cleanliness, constipation, or breathing foul air. If these predisposing causes are avoided, temporary exposure to wet and cold may be endured with impunity; but where the above causes exist, the slightest exposure induces headache, ringing in the ears, watery eyes, sore throat, and cough. The lesson to be learned is, pay special attention to the laws of health, so as to prevent these predisposing causes to colds. If the shoulders are rounded and the lungs are circumscribed in too small a space, the accumulation of waste matter causes local irritation which produces coughing; this is an effort of Nature to expel the offending matter in the form of phlegm; and if the irritation be long continued, inflammation and ulceration will ensue, which ultimately cause the destruction of the lungs and produce consumption. But if the lungs are large and strong, the waste matter will be taken to some other part, probably to the head, where it causes headache, sneezing, or what medical men call *catarrh*. This is attended by irritation and a burning sensation of the skin. Sometimes this waste matter is retained in the blood for a long time and impedes the circulation, and predisposes to inflammation or congestion, more especially in corpulent persons. If the cause is not quickly removed, the waste matter will speedily accumulate and throw so much work upon the heart and other internal organs that the pulsations will be so rapidly increased as to produce a feverish condition of body, and the patient will have to lie in bed for some days, perhaps for weeks or months. If malarial smells are prevalent and poisonous gases are inhaled through the nostrils, the blood will become still more

infected, until Nature makes a great effort to rid herself of these impurities. She does this by forcing out the poisons by way of papulæ or pimples, which condition is called by the faculty "small-pox." Hence it will be seen that small-pox and fevers are aggravated colds, which are aided and abetted by poisonous smells, as effluvia from compost heaps, &c. We call this outbreak of pimples "Nature's crisis," for it is her wholesale way of getting rid of the poisonous matters which have accumulated in the system. It should be borne in mind that if the circulation be impeded, the blood becomes putrid and poisonous. Then, too, small-pox, measles, &c., frequently leave some poisonous matter in the system, especially if they have been unskilfully treated with drugs, which invariably render the blood poor and scrofulous, and this in turn lays the foundation for consumption and kindred affections. This is more especially the case when the patient is stoved up in a close room; and, when recovering, is allowed to eat fatty and indigestible food, as bacon, pork, ham, fat meats, &c., and to drink wine, brandy, and milk *ad libitum*.

CAUSES OF A COLD.

The usual exciting causes of a cold are:—

1st. By going from a hot room into the cold atmosphere, and again returning to the hot room before sufficient exercise has been taken to produce a natural warmth of the body.

2nd. By riding in a vehicle against a cold wind until the body is chilled.

3rd. By sleeping in damp sheets, the moisture from which is allowed to escape, carrying with it much of the electricity from the system, which renders the body negative to surrounding influences.

4th. By exposure to cold, damp air, or raw wind, after the throat and lungs have been warmed up by singing or speaking. In all such cases the mouth should be well guarded, the breath inhaled and exhaled through the nostrils, and the mouth covered with a piece of clean cotton wadding or woollen, until the warm room is again reached. Public speakers should guard against sleeping in a very cold bedroom after the lungs have been inflamed by speaking or preaching.

5th. By remaining in a still position so long as to become chilly, and from cooling too speedily after having been excited to an unnatural warmth, especially when perspiration has been teeming freely from the body.

6th. By sitting near to an open window or door with the wind blowing on the body. By all means avoid draughts ; but do not fail to have all the rooms in the house well ventilated, for impure air gives quite as many colds as do draughts.

7th. By failure to remove every article of damp clothing from the body or feet the instant a person becomes still. If you have got wet to the skin do not fail to keep moving till it is convenient to change the clothing. When the clothing is removed, the body should be briskly rubbed with a dry rough towel until the blood is brought to the surface. Drinking a tumbler of warm water would help to drive the heat from the inner parts of the body to the surface of the skin.

8th. By getting into a conveyance and driving home after having a long ride in a railway carriage, and entering a hot room while the body is cold and chilly. In all such cases a person should walk home at such a speed as will

insure a natural warmth of body before going into a hot room. No one can take a cold at any time, night or day, rain or shine, if the simple precaution is observed, to walk with sufficient rapidity to keep off a feeling of chilliness on entering a warm room. It is much better to get up a natural heat by exercise, than to go direct to the hot fire while the body is cold from inaction.

9th. By eating ice-cream, or drinking freely of cold water, or any other cold drink when the body is perspiring freely, especially if brisk exercise is not immediately taken. It is much better to drink warm water when the body is heated.

10th. By sitting in a public meeting where the wind falls upon the body with perceptible coldness. When this cannot be prevented, however, sufficient exercise should be taken to get up a reaction before going into a hot room.

11th. By sitting over a fire and taking too little out-of-door exercise in cold and wet weather. Such practices have a very weakening and debilitating effect even upon the strongest constitutions.

12th. By laying aside the outer clothing too soon after out-door exercise. Keep on the extra clothing for five minutes after you enter a warm room.

13th. Failing to remove the garments that have been next the skin after a violent perspiration. In all such cases the flannel or linen should be removed, and the body washed, or rubbed well with a dry towel, and dry linen applied.

14th. By sitting in a cold room until the body feels chilled. It is a violation of physiological law to invite friends to sit in a cold parlour or drawing-room; let them be taken either into the kitchen, or some other warm apartment, until the entertaining room has been heated. Many

persons have contracted a severe cold by conforming to this absurd idea of respectability.

15th. A very common way in which a severe cold is produced is by eating a very full evening meal after fasting all day, then retiring to rest and sleeping in a warm room which has been heated by hot air and badly ventilated. When a person has been without food all day, he should eat very temperately at night, in order that he may get up refreshed and be ready for an early breakfast; a hot supper will have a disturbing effect upon the system and produce general debility.

16th. By wearing the hat while sitting indoors, which overheats the head and throws the circulation out of balance, and thereby conduces to catarrh or cold in the head.

HOW TO CURE A COLD.

That kind of treatment is the best which will most effectually open the pores of the skin. When the patient has contracted a cold he should have a warm bath. Let the body be completely immersed in warm water, and remain in it for fifteen or twenty minutes, during which let him have a thorough good brushing, followed by a douching of cold water, dry rubbing with a rough towel, and plenty of friction with the bare hands. The wet compress may be worn during the night, and when removed next morning the parts should be instantly washed with cold water, rubbed briskly with a towel, and followed by friction with the bare hands. But the free action of the skin is more certainly obtained by the influence of hot air; hence, if convenient, the hot-air bath may be advantageously taken instead of

the warm bath, and followed with a pouring bath or cold dripping sheet.

The wet sheet pack is one of the best remedial appliances for a cold with which we are acquainted, and though it is more trouble than either of the former, it is also more effectual. You must not be afraid of "trouble" if you want to be cured. The pack may be taken about eleven o'clock a.m., or half way between meals—about forty minutes in duration, and followed with a pouring, or cold dripping sheet bath. The foot-bath is also effectual in cases of headache, cold feet, &c.; in short, anything that will cause the patient to perspire freely will be successful in this class of disease, but the remedy must be applied early, and not be delayed until the cold becomes chronic. It would also be well for each patient to drink from a pint to a quart of warm water on retiring to bed, when the stomach will take it. This will cause the perspiration to stream out freely.

The Turkish bath is also very serviceable in helping the system to throw off the refuse matter, but when the skin is very dry, a vapour bath may be substituted. If there is an aching in the limbs, accompanied with severe catarrh, the hot air-bath will be preferable to either the Turkish or Vapour. In these cases hot air acts upon the skin, and is not inhaled into the lungs.

Instead of sitting close up to the fire, the patient should exercise freely out of doors until he perspires. Very little food should be taken until the cold is overcome. When it is attended with intense thirst, warm water may be freely drunk; cold water would have too chilling an effect upon the stomach.

To cure a cold in most cases the only treatment needed, if the cold be taken in hand in time, is to have a warm bath, as above described, wear the wet compress around the body during the night, drink two or three tumblers of hot water on retiring to bed, and sponge the body with cold water the next morning. If this does not completely cure the cold, then recourse should be had to the wet sheet pack, the hot-air, vapour, or the Turkish bath. It will greatly add to the beneficial effect of the bath if sufficient exercise be taken beforehand, in order to get up the natural heat of the body, and after the bath has been taken the exercise should be repeated. Colds ought not to be trifled with, but should be promptly treated in their incipient stage. No derangement of health is more serious than a severe cold, yet there is none that is more commonly neglected. People seem to consider colds as inevitable misfortunes, but they never come without a cause.

HOW TO PREVENT A COLD.

We have said that every healthy person throws off from 2 to 3lbs of waste matter daily, and a great part of this is passed off through the pores of the skin; therefore, unless the skin be washed thoroughly several times per week, this waste matter will accumulate upon the skin and in the clothing; and when the body is forcibly exerted and the pores are thrown open, this waste matter is re-absorbed, clogs up the pores, and prevents the escape of other waste matter. It will thus be seen that cleanliness is essential to health. Every person should change the underclothing

frequently. The garment which has been worn next to the skin during the day should not be worn during the night, When taken off it should be hung up either in the sunshine, or by the fire, to air, before it is put on again. Many persons will think that this is too much trouble; but it is far better than being laid up for weeks and paying doctors' bills. Another good preventive of colds is to sponge the body all over with cold water every morning on rising, so as to excite the skin to action and call the blood freely to the surface of the body. This will warm up the system, give tone to the nerves, energy to the spirits, and keep off cold. Cold water should be invariably used for washing, for warm water has a weakening, enfeebling, and relaxing effect upon the system. Weak persons should not immerse the body into cold water, but use a sponge, and wash the chest, abdomen, and back with water only, putting no soap on at first, for the soap gets into the pores of the skin and chokes them up. After the skin has been wetted, soap may be applied with hand or sponge and the body rubbed briskly. The soap should then be washed off, and the trunk rubbed dry. When this has been done, one foot should be placed in the bowl or bath and the leg and thigh well washed, then rubbed dry, and afterwards treat the other leg in the same way. The bather should be particular to wipe thoroughly dry between the toes, for if this is not done the electricity of the body will be called to the part and thrown off with too much freedom, which is a source of exhaustion. After the whole body has been washed, considerable friction should follow with a rough towel and the bare hands in order to get up the natural heat and glow of the body. Those who are troubled with dyspepsia should

also place their thumbs upon their hips and knead their bowels with their bare hands; this will greatly aid the process of digestion and remove flatulency. Patting and pounding the abdomen are also beneficial.

One of the most effectual ways of preventing colds, after having been exposed to the rain and when the body is wet, is to remove all the damp clothes immediately on arriving home, sponge over with cold water and rub the body freely with a towel and the bare hands. If wet clothes are allowed to remain and the moisture is dried while upon the body, electricity or life force will be thrown off at too rapid a rate, and as a result fever, exhaustion, debility, &c., ensue. When a person has been riding a long distance by train or other conveyance, and feels cold or chilly, he should never go into a hot room nor near a fire until sufficient physical exercise has been taken to restore the natural heat of the body, otherwise the action of the fire will produce a chill in the body, and that instant a cold will be contracted. When a person is frozen, it might cause his death to place him in a warm bath, or in a hot room; consequently the body should be rubbed with snow and with the bare hands till Nature's warmth is gradually restored. A sudden exposure to heat, after being chilled, is a violation of Nature's laws.

FEVER.

We have already stated that a cold is caused by the closing of the pores of the skin, which causes that which is wasted in the body to be retained in the blood; and unless

means be taken by which these pores are speedily brought into a normal condition, the waste matter will accumulate at a rapid rate and produce what may be termed an augmented cold, which is *Fever*. This generally begins with a chill or rigour, followed by pain in the head, back, and limbs, loss of appetite, great thirst, quick pulse, and constipation, generally terminating in profuse sweating, and often with a copious discharge from the kidneys. On the first appearance of fever, the best home treatment with which we are acquainted is this—Wring a blanket out of hot water and wrap it tightly around the patient, and cover with several dry blankets, so as to produce free perspiration. The patient may then be taken out of this blanket pack and have a cold pouring bath; that is to say, he should stand in a sponge bath or some other vessel, and two or three buckets of cold water should be poured over him; let brisk rubbing accompany this bath, and wipe the patient thoroughly dry. The wet compress should then be put around the body. If the fever continues, the wet compress may be removed after an hour or two, and another pouring bath, dripping sheet, or wet sheet pack applied; the latter is the most effective. Don't allow the patient to remain in the pack too long; half-an-hour of good sweating will be long enough. In some cases, however, patients have to remain in the pack from fifteen to twenty minutes before they begin to perspire, in which case they may remain in it forty minutes. After each wet sheet pack, the dripping sheet or pouring bath should be taken—the latter is preferable where there is not much reactive power in the system. When the patient has a fair stock of vitality, the dripping sheet may

be applied with great advantage. While the patient is in the pack, cool water may be drank freely, but it should not be too cold. Three or four packs may be given each day; and several pouring baths or dripping sheets applied at short intervals when the fever is violent. Let water injections be freely administered, and the wet compress applied after each bath. Great care should be taken that the swansdown calico, or other cloths which have been next to the skin, be well washed each time when taken off. This treatment may be applied to all kinds of fevers where there is good reactive power. Great care must be taken that the bedroom be kept well ventilated.

Simple continued fever will not require such vigorous treatment, inasmuch as the patient has not reactive power enough in the system to endure it; but one wet sheet pack per day, the wet compress re-applied three times each day, cold water injections and a sponge down with cold water twice a day should be resorted to. Let the bowels be opened twice a day in all kinds of fevers.

Typhus fever appears to be a simple continued fever with great nervous exhaustion. In this phase of fever the warm blanket pack should be freely applied, say, twice a day; after which cold pouring baths may be applied, and the wet compress as before.

Typhoid Fever is simply a severe form of typhus fever. In this phase of the disease it is supposed that the follicles of the intestines inflame and ulcerate, and that the abdomen is the real seat of this affection; there is, however, great diversity of opinion amongst medical writers on this matter. The disease is considered by many to be epidemic and contagious, and is marked by alternations of heat and

cold ; dry, hot, harsh skin ; a turgid and dark condition of the face ; severe headache ; heavy and red eyes ; coated tongue, with a brown or yellowish fur, nausea and retching ; torpid boils, a small, hard, tense, frequent and irregular pulse, combined with a foetid breath and even eruptions on the skin.

Treatment.—Apply the wet sheet pack 40 minutes daily. Let the sheet be wrung out of tepid water, if the patient is not very weak ; and if he is very low it may be wrung out of warm water. The patient may also drink warm water freely, and follow the wet sheet-pack with a pouring bath, but if the patient is very weak, a tepid dripping sheet may be applied, with gentle rubbing. Apply the wet compress around the body both day and night, and change it at intervals of 5 or 6 hours.

When the fever is very strong, the cold wet sheet pack may be applied for forty minutes twice a day. It may be mentioned that during the Franco-German war of 1870 a number of German soldiers who were attacked with camp typhoid fever, were treated with cold baths daily, and 80 per cent. of them recovered. Wherever there is sufficient vitality to endure the cold wet sheet pack and cold spongings they should never be neglected ; but when there is but little vitality the water may be warmed according to the strength of the patient. When the patient is too weak to sit up, let the body be sponged over with water several times a day ; or four strong persons may take hold of the four corners of the sheet and lower the patient into a tepid bath, where he may remain for a few minutes ; then wrap him in warm blankets for an hour or two, and afterwards sponge the body with cold or cool water.

Yellow Fever is classed as a continued fever of a contagious and malarious nature. In this case much the same treatment may be given as in the typhoid form, with the exception that the baths should be colder and more heroic. Frequent half or pouring baths will be beneficial.

Intermittent Fever is accompanied with a chill or rigour, which may last from half an hour to 2 or 3 hours. *Ague* is one phase of this disorder. It is caused chiefly by malaria acting upon a weak and debilitated system, and is sometimes fatal to weak and exhausted constitutions.

Treatment.—Break up the chill with frequent pouring or half baths, either of which will produce a rapid reaction. Wrap the patient in several blankets; let him drink freely of warm water; and when the fever returns repeat the baths above named, or let him have a tepid wet sheet pack of 50 minutes duration, finishing with a pouring bath or dripping sheet. Apply the wet compress night and day, changing it every 4 or 5 hours. When the stomach is disordered wash it out with warm water and the stomach tube. The less the patient eats the better. It would be well to remove the patient from the malarious region into a healthier and more bracing atmosphere, otherwise there may be a recurrence of this affection.

Bilious Remittent Fever may commence with or without a chill, and be followed by languor, pains in the head, uneasiness of the stomach; a hot, dry skin; full, bounding pulse; thirst, vomiting, yellow or brown tongue, constipated bowels, and the stools may be green and acrid.

Treatment.—Wash out the stomach twice or thrice a day. Give one or two wet sheet packs daily, or a warm shallow bath every 24 hours, and follow with a pouring or

dripping sheet ; apply the wet compress day and night and change it every 6 hours.

Malignant Remittent Fever usually occurs where the blood is more or less poisoned and the constitution exhausted. The skin is cold and clammy and the countenance livid and shrunken. The pulse is frequent and fluttering and sometimes accompanied with delirium.

Treatment.—A cool half bath of 20 minutes duration, accompanied with cold sponging of the head, may be taken twice a day, and a tepid or cold wet sheet pack applied once daily. In this case 40 minutes in duration will be sufficient. A pouring bath or dripping sheet may be applied after the wet sheet pack. Wash out the stomach twice daily. Apply cold wet cloths to the head, and change them every half hour. Open the bowels freely with cool water injections. Let the patient drink a little toast water and eat a few grapes, or other ripe fruit, avoiding plums. A little wheat meal mush or bread and butter may be eaten, but sufficient food to satisfy a craving appetite after the crisis is over would be very dangerous, and a single indulgence in a full meal, or one of improper food, might terminate fatally.

Symptomatic or Hectic Fever usually accompanies wounds and local inflammations. This fever is intermittent, recurring once or twice a day, accompanied with a quick pulse, flushed face, suffused eye, heated skin, and thirst, and followed by profuse sweatings.

Treatment.—A half bath may be taken on each recurrence of the fever ; or should this not be convenient, a pouring bath or a dripping sheet may be applied. Let the wet compress be worn both night and day and changed every 6 or 7 hours. The patient may drink freely of warm water but eat sparingly.

SCARLATINA.

Scarlatina is a contagious disease, an epidemic caused by effluvia and bad air arising from cesspools, uncleanly conditions, and living in badly ventilated houses. On the third or fourth day in scarlatina, an eruption breaks out on the skin. The eruptions are first pale red, then they are scarlet, and they extend or run together and form patches. The danger in this disease lies in its settling upon the throat and the membranes of the brain; consequently cold wet cloths should be freely applied around the throat, covered with several thicknesses of dry flannel, and changed every half-hour. The wet compress may be applied around the body, and a wet sheet pack may be given once or twice daily, with injections of water night and morning. Frequent draughts of warm water may be drunk with advantage.

SMALL-POX.

Small-pox is highly contagious, and is caused, as before stated, by an accumulation of poisonous matters in the blood. We have stated that fever is a second stage of, or an aggravated, cold; and small-pox may be said to be the third stage of a cold of a very malignant type. When the waste matter is retained in the blood and malarial smells abound, with imperfect ventilation, rich and greasy foods, and uncleanness, the blood becomes literally putrid, and Nature makes a great effort to expel the poison, which she forces out in a number of papulæ or pimples, and this is what is called "small-pox." Medical practitioners

have of late years recommended vaccination as an antidote to small-pox. There is, however, no virtue in vaccination beyond the imagined protection in the mind of the vaccinated person. Vaccination cannot possibly of itself prevent small-pox, because lymph is corrupt matter of the same nature as that which causes small-pox; and there is also great risk of imparting other and worse diseases. Small-pox is not the dreadful scourge it was formerly. Sanitary improvements and better modes of treatment have robbed it of its terrors. We have no hesitation in saying that small-pox is one of the best friends of the community. As before stated, it is nature's crisis, or effort to rid herself of the morbid and deadly matter which has accumulated in the system. When small-pox is judiciously treated with wet sheet packs, water injections, &c., ninety-nine cases out of every hundred should recover, the patients having no marks, and being healthier than they were before. We have had much experience with small-pox, and have every confidence in the treatment here recommended.

There are two kinds of this disease; the confluent kind is the most dangerous. In this form the pustules flatten and run together in one mass of suppurated mischief, and prevent free perspiration. When a patient believes he has an attack of small-pox,—which will be accompanied by violent pains in the back of the head and a chill running through the system, the skin feeling hot and dry,—the friends of the patient should at once dip a blanket into warm water, and ring it out slightly, but not tightly, and wrap it all around the patient; then four or five dry blankets should be wrapped around the wet one; the patient should lie in bed until he perspires freely, and let the perspiration continue

fifteen or twenty minutes. The patient may then be taken out, and either a dripping sheet or two or three bucketsful of cold water may be poured upon him. If the papulæ have not broken out, throw a dry sheet over the patient, and rub the body well with the bare hands; but if the papulæ have broken out, then instead of rubbing, the sheet should be gently patted to the body, so as to absorb the moisture. A wet compress should be applied around the body, and changed every hour till the fever has abated, after which it may be changed every four hours, and a tepid water injection of one to two pints may be administered. If the water is absorbed, a second or third injection should be applied until the bowels act freely. If there is any soreness about the throat, a cloth, or towel, should be wrung out of cold water and placed around the throat in three or four thicknesses, over which a quantity of dry flannel should be wrapped. This should be renewed every half-hour until the pain subsides. The wet sheet pack may be given four or five times a day if the fever runs high. But if the papulæ have run together and the disease is far advanced it would then be advisable to cease giving the wet sheet packs, except about once every twenty-four hours; and if the patient is very feeble, they may be dispensed with altogether. The best thing to do then is to get four strong persons, one to take hold of each corner of the sheet upon which the patient lies, and lower him into a warm bath, in which he may remain twenty or thirty minutes; after which a dry sheet may be thrown over him and patted so as to absorb the moisture. This bath will soften the pustules, and allow the waste matter to escape. The danger to be dreaded, when the patient is in this condition, is, lest

the morbid humours should not pass off, and thereby produce a collapse of the vital power. The warm bath may be repeated twice a day ; and the warm wet compress may be applied night and day and changed every four hours. If the patient burns very hot, the body may be sponged over with tepid water and the bowels relieved twice a day by tepid water injections. The patient may drink warm or cold water ; but when the disease is far advanced, a little beef tea may be allowed ; but the patient should not be encouraged to eat anything. This disease feeds itself, and the less the patient eats the better it will be for him.

The bedroom should be well ventilated, and when the windows and doors are wide open, throw a covering over the patient, so as to prevent the draught from coming into direct contact with him. If the fresh air is shut out of the room, there is very little hope of recovery, for every patient who is suffering from fever, small-pox, or scarlatina, requires an abundance of fresh air. There is no fear of taking cold so long as they are kept from chilling draughts.

Full blooded persons, and those who are very stout, should have the wet sheet pack applied very freely ; but it ought not to be kept on more than half an-hour at one time. Those who are more spare in flesh may keep them on till they perspire freely. We have known obese persons whom we could not get to perspire at all : but the wet sheet pack has had a soothing and mollifying effect upon their system. In such cases, however, it should not remain on longer than half an-hour, after which apply the wet compress and change it every half-hour, and do not fail to wash the wet cloths every time they are removed from the body.

Every attendant should have a positive mind, and not

be afraid of contracting the disease, for if agitated and fearful they are almost sure to take it. There is no danger of attendants catching this disease if they have their bowels moved twice a day with water injections; wear the wet compress during the night; sponge themselves well with cold water every morning on rising; take a sweating bath once a week; eat vegetable food; avoid all intoxicating drinks, and keep a current of pure air passing through their bed, sitting, and work-rooms. Tea and coffee should be studiously avoided, inasmuch as they have an enfeebling and debilitating effect upon the system. When the patient begins to recover, the appetite will be somewhat ravenous, and he should be careful to eat slowly and sparingly. The best food is wheat meal mush, ripe and stewed fruits, bread containing the bran, little butter, perhaps some beef tea, with rice, sago, or other easily digested food. New bread and the white of eggs should be avoided. If people would keep their bowels regular, and avoid eating bacon, pork, ham, and other indigestible food, practice perfect cleanliness, avoid impure air and bad smells, they would seldom or never be troubled with small-pox. Every person whose system is susceptible to contagious diseases should sometimes have the Life-awaker applied, in order to rid the system of the accumulation of morbid matter, and thereby remove the danger of contracting this disease.

CATARRH.

Catarrh is simply an inflammation of the mucous membrane of the nasal cavities. When attended with fever, the disease is called acute catarrh, or catarrhal fever.

Influenza is sometimes called epidemic catarrh. It differs from catarrh proper only in the circumstance that the inflammatory affection extends to the mucous membrane of the windpipe and bronchial ramifications. Cold and a stoppage of the pores of the skin is a frequent cause of catarrh. The inhalation of dust may cause sneezing and thereby influence the mucous membrane of the nasal cavities and predispose to this affection; as also does the wearing of hats while sitting or working in a close room, or sudden and frequent changes from heat to cold, and *vice versa*. In the treatment of chronic catarrh a local inflammation has to be subdued, and the only additional or different medication required in its acute form are such measures as are adapted to the febrile condition. There should be very little difficulty in the treatment of this disease, and yet few diseases are doctored more unsuccessfully. Chronic catarrh, however, is one of the most obstinate maladies with which physicians have to deal. Scarcely any disease can be named, if we except consumption, cholera, and hydrophobia, for which so many remedies are recommended by medical practitioners, though these diseases are seldom or never cured by medicine. We do not see any reason why there should be more difficulty in treating inflammation of the nose than of any other part of the body. In order to treat any disease properly, reference must be had in all prescriptions to the essential or continuing cause or causes. Catarrh seems only to affect the nose and forehead, but it is principally a disease of the liver and a veritable bilious complaint. It is the function of the liver to excrete from the blood certain hydro-carbonaceous elements in the form of bile; but if this organ becomes inactive, torpid, or obstructed, so that

it cannot properly perform its duties, these biliary elements accumulate in the blood, and are then expelled through other channels. Sometimes these biliary elements break out in the shape of pimples, or rashes; the perspiration becomes viscid and foetid, and the kidneys very frequently do vicarious duty so that the urine becomes discoloured. Sometimes a quantity of the biliary matter is expelled through the lungs, and is dark, nauseous, or bloody. In other cases the eyes become affected, the lids are granulated, the corners ulcerated, and the humours viscid and opaque with biliary deposits, in consequence of the blood being so charged with biliary elements, that the mucous membrane of the conjunctiva becomes an abnormal depurating surface.

The treatment of this disease should be chiefly directed to the restoration of the functions of the liver. Local applications may also be resorted to. Tepid water may be sniffed up the nose and then blown away along with the effete matter, and repeated until the passage is cleared from the nostrils to the roof of the mouth, after which cold water should be sniffed up the nose so as to prevent taking cold. A wet cloth should be laid over the forehead during the night, covered with one or two thicknesses of dry flannel, and bandaged down tightly, and when taken off on rising, the forehead should be well washed with cold water. This treatment, however, will not cure the affection unless the pores of the skin are opened by frequent ablutions; and to effect this the wet compress and the wet sheet pack are invaluable. Whatever obstructs any one of the depurating organs—the skin, lungs, kidneys, or bowels—tends directly to congestion of the liver, and indirectly to the production of catarrh. Hence the successful treatment of catarrh requires general

attention to all the excreting organs and especially the liver. Fats, gravies, and all kinds of rich food should be studiously avoided. Unless catarrh is removed, the inflammation will soon extend to the mucous membrane of the windpipe and bronchial ramification, and will lead to bronchitis and other lung affections. Let the bowels be kept clear and open by daily injections; and the food simple and non-irritating.

If the above treatment does not remove the affection quickly, the Life-awaker should be applied to the back of the neck, behind the ears, down each side of the spine, and over the liver. An abundance of out-door exercise should be taken, more especially in climbing the mountains, so as to produce deep breathing, and an active condition of the excretory organs, and thereby rid the system of its impurities. This will soon restore the olfactory organs to their normal condition, especially if the stomach is occasionally used.

HAY FEVER.

Hay Fever has been so named because the malady generally occurs in haymaking time. It is also called "Hay Asthma," which is a more correct term, the disease not being a fever at all. In some cases it is connected with catarrhal affections, hence it has received the further designation of "Autumnal Catarrh." A similar malady, when it occurs in June, is known by the name of "June Cold," or "Nose Cold." A change of air, especially to the mountains or the sea side, will remove this troublesome malady for the time. The principal cause of hay fever is congestion of the liver, which is liable to occur in

hot weather and during violent exercise under a hot sun in the hay and harvest season. The object of our mode of treatment is to reduce the engorgement and restore the functions of the liver, which we accomplish by opening the outlets of the body with suitable bathing and diet. This disorder is so nearly related to catarrh that there is very little difference between them. Some people are periodically very much troubled with hay fever during the summer and autumn of the year, and many nostrums have been recommended for its cure. The simplest remedies are those which we have given for catarrh, with the addition of a little liquid sulphur which should be passed up the nostrils with a camel hair brush. The tonsils and the inside of the throat should also be painted with the sulphur. A writer in the "British Medical Journal" has recently contributed the following remedy for hay fever:—"Pass about a pint of tepid water, containing a powder composed of equal parts of borax and pure alum, up one nostril and down the other. Dissolve a small salt-spoonful (20 grains) of this powder in a pint of warm water; then take three feet of indiarubber tubing used for feeding bottles, and put one end of the tube into the water so that it may touch the bottom, then place the bottle on a shelf above the head, exhaust the air from the tube by suction, and when the water begins to flow place the tube a little way up one nostril, which should be gently closed below it. On leaning the head over the basin, the water will flow down the other nostril, and instant alleviation will be the result. This operation may be repeated twice a-day. During the operation breathing is performed through the throat."

INFLUENZA

Is an epidemic catarrh and a modified form of pneumonia. In this case the attack is sudden, the fever severe and very depressive ; there is great heaviness over the eyes, extreme languor, frequent sighing, violent headache, irregular pulse, frequent sneezing, a moist skin, and a tendency to profuse sweating ; but the heat of the body is seldom great.

The danger in this disease is its tendency to extend to the lungs, at which time a severe pain attacks the chest, with a pre-disposition to pleurisy ; and, if the inflammation is not speedily arrested, it invades the passages which lead from the nose to the ears, cheek-bones, frontal sinuses, and throat, extending, as before stated, to the tubes of the lungs.

In the latter stage it is called Bronchitis or Catarrh of the air-tubes of the lungs.

Loss of hearing is frequently caused by this disease. Probably nine-tenths of all cases of diminished hearing and ear discharges originate in nasal catarrh.

Its treatment is exceedingly simple. Practically speaking catarrh may be regarded as a *high fever*, and influenza as a *low fever*. Tepid ablutions should be taken, frequently repeated, and followed with a dry blanket pack for one hour, especially when the body feels chilly. A cold wet compress should then be applied around the body, and renewed every three hours. Let the bowels be freely moved by tepid injections at the outset, and when there is considerable nausea and retching, a warm water emetic or stomach washing should be administered. A nose bath may also be employed to advantage. In this case a little tepid water

should be sniffed up one nostril, while the other is pressed close with the finger; the matter should then be blown away; repeat this until a clear passage is effected to the roof of the mouth, and it may be repeated two or three times a day. This treatment is valuable in all cases of catarrh, deafness, headache, and kindred affections; but the heat of the water should not exceed 70 or 75 degrees (Fah). In this, and all catarrhal affections, a little glycerine may be smeared over the nose and the lower part of the forehead and rubbed well in on retiring to bed; or a little goose grease will sometimes give relief.

CLERGYMAN'S SORE THROAT.

This is a term applied to throat-ail to which clergymen, lecturers, singers, dramatists, and other talking personages are very subject. Clergymen lead a more sedentary life than many men, inasmuch as they are more in-doors and confined in heated rooms when studying their sermons. Many of them eat late suppers, and drink strong tea and coffee, which irritate and inflame the stomach, and thereby weaken and relax the throat and surrounding parts. Clergymen frequently muffle up their throats in cold weather, which only makes the vocal organs more sensitive and susceptible to cold. Hence mufflers and other woollen garments around the throat should be dispensed with, except when the body is overheated after a long discourse. Instead of these a pocket handkerchief may be used, or a little wadding placed over the mouth, to avoid inhaling the cold air. When a man has been speaking excitedly and for a con-

siderable time in a heated room the lungs become irritated. If the speaker then goes out of doors and draws in through the mouth a quantity of cold air, the lungs and throat become congested ; and this is a fertile source of consumption, bronchitis, and other lung affections. It is unwise to breathe through the mouth, especially at such a time. Public speakers should have a fire in their bedroom on winter nights, for if they inhale the cold atmosphere during sleep, after their lungs have been excited and inflamed, there is danger both to the lungs and to the bronchial tubes. Such persons would be greatly benefited by an abundance of muscular exercise out of doors, either in digging, riding, walking, running, or with gymnastic appliances, so as to produce uniform activity of all parts of the body, and thereby prevent local debility.

The local treatment for this affection is three or four thicknesses of swansdown calico wrung out of cold water and wrapped around the throat during each night, over which four or five thicknesses of dry flannel and a calico bandage should be tightly wrapped. When taken off, the parts should be well washed with cold water. In obstinate cases, however, the Life-awaker would be very beneficial. Many public speakers put so much energy into their discourses as to cause profuse perspiration. Whenever this is the case, their under linen ought to be removed before they go into the open air. On its removal, the body should be rubbed over freely with a towel wrung out of cold water, and followed with sufficient friction to produce warmth ; dry linen should then replace that which has been removed, in order to prevent chill and the danger of taking cold. This is one of the best means of preventing throat-ail.

Public speakers who would avoid contracting sore throats would do well to observe the following rules :—

Eat very plain, simple, well cooked, and nutritious food, avoiding fats and greases. Never eat when exhausted, but drink freely of warm water.

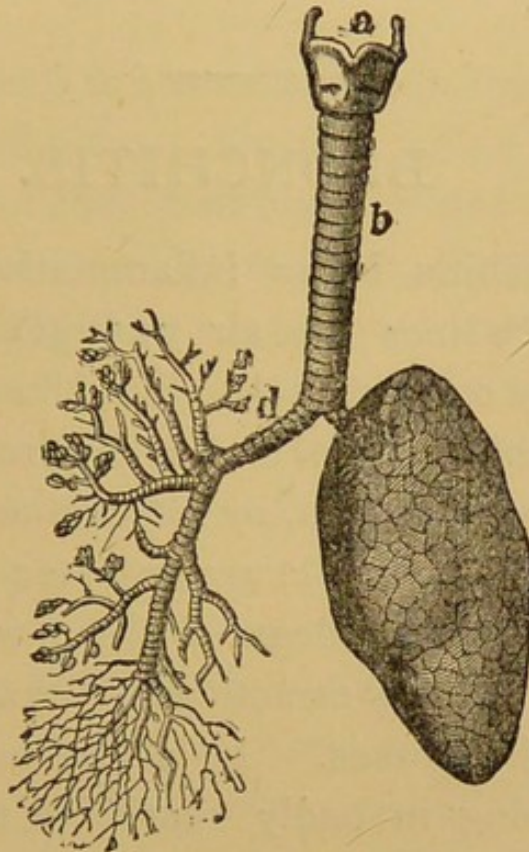


FIG. 6.—Showing the Windpipe, Bronchial Tubes, and Lungs.

a—The Voice Box. *b*—Windpipe. *d*—Bronchial Tubes.

Sleep eight hours nightly in a well-ventilated bedroom, and in very cold weather a little fire would be beneficial.

Stand erect when speaking. Speak slowly and distinctly.

Form the voice in the mouth and not in the throat.

Keep the lungs inflated by frequent inhalations.

When the throat is tired, stop for a few moments and sip a little warm water.

Avoid wearing tight fitting collars, for anything that tightly compresses the neck does serious injury.

Drinking cold water when speaking is injurious, because it chills the organs that are then overheated ; but warm water has a very soothing effect.

Never speak for any great length of time upon a full stomach.

BRONCHITIS.

Acute bronchitis is an inflammation of the mucous membrane which lines the air passages of the lungs. It begins with any common cold. Scrofulous constitutions are most liable to this disease, and it is greatly aggravated, if not very frequently caused, by indigestion. As stated in a previous chapter, when bile accumulates in the stomach it converts the food into phlegm or slime, which is brought up the œsophagus by the contractions of the stomach and passed into the bronchial tubes. It is also caused by exposure to chills, sleeping in badly ventilated rooms, exposure to dust, and by getting into a profuse perspiration by public speaking, or by any other exertion, and then going into a cold room and cooling down too quickly.

The *treatment* is the avoidance of rich and greasy food, taking frequent draughts of warm water, apply a blanket wrung out of warm water and place it snugly over and around the body, over which four or five other dry blankets should be tightly wrapped. In one hour this will cause a profuse perspiration. The dripping sheet or pouring bath should then be applied, followed with much friction with a towel and with the bare hands. Wear the wet compress

around the body night and day, and renew it four or five times daily. Each time it is taken off, the parts should be well washed with cold water accompanied with plenty of friction. Take little or no food, otherwise the disease will be protracted. The hot chest and back pad should also be worn during the night, when the parts are raw and sore.

Chronic Bronchitis is a mild and continued form of acute bronchitis. In this disease there is going on a gradual thickening of the mucous membrane which interferes with respiration. Unless speedily removed, night sweats, fever, and other hectic symptoms appear, and its cure eventually becomes as hopeless as consumption. This disease should not be trifled with, otherwise abscesses may be formed in the lungs, which will sooner or later lead to phthisis and premature death.

The treatment is the same as for acute bronchitis, modified to suit the strength of the patient. The hot and cold foot-bath may be taken at bed time, and the patient should breathe freely through the nostrils.

Let the diet be very sparing, and avoid all kinds of irritants, and wash out the stomach nightly on retiring to bed.

As the inhaling of dust is conducive to bronchial affections, it would be well for every man who comes in contact with much dust to wear his moustache and beard, and not pull the hairs out of his nostrils.

Domestic servants and others who have to brush and shake carpets should cover the face with a thin cloth or bit of gauze, to exclude the dust from the nose, eyes, and ears.

In bad cases of bronchitis, the Life-awaker, if skilfully applied, would be very beneficial.

Stone cutters, flour dealers, bakers, and others engaged in dusty and unhealthy employments, are very subject to this disease, hence they should wear a fine wire gauze over their mouths to prevent the dust from getting upon the lungs.

When the breathing is very difficult, the feet should be placed in water as hot as it can be borne, the trunk of the

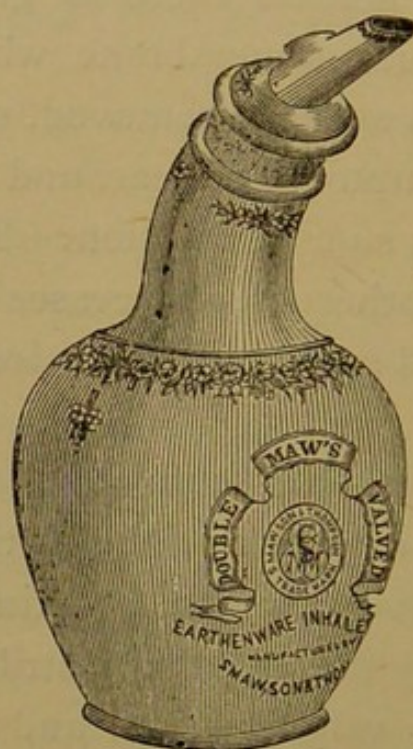


FIG. 7.—Inhaler.

body stripped of its clothing, and a strong, healthy man should dip his hands into cold water and rub the back freely between the shoulders until the parts are quite warm and dry. The hands may then be dipped into the water again and one hand placed over the back and the other upon the chest, and these parts rubbed so freely as to produce considerable warmth and a free circulation of the blood. The chest and back pad may then be applied and kept on during

the night. In this case the swansdown calico or towel when placed next to the skin should be wrung out of warm water and covered with four or five thicknesses of dry flannel and bandaged down snugly, so as to keep the patient warm all night; sponge the parts freely with cold water on the removal of the pads, to prevent taking fresh cold, and follow with gentle friction so as to produce warmth and a glow all over the body.

When the cough is hard and dry, with a sense of soreness, rawness, and dryness, it would be well to inhale a quantity of steam as far into the lungs as possible. A very handy inhaler is manufactured for this purpose, as seen in Fig. 7, but where this is not accessible, a quart jug may be filled with boiling hot water, a towel folded and put around the top so as to prevent the steam from escaping too rapidly, and place the mouth over the aperture and draw in the steam.

When the breathing is very difficult, accompanied with heavy wheezing, a handful of camomile flowers may be put into the jug, and the boiling water poured upon them, the steam from which will have a very soothing effect upon the lungs.

At best bronchitis is a dangerous and most obstinate disease, and it must be understood that time and patience are important considerations. Mild cases may be cured with a few weeks' treatment, but where the case is of long standing, several months or even one or two years' treatment may be necessary to complete a cure, but the latter period applies to those cases only of many years standing, and where the patients have been heavily drugged or treated with mineral poisons.

When there is sufficient strength, and the patient is easily fatigued by exercise, he should walk regularly and perseveringly in the open air, but should avoid great fatigue. The distance may, however, be gradually increased daily, and deep breathing encouraged.

When much fever accompanies bronchitis, the hot air, vapour, or shallow bath may be taken several times per week, either of which may be followed with a dripping sheet or a pouring bath, but great care should be taken not to produce too great a chill when there is but little reactive power; hence, when the patient is very weak, the chill may be taken off the water before it is applied.

MEASLES.

There are two varieties of this disease, termed Mild or Simple, and Black or Malignant; and they are somewhat analogous to the two forms of small-pox, and like that disease are induced by a lesser or greater degree of grossness of the blood.

Symptoms.—Measles usually commence in a similar way to catarrh or influenza, accompanied with difficulty of breathing, frequent sneezing, cough, hoarseness, smarting of the eyes, itching of the face, thirst, and are sometimes accompanied with nausea and vomiting. On the fourth day an eruption appears on the face, and gradually extends over the body. This eruption appears like small red points, and do not rise into visible pimples, but feel a little prominent to the touch. Their colour changes to a brownish hue on the fifth or sixth day, and in a day or two

more they disappear entirely. This eruption is accompanied with fever which slightly increases with the eruption, and is attended with pneumonic symptoms, as soreness of the chest, cough, and oppressed respiration.

In the *Malignant* form, however, the eruption occurs a day or two earlier, and usually disappears and reappears. In this case the colour is of a dark or livid hue, the abdomen is very tender, and the patient becomes delirious. The

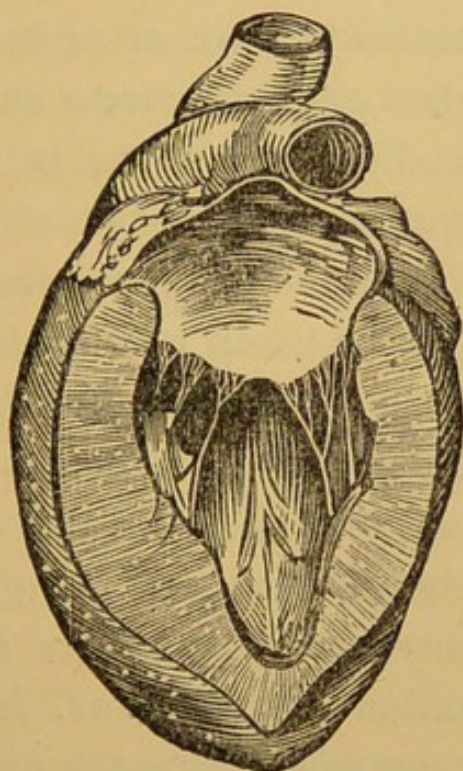


FIG. 8.—Heart of a Calf in Measles.

lungs, heart, and other internal organs are more or less inflamed, and pimples, points, or spots appear upon one or more of the internal organs, as seen in Fig. 8, which is the heart of a calf affected with measles.

It will thus be seen that both the internal and external parts are affected, and unless this disease be rationally treated it is likely to produce many other serious affections,

as granulated eyelids, gatherings, ulcers, deafness, and kindred other disorders.

Treatment.—In either phase of the disease the treatment is very simple and similar to that recommended for scarlatina, with the addition of a warm blanket pack every alternate day. The dietary should be very abstemious, and composed chiefly of water-gruel and apple tea; a few grapes may be eaten if ripe ones can be obtained.

Nothing brings out the eruption and clears the blood so promptly and effectually as warm or hot wet sheet packs, which may be applied once or twice a day for forty minutes in duration, especially where there is much fever. This admirable bath speedily moderates all the symptoms of violent disorder, both in the circulating and nervous system.

Great care should be taken not to allow the eruption to be driven into the body, consequently the patient should be kept warm. When the eruption comes out freely, and the fever is not violent, one or two daily tepid ablutions are sufficient, especially if a warm wet compress is worn during the night, but where there is severe cough, pain in the chest or inflammation of the lungs, the chest and back pad should also be applied during the night. This may be repeated three or four nights in succession, and when removed, sponge the part with water about 65 degrees, and wipe dry with a soft towel, but friction should be avoided. When accompanied with diarrhœa, a warm water injection may be taken to wash away the corroding excretions, after which cool or cold water injections should follow each discharge until a normal action is produced.

WHOOPIING COUGH,

Sometimes called Chincough or Kincough, usually occurs in childhood, though we sometimes meet with cases in persons of advanced age. This ailment is often epidemic and is of a contagious nature. Some writers have denied this, though it is a noticeable fact that when a child has whooping cough, and comes in contact with other children, they very often contract it. At the commencement of the disease it is accompanied with catarrh, and then resembles a common cold. The second, or convulsive stage, is usually known by the peculiar cough attending it. The third stage is when the cough begins to decrease and the spasmodic symptoms are passing away.

The *treatment* in the first stage should be a warm bath of fifteen minutes' duration, with a warm wet compress applied around the body, covered with four or five thicknesses of dry flannel, and bandaged down snugly.

When the bandage is removed the parts should be well sponged with cold water, and the cold sponging may be repeated two or three times a day. Out-of-door exercise is very beneficial, more especially when it is not very cold; at such times the exercise may be taken within doors where there is good ventilation.

In the second, or inflammatory stage of whooping cough, more or less feverishness appears, and in this case the chest and back pad may be wrung out of cold water and applied to the front and back parts of the body. Cover with several thicknesses of dry flannel and bandage comfortably. Keep the bandage on all night, and next morning sponge the parts freely with cold water. Some medical practitioners

recommend the wet jacket, to be wrung out of tepid water and applied to the upper part of the body, covered with flannels, and bandaged as before; but the chest and back pad will answer all practical purposes. When the pad is taken off in the morning a cold sponge bath should be given.

Let the diet be very light, plain, and digestible; warm water may be drunk freely. Pure filtered rain water is better than any other kind.

In the third stage the wet compress may be applied around the body nightly, covered with dry flannel and bandaged. Next morning sponge the parts freely with cold water. If the child swoons or faints from congestion of the brain, it should be taken into the open air and sprinkled with cold water. In each of the three stages a tepid shallow bath once a day is very beneficial. Some practitioners recommend a wet sheet pack, but when the cough is very bad the wet sheet pack would be very inconvenient and hard to bear. We have known a change of air to cure whooping cough in a few hours; that is to say, a few hours' ride by railway will sometimes act with magical effect upon this disorder.

A German medical journal, published at Berlin, mentions a case of whooping cough which was successfully treated with turpentine. The patient was a girl, three-and-a-half years old, and a fatal issue seemed to be imminent. The doctor prescribed *ob. terebinth*, 10 grains; *syr. altheæ*, 80 grains, a teaspoonful to be given every three hours. The next day the child was sitting up in bed, eating a large slice of bread and butter with evident relish. The cough was completely cured, and no evil results followed this novel treatment.

We are not in favour of the application of turpentine, or any other drug, for disorders of this kind, though sometimes they are much easier to apply than the water treatment.

We have known a number of cases to be cured by dissolving a bit of alum the size of a pea in a wineglassful of water, to which was added a little loaf sugar, a teaspoonful being taken when the cough was troublesome.

Another simple prescription which has been frequently resorted to successfully is a tablespoonful of treacle mixed with a wineglassful of warm water, to which is added a bit of saltpetre the size of a pea, mixed well together, and taken as before. But the simplest and most effectual of all treatment is to let the child drink freely of warm water and apply the baths and compresses as above advised.

CROUP.

Croup is an inflammation of the mucous membrane of the trachea, or windpipe, attended with a thick, tenacious, glairy, secretion, which hardens, if the disease is not soon arrested, into a preternatural membrane, and produces death by the closing of the air passages in the larynx. It usually attacks children of one year old and upwards. Its *first* stage is denoted by a ringing cough, difficult breathing, and fever. In the *second* stage the breathing is sometimes hissing, and at other times creaking or crowing. It usually comes on towards evening with the appearance of a common cold, sneezing, &c. In the *third* stage the cough and voice are stridulous, the respiration is laborious and suffocating, and the case is generally regarded as hopeless.

This is a disease of over-fed, scrofulous, and delicately-reared children. Sudden alternations of temperature, especially coming from a heated, ill-ventilated apartment into a humid atmosphere, or *vice versa*, with little or no attention to bathing, are among the prominent circumstances which co-operate to produce this disease.

Croup may be prevented by feeding children upon digestible food, as wheat meal mush, ripe fruits, and the higher class of vegetables.

Its treatment is very simple when taken in season. It is simply an inflammation of an organ within our reach. The whole throat should be instantly enveloped in several folds of very wet cold cloths, and these should be frequently changed until the respiration becomes free. If the fever is not very high the whole body may be bathed in tepid water, about 70 degrees, and then packed in a dry blanket until the heat returns, or perspiration takes place. If the general fever and heat of the surface are considerable, the tepid wet sheet pack is the best, and should be managed in all respects as for a common fever. The pack in all cases should be followed by a cold wash down, and much friction. Let the bowels be opened with the enema, if they do not act freely without. Cold chest and back pads will be very beneficial, and they should be applied nightly until the cough has subsided. On the removal of the pads next morning the parts should be sponged freely with cold water. A change of air is very desirable in this disorder, and when the breathing is very difficult the inhalation of steam is one of the best remedies.

DIPHTHERIA.

This disease is similar to croup, a false membrane being formed in the throat, and it is therefore equally dangerous if the disease gets beyond control. The symptoms are slight fever, dryness of the throat, pain in swallowing, swollen glands, red mucous membrane, nausea and vomiting. It is very desirable to understand the nature, cause, and best mode of treating diphtheria, because, unfortunately, it has become increasingly prevalent of late years, though it is by no means a modern disease. The characteristic feature of diphtheria, when fully developed, is the formation of a false membrane upon the fauces, tonsils, and other parts of the mouth and throat, as also in the nasal cavity, and even in the stomach and intestines. The exact nature of this membrane has been the subject of much experiment and discussion. Physiological and microscopical investigations indicate that it consists of vegetable parasitical organisms, the germs having been inhaled in breathing. These germs are more or less present in the common air, and are abundant in the atmosphere surrounding decomposing and putrifying organic matter ; it may therefore be classed with what are called "filth diseases." Cesspools, middens, foul drains, damp cellars, and mouldy walls are amongst the causes of this fatal pest, and considering the commonness of these nuisances the wonder is that the disease is not more prevalent. The spontaneous origin of diphtheria has been denied by some writers, but there have been so many cases which could not be attributed to contagion that this anti-spontaneous theory is now generally discredited. It is the enormous number and extraordinary vitality of these germs

which give to diphtheria its dangerous character. The disease is very contagious and may be communicated by inhaling the breath of a patient suffering from an acute attack. Experiments upon animals prove that it is communicable by inoculation. The period of incubation is usually from two to eight days. The germs are remarkably tenacious of life, so that it is almost impossible to destroy them, either by great heat or intense cold. This disorder may be communicated by drinking contaminated water, milk, or even beer. During the prevalence of an epidemic of diphtheria there is danger of imparting the disease through the loving kisses which are exchanged between the gentle sex and bestowed by them so freely upon little children. The death of the Princess Alice from this loving act will be remembered by our readers. It is said that the disease has been imparted by the use of a common drinking cup, and by toys, books, clothing, or anything that may become infected by the breath or excretions of the patient. In most cases recovery from the disease is slow, and it often baffles the highest skill and most loving care. Dr. Swift and other allopathic practitioners, who have spent many years in studying this disease, assert that they are not acquainted with any safe or speedy cure. We do not see, however, why diphtheria should not be as curable as any other disease, especially when it is taken in time.

The most rational system of *treatment* for this disorder is to apply cold wet cloths to the throat and cover them with several thicknesses of dry flannel, bandage down, and renew them every half-hour. In extreme cases, pounded ice may be put upon the cloths before they are applied to the throat. A warm bath every six hours is also beneficial.

The patient should drink freely of warm water, and small pieces of ice may sometimes be placed in the mouth. A very safe and useful thing to do is to give the patient frequent copious draughts of lemon juice, a part of which should be retained in the throat for a few seconds.

When the fungi are so numerous as literally to swell up the throat, it would be well to mix a teaspoonful of flour of brimstone with a wineglassful of water, and stir it with the finger instead of a spoon, to insure thorough blending. When it is well mixed the patient should take it as a gargle, and instead of spitting it out it may be swallowed. When the throat is nearly closed up, and it is nearly impossible to gargle, a little sulphur may be blown into the throat through a quill. When it is inconvenient to adopt either of these plans a small bottle of tinctured sulphur may be purchased from the homœopathic chemist and the liquid applied with a camel hair brush. This acts almost like a charm. If the nostrils are also closed up with the fungi, it would be well to dip the camel hair brush into the liquid sulphur and pass it up the nose so as to dislodge these troublesome parasites. The bowels should be kept quite regular by water injections if they do not act freely without, and the patient surrounded by healthy conditions. The room should be neither too warm nor too cold, and an equable temperature must prevail.

PNEUMONIA,

or Inflammation of the Lungs, is very dangerous when it is not judiciously treated. This disease is usually confined to one lung ; but in some cases both of the lungs become affected,

in which case it is called "Double Pneumonia." There are several phases of this disorder, one of which is called "Typhoid Pneumonia," signifying that it is of the putrid kind, or that termed Nervous; and Bilious Pneumonia, when the disease is complicated with other bilious derangements. Chronic Pneumonia is that which sometimes follows the acute type of the disease, although some doctors doubt the existence of the latter form. Pneumonia is always attended with fever, and a disproportionate accumulation of blood in the lungs, which occasions a sense of weight or heaviness and impedes the full expansion of the lungs.

The most rational system of treatment is that which will equalise the circulation or determine the blood from the lungs to other parts of the body.

When the surface of the body is very hot, a warm bath may be given; but if the patient is very weak and chilly warm fomentations may be applied to the abdomen with hot flannels to the feet. When some parts are hot and others cold the warm bath should be followed with the wet compress, wrung out of warm water and wrapped around the body. When the bowels are constipated they should be moved by injections of warm water. When expectoration is difficult, let the patient drink freely of warm water, and be kept in a room of moderate temperature.

PLEURISY

Is an inflammation of the lining membrane of the lungs, and, indeed, there is very little difference between pleurisy and pneumonia, except that pneumonia affects more especially the general surface of the lungs and pleurisy is an

affection or inflammation in the region of the pleura. It is a dangerous disease. In the *first* stage the pain is acute, hindering the action of the chest. In the *second* stage it is deeper and duller, accompanied by difficult respiration. There is great heat and sense of weight about the chest, short and dry cough, with a slight mucous expectoration. In a day or two the expectoration becomes viscid and more or less rusty coloured, yellow, or bloody. The pulse is full, strong, and quick; or small, weak, and frequent, as the fever approximates to the inflammatory or typhoid type. Pleurisy may terminate in an effusion of water in the chest, by resolution, suppuration, effusion, hemorrhage, and the formation of adhesions, which are all dangerous.

Its special causes are unequal temperature, exposure of the body, cold or wet feet, exhaustion from sleeplessness, or over-exertion. One of its chief causes, however, is the inhaling of cold air into the lungs after violent exertion. Lecturers and preachers are subject to this disease when they incautiously breathe cold air into their mouths, instead of through their nostrils, after having been speaking in a heated room. It may also be induced by sleeping in a cold bed-room, after having enfeebled the throat by inhaling hot air. The treatment of this disorder is similar to that recommended for pneumonia, with the addition of the application of the hot chest and back pads, covered with several thicknesses of dry flannel bound down tightly, but not so tight as to impede respiration. Previous to applying the chest and back pads, it would be well to take a hot sitz bath and back sponge, and evacuate the bowels with the enema. Then apply the chest and back pads as above described, and let the patient go to

bed and remain there for several hours. If there is much thirst draughts of warm water may be taken. After the patient has been in bed five or six hours the chest and back pads may be removed, and a strong person may dip his hands into cold water and rub the chest and back freely while they are wet until they are quite warm and dry. Then apply a second set of chest and back pads, and keep them on for three or four hours, when they should be changed, and a wet rubbing resorted to as before. By this means an equable circulation will be produced, and the patient will be out of danger in a few hours; but care should be taken not to expose the patient to cold draughts or to the breathing of cold air for a few days, otherwise there may be a relapse.

AFFECTIONS OF THE UVULA.

This is commonly called "Hoarseness." It is an affection of the windpipe, and has its seat in the liver and bowels. Its treatment is somewhat difficult, unless taken in its early stages. A wet sheet pack may be applied every alternate day, and a wet compress worn during the night, both around the throat and over the chest and back. When possible the Life-awaker should also be applied over the throat, chest, liver, stomach, and bowels once every fortnight until the difficulty is overcome.

DYSPHAGIA

or a difficulty in swallowing arises from a contraction of the œsophagus, weakness of the muscles of deglutition, or from morbid growths. There are various modifications of this

rather troublesome affection, but they all proceed from similar causes, as a neglected catarrh, common sore throat, syphilis, small pox, tobacco smoking, &c.

Treatment.—Wash out the stomach several times a week, the wet compress may be worn four nights weekly; a wet cloth wrapped tightly around the throat at night, covered with dry flannel and bandaged; next morning sponge the parts with cold water, and accompany with friction with the bare hands. We have cured some very bad cases where the œsophagus was completely closed, or made up by morbid growths, with two or three applications of the Life-awaker, when all other treatment seemed to fail.

COUGHS.

Coughs are produced by a variety of causes. As before stated, they are frequently the result of an accumulation of waste matter in the blood, which has been conveyed to the lungs, causing a tickling sensation which induces nature to make an extra effort to expel the foe. This effort is called a *cold cough*, and expels the morbid matter in the form of phlegm. Over-eating has also a tendency to produce a cough. When the stomach becomes unduly distended by eating too much, it causes such an unpleasant fulness in that region, that nature comes to the rescue by coughing up a quantity of the superfluous food. This is called

A STOMACH COUGH.

It is louder, harder, and deeper than the cough from the lungs. It comes on in fits, while the “cold cough” is very frequent. The stomach cough may be cured by a strict

diet, consisting chiefly of stewed fruits, unbuttered wheaten bread, drinking frequent sips of warm water, and by washing out the stomach several times a week to rid the digestive apparatus of the offending matter. The bowels should be opened at least once every twenty-four hours, and let the patient exercise in the open air several hours daily.

A LIVER COUGH,

Sometimes called a bilious cough, is usually distinguished from other varieties by being dry; the patient, at the same time, being bilious, has a sickness at stomach, a furred tongue, variable appetite, bad taste in the mouth on rising each morning, and indisposed to do anything. This is easily cured by taking an abundance of out-door exercise, eating no more than three light meals per day. A tumbler of warm water may be drunk on rising, and also on retiring to bed, and repeated whenever the cough is troublesome. The food should consist chiefly of fruits and the higher class of vegetables and bread; all kinds of rich and greasy food should be avoided. A little lean meat once a day is permissible. When convenient wash out the stomach four times per week, and have the Life-awaker applied a time or two to relieve the blood of its impurity.

THE NERVOUS COUGH

Is caused by anything which excites or worries the mind. This cough has a sharp sound, and one follows the other in quick succession, sometimes lasting for an hour.

Very nervous or excitable people, and those of hysterical temperament, are most liable to this cough.

It can be cured by riding on horseback, and some agreeable out-door occupation, with nourishing food, regular habits, and tonic water treatment. The wet compress may

be applied four nights weekly. A cold sponge bath on rising, and occasional sitz, pouring, or shallow baths will be very beneficial.

CONSUMPTIVE COUGH.

Comes on with a dry tickling sensation at the bottom of the neck in front. It is a fruitless cough; nothing comes up. In the course of an hour or two it disappears, and is not noticed again until next morning. Whenever the cough appears each morning, and disappears in the afterpart of the day, strict attention should be paid to regular daily habits, and all aggravating causes must be removed. The lungs should be expanded by dumb-bells, clubs, or chest-expander exercises; as also by long walks, frequent ablutions, &c. By this means the respiratory functions will be strengthened and improved. When the cause is removed the effect will cease.

Much coughing is frequently indulged in without sufficient cause; and if the habit of unnecessary coughing is not checked it will become habitual. Dr. Brown-Sequard says: "When coughing cannot do any good it should be resisted." In nine cases out of ten it can be resisted by an effort of the will, or by diverting the attention.

Another way is to inhale a long breath when the coughing is coming on, and breathe out slowly, which will give time for the spasm to subside. Useless coughing only irritates the throat and lungs, and it may produce sore throat, &c.

Coughing is necessary and very beneficial when the lungs are choked up with phlegm, and when it can be expelled thereby; also when the stomach is unduly distended and when mucus accumulates in the œsophagus. In all other

cases coughing is hurtful. A cough in itself is nature's effort to clear the offensive matter from some internal organ; it is produced by a contraction of the muscles, and by an effort of nature to heal herself, thereby expelling the foe that is causing the disturbance. Hence, a cough is the best friend a person has, so long as the morbid matter accumulates and chokes up any of the internal organs. This implies that instead of trying to kill the cough by drugs, &c., we should remove the cause, and the effect would soon cease. In all cases of cough, frequent draughts of warm or hot water will be very beneficial, and far better than the drugs that are usually sold as "cough mixtures," which may allay the irritation for the time being, but they also dry up and debilitate the internal parts to an alarming extent, and thereby injure other organs without permanently curing the cough. Above all, avoid eating too heartily if you would avoid coughs, colds, and kindred disorders.

Dr. Levi Reuben says: "*Repletion*, or plethora—a surcharge of the blood with solid or liquid matters through the digestive organs—is a far more frequent cause of colds than the majority of sufferers suspect . . . An over-full meal taken at any hour of the day, by at once overtaxing and clogging all the operations of life, destroys the balance of the circulation, checks the action of the skin, gives rise to feverishness, and may produce or re-awaken a bronchitis, a catarrh, or any similar difficulty. This is a prolific source of those colds taken in midsummer, and in the mildest weather, and terminate in hay fever, catarrh, consumption, &c."

CONSUMPTION.

The highest medical authorities of this and other countries have expressed the opinion that tubercular disease of the various tissues is chiefly responsible for one-third of the deaths which occur amongst the youth and adult of civilized peoples. The chief seat of this tubercular disease is, in great part, in the lungs.

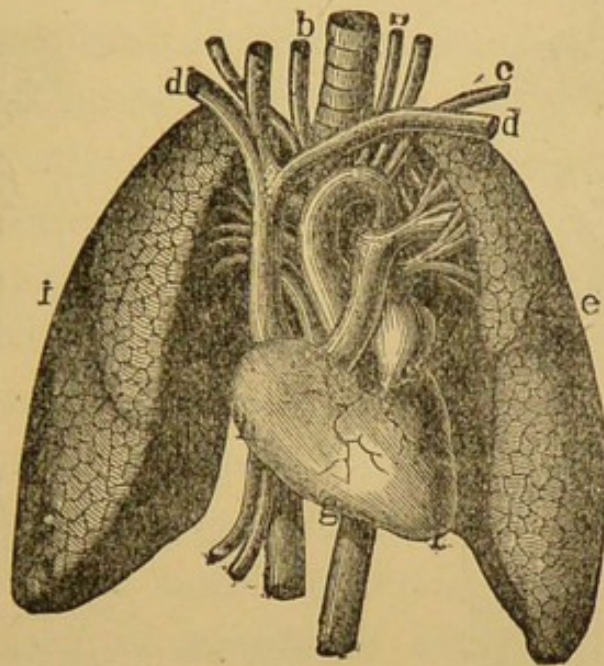


FIG. 9.

[Heart and Lungs, showing Blood and Air Vessels.]

a—Left Primitive Carotid Artery. *b*—Right Primitive Carotid Artery.
c c—Right and Left Subclavian Arteries. *d d*—Right and Left
 Subclavian Veins. *e*—Left Lung. *f*—Right Lung. *g*—The Heart.
h—Right Auricle. *i*—Left Ventricle.

During the last century many useless nostrums have been advertised for the cure of consumption, but very few cases have survived after having reached the third stage. If this disease is taken in time, and before the taint is localised, it is comparatively easy to cure; but it is much better to prevent the disease than to try to cure it, for "one ounce of prevention is better than a pound of cure,"

especially in lung affections. If people were surrounded by healthy conditions, lived in well-ventilated houses, ate nourishing and laxative food, took an abundance of outdoor exercise, and broke up a cold as soon as contracted, consumption and its kindred affections could easily be prevented.



FIG. 10.

[A well-developed and well-formed chest, and healthy lungs, capable of warding off colds and lung affections.]



FIG. 11.

[A malformed and weak chest subject to colds, and predisposed to consumption.]

It is generally supposed that consumption originates in a cold, or in an inflammation; but our experience convinces us that it originates in tubercles. These tubercles are caused by a morbid condition of the organism, known as the tubercular or scrofulous diathesis.

This morbid condition is generally the result of unphysiological habits, but in many cases it is hereditary.

Some persons are born with such a malformation of the chest, and with so strong a predisposition to tubercles that the slightest violation of the physiological laws will suffice to induce an overloading of the blood vessels in the lungs, or, in other words, to congestion.

When the lungs are congested, the tubercles, which are contained in the blood, accumulate in that region, and gorge up the blood vessels. The tubercles naturally excite the inflammatory action, which produces a cough, and by this means portions of the tubercle and scrofulous matters are expelled from their position, so far therefore a beneficial change is produced; but while this is going on the unhealthy inflammation is destroying the neighbouring structures, so that when the tubercular matter is expectorated by means of coughing, a hole or cavity is left in its place. When the lungs are circumscribed in too small a space (as seen in Fig. 11) it is very difficult for the blood to pass through this region, and the blood vessels are apt to become obstructed or congested even with the slightest cold.

This evidently implies that unless the chest and lungs be expanded by deep breathing, and gymnastic exercises, there can be very little hope for the prevention of premature decay.

The first effect of tubercle is to choke up and render a portion of the lungs useless for the purpose of breathing. This quickens the pulse and shortens the breath, and there is consequent weakness and feverishness. The little, dry, hacking cough, which marks the first stage of this disease, is produced by the irritation of foreign matter, and the cough is an instinctive effort to expel it.

When the blood is surcharged with tubercles and scrofulous humours, the air cells will be choked up with them. In the first instance these tubercles and matters are in a fluid condition, but afterwards become solid. Two neighbouring air cells in this state have a tendency to unite, because the pressure exerted by their contents obliterates the thin wall and the blood vessels which separate them. If the cause be not removed, and the pressure still remains, a number of air cells become fused together, and produce the larger tubercles. When a considerable portion of the air cells are obliterated, the sides of the smaller bronchial tubes leading to them are pressed together, and they are finally converted into small hard strings. In this stage the disease is very difficult to cure.

SYMPTOMS OF CONSUMPTION

One of the most prominent and distressing symptoms of consumption is cough, and some people imagine that if they could only cure the cough that nothing would ail them; hence, they run off to the doctor, or to the chemist, for some medicine to *kill* the cough. We have already shown that a cough is produced by many different causes; hence, the folly of attempting to cure it in all cases by one remedy will be apparent.

Numerous lozenges, drops, pills, or drugs which contain some portion of opium or ipecacuanha, which have the effect of relieving the irritability of the nerves of the lungs and windpipe, are advertised in nearly every newspaper, and as one or more coughs arise from this cause, all these preparations attain some degree of reputation, but very few persons are aware what an amount of injury they produce. Chlorodyne, and all other advertised cough

remedies, as "Essence of Linseed," &c., are highly injurious to the stomach and nerves; hence, they sooner or later produce complete prostration. So long as scrofulous matter and tubercles remain in the blood it is not sound policy to try and relieve the cough, except by removing the cause, for the cough has a tendency to expel the offending matter, instead of allowing it to accumulate and block up all the air passages.

THREE STAGES OF CONSUMPTION

First stage: There is an abnormal condition of the blood, accompanied with slight tickling cough. For a time there may be but one or two slight efforts upon rising in the morning; then it recurs during the day, and now again after any effort which hurries the breathing, and not unfrequently upon lying down at night the pulse becomes quicker. This is especially noticeable in the evening and after a full meal. Chilliness in the evening is followed by a slight fever, with heat in the palms of the hands and soles of the feet, which continues during the night. After some time perspiration comes on, generally towards morning. The patient's general aspect is changed; the face is pale and languid in the morning, and flushed in the evening. He gradually wastes away and becomes perceptibly thinner, with a huskiness in the voice.

Second stage: Expectoration, which in the first stage had the appearance of saliva, now begins to contain small yellow lumps of considerable consistency, and perhaps little points or streaks of blood. The pulse is rapid, and the evening chills are more marked. The face is very pale in the morning, with a slight flush of the cheek in the afternoon and evening.

The cough now increases in frequency, and is usually accompanied with the expectoration of a purulent mucus, varying in consistency from a watery, whey-like matter to genuine puss, which may be variously coloured—as brown, green, black, yellow, &c. In some cases, however, the expectoration is very slight, and there may be almost an entire absence of cough; while, in other cases, the cough is very troublesome and the expectorations very copious. Uneasiness in the chest is now felt more constantly, and the breathing is often accompanied by a kind of ticking. The pulse now beat more rapidly, and usually range from 90 to 130 per minute. The strength fails rapidly, the body becomes emaciated, the fingers shrink between the joints, and the nails are bent forward. The eyes appear shrunken and bright, the nose is sharp, and the neck becomes quite thin and shrunken, whilst the spine and shoulder-blades project, indicating general decay of the muscles. At this stage night sweats become very frequent and debilitating.

The *Third* stage of consumption is the last, and involves the disintegration of the parts. By the breaking down of the thin walls and blood-vessels which separate the air cells, abscesses are formed, which empty themselves through the mouth. There is a profuse perspiration, abundant expectoration, and diarrhœa. In each stage the breathing capacity of the lungs is lessened and the respiration becomes quicker, so that the diminished breathing cannot supply the usual amount of oxygen required by the system.

Coughing is not always a reliable symptom of consumption, it is frequently caused by several other physical derangements, as will be seen by reference to the article on coughs. Sometimes the disease reaches the third stage

before any cough is perceptible, hence there may exist the worst cough and be no consumption, and the worst consumption and no cough. General emaciation is a prominent feature in consumption, while *pain in the chest* is no certain sign of phthisis.



FIG. 12.—Vitals caved in.

[Fashionable, tight-laced lady, a candidate for an early grave.]

The *hectic flush* upon the cheek, the *night-sweat* and *diarrhœa*, combined with a *gradual wasting of the system*, invariably indicate the presence of this disease. Cheerfulness and hope of recovery are remarkable symptoms, and are generally present, except where there is dyspepsia. Panting and palpitation when running up stairs are also strong indications.

There are many causes of consumption. Some of the most prominent are *tight lacing* (as seen in figs. 12 and 13), which compresses the lungs and impedes the circulation of the blood; *excessive sexual or genital excitement*, which exhausts and debilitates the system; dyspepsia, impure air, bad and stooping postures, mental anxiety, sitting too long in one position, and taking too little muscular exercise.

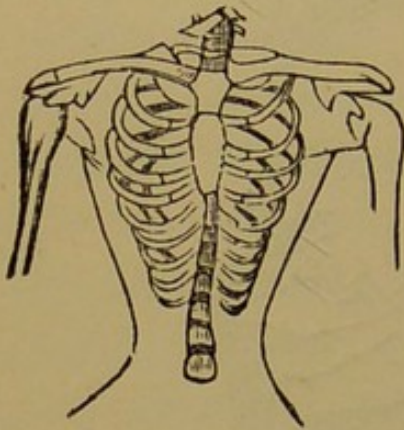


FIG. 13.

[Contracted Chest and Waist, caused by 'Tight Lacing,' which is conducive to Consumption and other affections.]

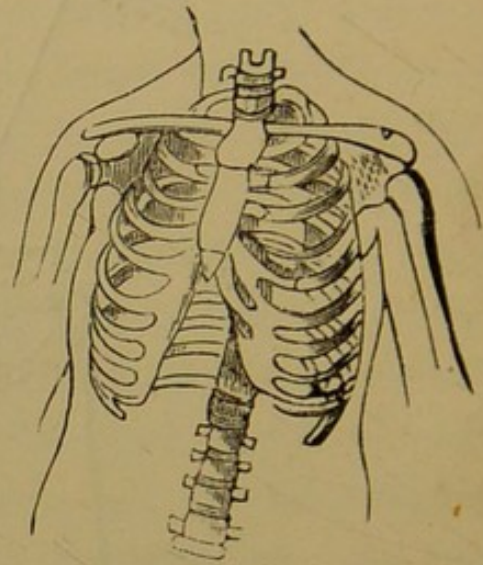


FIG. 14.

[A Natural Chest and Waist. The circulation of the blood has not been impeded, and is favourable to good health and long life.]

Every species of dust is highly injurious, and especially that of feathers. This is one reason why consumptive people should never sleep on feather beds. Syphilis causes scrofula, and scrofula produces tubercle. Vaccination has also a tendency to convey the taint from one child to another. This should convince all reasonable persons that vaccination is an absurd violation of nature's laws, for it has a tendency to spread diseases broadcast throughout the land—and yet people are by law compelled to submit their

innocent babes to the lancet of the blood-poisoner. This is state-paid medicine craft. Alas! when will the public refuse to be gulled by persons who make it their business to poison the blood of healthy human beings?

CONSUMPTION CURABLE.

When the proper methods are employed, and when the patient is surrounded by favourable conditions, this disease is curable in its early stages, especially when only a small portion of the lungs is involved and where there is a good stock of vitality to work upon.

HOW TO CURE CONSUMPTION.

The cure cannot be too soon commenced, its prevention should begin at birth. No infant should be allowed to suck a scrofulous mother or nurse, otherwise the disease may be generated, if not inherited from its parent. It should be taken out into the fresh air and allowed to bask in the sunlight. Whenever there is a predisposition to consumption, great care should be taken to induce deep and copious breathing. The chest and lungs should be expanded by the use of the chest expander (as seen in figs. 15 to 18) and dumb bells, clubs, or other gymnastic exercises. Long walks should be taken in the pure fresh air, and the breath inhaled and exhaled through the nostrils. Horse-back riding is very beneficial, especially when the atmosphere is clear and dry, but even in damp weather an abundance of out-door exercise is necessary in order to promote free respiration, excretion, and the invigoration of the system.

A great variety of muscular or gymnastic exercises can be employed to advantage in expanding the chest, as striking the elbows or backs of the hands together behind the back;

striking the hands out laterally alternately, making gentle circular motions with the hands while both arms are extended laterally from the body, patting and gently pounding the chest, stomach, and abdomen with the closed hands, as also by club and dumb-bell exercises. People of both sexes and of all ages should practice a few minutes daily with these useful appliances.



FIG. 15.



FIG. 17.



FIG. 16.

Exercise quickens the circulation, deepens the breathing, promotes perspiration and the secretions, stimulates digestion, arouses dormant parts, creates greater activity within the body, utilises more food, cheers the spirits and improves health generally.



FIG. 18.

[CHEST EXPANDER EXERCISE.]

One of the very best respiratory exercises is that of taking slow, deep, full inspirations, holding the breath as long as convenient when the lungs are fully inflated, and then expiring very slowly; this may be practised a few minutes at a time, and repeated many times a-day.

A short, sharp walk should be taken, during which the lungs ought to be deeply and fully inflated. Try how far you can walk without drawing in your breath.

Continue this for a few minutes, and afterwards walk quicker, breathing quickly and deeply. By this means the air vesicles of the lungs will be expanded and the breathing capacity enlarged.

Those who have a tendency to consumption, and indeed those who have already entered into the first or second stage of the disease, will be greatly benefited by drinking a tumbler of hot water on retiring to bed. In order to remove the nausea; the juice of a lemon may also be squeezed into the hot water. This beverage will help to induce sound and refreshing sleep, soothe the cough, and help to expel sulphate of lime from the lungs, and thereby conduce to a restoration of health.

Let the diet be pure and nourishing, avoiding all kinds of condiments, indigestible food, bacon, pork, ham, and everything of a rich and greasy nature. Doctors frequently prescribe cod liver oil, fat bacon, &c., but these articles do not remove the cause, consequently they cannot cure the disease. Then, too, bacon and cod liver oil help to slime up the stomach and predispose to plethora and to the formation of tubercles, as also to an increase of scrofula, which means an increase of the disease-producing qualities. We admit that they have a tendency to allay the irritation that causes the cough, but no treatment can be effectual in curing the disease which does not remove the cause. This must be done by some process of purification and invigoration, that will remove the tubercles and scrofulous matter from the blood, and assist nature to build up a strong and healthy body.

Quacks, both regular and irregular seem to recognise this fact; hence, they have some special "blood-purifying" (?)

nostrum to recommend for the expulsion of the offending matter. Such medicines act directly upon the stomach and intestines, or rather the stomach acts upon them, whereby purging is produced, and the alimentary canal is cleared of its contents, but the blood remains in the same condition as before, accompanied with considerable inflammation which has been produced by the action of the medicines, consequently they do more harm than good, and cannot possibly effect a cure.

THE BEST FOOD.

Milk is sometimes freely recommended by the faculty, but when the stomach is weak and the liver sluggish, it will increase the cough by producing phlegm, and will do more harm than good; but it is very beneficial in some cases, especially if used sparingly. Ripe fruits, wheat meal mush, stewed fruits, brown bread, and the higher class of vegetables are preferable to animal food.

RATIONAL TREATMENT.

The wet sheet pack fifty minutes daily, followed with the tepid shallow bath for five minutes, after which a dripping sheet, or a bucketful or two of cool water poured over the body, and followed with much friction, are amongst the best applications. The wet compress should be worn around the body during each night; if the feet be cold, let the hot and cold foot bath be taken on retiring to bed. Sitz baths are also very beneficial; the water should be about 80 degrees to commence with and gradually cooled down to 60 degrees, and its duration may vary from five to ten minutes, according to the strength of the patient.

NIGHT-SWEATS

may be checked or palliated by the cold dripping sheet at bed time, accompanied with brisk rubbing, if the patient is able to bear it, if not, by sponging the surface with tepid water. In addition to this, a little white-wine vinegar may be smeared over the body and rubbed well in on retiring to bed.

In severe cases of ulceration, or tuberculation, the patient is extremely sensitive to cold, and the temperature of the water should be milder; hence, those baths which would occasion much of a shock to the system should be avoided. When the feet are habitually cold, the feet of cotton socks may be wrung tightly out of tepid water and put upon the feet on retiring to bed and kept on during the night, over which one or two pairs of dry lambs' wool stockings should be drawn; this will have a tendency to attract the blood to the extremities, and thereby improve the circulation and add warmth to the feet.

When the skin is dry, and when there are no night-sweats, a vapour bath may be given about every fifth day in order to aid free perspiration. This treatment will open the pores of the skin and allow the scrofulous humours to escape; by this means nature will be assisted to throw off the diseased particles through the natural outlet. It is not advisable, however, to give too many sweating baths, for they have a very weakening and relaxing effect upon the system, while the cool and cold baths have a bracing and tonic effect upon the whole body; hence, the advice of some experienced person is essential in all serious cases of Consumption.

The Life-awaker is very beneficial in clearing the blood of tubercle and scrofulous matter. In many cases its effects are literally miraculous, but it should not be applied by any unskilful or inexperienced person—for in some delicate cases there is not reactive power enough to withstand its application, except when *slightly* and *skilfully* applied.

When diarrhœa accompanies the disease, cold water injections should be taken after every discharge.

A dry, clear, mild climate is very beneficial to Consumptive subjects, whilst a moist, damp, and misty climate is very unfavourable. Keep the mind cheerful and buoyed up; avoid sitting in a hot and enfeebling room; get into merry company; keep your bed and sitting-room about the same heat, about 65 degrees Fahrenheit; do not fold your arms but keep the body erect, and live much in the open air; avoid inhaling dust through your mouth; go long walks up-hill, but do not attempt too much at first, and increase the distance daily; avoid eating late suppers; drink frequent sips of warm or hot water when the cough is troublesome; keep your bed and sitting-rooms well ventilated, so as to get as much pure air as possible; always keep the body erect, and the shoulders well thrown back, both when reading, sitting, walking, and sleeping; cast away care and anxiety, and do not think too much about your condition or bodily ailment and you will soon recover, unless you have neglected yourself till the disease has advanced into the third stage. Over-eating is a very serious obstacle to recovery, and a strict dietary should be studiously observed.

Remember that drugs are highly mischievous, and none are more so than opium, which is almost universally given,

and which enters largely into the composition of nearly all the drugs in use; after a time all its soothing effects are lost and the disease becomes more painful.

Consumption is a disease that cannot be cured without great effort, and it usually requires ten or twelve months' thorough treatment to eradicate it from the system, but some cases can be cured in half or a quarter of that time. A case in point: some four years ago we visited the town of Leeds, a young gentleman came for advice on health, saying that several doctors declared that he was consumptive. He was gradually losing weight and strength, weighing six stone four pounds at the time. We recommended him to take a winter's course of gymnastic exercises, a few baths, and to use the chest expander several minutes daily, and to see us again the following summer. He carried out our advice to the very letter, and in six months he had gained two-and-a-half stones in weight, his cough ceased, and all symptoms of consumption had disappeared. "Go thou and do likewise," if you suffer from the same affection. Fewer people would die of consumption if children were encouraged to develop their muscles and respiratory functions by vigorous bodily exercise instead of being crammed with book learning, and over-taxing their minds at the expense of the body, in order that they may appear smart and brilliant—poor things, they are lacking in vital stamina and they will not be capable of making much use of their learning.

Youth is the time for muscular exercise, for bodily development, and for general activity of the vital powers, so as to lay a good foundation upon which to build a strong and healthy mind. If children were allowed to frolic and play

several hours daily, instead of poring over their lessons after they return home from school, we are certain that they would make better scholars and become better and more healthy citizens. It is impossible for children to remember all they read when the mind is being overtaxed. Why not



FIG. 19.—Body and brain equally exercised; hence, harmony between body and brain, and a strong constitution.



FIG. 20.—Brain overtaxed, and too little attention paid to physical and social training; hence, too much seriousness, intensity, and irritability of mind, combined with a lack of juvenility and animal life.

let them read and study less in order that they may remember what they have learned? There would be a deal more sense in such a course; besides, what does book learning avail a child if its acquisition breaks down the body and cuts short its life? Notice the difference in the physique of youths who frolic about and exercise the muscles, and

those who are kept close to their studies for seven or eight dreary hours per day (Figs. 19 and 20). Which will live the longest? and which will be most healthy? We have but to open our eyes and we shall soon see that the close student appears languid, careworn, and delicate, while the lad who goes to school and studies only five hours daily, is robust, strong, and healthy.

It should be remembered that the blood is forced along its vessels by the action of the heart, which is a species of force-pump composed of muscles, and that the alternate enlargement and decrease in the size of the chest, during breathing, assist in propelling the streams of blood; hence, it is easy to understand that exercise, by quickening both the breathing and the action of the heart, must exert considerable influence in preventing any overloading of the blood vessels, and that sedentary employments, on the contrary, contribute to their congestion.

Man is not the only sufferer from this sad disease, for it is one of the chief causes of death among many of the inferior animals. It is well known that lions, tigers, and other beasts of prey, when confined in cages, often waste away with all the symptoms of this disease; but so long as they are allowed to roam at large in their natural condition they are said to be exempt from it. This should teach us an important lesson. It is quite evident that those persons suffer most from consumption who are closely confined in-doors, and who take too little physical exercise to ensure deep and copious breathing of pure air.

A few years ago a lady in Scarbro', whom the doctors declared to be consumptive, and asserted that there was no hope of her recovery, was brought to our establishment for

treatment. We gave her a number of baths and applied the Life-awaker ; but neither of these appliances seemed to do her any good. Our great difficulty with this patient was to get her out of doors and induce her to exercise and breathe deeply, her excuse being that when she went out she coughed violently, and this exhausted her very much. We, however, insisted upon her first taking a short walk and increasing the distance every day, until she could walk to the top of Oliver's Mount and back again. The first day she managed to walk about 200 yards, and the cough was very heavy, but she coughed up such a quantity of phlegm, that she could breathe more freely, and slept soundly all night, whereas previously she was kept awake by an accumulation of phlegm which she tried in vain to cough up. These walks were increased in length daily for two months, by which time we were able to send our patient home free from cough and without any consumptive appearance. Nine years have now elapsed, and the consumptive symptoms have not returned. The lady continues to exercise freely in the open air and takes the baths we prescribed, and she now testifies that she feels healthier and stronger than ever before.

Most of those who have investigated these diseases have arrived at the conclusion that scrofula, consumption, hip diseases, and other complaints of an equally fatal character, arise from the same cause and are of the same nature. Whether this be so or not, we do know that all of these affections may, in the majority of cases, be prevented and cured by a steady perseverance in such a course of treatment as above recommended.

We have already explained that sedentary occupations and close in-door confinement are conducive to congestion

of the lungs, which, in scrofulous constitutions is apt to produce dangerous consequences.

On the other hand, an abundance of out-door exercise and physical exertion have the contrary effect, by equalising the circulation and promoting harmony between one part of the body and another.

SPITTING OF BLOOD.

Loss of blood is very unpleasant under all circumstances, and is often a sign of danger; but in most cases it is not so dangerous to health as most persons imagine. In many cases it is difficult to determine from whence the blood issues; whether from the fauces, the posterior cavities of the nostrils, the lungs, or the stomach. Too many persons consider the spitting of blood to be an indication or symptom of consumption, but in most cases it is simply indicative of a delicate and plethoric constitution, and may be brought on by excitement, indigestion, and even by smoking.

Its treatment consists chiefly in a contraction of the blood vessels. The circulation should be balanced or equalised and the general system invigorated.

The coldest water and pounded ice should be applied to the throat and chest until the spitting of blood is checked. Apply cold wet compresses around the body each night, and cold sitz baths may be taken several times a day, and from two to five minutes in duration. The bowels must be kept quite regular, while condiments, highly seasoned, and indigestible food should be studiously avoided. In many persons there is a constitutional weakness in the blood

vessels, which renders them liable to hemorrhage and spitting of blood all their lives. The saliva is often tinged with blood from the gums, proceeding from decayed teeth; but such instances may be distinguished from bleeding lungs and air passages, by the circumstance that in such cases they are not accompanied by a cough. When blood issues with coughing, its source is below the glottis, or opening into the larynx. When it comes from around the fauces it is merely hawked up, while blood from the stomach can come up in no other way than by coughing or vomiting, and in this case it is generally dark coloured.

In bleedings from the lungs and stomach, sips of the coldest water or bits of ice should be occasionally swallowed, and cold wet cloths applied to the chest and stomach. In each case the patient must be kept cool and quiet. If the extremities are cold let them be thoroughly rubbed with a cold wet cloth, and followed with a rubbing with dry flannel and the bare hands till they are quite warm. In *bleeding* from the rectum, or urethra, cold injections and cold sitz baths are the best local appliances.

NOSE BLEEDING

is a great source of anxiety to many persons. This is usually an indication of a plethoric constitution. Examples are recorded of large quantities of blood being discharged without causing death. In one case it is said that 40 lbs. was parted with in two days.

CAUSES.

Nose bleeding may be brought on by excitement, drinking stimulants, smoking, and by extreme heat.

Treatment.—Let a plentiful supply of cold water be applied to the head, neck, and spine, and cold water sniffed up the nostrils. When it is accompanied with feverish heat, or inflammatory excitement, the whole body should be properly cooled with the cold dripping sheet, or ablution at 60 deg. Fah. The nose should be kept uncovered and the head freely exposed to the cold air.

Another simple way of stopping bleeding of the nose is by a vigorous motion of the jaws. A piece of gum, or any other tough substance, may be placed in the mouth and chewed vigorously. Simple as this plan appears it sometimes acts with magical effect.

Deep and quick breathing for two or three minutes will not only stop nose bleeding but lessen the pain of neuralgia and toothache, as well as counteract the pain from a bruise or fall.

Some people can stop bleeding by pressing the nose firmly between the thumb and finger, thus preventing the flow. Bits of ice may be placed on the nape of the neck, on the nose, and on the mouth.

Another method is to apply pressure to the upper lip just underneath the nose, pressing it firmly against the superior maxillary bone, or just above the roots of the teeth in the upper jaw. Doctors sometimes practise plugging, but either of the above plans are easier and will have quite as good or better effect.

ASTHMA

is a very troublesome disease. Its chief feature is great difficulty of breathing, accompanied with a wheezing sound and a sense of contraction in the throat, with coughing and expectoration. Medical men distinguish two varieties; the *dry, convulsive, or nervous*; and the *humid, or common*. In the first-named variety the attacks are sudden, violent, and of short duration; whilst, in the second variety, the paroxysms are greatly protracted, the breathing laborious and difficult, the cough violent, and the expectoration commences early. At first it is very scanty, but afterwards copious, affording great relief. In many cases the attack is in the night. Some patients find it very difficult to sleep from eleven o'clock until two or three in the morning, after which time their sleep is more refreshing.

This disease is very little understood; but, as a rule, most asthmatics are over-eaters. Gluttony is a common provocation of the attack; hence, in these cases, all treatment fails unless the diet of the patient can be restricted. Tobacco smoking is highly conducive to this disease, and is one of its greatest causes, though it often affords immediate relief for the time being, but it still further debilitates the system and aggravates future attacks. We never knew a case to be cured until the pernicious practice of smoking was abandoned. Asthma is sometimes complicated with bronchitis. Each attack is preceded by a cold and cough, or sneezing, in which case it can be greatly relieved by curing the catarrh and liability to cold. It is generally understood to be an hereditary disease, and greatly aggravated by fast eating, late suppers, new bread, rich and greasy food.

Treatment.—In order to cure asthma we must first cure dyspepsia, which is the chief cause of it, and in order to cure dyspepsia a strict dietary is necessary. Medical authors admit that asthma is seldom cured by drugs, and they console themselves with the reflection that patients seldom die of the disease until it takes some other form.

Emetics, especially of lobelia, have been strongly recommended by the faculty, but in most cases they have a debilitating effect upon the organism.

The best emetic with which we are acquainted is warm water, which should be imbibed in large quantities, if an emetic is found to be really necessary; but, in most cases, the patient is far better without it, inasmuch as the retching has a tendency to strain and even congest the internal parts.

The most effectual way of relieving this affection is by drinking $1\frac{1}{2}$ pints of warm water and then passing a flexible tube into the stomach, when the syphonic action will expel both the water and the mucus that has accumulated in the stomach. We have tubes specially adapted for this purpose, and it is surprising what a magical effect this washing of the stomach has upon this particular disease. There is no retching or straining yet the stomach is thoroughly cleansed by this easy process.

A thorough system of water treatment is also beneficial, inasmuch as it will tone up the whole system and cure many obstinate cases, but it is of little use trying water if the diet is not attended to.

Let the bowels be freely opened with water injections when they do not act freely without. Stewed fruit should form a large portion of the patient's diet, and when the

breathing is very difficult, draughts of warm water will generally relieve it. A shallow bath daily from 75 to 95 degrees for fifteen minutes, and the wet sheet pack for forty minutes, are amongst the best applications. The most effectual treatment with which we are acquainted for Asthma is the application of the Life-awaker in connection with stomach-washing and the water treatment above named; their combined action relieve this treacherous disease in a short time. In some cases the inhaling of camphor produces immediate relief, but it produces no permanent benefit. In bad cases of Asthma it is advisable to have a fire in the bedroom during the night, especially in cold or damp weather. We should here note that the English climate is antagonistic to a permanent cure of this affection, and we very much doubt whether it would be possible to eradicate it completely in very serious cases without a change of climate; still the above treatment will palliate the affection very materially.

INFLAMMATION OF THE THROAT. QUINSY.

Quinsy consists of the swelling of the mucous membrane of the fauces and tonsils, by which the functions of swallowing, breathing, and speech are performed with great pain and difficulty. The accompanying fever is violent, and the disease terminates in a few days by resolution or suppuration.

The *second* form is known as the malignant or ulcerated sore throat. The attendant fever is typhoid.

In the *third* variety the swelling is extremely painful and the breathing difficult; and in the *fourth* the difficulty in swallowing is felt below the pharynx, and food is generally rejected when it reaches the seat of obstruction. The special causes are sudden changes of weather or taking cold.

The best *treatment* for quinsy is the application of the Life-awaker to the throat. After this has been applied some five or six days, the wet bandage should be applied around the throat nightly, and the wet compress around the trunk of the body, extending from the armpits to the hips, four nights weekly. When the Life-awaker is not accessible the throat should be gargled with tepid soft water by the half-hour at a time, and repeated four to six times daily; this usually removes a deal of tough phlegm, and the soreness is greatly relieved. When the tonsils are very much swollen, the inhalation of vapour from heated vinegar will generally give speedy relief; also dip the hands into cold soft water, and wash the throat and chest therewith, and accompany with a few minutes' friction with the bare hands; repeat this several times daily, and afterwards apply a cold wet cloth to the throat, and cover with dry flannel, and bandage down snugly. Keep this on night and day, and change it every three hours during the day, at which times wash and rub the neck and throat freely as above indicated.

In the malignant form, small draughts of iced water should be frequently taken, and the coldest water or pounded ice applied to the throat whenever the heat is very troublesome.

The *third* variety. When the swelling is extremely painful, bathe the external parts with hot water for five

minutes every two hours, then put on a hot wet cloth and cover with dry flannel and bandage down. Inhale the steam from heated vinegar for five minutes every three hours, and gargle the throat freely with tepid water. Also take a blanket pack every alternate day.

The *fourth* variety is sometimes termed *quinsy of the œsophagus*, and is more difficult to reach than either of the above. Where this phase of the affection is accompanied with much fever, the hot, wet blanket pack should be at once applied to produce free perspiration. This should be followed with the tepid half-bath or dripping sheet; apply the wet compress around the body, and change it morning, noon, and night; also steam the throat with vinegar, and gargle it freely with tepid water.

INFLAMMATION OF THE LARYNX

should be treated by ice-water gargles twenty minutes in duration, and applied a dozen times a day. Cold, wet cloths containing ice to the throat, changed every hour; hot fomentations to the abdomen a time or two daily, ten minutes in duration: or a hot, full bath may be taken once a day, 100 degrees, and twelve minutes in duration, and followed with the warm, wet compress, which should be changed three times daily.

ON FOOD.

Much of what we deplore as human depravity is caused by improper quality and quantity of food. Seeing that we cannot live without food, that aliment of various kinds is essential to human existence and growth, it becomes a question of the highest importance to know what we should eat and drink, and what we should avoid. There is a perpetual waste going on in the human system, which must be replaced by nutritive properties eliminated from food by the process of digestion. When the right kind of food is not taken to supply the waste that is constantly going on, the reservoir of life is then emptied faster than it is filled; this causes the individual to feel weak and sickly; and if this is long continued he will starve for want of nourishment. Few persons could live without food more than twenty days; and the majority of people would become very debilitated in forty-eight hours.

While many poor people have to fast involuntarily, a large number of persons stuff up their system and distend their stomachs with food to such a wasteful and disgusting degree as to bring on dyspepsia and other painful disorders. There is a prevalent idea that unless persons are always eating they cannot be strong and healthy. The converse of this is true—those who are perpetually eating cannot possibly enjoy good health. It is not the quantity of food that a man eats that nourishes him, but that portion only which he can readily and completely digest or assimilate. If we overload the stomach, the food is certain to be a source of weakness and not of strength. It is therefore important that we be particular in regard to the quantity

as well as the quality of our food, otherwise we cannot build up a strong and healthy body.

The lower the order of animals the lower is the character of its food. Animals which feed on carrion, such as the jackal, are lower in the scale than those that feed on living flesh, such as the lion. The omnivorous pig is by no means a dainty animal, in fact it is a kind of food scavenger; and though many persons regard its flesh as palatable, experience proves that it is not wholesome. Monkeys live on fruits, nuts, &c., and they rank higher in intelligence.

The natural food of any animal, man included, is an index to its habits and character; and as man's food embraces the diet of nearly all other animals, so his characteristics include those of the whole animal kingdom. Man is endowed with reason, and can select that kind of food which is best adapted, not only to his present requirements, but to the building up of the highest kind of physical and moral excellence. There was a time when "man did eat angels' food;" and all writers agree that in the golden age of Paradise the fruits of the earth were man's appointed food. So long as standing armies are kept up, and men war upon each other, a diet of fruit and grain would not exactly answer: men would be too gentle and merciful; they would lack the "tiger in their fierce deportment," which Shakespeare says befits the "blast of war." Feeding dogs and men on raw flesh increases their ferocity. Butchers would not be fit for their work if they did not partake largely of flesh. The more flesh a person eats the stronger will his animal propensities become, and the greater will be the desire for alcoholic drinks. Prostitutes declare that they could not carry on their trade if public

houses were closed, which would soon be the case if we all became vegetarians. It becomes an important question as to what kind of food will best develop man's physical, intellectual, and moral nature? Let us first refer to bread, which has been called

“THE STAFF OF LIFE ;”

and so it is, when rightly made. Chemically analysed, wheat, the best of the cereal family, contains about eight-tenths of nutritious substances ; rye, barley, and oats rather less ; while flesh meat contains only about five-and-a-half-tenths. Having obtained the best wheat, the next question is how to prepare it. After the grain is cleansed from chaff and dirt it is ground. But the miller commits two egregious errors,—first, the weight of the grinding stones and their rapidity of motion crush the wheat into a powder, and at the same time make it so hot that its nutritive and palatable properties are seriously impaired. Hence, flour is often said to be “dead,” “killed,” because its “life” or nutrition has been partially destroyed. Wheat is far sweeter when ground coarsely or simply crushed. The miller grinds the wheat into fine flour in order that it may be “sifted” the more thoroughly, so as to present a whiter appearance. Thus, for the sake of the “look,” the quality is impaired. The removal of the bran is another mischievous error, the evil effects of which it is almost impossible to over-estimate. After all, do white flour and white bread “look” better than brown? It is all a question of education or training. To our eyes brown bread looks much better than white bread, because we like it better and know that it is more wholesome.

Very few English women know how to make delicious and wholesome bread, even if they had the proper culinary appliances. Those who have travelled on the Continent know what excellent bread is made by the French, Austrian, and Italian bakers. The reason why the bakers of Paris and Vienna make the best bread is because they use a thermometer, and find out by it when the oven is at the right heat before they put in the bread. When the dough is put into the oven the starch cells swell, and the yeast grows in the heat until it has spread through all the dough, and then the yeast plant is killed. It takes about five minutes in a hot oven to do this. Then the oven should be cooled some twenty degrees, so that the bread may bake gradually.

It is not in dress only, but in food, that society is tyrannised over by Mrs. Grundy. The bran is an essential part of the wheat and greatly improves its nutritive qualities, its palatableness, and its digestibility, by promoting intestinal action. Furthermore, the bran is rich in phosphorous, which is essential as food for the brain. All literary men should eat brown bread, not only to enrich the brain, but to prevent the costiveness which is apt to be induced by sedentary habits. Again, the common process of grinding has this further disadvantage—that the gritty particles wear off from the stones and mix with the flour—causing irritation to teeth, stomach, and intestines. It would be far better if people would

GRIND THEIR OWN WHEAT.

For years we have done this for a numerous company by means of a steel mill, which may be purchased at a

reasonable price. A very good mill may be bought for 25s., but for family use a 50s. mill would be far better. By this means every man may become his own miller, and though the process is rather slow, the exercise is excellent, and the bread made of freshly ground wheat is far sweeter than that made from stale flour. Fine bread is not nearly so nourishing as brown. A dog fed upon fine bread alone will die of starvation in forty days, but if fed upon brown bread it will be healthy and active. This also implies that man would starve upon white bread, which does not contain all the elements essential to build up the human system, unless he also partake of other kinds of food. There is also greater economy in using whole wheat meal, both nationally and in the domestic sphere. A steel mill will repay its cost in a few months.

BRAIN WORKERS

require a better quality and a different quantity of nutrition than mechanics and labourers, because brain work causes a greater waste of nerve force than the labour of the muscles. According to Professor Houghton, three hours of hard study produce more important changes of tissue than a whole day of muscular labour. Phosphorus, which is a prominent ingredient of the brain, is deposited in the urine after mental labour, and recent experiments have shown that in this way it is possible to determine whether an individual has been chiefly using his brain or his muscles. Brain workers, for the same reason, require plenty of sleep. There is little or no phosphorus contained in fine white flour, consequently, bread which is made from the finest flour contains little or no brain food. This is one reason why those who eat white

bread are very liable to neuralgia and kindred disorders. We cannot commend too highly

WHEAT MEAL MUSH

as an article of diet. Those who live chiefly or largely upon this food will not suffer from constipation, especially if they eat freely of stewed fruits. Wheat mush is made by cracking white wheat in one of the mills before named and then making it into a kind of porridge. Care should be taken that it does not burn. To prevent burning we have had made a double pan on purpose for its preparation. This pan has the further recommendation that the mush does not need much stirring. It should be boiled one hour, and for bad cases of dyspepsia, two hours. Oatmeal is an excellent article of diet, but it does not agree with the constitution of everyone; some find it too heating, and in many cases it produces acidity of the stomach or heartburn. Dr. Nichols supplies an article for mush, &c., known as the "Food of Health." This is composed principally of whole wheat meal and oatmeal. This nourishing food is also a very palatable diet. Haricot beans and lentils might be eaten with benefit at dinner; and fruits of most kinds are acceptable at every meal. It is desirable to eat a piece of bread and butter with the wheat mush, so as to prevent its being swallowed before it is thoroughly masticated. It is a common fault to eat too fast, and to swallow food before it is sufficiently masticated and mixed with the saliva. We have said that oatmeal does not agree with everybody, the same may also be said of wheat meal mush, but this applies chiefly to those who have a weak stomach, and are of a bilious temperament. In their case it would be

well to toast a piece of brown bread, and break it into small pieces, and put it into a basin with two or three lumps of sugar, pouring over and covering it with boiling water; add a little milk, and eat it in the same way as mush is partaken. This dish will agree with the most delicate stomach. The process of digestion, it should be remembered, begins in the mouth. Swallowing the food without thorough mastication is a most injurious practice, and should be avoided by all who would be healthy, and who would like the stomach to do its work thoroughly. Neither is it wise to drink freely at meals. It is highly injurious for persons to take a bite of bread and butter and then almost instantly wash it down with hot and strong tea or coffee. Every mouthful of food should be thoroughly masticated and mixed with the saliva, not only to facilitate its digestion, but in order to relish the food. When food is not well masticated the stomach has to do its own work, and the work of the teeth also. There would be less complaint about

BAD TEETH

if they were used more in mastication, because the working of the jaws brings blood to the gums and imparts warmth and strength to the facial muscles, thus warding off colds, face-ache, toothache, and neuralgia. Meals should be taken at regular intervals. It is not well to breakfast one morning at 7 o'clock and the next morning at 10. Those who would be healthy should practise regularity in everything, especially in eating, sleeping, washing, exercising, &c.

AN EXPERIMENT WITH HORSES.

A short time ago a curious experiment was made in Scotland, which illustrated the danger of drinking whilst

eating. A number of worn-out horses that were destined to be slaughtered were the subjects of the experiment. They were fed in the following way. Some of the horses drank water before eating their corn; others were supplied with water when they had eaten half their corn; some as soon as they had finished it; the remainder had no water for one hour after eating. It was noticed that the horses which drank with their food or immediately after were troubled with gripes; and, on being killed and opened, some of their food was found to have been washed undigested into the intestines, and this was the cause of the disturbance. The horses which had no water for an hour after eating appeared to be all right, and the processes of digestion and assimilation were going on perfectly. Drinking at meals certainly retards digestion until the liquid is absorbed; and it also predisposes to flatulency. Further, this sipping at meal times induces people to eat far more than they need, and this also produces indigestion, heart-burn, spasms, &c.

No kind of aliment is more injurious than rich pastry, pickles, vinegar, and highly-seasoned food. Condiments, such as mustard and pepper, had better be avoided, for they irritate and inflame the stomach. Such articles are usually taken to stimulate the appetite to take more food than would otherwise be the case, which is a dangerous proceeding; hence the appetite should not be stimulated. There is much danger from over-eating, and none from moderate fasting. Stimulating and irritating substances increase the exhaustion and sinking feeling which they are taken to remove.

ALL FATTY SUBSTANCES ARE VERY INDIGESTIBLE,

as every dyspeptic person knows too well. We observe that bilious persons, who should not touch fat and pastry, often have a strong *liking* for these things. Dr. Beaumont, in his celebrated experiments on a Canadian, who had an opening into his stomach from a gunshot wound in the breast, found that the gastric juice acted very slowly upon fatty substances. He also found that oily and fatty food caused bile in the stomach, which would seem to be a provision of Nature to assist in the digestion of the fat, but the indisposition that follows its use clearly indicates that it is a violation of the health laws to eat such bile-producing articles. In dyspeptic individuals fat does not become properly chymified. It floats on the contents of the stomach, and, becoming rancid, excites heartburn, nausea, eructations, and at times vomiting. There is need of common-sense management amongst all classes, and also more knowledge of the art of cooking.

The following Table will be of service to those who wish to know the comparative length of time each article of diet takes to digest. We use the word "comparative," because it is a well-known fact that those people who lead a sedentary life, and also those who are dyspeptic, do not digest their food so rapidly as those who lead an active life and whose stomach is in a healthy condition. A case in point came under our notice a short time ago. A gentleman consulted us who had eaten a pork pie four days previously, and he complained of a heavy weight in the region of the stomach, with acidity, griping, &c. We at once washed out his stomach, when a quantity of pork in

an undigested state was expelled from the stomach through the tube. He was surprised to see that the pork had not digested, and when we hinted that it was probably some other kind of meat which he might have eaten the day previous, he assured us he had not partaken of a single particle of meat during the four days since he had eaten the pork pie. It will thus be seen that indigestible food may remain in the stomach for several days and produce general disturbance in the digestive apparatus. Another case which came under our notice revealed the astounding fact that the peelings of roasted potatoes could remain undigested in a man's stomach for a whole week. When the man's stomach was washed out a quantity of potato peelings were expelled from the stomach. When we asked for an explanation, the man informed us that he was very fond of eating the peelings of roasted potatoes, but that he had not partaken of any within the last seven days, consequently the peelings must have been in the stomach during all that time. When the potato peelings were expelled they were literally as green as grass, and the stomachic disturbances which had been going on for a week at once ceased.

The same reasoning will probably apply to other articles of diet; and we are under the impression that the generality of foods require much longer to digest thoroughly than is indicated in the following Table. This is the chief reason why we recommend two meals per day, for the stomach requires rest as well as any other organ of the body.

TABLE SHOWING THE COMPARATIVE TIME OF DIGESTION OF THE DIFFERENT ARTICLES OF DIET

Article of Diet.	Mode of Preparation.	Time required for Digestion.		Article of Diet.	Mode of Preparation.	Time required for Digestion.	
		H.	M.			H.	M.
Ripe	Boiled	1	0	Chicken Soup	Boiled	3	0
Rice	"	1	0	Cake	Baked	3	0
Eggs (whipped) ..	Raw	1	30	Dumpling (apple) ..	Boiled	3	0
Trout, Salmon (fresh) ..	Boiled	1	30	Mutton (fresh) ..	Roasted	3	15
" " "	Fried	1	30	Oysters (fresh) ..	Roasted	3	15
Soup (barley) ..	Boiled	1	30	Bread (corn) ..	Baked	3	15
Apples (sweet) ..	Raw	1	30	Carrot (orange) ..	Boiled	3	15
Venison (steak) ..	Broiled	1	35	Sausage (fresh) ..	Broiled	3	20
Brains	Boiled	1	45	Eggs (fresh) ..	H'd boil'd	3	30
Sago	Boiled	1	45	Eggs (fresh) ..	Fried	3	30
Liver, beef's (fresh) ..	Broiled	2	0	Flounder (fresh) ..	Fried	3	30
Eggs (fresh) ..	Raw	2	0	Oysters (fresh) ..	Stewed	3	30
Codfish (cured, dry) ..	Boiled	2	0	Beef (dry) ..	Roasted	3	30
Capioca	Boiled	2	0	Beef (with mustard, &c.)	Boiled	3	30
Barley	Boiled	2	0	Butter	Melted	3	30
Milk	Boiled	2	0	Cheese (old strong) ..	Raw	3	30
Apples (sour, mellow) ..	Raw	2	0	Soup (mutton) ..	Boiled	3	30
Cabbage (with Vinegar)	Raw	2	0	Oyster Soup ..	Boiled	3	30
Milk	Raw	2	15	Bread (wheaten, fresh)	Baked	3	30
Eggs	Roasted	2	15	Turnips (flat) ..	Boiled	3	30
Turkey (wild) ..	Roasted	2	18	Potatoes ..	Boiled	3	30
Turkey (domestic) ..	Boiled	2	25	Beet	Boiled	3	45
Turkey (domestic) ..	Roasted	2	30	Salmon (salted) ..	Boiled	4	0
Goose (wild) ..	Roasted	2	30	Beef (fresh, lean) ..	Fried	4	0
Lamb (fresh) ..	Broiled	2	30	Veal (fresh) ..	Broiled	4	0
Hash, meat, & vegetables	Warmed	2	30	Fowls (domestic) ..	Boiled	4	0
Beans (pod) ..	Boiled	2	30	Fowls (domestic) ..	Roasted	4	0
Cake (sponge) ..	Baked	2	30	Ducks (domestic) ..	Roasted	4	0
Parsnips ..	Boiled	2	30	Soup, Bread, Beef, and	Boiled	4	0
Potatoes ..	Roasted	2	30	Vegetables ..			
Potatoes ..	Baked	2	30	Heart (animal) ..	Fried	4	0
Gelatine ..	Boiled	2	30	Soup (marrow bones) ..	Boiled	4	15
Cabbage (head) ..	Raw	2	30	Beef (old, hard, salted)	Boiled	4	15
Chicken (full grown) ..	Fricassee	2	45	Suet (mutton, fresh) ..	Roasted	4	30
Beef (with salt only) ..	Boiled	2	45	Cabbage (with Vinegar)	Boiled	4	30
Custard ..	Baked	2	45	Veal (fresh) ..	Fried	4	30
Apples (sour and hard)	Raw	2	50	Suet (beef, fresh) ..	Roasted	5	3
Oysters ..	Raw	2	55	Sucking Pig ..	Roasted	2	30
Eggs (fresh) ..	S't boil'd	3	0	Pork Steak ..	Broiled	3	15
Beef (fresh, lean) ..	Roasted	3	0	" (recently salted) ..	Broiled	3	15
Beef Steak ..	Broiled	3	0	" " " " ..	Fried	4	15
Mutton (fresh) ..	Broiled	3	0	" " " " ..	Boiled	4	30
Mutton (fresh) ..	Boiled	3	0	" (fat and lean) ..	Roasted	5	15
Soup (beans) ..	Boiled	3	0				

Many people eat pork, and consider it an appetising dish, forgetting that it has a tendency to produce Scrofula, Worms, and kindred disorders, besides which it is difficult of digestion, as will be readily seen from a glance at the above figures.

WHAT IS MEANT BY THE HIGHER CLASS OF VEGETABLES.

Our readers will probably be at a loss as to what we mean by the "higher class of vegetables." It will perhaps be well to explain that those vegetables which grow in the earth, or are of a windy or watery nature, are not classed under this heading; but those vegetables which are very nutritious, palatable, and ripen above the earth, are termed the higher class vegetables, and include peas, haricot and broad beans, lentils, tomatoes, cauliflower, brocoli, &c. Potatoes are usually planted in manure, and grow underneath the soil. When thus grown they partake largely of the qualities of the manure, and are not so healthy as an article of diet as the vegetables above named. Potatoes are more palatable, and far better for the system when planted in the pure soil. Manure should be mixed with the soil in the autumn, and allowed to remain during the winter, when a chemical change will take place, and the potatoes will be much sweeter and healthier than if planted in the manure. Cabbages are very watery and windy, and may be classed amongst the lower type of vegetables. Kidney beans, vegetable marrow, &c., are succulent and easily digested, on condition that pepper and other condiments that irritate and excite the stomach are withheld; but they are not such nutritious and valuable articles of diet as the vegetables classed under the first heading. Onions, carrots, turnips, parsnips, and similar vegetables are of second rate quality, but boiled onions have a very beneficial effect upon the kidneys, and when roasted between the bars until quite soft and eaten on retiring to bed they assist the urinary organs to pass off the urine with greater facility.

INJURIOUS EFFECTS OF TEA AND COFFEE.

In the use of tea and coffee also there is need of greater restriction and information. There is a vast deal too much of these drinks consumed. Tea contains many substances, some of which are hurtful, especially when the tea is made strong. The theine has a powerful effect upon the nerves, and keeps people awake. The tannic acid is the stuff that tans leather, and if you drink strong tea after eating flesh it will partly tan it—that is, make it so tough as to be difficult to digest. The theine also stops the gastric juice from flowing freely into the stomach. There is a volatile aromatic oil in tea which imparts the flavour to it; when tea is boiled, this flavour, to a great extent, is destroyed. What are the effects of tea drinking? We will suppose that a poor woman is faint with work and want of food. Her stomach is empty when she swallows a cup of pretty strong and hot tea. The tea warms her stomach and the theine soothes her nerves for a time, like the pipe of the tobacco smoker. But as there is no nourishment in tea, excepting that contained in the sugar and milk, unless she eat substantial food, the tea will only leave her more exhausted. Tea has a powerful effect on the skin; it opens the pores and makes you perspire; and this is another way in which it has a weakening effect. I am certain that the mothers and daughters of England injure themselves by their undue consumption of tea, which makes them liable to chills, nervousness, face-ache, rheumatism, bronchitis, and other complaints. Coffee is nearly as objectionable as tea. It contains a substance called *caffeine*, which is similar

to theine in its composition and effects upon the nerves. Drinking strong coffee is a sure way of gradually driving away sleep and of rendering the partaker irritable. Coffee does not open the pores, but rather closes them; it does not waste the body, but makes the blood hot, inflames the system, upsets the kidneys, and frequently causes a pain in the back. Many persons drink tea and coffee to drive away headache, but these beverages are the greatest cause of this sad affection. It is true that they generally relieve it at the time they are taken, but why, and how? They act directly upon the nerves of the stomach, cause a greater amount of blood to be sent to the brain, relieving the pain for the time being, but it returns with greater intensity afterwards. The circulation thereby becomes impaired, and the whole physical and mental system is caused to suffer; yea, they gradually and surely undermine and destroy the very citadel of life itself.

EFFECT OF TEA AND COFFEE ON THE GROWTH OF CHILDREN.

Parents should remember that tea and coffee are more especially injurious to children. Dr. Ferguson, an eminent physician, has investigated the influence of tea and coffee upon the health and development of children, and has ascertained that children who were allowed tea and coffee grew but 4 lbs. a year between the ages of 13 and 16, while those who drank water and milk gained 15 lbs. during the same period, showing that those who desire to have healthy and strong children should not stunt their growth with these seductive drinks.

DISEASE IS A FRIEND IN DISGUISE.

It not unfrequently happens that chronic disease is the means of prolonging life ; not that a sick person can live longer than one who is well, but a person who is not in good health usually takes great care of himself, eats wholesome food, and avoids dissipation ; he also keeps regular hours, and in a variety of ways seeks to avoid the dangers to which robust persons expose themselves. Were it not for the bilious attacks and dyspepsia to which many people are liable, they would go on eating and drinking until they had surfeited their systems to such an extent that the stomach and intestines would become so abnormally distended as to produce plethora and kindred disorders. Hence these bilious and dyspeptic attacks are like resting places on the journey of life. The same may be said of fevers, which are really remedial processes by which waste and poisonous elements are removed from the system, which would otherwise accumulate to such a degree as to wholly obstruct the vital operations and cause death. Every rheumatic pain forcibly reminds us that we have been violating the laws of health, and that measures must be taken to restore the balance between one part of the body and another. Every headache is an indication that either the stomach or liver is out of order, or that too much blood has accumulated in the brain. Hence these unpleasant aches and pains are Nature's warnings, and are intended as merciful restraining influences in order to guard us against a continuance in practices which conduce to sudden death.

DIGESTION.

Digestion comprises all the processes of nutrition which are performed in the alimentary canal. It prepares the food material for absorption into the circulating system, and in its broadest sense embraces the prehension of food. Digestion begins in the mouth, where the food is cut, crushed, and ground by the teeth, mashed into a pulp and moistened by the saliva, which is a digestive fluid supplied by three sets of glands located around the ears and under the jaws and tongue. When the food is properly masticated it is passed down the œsophagus, or gullet, into the stomach, when a contraction of the muscular coating of the stomach takes place, by which the food is rolled about and literally churned. This churning process is for the purpose of inter-mixing the gastric juice with the food, and it gradually converts the food into a pulpy mass, called chyme. The wonderful properties of the gastric juice have thus far eluded all chemical and microscopical investigations. It is known to be slightly acid, and to have the power of transforming organic elements unlike that of any other known substance.

The fibres of the muscular coat of the stomach are so arranged as to do their work admirably. There are a number of circular and oblique fibres which allow the stomach to compress and knead the food in all possible directions. The active principle or solvent of the gastric juice is of a corpuscular nature, and from its analysis an active principle has been discovered, which is termed *Pepsine*.

The mucous membrane lining the wall of the stomach is so completely studded with glands for the secretion of the

gastric juice that its surface has a velvety or napped appearance. Some of the most eminent medical men believe that these glands are not only for the purpose of secreting the gastric juice, but that Pepsine is also elaborated and perfected in some of them, and that in proportion to their healthy and active condition will there be an abundant supply of gastric juice and Pepsine, a deficient supply of which lays the foundation for what is termed Dyspepsia; hence, *dyspepsia* is neither more nor less than there being too little pepsine to dissolve the food.

When the stomach is empty, the small arteries of the mucous membrane are very much contracted, and comparatively little blood is sent to them. On the entrance of food, the nerves of the stomach receive electric force from the brain, and this nervous action causes these small arteries to dilate, the peptic and other glands rapidly elaborate the greater supply of blood that is sent to them, and convey it to the mucous membrane to be intermixed with the food, and in proportion to the healthy action of these glands and the thoroughness with which they do their work will the food be digested; more especially if the nerves of the stomach are also in a healthy condition. If these nerves be deranged by drinking strong tea or coffee, or alcoholic drinks, by smoking tobacco, or eating highly seasoned food, the nervous power or directing forces of nature are partly paralysed, and digestion is thereby retarded. Then, too, mental emotions have a very debilitating effect upon the stomach, inasmuch as they greatly effect the organic secretions. It is a well known fact that intense grief will arrest the secretions of the gastric juice as effectually as belladonna. It is equally true that violent rage will make the saliva as

poisonous as will a mercurial salivation; also that a paroxysm of anger will render the bile as acid and irritating as a dose of calomel; whilst intense grief, great anxiety and excessive mental emotion very frequently retards digestion. This is the chief reason why we recommend people to "laugh and grow fat," or in other words, to avoid excesses, live

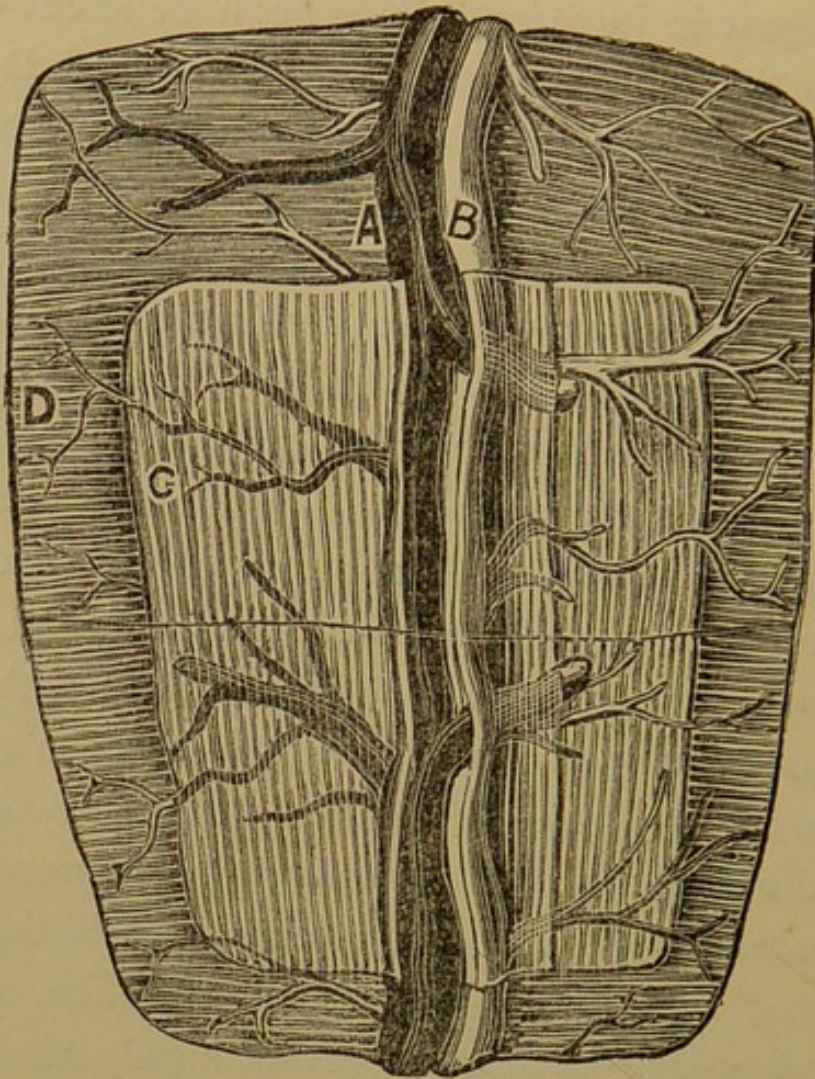


FIG. 21.—Section of the Stomach showing the Blood Vessels and Muscles.

hygienically, and become jolly, cheerful, and merry, and thereby facilitate the transmission of the mental electricity and directing power to every part of the stomach, in order that every gland, nerve, and fibre may do their work to perfection.

Fig. 21 represents an enlarged external view of a section of the stomach. It will be seen that the outer portion of the stomach is composed chiefly of muscles (c and d) and accompanied with blood vessels (A and B), and that a portion of these muscles act as a kind of filtering bed to the blood which is conveyed to them by the veins and arteries.

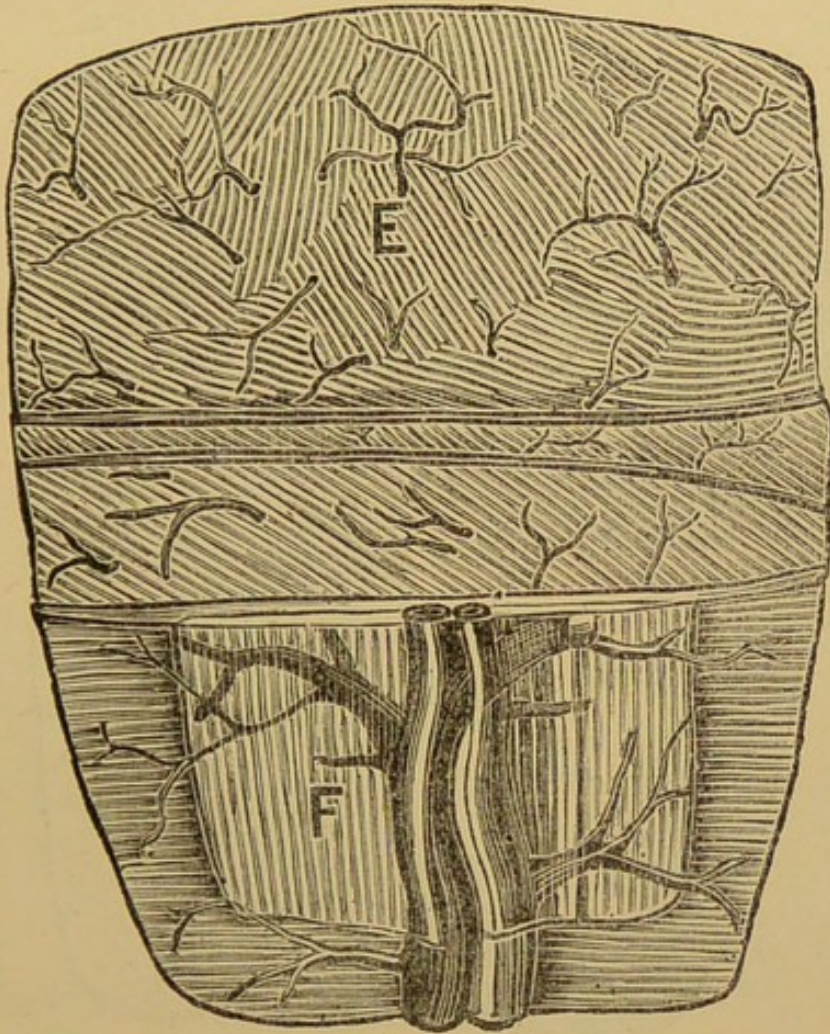


FIG. 22.

F. Showing the exterior of the Stomach and Blood Vessels.

E. Circular and oblique fibres for compressing and kneading the food. The black marks show the blood as it undergoes the *filtering* process, previous to entering into the Glands.

When the blood enters these parts it is comparatively gross, but becomes more refined as it passes through this filtering process. It then enters the glands and undergoes a still further elaborating and refining process; and by

the time it enters the stomach it has marvellous dissolving power, so much so that it is said to digest even metallic substances, such as horse-nails, buttons, &c., which have been accidentally swallowed.

Fig. 22 is also an enlarged view of a section of the stomach, with two layers of muscles removed from the

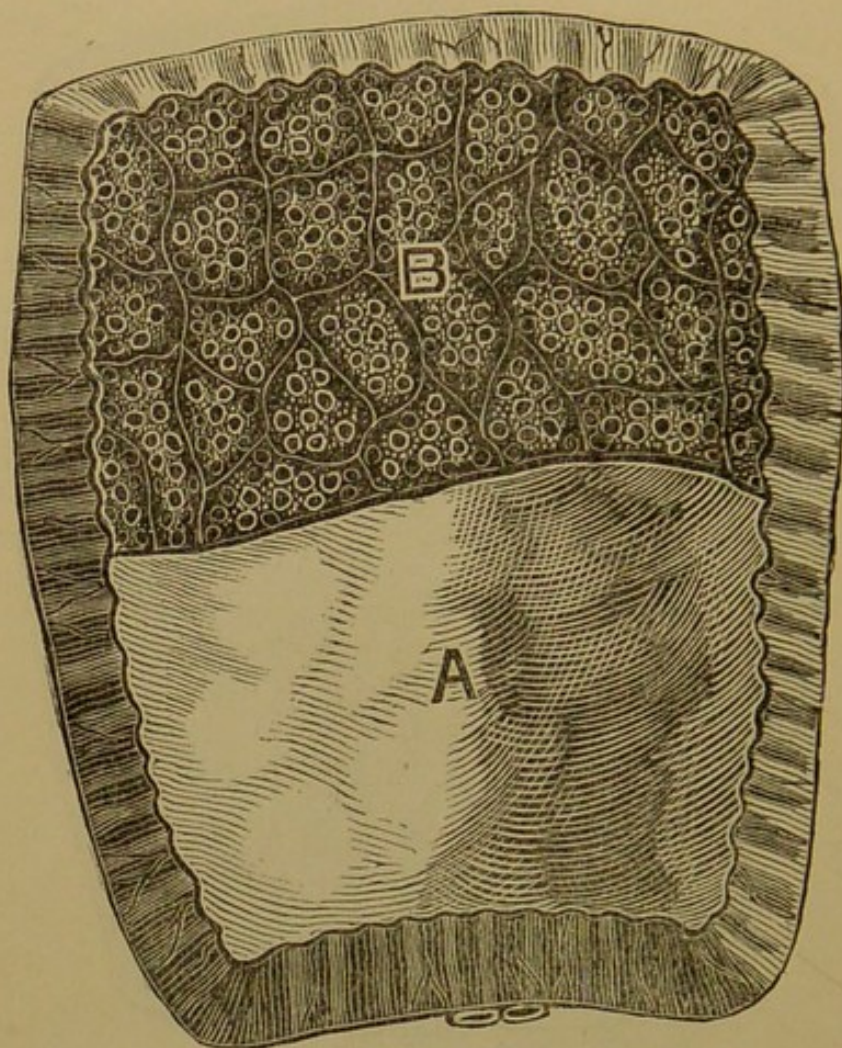


FIG. 23.—Internal View of a Section of the Stomach.

A. The Coating, which has a velvety or napped appearance.
B shows the orifices of the Pepseniferous and other glands as they appear under the coating.

upper section, showing where the blood enters into the glands above-named.

Fig. 23 is an enlarged internal view of a section of the stomach. The lower part thereof shows the coating as it

appears in the human stomach, whilst the upper part exhibits the orifices of the glands which elaborate the gastric juice, pepsine, &c.

In Fig. 24 we give a view of one of these glands, very much enlarged, and in a healthy condition. It will be

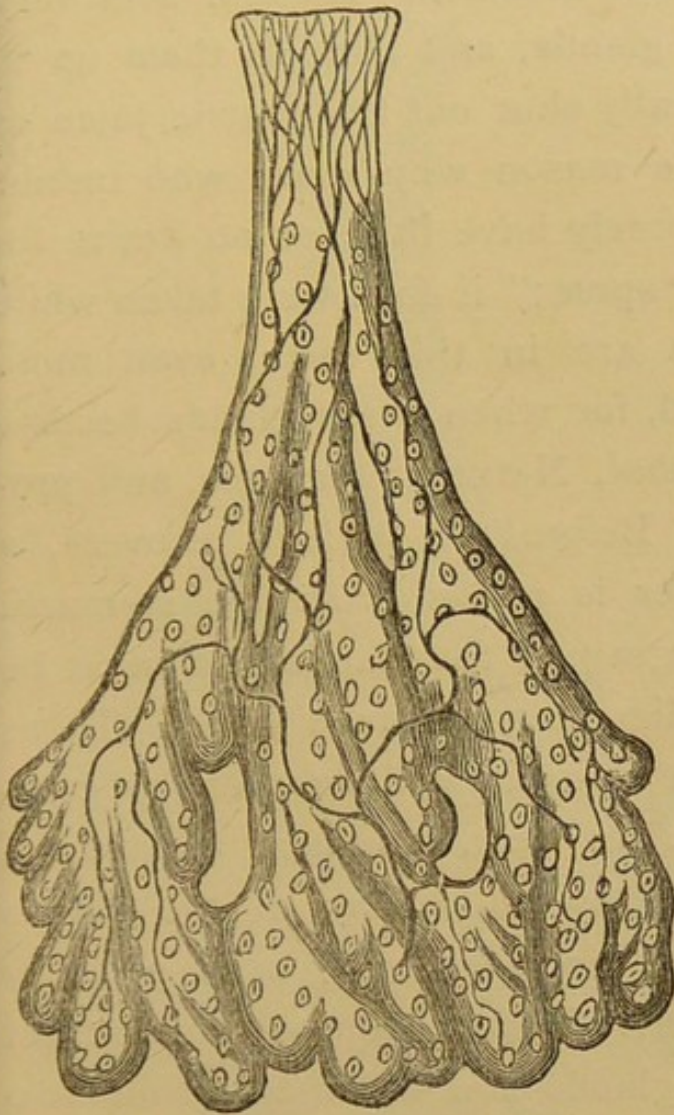


FIG. 24.—A Healthy *Peptic* or Pepsiniferous Gland, very much enlarged.



FIG. 25.—The Shrivelled Gland of "The Tippler."

observed that there is an evenness and harmony between one part of the gland and another, and that it is somewhat rounded and has a very healthy appearance. When the glands are in this condition, the gastric juice and its active principle, pepsine, are freely elaborated, and the stomach performs

its duties without an ache or pain. There is a remarkable difference in the appearance and condition of this gland and Fig. 25, which is in a state of atrophy. In this state the gland is shrivelled, shrunk, and literally useless. This condition is produced by alcoholic drinks, which cause a chronic derangement of the stomach. Alcohol acts very deleteriously upon these glands, and shrivels them up to such an extent as to literally shut out the gastric juice or pepsine; and this is one reason why those who imbibe intoxicating liquors very freely have little or no desire for solid food while on the "spree;" if food were taken while the stomach and glands are in this state, even more mischief would be caused, for when these glands become literally paralysed by alcohol, Nature intervenes, and produces *delirium tremens*. Before the patient recovers, a quantity of peculiar matter is passed from the stomach. This matter has been clogging up the glands, and must be got rid of before natural digestion can take place. These glands vary materially in size, as will be seen by comparison. This difference in size, as here illustrated, indicates the difference in the dimensions of the glands in health and disease, the largest having been properly nourished, and the other shrivelled and stunted by unnatural habits. Each of these glands are enlarged about two hundred and fifty times their natural size.

Fig. 26 gives an internal view of a natural and healthy *peptic* gland. Its full and rounded appearance shows a marked contrast to that of Fig. 27, which represents one of these glands in a state of chronic derangement, produced by drinking strong tea and coffee, which also act upon the nerves throughout the system, and produces the

nervousness and peevishness characteristic of the drinkers of strong tea and coffee.

Fig. 28 shows one of these glands in a state of atrophy, accompanied with sappy kists, and lacking the uniformity which prevails in the healthy gland. This diseased con-

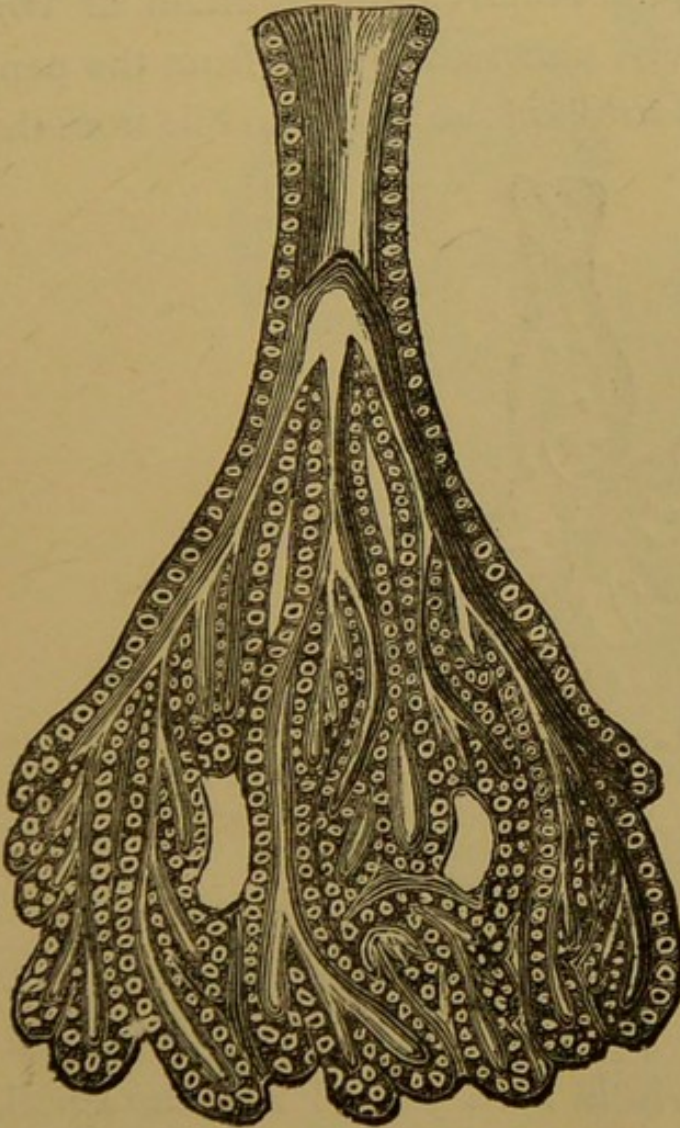


FIG. 26.—Internal view of a *Peptic* Gland in a healthy condition.

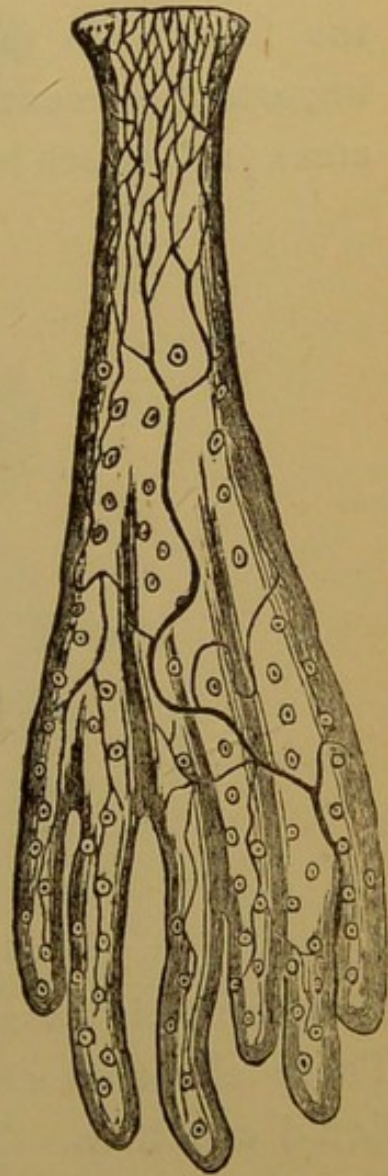


FIG. 27.—*Peptic* Gland very much relaxed and weakened.

dition is produced by eating fat meats, such as bacon, pork, and ham, hot buttered cakes, and other rich and greasy food, which choke up and close the orifices of the glands, and cause a distention in the abdominal region.

When the food has been well mixed with the gastric juice and is converted into a pulpy state, called chyme, it is passed from the stomach into the duodenum [see cut Fig. 29—(13, 13)], which is sometimes called the “lesser stomach,” but, in fact, there is only one stomach. While the food is in this tube it receives the addition of two important elements, namely, pancreatic juice from the pancreas (14), which is a fluid similar to saliva; and bile from the

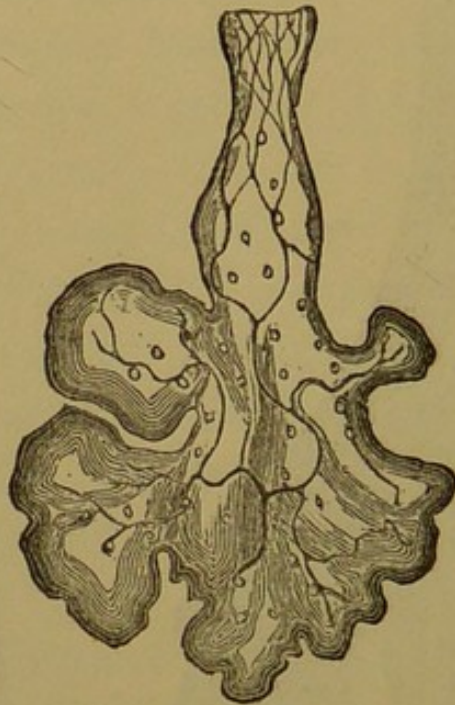


FIG. 28—*Peptic Gland with Sappy Kists.*

liver, which is transmitted through the gall duct (11 and 12). These elements change the chyme into chyle, or into a liquid condition. The chyle is then passed into the small intestines, which are about 25 feet long, as seen in cut Fig. 29—(15). These intestines are permeated with millions of little villi or rounded tubes, which contain the lacteal vessels, as seen in cut Fig. 30. As the food passes through these long intestinal passages, the villi and lacteal vessels rapidly absorb that portion of the chyle which has been properly prepared for nutrition. That portion which

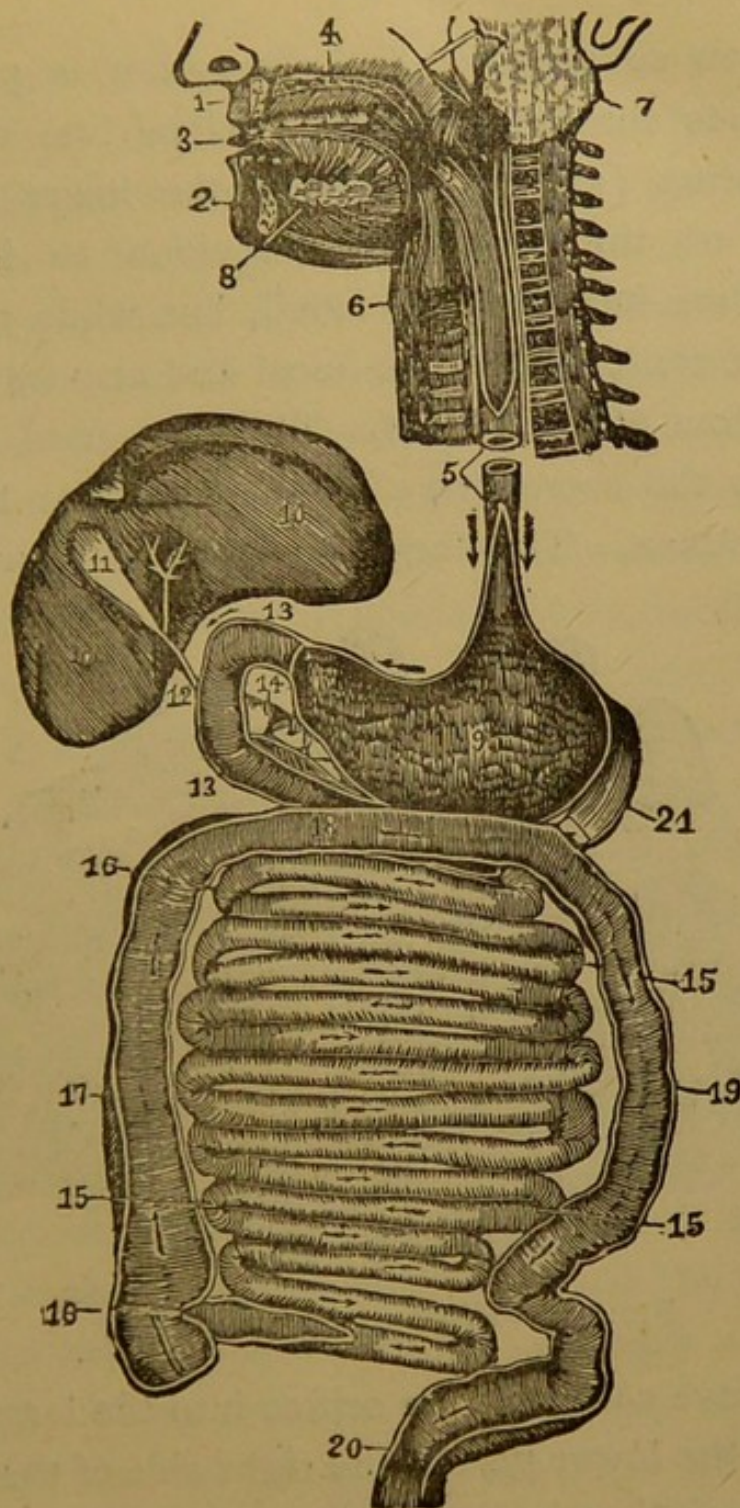


FIG. 29.—The Digestive System.

1. The upper jaw. 2. Lower jaw. 3. Tongue. 4. Roof of the mouth. 5. Œsophagus. 6. Trachea. 7. The Parotid gland. 8. The Sublingual gland; the two latter are salivary glands. 9. Stomach. 10, 10. Liver. 11. The Gall bladder. 12. The Bile duct which conveys the bile to the duodenum (13, 13). 14. The Pancreas. 15, 15, 15, 15. Small intestines. 16. Opening of the small into the large intestine or colon. 17, 18, 19, 20. The large intestine or colon. 21. Spleen. 22. Upper part of the spinal column. The arrows show the direction in which the chyle passes through the intestines. 20. The part of the colon termed the rectum.

has not been so prepared for absorption is passed along the intestines through a valvular orifice into the large or gross intestine [cut 29—(16)] at the lower part of the right side of the abdomen. Previous to its entering this part there has been no smell, but while in the large intestine the contents become fœcal and acquire the appearance and odour of excrement. This change of condition is produced by the secretions of glands peculiar to that part of the intestines. The large intestine is about nine feet

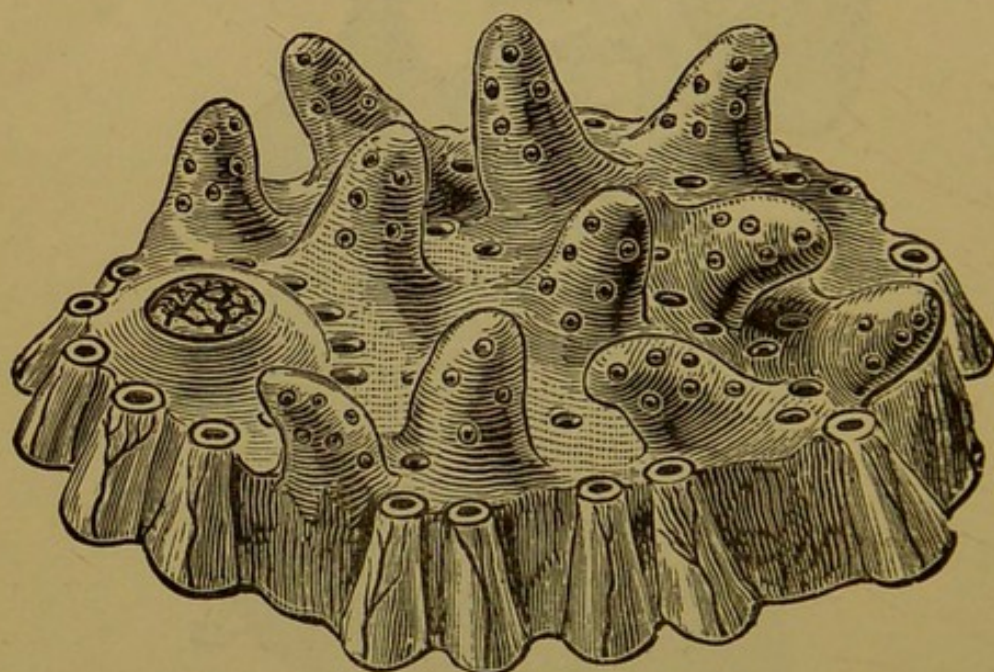


FIG. 30.—*Villi*, greatly magnified,

long. We have said that the orifice into the large intestine is located at the lower part of the right side of the abdomen. This large intestine is called the "colon;" it ascends on the right side, crosses over a little above the naval, descends on the left side, and then turns backward. The lower part of this passage is termed the "rectum," and the outer orifice the "anus," or seat. Around this there is a strong muscle, which keeps a tight grasp to prevent the involuntary passage of the fœcal matter. It will thus be seen that

the grosser particles of food are passed out at this cavity, while that which has been properly prepared for assimilation is taken up by the absorbents and gives strength to the body.

This explains why a great number of people eat a large quantity of food which does not nourish them. When the glands in the stomach are weakened or debilitated, very little pepsine is poured thereinto; and when people eat too much fat and greasy food the gastric juice cannot intermix with it, but it is passed down the intestines and expelled as waste and corrupt matter. It sometimes produces biliousness and vomiting, and frequently clogs up the blood with morbid humours. When food is not properly masticated, and when it contains a great deal of fat, it also slimes up the little villi or absorbents in the intestines and causes them to lie flat and useless, so that the system cannot receive much benefit from the food which has been eaten, thus demonstrating that great care ought to be taken in the selection of our food.

When the glands of the stomach become sluggish, and fail to perform their functions aright, they should be brought into action partly by pounding, slapping, or kneading the part with the bare hands, which will cause the blood to flow more freely thereto, and thereby produce more natural action. On the other hand, if medicines are taken into the stomach to whip it into action, the glands become irreparably injured, the stomach is robbed of its coating, its sides are blistered, and its contractability is greatly impaired. This explains how it is that those who take much medicine have a sinking in the region of the stomach, and why that organ becomes flattened.

When the chyle is absorbed by the lacteals it is taken into the blood-vessels and conveyed to the lungs,

where it receives oxygen and is converted into arterialised blood. Digestion is then completed, and the blood is sent by the heart with tremendous power to the minutest vessels in the remotest parts of the system, to repair all damages, impart strength to the muscles, vigour to the brain, and vitality to the entire organism.

DYSPEPSIA.

It is said that nearly every one is more or less dyspeptic now-a-days, and very few persons ask themselves the question, how they may prevent it? This should be the first business of all, for if the stomach be weak and debilitated, the mind cannot be healthy and vigorous. The stamina, strength, and influence of a nation greatly depend upon the health and vigour of its inhabitants.

A dyspeptic race never did and never can take the lead in human progression, neither can such people fully enjoy the pleasures of life, for indigestion produces a great variety of unpleasant sensations; amongst the most prominent of its miserable effects are a want of, or an inordinate appetite, which, if it be appeased by eating a large quantity of food, or by drinking too much liquid, a distension or feeling of enlargement of the stomach is produced, and this in turn will cause acidity, heartburn, flatulency, pain in the stomach, unpleasant taste in the mouth, and perhaps a rumbling noise in the bowels. Many cases of dyspepsia are accompanied with general debility, great languidness, and incapacity for exertion. The minds of persons so afflicted frequently become irritable, fidgety, and desponding; they are apprehensive of some impending calamity, and the sleep is more

or less disturbed with unpleasant dreams. A dyspeptic person has an ever present predisposition to various forms of chronic diseases, in fact it is this condition that almost always precedes consumption and other serious maladies.

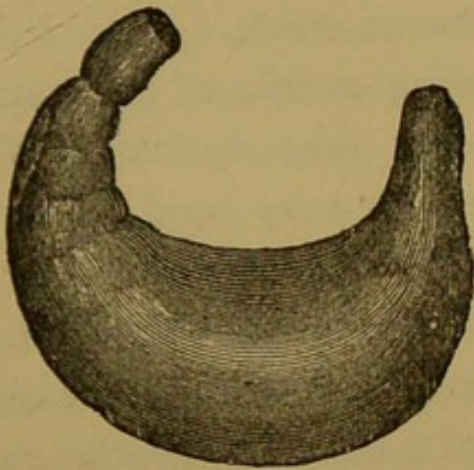


FIG. 31.

[Natural Size of the Stomach.]

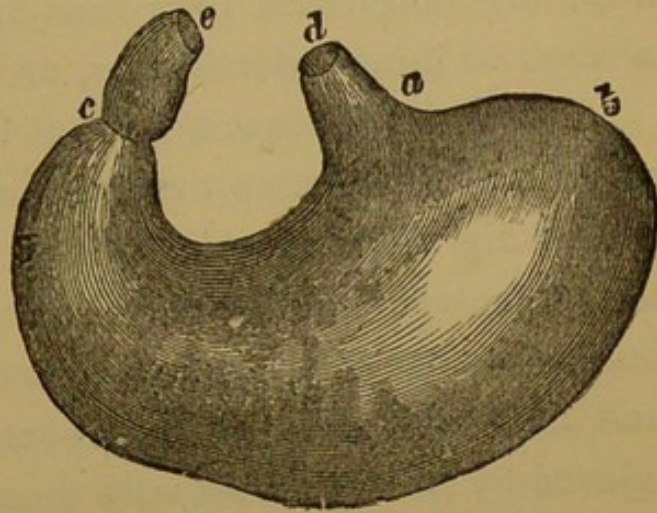


FIG. 32.

[Stomach greatly distended by over-eating and drinking, causing Flatulency, Heartburn, Indigestion, and Shortness of Breath.]

[*a*—Cardiac Orifice. *b*—Cardiac End.
c—The Pyloric End. *d*—Æsophagus
or Gullet. *e*—Duodenum.]

It is an important fact that many affections termed scrofulous and tuberculous are chiefly due to indigestion. Imperfect nutrition is the very essence of chronic diseases which are said to consist in a depraved habit of body, plethora, scurvy, and other debilitating conditions.

When food is taken into the mouth it should be thoroughly masticated. The object of mastication is insalivation, or, in other words, every particle of food should be saturated or mixed with saliva, or digestion cannot be properly performed. But in these days of fast eating and copious drinking the food is not thoroughly insalivated; it is hurried

into the stomach and washed down with some kind of liquid. This is very improper.

Those who would have perfect digestion should eat slowly, masticate their food thoroughly, drink but little, if any, and laugh and joke freely at meals. Drinking should always be done before, after, or between meals.

Many people make milk a leading article of food, and some doctors recommend it in their prescriptions. We have long been of opinion that milk is very good for fattening calves and for stuffing up the system with biliary humours, but that it is not good for building up a strong and healthy body. In fact, some constitutions are greatly injured by its use, especially those of a bilious temperament and those who have a weak condition of body, but when milk is mixed with water or eaten with mush it will then agree with most constitutions, especially if a piece of dry bread is eaten with the mush.

People should observe what agrees and what disagrees with them. If milk does not produce obesity, or cause a cough, or acrid phlegm, it can do no harm, especially if a dry biscuit is eaten with it to ensure insalivation.

All persons who have weak stomachs should remember that semi-liquids, or food that is composed of hard particles and mixed with milk or water, as mushes, gruels, soups, puddings, &c., should always be taken with dry bread, hard biscuits, or something similar, and eaten very slowly, otherwise the stomach will be overtaxed with unsalivated food, which will produce indigestion.

Drinking hot liquids, eating new bread, highly seasoned food, condiments, late suppers, and smoking tobacco, will debilitate the stomach and lay the foundation for dyspepsia.

Worry and business anxiety will break down the strongest constitution and weaken the stomach; hence, those who would avoid dyspepsia should always leave business in their workshops when they go to their meals.

Eating too hurriedly and too often has a tendency to overload the stomach and to produce mischief, for every particle of food that is taken over and above what is needed for assimilation is so much injury to the system.

IRREGULAR EATING IS VERY INJURIOUS ;

in fact, it is as frequent a cause of stomach disease as over-eating; hence, strict regularity of meals should be observed. Alcoholic drinks usually excite or create a false appetite, which leads to over-eating. They do not aid digestion, as some people suppose, but they retard it, and do a serious injury to both body and brain. Dyspeptics are usually large eaters, and generally crave for food of a stimulating and irritating nature; hence sauces, condiments, and bitters are taken to sharpen the appetite. Their stomachs are inflamed with mustard, irritated with pepper, chilled with ice water, scalded with hot coffee, and literally poisoned with alcoholic drinks. If the stomach complains of such terrible treatment by hanging out its flag of distress by way of aches or pains, the cigar or pipe of tobacco is immediately taken to benumb or deaden the pain, but it does not remove the cause, or, in other words, it weakens and destroys the sensitiveness of the nerves and lays the foundation for serious nervous affections.

Those who eat too much and partake of highly seasoned and indigestible food, usually swallow a large quantity of medicines or pills in order to work them off. This process

of drugging has a debilitating effect, both upon the stomach and upon all other parts of the system. There would be a deal more philosophy in fasting a day or two until the stomach is relieved of its burden, or in washing out the stomach, than in taking purgative medicines to hurry away the food before it has had time to digest.

Treatment.—First, all predisposing causes must be removed; the patient must give up injurious indulgences to be cured. A plain, simple, and spare diet is essential to a complete restoration. Meals should be taken with perfect regularity. All kinds of condiments, sauces, irritants, highly seasoned and indigestible foods must be dispensed with; tea, coffee, alcoholic drinks, late suppers, new bread, boiled dumplings, bacon, pork, and ham should be studiously avoided.

Cast care, anxiety, and despondency to the winds. Cheerful society, hearty laughter, and playfulness should receive their *full* share of attention. People gain nothing, but lose a deal by inattention to these important matters. Cheerfulness, laughter, and merry conversation should be encouraged at every meal; by these means digestion will be assisted, and retarded by an opposite course; hence, parents who compel their children to eat their meals without uttering a word do them a grievous injury.

Let the food be eaten slowly and masticated thoroughly before it is swallowed. Sit and rest the body ten minutes before each meal, and do not begin to work, read, or study for twenty minutes after the last mouthful has been swallowed. Drink but little at meals, and avoid drinking very cold liquids, otherwise they will chill the stomach and retard digestion.

Strict attention must be paid to the regulation of the bowels; if they do not act freely without, the enema should be used, but this may easily be dispensed with by eating laxative food, as wheat meal mush, bread containing the bran, stewed fruits, and by drinking a tumbler of warm water on retiring to bed and another on rising, especially if the patient goes to stool at one regular hour daily.

Sponge the body over with cold water on rising, and follow with brisk rubbing and a vigorous patting and pounding of the chest, stomach, and abdomen with the closed hand. The pounding may be repeated several times a day; by this means the blood will be drawn to the parts, and the lacteals will do their work more perfectly.

Wash the teeth and mouth with a toothbrush and water every night and morning.

Take a sitz bath 80 degrees Fahrenheit, and gradually cool it down till quite cold before coming out, if there is sufficient vitality to cause a reaction, but if the patient is very weak and feeble, it should only be reduced to 70 degrees. Rubbing the bowels freely while in the sitz bath will add to its effect. The right time for taking baths is half way between meals. The wet compress may be worn around the body five or six nights weekly, but macintosh should not be used, inasmuch as it has an enfeebling effect upon the body.

When the feet are cold, the foot-bath may be used half-an-hour before retiring to bed, after which a short brisk walk should be taken.

When there is any pain in the abdominal region, the parts may be fomented with hot water for ten minutes, and followed by a sponging with cold water; a tumbler of warm

water may also be drunk, and if the bowels are constipated an injection should be administered. A wet sheet pack, vapour, hot-air, Turkish, or shallow bath may be taken once or twice a week.

Two meals per day are quite sufficient for a dyspeptic patient, especially if he has not very hard muscular work to perform. Roasted or baked potatoes are more easily digested than those that are boiled, but avoid eating the skins. Eat very little meat, and let it consist of lean mutton, pigeon, fowl, or fish, and not more than two ounces per day of either—in fact, ripe fruits, tomatoes, haricot beans, lentils, mush, the yolks of eggs, and the higher class of vegetables are even better than meat; still a small quantity is permissible, if the patient feels that he must take it.

Yorkshire puddings, the white of eggs, sweet cakes, candies, tarts, and rich pastries are specially injurious.

We have said that two meals per day are quite sufficient for dyspeptics, but we are fully convinced that in bad cases one meal per day would be even better than two or three, but some people are not willing to conform to this rule, thinking that it would starve them to death. Some of our best cures, however, have been brought about by strictly adhering to this rule and by means of the treatment above recommended. Dyspeptics should eat hard wheaten biscuits and that kind of food that requires thorough mastication. Soups, stews, and other semi-liquid food are not so good.

Out-door exercise is very important, and no patient can be thoroughly restored who does not exercise in the open air.

Leaning over the stomach, sitting with the elbows upon the knees, or in other bad postures, greatly retards digestion. By this means the stomach and intestines are so compressed as to prevent the proper assimilation of the food. Amatory excesses and all kinds of undue mental excitement are also debilitating to the stomach; while cheerfulness, a hearty



FIG. 33.

[Improper position, unfavourable to health.]

FIG. 34.

[Proper position, favourable to digestion, respiration, and health.]

laugh, and pleasant conversation aid to dissipate all symptoms of disease.

Washing out the stomach several times per week by means of warm water and the stomach tube is invaluable to dyspeptics, more especially when the ailment is accompanied with acidity and a sluggish liver. We are of opinion

that this purifying process would cure nine-tenths of the dyspeptics in the land, on condition that they attend strictly to the rational system of diet we have recommended.

Dyspeptics should observe the following regulations:—

1. Never eat between meals.
2. Eat in a lively, cheerful manner.



FIG. 35.

[Healthy position.]



FIG. 36.

[Unhealthy position; predisposing to indigestion, lung affections, and debility.]

3. Never walk, read, or study within half-an-hour after meals.
4. Spend at least half-an-hour's time at each meal.
5. Eat nothing after a noon-day dinner but some bread and butter, stewed fruit, and one cup of cocoa, or milk and water.

6. Cut all the food into very small pieces before passing it into the mouth.
7. Drink very little at meal times, and never excite or worry the mind while eating, for that is enough to make a healthy person dyspeptic.
8. Never take any purgative medicines, for the more you take the more you will require. Nature resembles a spoiled child, the more it is pampered the more it will want it.
9. If the teeth are so bad that the food cannot be properly masticated, procure artificial ones in their place, but if this is not convenient, purchase a "food masticator"; this is a fairly good substitute for teeth.

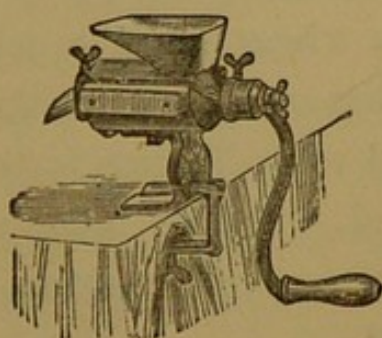


FIG. 37.

MASTICATOR.

[Invaluable for persons who have weak stomachs, or who have bad or no teeth. It assists digestion, and helps to obviate the inconvenience arising from loss of teeth, and is very serviceable in mincing meat, vegetables, &c. It is also invaluable in the nursery for preparing food for children.]

10. Avoid drinking very hot drinks and eating highly seasoned foods.
11. If you cannot digest three meals per day, reduce them to two, and if they are too much, then try one, and give your stomach time to rest.

12. Eat laxative food, such as bread containing the bran, and wheat meal mush, especially when the bowels are constipated.
13. Never brood over anything that is disagreeable; it is this kind of thing which fills our madhouses; besides which it is much better to look on the bright side of a subject than to be perpetually magnifying the unpleasant affairs of life.
14. The teeth should be well brushed after eating the last meal and on rising in the morning, and rinse the mouth with lime water every morning, to neutralise any acids which may have accumulated during the night.
15. Let the breakfast consist chiefly of soft, sloppy, or pulpy food, as wheat meal mush, oatmeal porridge, stewed fruit, brown bread toasted and broken into a basin, softened with boiling water, and a little sugar and milk added. Brown bread and butter may also be eaten; but very little slops should be taken at any other meal.
16. When there is acidity of the stomach or any unpleasant sensation, wash out the stomach before breakfast and previous to taking the last meal, which, of course, should be a very light one.

AN ILLUSTRATION OF THE DIET CURE.

We will narrate the particulars of a case of sickness we treated successfully, in order to show the benefit of moderation in diet, combined with our hygienic treatment. A patient came to our establishment who had been suffering from dyspepsia, flatulency, asthma, and kindred disorders

for several years. He was nearly reduced to a skeleton, and could not walk many yards without great difficulty. Three doctors, by whom he had been treated, gave no hope of his recovery, for he could not keep any food upon his stomach. When he came to our hygienic establishment for treatment we dieted him upon one meal a day for a month, and afterwards increased it to two meals, and with the aid of judicious water treatment, the Life-awaker, &c., he soon regained strength, and ate his food with such relish that in three months he weighed four stones heavier than when he came for treatment. If any one should doubt this or any other case we have mentioned, we shall be ready to supply privately the names and addresses of the individuals. Many other illustrations of a similar character could be given if space permitted.

We have not space here to dilate upon the properties of different kinds of food, but this will be found in our Works, entitled, "Health and Economy in the Selection of Food" and "The Best Food, and How to Cook It."

CRAMP, OR SPASM OF THE STOMACH.

This affection is sometimes called *Colic* of the stomach, and it is usually a very painful, if not a severe and dangerous disorder.

Causes.—The fermentation of indigestible food, over-eating, long continued pressure over the stomach after eating a hearty meal, the accumulation of *acrid bile*, and purgative medicine, all tend to produce this affection.

Treatment.—The most speedy and effectual way of curing this painful disorder is by washing out the stomach

with the stomach tube; if this is not available, several tumblers of warm water may be quickly swallowed, then tickle the throat to produce vomiting; also take copious injections of warm water, and wear the wet compress both night and day till cured. Rich and greasy food must also be avoided.

STOMACH WASHING.

Washing out the stomach is a comparatively modern mode of treating patients suffering from dyspepsia and other functional derangements arising from indigestion, biliousness, &c. It may appear to many that washing out the stomach must be a difficult and dangerous operation, yet it is one of the simplest, quickest, and safest prescriptions. The plan was first tried by a German physician in Vienna a few years ago, and it has already become quite popular on the Continent and in America; but in this country very few medical men use the stomach tube, and they keep it as quiet as they can, fearing perhaps that its universal use would put an end to the drugging system. We have found that cases which were intractable to other treatment have readily yielded to this cleansing process. This mode of cure is founded on the fact that a disordered and foul stomach is the source of nearly all diseases, and that health cannot be regained until the stomach is cleansed and strengthened. The best time for performing the operation of washing the stomach is half-an-hour before meals or at bed time. The apparatus has nothing to do with soap and brush, but consists simply of a flexible tube of India-rubber, about a foot and a half long,

which is passed into the mouth and down the gullet, and allowed to drop gently into the stomach as far as the pylorus. This tube may be connected with a yard of common flexible tubing and a glass funnel, which is held on a level with the patient's breast, and tepid water is then poured slowly into the funnel until sufficient water has been swallowed to produce a sensation of fulness. The funnel is then lowered to the level of the waist and the fluid allowed to syphon out; or the funnel and extra tubing may be dispensed with altogether, in which case $1\frac{1}{2}$ pints of warm water should be swallowed, the tube inserted, and the head inclined a little forward. The freedom with which the water flows out astonishes all who witness this curious operation for the first time. The fluid ejected is generally discoloured, and contains more or less bile or slime and undigested particles of food. When the stomach is very foul the washing should be repeated until the water returns quite clear, which is a proof that the stomach is cleansed of its impurities for the time being. In serious cases the washing should be repeated every day for a week or longer, and during that time the diet should be restricted to one or two meals a day of the lightest and most digestible food. After a week the washing may be done every second or third day, and discontinued at the end of three or four weeks. The advantages of stomach washing are these—it is safe, simple, inexpensive, and one of the most efficacious remedies in cases of bilious headaches, jaundice, flatulency, catarrh, stomach and liver coughs, and various phases of chronic dyspepsia. The latter is a disease which makes its victims a burden to themselves and their friends, and the cure of which has hitherto baffled the skill of physicians.

In all ordinary cases of ailment arising from dyspepsia, a torpid liver, or a common cold, the stomach may be washed twice a day—on retiring to bed and just before dinner,—in which case a hearty or full meal should be avoided.

MASSAGE,

Or the “Movement Cure,” has of late years become very popular. This is a system of manipulations, such as patting, slapping, kneading, and pounding various parts of the body.

For the relief of dyspepsia these slappings and kneadings are directed chiefly to the region of the stomach, whilst other parts of the body are manipulated to relieve local affections.

This system of treatment is new to many people, though we have been recommending and practising it on a small scale for a quarter of a century. We are delighted to know that this simple mode of cure is now receiving much attention and finding favour with the public.

We trust that the “Movement Cure,” and all other hygienic agencies, will in future receive increasing patronage from the thinking part of the community. Anything which will help to circulate the blood and assist Nature to do her work of reparation and restoration is far preferable to poisoning people with drugs because they are sick.

Massage, or the Swedish movement cure, is not a new discovery, but is believed to be as old as the art of healing. Its remedial action is based upon the principle that movement in the stomach by means of muscular activity is the

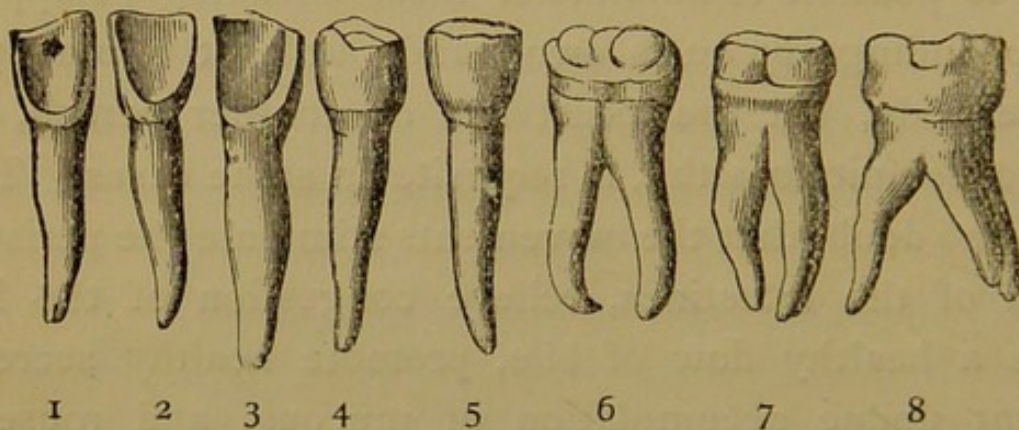
principal means by which food in the stomach is digested, and that it is the absence or weakness of this muscular movement, combined with a deficient supply of gastric juice or pepsine, that causes so many cases of dyspepsia. Extraordinary cases of recovery from indigestion, constipation, and other affections are attributed to the employment of massage.

It is possible to administer these kneadings, slappings, and poundings by one's own hands, at least to most parts of the body, but the assistance of another person, who should be quite healthy, is requisite in some cases. There can be no doubt that the movements stimulate the peristaltic action of the intestines, relieve congestion of the liver, excite a healthy flow of bile, promote healthy secretion, prevent undue accumulation of mucous, and rouse the great nerve centres of the organic system into a state of healthy activity. Obstinate cases of constipation have been known to yield to this treatment in one or two weeks. The movements must not be too prolonged at one time; an hour at once is quite long enough for the practice of massage upon most patients.

TOOTHACHE.

When the teeth are decayed, extraction is the only cure; but if there be great irritability hold tepid water in the mouth until it becomes warm, then change it; at the same time rub the back of the ears and side of the face with cold water. Toothache is generally caused by indigestion, relaxed nerves, caries of the teeth, fast eating, drinking hot liquids, &c.

Prevention.—The best way to prevent toothache is to eat slowly and masticate the food thoroughly. Eat the crusts of bread, wash the teeth after each meal with a soft tooth brush, and especially on retiring to bed and on rising each morning. Discard the use of tooth powders; they contain an acid which is destructive to the enamel of the teeth. A little soap is far preferable to all the powders that are



FIGS. 38 to 45.

[Human Teeth. The Enamel has been softened and removed from the upper parts of Nos. 1, 2, and 3, by the accumulation of tartar, which should have been prevented by washing with soap and water, in order to preserve the teeth.]

generally advertised and recommended. When there is a tendency to yellowness of the teeth, a little powdered precipitated chalk may be used; and in very bad cases it may be necessary to employ powdered cuttle-fish bone, or even finely pulverised pumice stone.

Sometimes the teeth are caused to decay by there being too large a proportion of acid in the saliva. When this is the case, the mouth should be well rinsed two or three times a day with a weak solution of carbonate of soda and water, or with lime water. The latter may be produced by pulverising a piece of quicklime about the size of a walnut

and putting it into a pint bottle; add to it water, shake it up, and allow it to settle, it is then ready for use.

As soon as teeth begin to decay have them stopped by a good dentist; but when they are quite decayed have them removed, otherwise ulceration at their root and other facial disturbances may be produced.

When the face is swollen bathe it freely with hot water, more especially about the cheeks and ears, and apply a hot wet cloth to the face, cover it with dry flannel, and bandage down snugly, and keep it on all night. If the pain and swelling do not subside, repeat the bathing and wet cloths next morning, and also at intervals of two hours till the symptoms subside. Wash out the stomach daily, and when constipated, use the enema with tepid water to produce free action.

Toothache may sometimes be cured by wrapping a small piece of cotton wadding around a penknife blade, and dipped into *unmethyated* chloroform, and applied to the part affected, especially when it is also rubbed over the inflamed gums. The sniffing up the nostrils of a little common table salt has also been known to cure this affection in a marvellously short space of time.

CONSTIPATION.

Constipation is a disease of exhaustion. It is promoted by inattention to the calls of nature; by taking purgative medicines, which irritate and inflame the stomach and intestines, and thereby aggravate the symptoms they only temporarily remove; also by eating highly-seasoned food,

and that which is of a too concentrated, fine, and purely nutritious character.

Treatment.—We have already stated that any obstruction which prevents the bile from passing into the intestines will cause constipation; hence, it is of the highest importance that all obstructions in the region of the bile duct should be removed by the stomach washing process, also by drinking freely of warm water, and by patting or pounding the chest, stomach, and abdomen with the closed hands for a few minutes half-an-hour after each meal. In cases of inveterate constipation several months may be required to secure regular and continued action. Prompt attention must be paid to the calls of nature. When convenient, the bowels may be gently kneaded by an attendant for fifteen or twenty minutes every morning. This kneading will call the blood to the part and cause the bowels to act more naturally. Injections of warm water may be applied daily until the bowels act of their own accord. Frequent water injections, however, have a tendency to wash away the mucous from the intestines, which is always present in their natural state. When the mucous is thus washed away, fistulas are sometimes formed, accompanied with piles and kindred disorders. In order to counteract this, injections should be taken occasionally of weak linseed tea, soap-suds (made from soap which does not contain alum), sweet oil, or glycerine. The dietary should consist of brown bread, ripe and stewed fruits, wheat meal mush, vegetables, and very little meat.

The wet compress worn around the body during the night is very beneficial, and in some cases it acts like a charm. The warm sitz bath, strongly diluted with soap, is also very beneficial.

HEMORRHOIDS OR PILES.

Piles are caused by constipation, sedentary habits, and excessive amatory indulgence. Purgative medicines have also a tendency to weaken the intestinal canal, and thereby favour their appearance.

Treatment.—They are cured by exercise, cool water injections, cool sitz baths, and the fountain bath. This treatment is effectual both for internal and external Piles, but amatory excesses must be avoided. In very serious cases of external piles we have found it necessary to apply the Life-awaker, but most cases yield to the above treatment. When it is necessary, however, to apply the Life-awaker, it should be done with great discretion, and by a very experienced person, otherwise considerable injury may be done.

FISTULA.

Fistula in *ano* is usually connected with Piles, and both are accompanied with habitual costiveness, which is their chief cause, although Fistula may sometimes be occasioned by wounds or injuries.

Treatment.—Keep the bowels regular by cool water injections and by eating laxative food. The sitz bath is highly beneficial; let the water be about 95 degrees to commence with, in which the patient should sit for five or six minutes, after which the warm water should be allowed to run off and cold water forced up from underneath the bath, which may easily be accomplished when a proper bath is used. The ordinary hip bath will not answer the

purpose a tenth part so well as the sitz baths, which we regularly use in our establishment, and which we have had specially made for such affections. Some cases of fistula, however, require a surgical operation, but nine cases out of ten will yield to the above treatment, more especially if the rising douche bath is also frequently applied. The wet compress should also be worn around the body four nights weekly, accompanied with occasional half-baths, wet sheet packs, and stomach washings, in order to clear away impurities and thereby remove the cause.

DIARRHŒA.

There are several phases of this disease, which are too numerous to particularise in a small work like this. It would require a special treatise to do full justice to this malady.

Treatment.—When it is caused by biliousness it may easily be relieved for a time by one or two copious tepid water injections. The patient should fast for several days, drinking nothing but cold or warm water. Apply the wet compress around the body, and renew several times a day. A wet sheet pack may also be advantageously applied for fifty minutes once every twenty-four hours. A sitz bath of sixty degrees (five minutes in duration) may be applied every three hours. When the diarrhœa continues for more than two days, apply cold water injections after every discharge. Let the water be slowly injected, so as not to excite peristaltic action. Cold water will keep the rectum distended and its walls apart, thereby preventing them from

mutual irritation. The regulation of the patient's diet is of the utmost importance, and it should be selected and apportioned with the greatest care. Everything of a rich and greasy nature should be studiously avoided. In very serious cases a quart of ice-cold water may be injected twice or thrice a day. Sometimes the water will be absorbed, but this is when it is needed in the blood. It is surprising how soon even chronic diarrhœa yields to these simple remedial agents. When there is much inflammation a shallow or half bath (70 degrees) may be taken five or six times per week, accompanied with friction with the bare hands, the patient remaining in the bath for seven or eight minutes, and if the diarrhœa still continues, an acorn may be roasted in the oven till quite brown; it should then be grated and mixed with a small tumbler of tepid or cool water and drunk fasting, and repeated two or three times daily.

COLIC.

All the diseases comprised under the head of colic or belly-ache are characterised by griping pains in the bowels, and are attended with vomiting and costiveness. In these cases gases are secreted through a morbid state of the intestines, which generally arise from the fermentation of indigestible food, which causes the stomach to distend, and brings about an uneasiness, fulness, and swelling in that region. Those who drink much at their meals are more subject to colic than those who drink but little, and masticate their food thoroughly.

Its *Treatment* is very simple and easy when the right

means are employed. Copious tepid or warm water injections should be taken, so as to free the alimentary canal of its accumulated contents, conjoined with sitz or half-baths, which should be 98 degrees at first, and followed with quite cold water. Apply the warm wet compress, and change it every three hours.

A very simple but somewhat unpleasant way of curing colic is by standing upon the head for about one and a half minutes. This causes the food, which is undergoing fermentation in a cavity of the stomach, to be removed to some other part of this organ, the gastric juice will then blend more freely with it and produce natural assimilation. Another speedy way of curing colic is by washing out the stomach with warm water and the stomach tube.

The nervous and spasmodic kind is more obstinate, and requires to be treated with the half-bath, thorough wet sheet pack, or with a sitz bath, accompanied with steady rubbing of the bowels. Hot fomentations generally give relief, but they render the bowels tender and favour future attacks, whilst intense cold overcomes spasm, as well as heat, without weakening the system. Wear the wet compress around the body during each night, and drink copious draughts of warm water; take but little, if any, food until the pain has subsided, or for some time after. In many cases the cold hip or sitz bath will give immediate relief, whilst in other cases hot water proves the best sedative. Probably in every case, when warm water fails in giving relief, cold water, promptly administered, succeeds; but if warm water is applied it should be followed with a cold sponging or pouring on of cold water, so as to close the pores and prevent the patient from taking cold. The wash-

ing out of the stomach, as above described, will save a great deal of trouble, and soon overcome even the spasmodic phase of this painful affection.

HERNIA, OR RUPTURE.

Hernia is sometimes caused by colic, especially when cathartic medicines have been resorted to. It may be reduced in nearly every case by pouring a stream of very cold water upon the part until thoroughly cooled. The bowel should then be pushed into its proper place, and snow or pounded ice may be applied until the parts become strengthened.

The strictest attention should be paid to diet. Laxative foods should be chiefly taken, in order to prevent constipation. With this precaution, and the avoidance of all rough exercises, the patient may manage without the use of a truss, but in very bad cases a truss or bandage is essential. A cold wet pad placed over the part, covered with dry flannel and bandaged, and worn for several nights weekly, will have a tendency to strengthen the part and give welcome relief, especially if the parts be well sponged with cold water and accompanied with an upward kneading and rubbing on its removal. In serious cases the pad may be worn night and day, and changed morning, noon, and night. Always sponge the parts freely with cold water every time the wet pads are changed.

CHOLERA.

There are several kinds of cholera which are usually characterised by vomiting, purging, and griping in the bowels, spasms in the arms and legs, often flatulent eructations, with great anxiety and prostration.

Spasmodic Cholera is generally preceded for hours or days with looseness or diarrhœa, which, if taken in its early stages, may be easily cured. Cholera is distinguished from colic by the presence of purging, and from *diarrhœa* by the absence of vomiting in the latter disease.

Bilious Cholera is commonly known as *cholera morbus*. The vomiting and purging are copious and frequent, with an abundance of bile. In the severest cases vomiting is vehement, the dejections very painful, the spasms violent, and the agony intense. In these cases the extremities are cold, the pulse feeble and irregular, and unless the patient be skilfully treated he dies within twenty-four hours from his first attack. The principal causes are usually an accumulation of acrid bile, indigestible articles of food, drastic purges, emetic drugs, &c.

Flatulent Cholera is sometimes called *Wind Cholera*. It is caused chiefly by indigestion; hence, dyspeptics are more liable to it than any other class. It is characterised by the absence of bile in the discharges, and there is great and oppressive flatulence and retching, with windy eructations and dejections.

The *Treatment* is much the same in both cases, but proportionate to the intensity of the disease and to the strength of the patient. The bowels should be emptied first by tepid water injections after each discharge during

the first hour, so as to remove all 'corrosive matter from the alimentary canal. After the first hour cold water injections should be applied after every discharge, until the purging is abated. Cleanse and soothe the stomach by large draughts of tepid water, and a tepid sitz bath should be freely administered, accompanied with brisk rubbing and plenty of friction with the bare hands.

Let the extremities be well rubbed until they are quite warm, and as often as the symptoms return the sitz bath and rubbing should be repeated. A tepid wet sheet pack for forty minutes may be given daily, and the patient allowed to breathe pure fresh air. If there is much nausea and retching at the outset of the disease a warm water emetic may be administered, or rather the stomach should be cleansed with warm water and the stomach tube. When there is much thirst frequent sips of cold water may be taken. If the warm sitz bath does not relieve the patient, cool or cold sitz baths may be given in their stead, accompanied with brisk rubbing.

SPASMODIC CHOLERA,

Sometimes called Malignant, Asiatic, or Pestilential Cholera, is generally epidemic, though not so dangerous nor so contagious as many people imagine. Healthy people and those who live upon a pure diet never need be afraid of it. The ordinary *symptoms* are more or less diarrhœa; the discharges present the appearance of gruel or rice water; there are flying pains, with a sense of coldness in the abdomen, accompanied with a pale countenance, nausea, vomiting, prostration of the muscular power, and nervous agitation

as also by cramp in the legs, arms, loins, and the abdominal muscles. The first symptom is accompanied with a desire for cold water; the skin is cold and clammy, the pulse irregular and scarcely perceptible, and complete prostration quickly ensues.

The class of persons who are mostly affected by this malady are those who live riotously and who do not pay strict attention to their dietetic habits, and especially those who debilitate their system by smoking and other intemperate practices. In the early stage of the disease, injections of warm water should be frequently administered; meanwhile the thirst may be appeased and the heat of the stomach mitigated with frequent but moderate draughts of cold water.

A cold wet compress should be applied around the body, and covered with dry soft flannel and bandaged down tightly with a calico bandage. When the patient is very weak a tepid dripping sheet, followed by a dry sheet, and accompanied with brisk, active, and persevering friction, should be employed. If the patient is too weak to bear this treatment, the surface of the body should be well rubbed with a cold wet towel, and succeeded by active friction with a dry soft flannel and with the bare hands. A cold sitz bath, at 60 degrees, for five minutes, is also a valuable assistant in any stage of the disease preceding the collapse.

When the spasms are violent and extraordinary, the friction should be proportionately vigorous. Wash out the stomach twice a day, and let the patient breathe pure fresh air.

CHOLERA INFANTUM

Is a fatal disease incident to weak and scrofulous infants, who are exposed to bad air and unhealthy conditions in a hot climate. When the evacuations from the bowels are mixed with blood, cold water injections should be frequently administered. When the fever is the highest, the child should be placed once a day in a tepid half-bath, during which time the whole of the body should be well rubbed with the bare hands. The food should be exceedingly simple, and consist chiefly of wheat meal mush and rice-water, seasoned with a little sugar and milk, but neither tea nor coffee should be taken.

LIVER COMPLAINT.

The liver is the largest organ in the human body. A well-developed, average-sized man, whose height is 5 feet 7 inches, will have about 90 cubic inches of liver, the average weight of which will be 50 ounces. The liver is not only the largest secreting gland in the human body, but it has been accorded the distinction of being situated in the very centre of the frame and placed in connection with both the respiratory and digestive systems, being directly associated on the one hand with the digestive canal by a special venous system of its own, and on the other hand indirectly connected with the respiratory organs by the general venous system. The liver receives directly from the digestive canal certain portions of the food pabulum, which have there undergone the necessary preparatory process of transformation to render them capable of absorption by the numerous portal capillaries.

This organ plays a proportionately greater part in the animal economy than any other glandular organ in the body. Not only does the liver secrete bile, but it is an actual sugar manufactory and a fat modifier; besides which it performs one or more other functions. Its importance is further demonstrated by the fact that even while the foetus is yet within its mother's womb it is to the liver that is directly returned the blood issuing from the maternal placenta. The liver is the only organ in the body which has power to transform albumenoids into sugar, though other organs possess the power of transforming amyloids into saccharine matter, such as the salivary and pancreatic glands. The saccharine and albuminous portions of the food are taken up by the capillaries of the portal vein and carried at once to the *hepatic* cells. The fatty and oleaginous elements of the food are absorbed from the intestines by the lacteals which merge together and form the thoracic duct, and convey these elements past the liver, and pour them into the general venous circulation at a point where they can be at once transported to the pulmonary capillaries and exposed by them in the vesicles of the lungs to the oxidising action of the inspired air, after which they come into contact with the hepatic tissues, and there receive the finishing touches in their preparation for the purposes of assimilation. We are not yet sufficiently acquainted with Nature's operations to determine how the hepatic cells act upon the fatty and oleaginous elements, but we do know that these cells possess a remarkable power of extracting oil-globules and fat-granules from the blood, and that they store them up in their interior, and transform them into a white crystalline substance termed chollsterin, which they

excrete along with the bile; and when too much fat is taken into the body, so much of these elements is sometimes excreted that it forms itself into hard concretions termed gall-stones, either in the gall bladder or in the bile-duct. Then, too, these hepatic cells sometimes become choked or overfilled with oil-globules, which produces the diseased condition called "fatty" or "lardaceous" livers.

When gall-stones are formed in the bile-duct an obstruction is produced, resulting in jaundice and kindred other affections. It will thus be seen that too free a use of fats or greasy food have a tendency to produce some of the worst disorders incidental to the human race, whilst too free a use of sugar, sweets, candies, &c., predispose to diabetes and kindred disorders. Bile is expelled from the gall bladder as a result of the mechanical effect of its contraction, which is called into play by reflex nervous action.

We have heard people declare that they could not for the life of them see what use there is for bile in the system. We may here explain that when the bile passes from the bile-duct into the duodenum it should then intermix with the food, in which case the intestines perform their duties more naturally. We find that there is more bile in the upper part of the intestines than in the lower part—that is to say, the bile intermixing with the food is gradually re-absorbed by the villi or rounded tubes contained in the intestines, and is taken up by the blood-vessels and again passed through the system to the liver, where it is secreted until Nature again requires it for the same purpose as before. Were it not for the action of the bile upon the villi and intestines, these parts would become dry and inactive, whereas the bile has a lubricating effect upon the parts and keeps them

supplied with mucous, which is essential to a healthy condition. Hence, it will be seen that when there is a deficiency of bile, or when the bile-duct is obstructed, constipation and kindred disorders will be the result.

We have said that the liver is a sugar manufacturing and fat modifying gland. This implies that sugar and fat are really necessary to a healthy condition of body; but there is sufficient sugar and fat contained in most kinds of fruit and vegetables to satisfy the requirements of nature, except in childhood, when more saccharine matter is needed—hence the natural liking of children for sweets. But when too much sugar and too many sweets are given to children the liver becomes clogged, and a bilious condition of body is produced, which is frequently accompanied with pimples, eruptions, &c. Fruit loses some of its saccharine matter in the process of cooking; in this case sugar may be added; but it must be borne in mind that sugar is a very feeding substance, and has a tendency to bring on diabetes and kindred disorders; hence, the too free use of sugar does far more harm than good.

It may here be observed that the *saliva* which intermixes with the food during the process of mastication, contains a small quantity of animal matter, called *Ptyalin*, which begins to change any starch the food may contain into sugar, so that it may the more readily pass into the blood through the mucous membrane of the intestines and the coats of the capillaries. If all the starch that is contained in the food were to be converted into sugar, it is quite evident that there would be so much saccharine matter in the blood, as to produce disease; hence this conversion of starch into sugar is wholly or partially arrested by the

acidity of the contents of the stomach as soon as it comes in contact therewith ; this is a wise provision of nature, and it was evidently designed for the purpose of modifying the supply of sugar.

When there is but little acid in the contents of the stomach, or when there is a deficient supply of this element, the manufacture of starch into sugar goes on at too rapid a rate, and produces the disease termed *Diabetes* ; on the other hand it may be urged that when there is too much acid in the saliva, that too little sugar is produced, hence the necessity for some such element as " Malt Extract " to facilitate the conversion of starch into this condition ; it is very questionable, however, whether " Malt Extract " does, or can, counteract these acids in the mouth, and even if they do, whether the antidote, by producing too much sugar, does not do more harm than good. Then, too, very few people suffer from having too little saccharine matter in the blood, whilst thousands are injured by there being too plentiful a supply of this element. We are prepared to admit, however, that the imagination acts very powerfully upon some people, and more especially upon dyspeptics and bilious subjects, consequently it is not surprising that many who have suffered from these diseases for a long time, should imagine that they derive some benefit from eating charcoal biscuits, malt extract, ground ginger, and even snails and earth-worms, but the relief which has been experienced has arisen more from the glowing descriptions of cure which are said to have been produced by their marvellous qualities than from any inherent virtue contained in the articles themselves. Anything that will buoy up a man's spirits and give him confidence or

faith in its supposed curative qualities, will most certainly aid digestion by sending more nerve force into the stomach, but this is caused by the hope engendered and the mental stimulus, rather than from any curative element contained in the nostrums applied.

The fact of the liver and other glands manufacturing sugar probably led some enterprising person to manufacture and recommend the use of "Malt Extract" as an aid to digestion; but, as above hinted, anything that is very sweet, and partaken freely with the food, has a tendency to throw more work upon the liver, and to produce enlargement of that organ without any corresponding advantage to the system. It is claimed that "Malt Extract" will convert starchy matters into sugar, as maltose, and some medical men have borne testimony to its valuable qualities as an aid to digestion; from the above, however, it will be seen that from the very fact of its dissolving starchy matters into sugar, even after this dissolving process should be wholly or partially arrested, it is calculated to do a great and irreparable injury to the whole physical fabric. Medical men are not infallible, and many of them have been equally unwise in recommending numerous nostrums that have been equally injurious to both body and mind. A morbid condition of the liver is as common as is a morbid condition of the stomach.

Biliousness is caused by eating rich and greasy food, late suppers, mince, veal, and pork pies, short cakes, pastry, and rich confectionery. Many people eat spice and candies to such an extent that their faces are covered with pimples. This is nature's flag of distress, indicating that she is being surfeited with such injurious articles.

Treatment.—Those who would clear themselves of pimples, biliousness, enlargement of the liver, and kindred affections, should studiously avoid eating the articles above named, and also take an abundance of out-door exercise and attend well to daily ablutions. When the blood is made up with biliary matter, if convenient, the Life-awaker should be applied all down the back, over the chest, stomach, and liver. The stomach should also be washed daily with warm water and the stomach tube till the symptoms subside. This latter treatment is far better than all the pills and purgatives in creation as an antidote for this affection.

The wet sheet pack is very beneficial, and it may be taken three or four times a week to advantage. The wet compress may also be worn during the night, and when taken off, let the parts be well washed with cold water, followed with a brisk rubbing, patting, and pounding over the chest, stomach, and abdomen with the closed hands. The Turkish, hot-air, and vapour baths are also very beneficial, when occasionally applied, but unless the cause be removed, the best treatment will be of little avail.

Some hydropathic practitioners frequently apply what is termed a "liver pack" for affections of the liver. For this purpose a considerable quantity of mustard is used, and the patient is sometimes enveloped in this pack and left alone for some twenty or more minutes, during which time some patients undergo such excruciating tortures that they declare they would rather die than have a repetition. These packs sometimes give considerable relief to congested livers for the time being, by producing what may be termed "counter irritation," or, in other words, by abnormally

exciting and inflaming the skin. We believe, however, that mustard packs and mustard poultices do needless violence to the system without compensating and permanent advantage. Then, too, the frequent application of these packs and poultices have a tendency to debilitate the system and render it more liable to the affections which their use are meant to mitigate; consequently, we dispense with mustard in all its forms, and, when necessary, we apply the "Life-awaker," which rids the system of its impurities, and thereby gives immediate relief to the liver and conduces to its healthy action.

TORPIDITY OF THE LIVER.

This is the most common derangement to which the liver is liable, and is the result of nervous disturbances and an insufficient supply of nervous vitality in the system, consequently the liver lacks sufficient nervous stimulus to impart vigour to this function; therefore, it may be said to be partially paralysed, or lacking in vitality. The frequent use of alcoholic drinks, grief, care, anxiety, and close mental application are conducive to a debilitated condition of this organ. Rich and greasy foods, breathing impure air, living in damp cellars, and in malarious districts have also a tendency to paralyse its action, more especially when very little out-of-door exercise is taken, in which case there might be a deficient secretion of bile, or an abnormal elimination of this element, either of which produce distressing symptoms, and are accompanied with a lowering of vital energy, which may end in consumption, bronchitis, or chronic invalidism.

We have said that living in damp cellars and in malarial districts has a tendency to produce torpid livers. This is also the case with animals, for when sheep are bred and remain in low-lying districts, and surrounded by miasma arising from the marshy nature of the locality, flakes are formed in the liver, producing what is known as

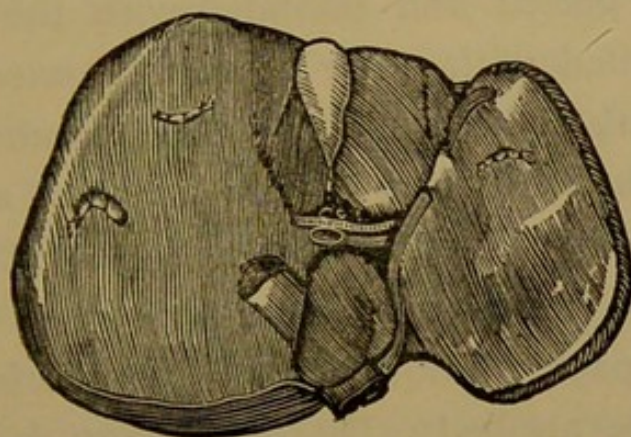


FIG. 46.—Grub in the Liver.

“sheep rot.” This is also true in regard to men, for when human beings are exposed to such unhealthy conditions, animalculæ of a peculiar nature are germinated and developed in the liver and other internal organs. Then, too, pork-eating sometimes causes grub in the liver, as seen in cut (Fig. 46). These parasites occasion a peculiar gnawing sensation in the region of the liver, and also conduce to impure and impoverished blood, which gives rise to consumption, ulceration, tubercular affections, and decay of these organs.

Treatment.—Whenever there is torpidity of the liver the stomach should be frequently washed with warm water and the stomach-tube, to clear away the bile which may have accumulated therein. Let the patient take frequent walks in the sunshine, breathing copiously and deeply through the nostrils. A wet compress may be worn three or

four nights weekly. A vapour, hot-air, or Turkish bath may occasionally be taken. Bacon, pork, ham, fat meats, damp cellars, and all unhealthy conditions must be studiously avoided. Cheerful society should be sought, and a few peals of hearty laughter taken between each meal. If this is not "get-able," the chest, stomach, and abdomen should be frequently patted and pounded with the closed hands, and accompanied with other gymnastic exercises, as chest expander, dumb-bells, or clubs, so as to cause the blood to circulate more freely through the system, and give more activity to the liver and internal organs. A foot bath may be taken three times per week, and, when convenient, a hot blanket pack, followed with a pouring bath, may occasionally be applied. By this means the nervous force will be more equally distributed through the organs of the human system, and thereby conduce to a healthy condition of all the internal parts. Above all, avoid sitting long in one posture, and do not mope over troubles or supposed injuries, for the more a person gives way to depression of spirits, sorrowing over his bodily ailments, or to thinking that others are not acting rightly by him, the more difficult it will be to cure this affection, inasmuch as the nerve-force will be taken from the liver, and unequally expended upon some other organ, and thereby conduce to hypochondria and kindred affections.

INFLAMMATION OF THE LIVER

is known by intense pain underneath the lower or small ribs on the right side. The pain extends to the back and the right shoulder, and is increased by a full inspiration, or

by lying on the left side. The white of the eyes have a yellow appearance, so also has the skin. The urine is highly coloured, whilst the fœces are void of colour.

Treatment.—Give the patient a sitz bath and back sponge at 100 degrees, for ten minutes. Then apply the hot wet compress around the body, and cover with dry flannel, and bandage down snugly. Let this remain on for two hours; then remove it, and dip the hands in cold water and rub the parts briskly with the wet hands; repeat this for fifteen or twenty minutes, and then apply a warm wet compress around the body. Keep it on for six or eight hours. If the feet are cold, take a hot and cold foot bath every morning and night. The next day a half-bath may be taken, and followed with the wet compress. A vapour bath may be applied on the third day, and followed with a pouring bath and an abundance of friction. Alternate sitz and half-baths may be taken daily till all the symptoms subside. When obtainable, the Life-awaker would also be very beneficial.

ENLARGEMENT OF THE LIVER.

Symptoms.—This condition of the liver is usually accompanied by great fulness on the right side, and a distension of the abdomen, with pain and aching between the shoulders and all down the right side, and is sometimes accompanied with great difficulty of breathing.

Treatment.—Give the patient a vapour or a Turkish bath. Then apply the warm wet compress, and let it remain on for six or eight hours. It should then be removed and the parts sponged with cold water, and

followed with an abundance of friction. Let the diet be very abstemious, avoiding fats and greases in all their forms. Very little, if any, sugar should be taken, otherwise the symptoms may be increased. The warm sitz bath and back sponge may be taken daily for ten minutes, and the wet compress worn both day and night, and let it be changed morning, noon, and night. When it has been worn four or five days, let there be a day's intermission, and then re-apply it until the symptoms subside. An application or two of the Life-awaker is also very beneficial, if obtainable, especially when a speedy cure is desired.

ULCERATION OR ABSCESS ON THE LIVER.

The best *Treatment* for this condition is the Life-awaker, which should be applied every tenth day. On the sixth day after its application a vapour bath may be taken, and the wet compress applied during the seventh, eighth, and ninth nights, and when removed each morning the parts should be sponged freely with cold water, and rubbed briskly with a dry towel and the bare hands until the parts are quite warm and dry. If the bowels do not act freely without, take water injections, and sometimes wash out the stomach, in order to prevent the accumulation of bile in the digestive apparatus. Occasional shallow and half-baths may be taken and followed with the pouring bath.

JAUNDICE.

Medical men who have written on this subject have described it under three forms, viz.:—as yellow, black, or green, according to the discoloration of the skin, which is impregnated with partially putrescent bile, to which some authors have added sub-varieties, such as *biliary*, *spasmodic*, *hepatic*, *infantile*, and *black vomit*. It matters little in which of these forms it presents itself so long as the disease is present.

Symptoms.—Jaundice is generally known by debility, languor, inactivity, acrid taste in the mouth, yellowness in the white of the eye, as also on the whole surface of the body, and by the heat and prickling of the skin, the pulse being slow and weak; the patient is downcast, gloomy, irritable, or listless. These symptoms are also accompanied with a feverish heat and dryness of the skin.

Causes.—The special cause of jaundice is torpor or inactivity of the liver, and is essentially due to some derangement of the biliary function, the principal of which is “obstruction to the escape of the bile.” This obstruction may take place in the gall bladder or be owing to a permanent “shutting up” of the duodenal orifice of the common bile duct by a cicatrised ulcer, which prevents the flow of the secreted bile into the intestines and the consequent penning of it up in the organ itself. To make this more plain it will be necessary to point out that when the liver (Fig. 29, 10, page 179) has secreted the bile it should be passed into the gall bladder (11), which is attached to the liver; it is then passed from the gall bladder through the bile duct (12) into the duodenum (13), and that part of the bile duct which

opens into the duodenum is termed the duodenal orifice of the bile duct. Whenever this orifice is obstructed it is impossible for the bile to pass into the duodenum, and the bile is then re-absorbed by the blood, and jaundice is produced. In the second place, jaundice may be caused by a diminished circulation of blood in the liver and its consequent abnormal diffusion. Each of these conditions gives rise to an increased influx of bile into the blood, and in both cases the liver becomes more or less directly implicated. The first of these causes implies that when there is mechanical obstruction of the passage of the bile into the intestines, there occurs consequent re-absorption of the retained bile into the blood; or there may be a suppression of the biliary secretion arising from a morbid condition of the liver itself, whereby the biliary ingredients, from not being eliminated, accumulate in the circulation and stain the skin.

Treatment.—It will be seen from the above that when there is obstruction in the region of the duodenal orifice, the most rational system of treatment should be applied to the removal of such obstruction. This may be done by drinking freely of warm or hot water. When a quantity of warm water passes from the stomach into the duodenum it comes into direct contact with the orifice above named, and this will have a tendency to lubricate and soften the obstructing matter, and thereby facilitate its elimination. Until recently we recommended warm water emetics for this purpose, which were very beneficial; but many patients objected to them because of the straining process consequent thereon. We now advise those who are troubled with such obstructions to drink from one-and-a-half to two pints of warm

water, then pass a flexible tube into their stomach, and allow its contractions to force up the water that has been swallowed, along with the bile that may have accumulated therein. When there is any obstruction in the bile duct, the presence of water and the stomach tube will sometimes cause a little heaving, and this movement literally expels from the bile duct that which causes the obstruction. A second draught of warm water and another application of the stomach tube clears away much of this obstruction; in fact, after washing out the stomach three or four times, the painful sense of fulness on the right side, which indicates obstruction, will gradually disappear. Those who are subject to jaundice, biliousness, and kindred other affections would also derive great benefit from drinking a glass or two of warm water before rising from bed, and then lie upon the left side for five or ten minutes. When the bowels are also constipated, tepid water injections should be freely employed until the sense of fulness is relieved, at which time cool water injections may be substituted. Let the wet compress be worn around the body during each night; a warm bath may be taken on rising each morning, followed with much friction with the bare hands and a towel wrung out of cold water. A tepid wet sheet pack forty minutes in duration should be administered five hours after the shallow bath, and followed with a pouring bath, and on retiring to bed a sitz bath eighty degrees, accompanied with brisk friction, would be beneficial. If this treatment does not quickly relieve the symptoms, the Life-awaker should be applied over the stomach, liver, back, and abdomen. By this means the worst form of jaundice may be cured in a short space of time. It would also be well

to wash out the stomach morning and night until the disease disappears.

GALL STONES.

Gall stones are the result of an obstruction of the bile duct, which pours bile into the duodenum or passage from the stomach to the intestines. This passage has been called by some "the lesser stomach," because it much resembles that important organ. When the bile duct is obstructed, the bile sometimes becomes hardened, causing acute, and sometimes excruciating pain when passing through this wholly or partially obstructed channel. In all such cases constipation and its kindred affections invariably occur.

The *Treatment* consists in frequent sitz baths at 100 degrees, accompanied with the back sponge with water of the same temperature. If the pain does not quickly subside, a warm wet compress may be applied around the body, and hot bricks or bottles applied to the feet. Let the extremities be well wrapped in blankets, in order to keep them warm.

Those who are subject to these ailments should procure a stomach pan or an India-rubber hot-water bottle for application in future attacks, these being more handy and more easily applied than hot bricks or glass bottles. The stomach washing process, as recommended for jaundice, is also very beneficial in this painful affection, ridding, as it does, the bile duct of that which is causing the obstruction, and thereby removes the cause. It would also be well to drink freely of warm water each night on retiring to bed and every

morning on rising, and then lie on the left side for a short time. The water should be soft rather than hard, and when it contains much lime let it be filtered.

DIABETES

Consists in a free but profuse discharge of urine, attended with great thirst and general debility. It is said that the urine in most cases contains a considerable quantity of saccharine matter, which is formed by some unnatural state of the digestive function, and also by a derangement of the liver and kidneys. In diabetes the skin is generally, if not always, in a condition of extreme torpidity.

Treatment.—The skin should first be attended to. When it is cold, pale, and bloodless, use the tepid wet sheet pack, forty minutes daily, in order to produce moderate perspiration; follow with the cold dripping sheet, and much friction to the whole surface. Let the wet compress be worn around the body nightly (when the Life-awaker is not applied), and wash the parts freely with cold water on its removal. The diet should consist chiefly of farinaceous food, wheat meal mush, wheaten biscuits, brown bread, roasted potatoes, &c. It would be well to avoid sugar, treacle, honey, jam, and everything that is very sweet. The stomach washing process is also very beneficial in this affection. If possible the Life-awaker should be applied every twelfth day till the disorder is cured. On the seventh day after its application a vapour bath may be taken, and during the next four days, alternate with the wet sheet pack, half-bath and sitz bath, each mid forenoon. The wet compress may also be worn on the eighth, ninth, tenth, and eleventh nights. Let the

patient drink warm or cool water as freely as thirst demands, but the diet must be very sparing and reduced to its lowest limit.

ERYSIPELAS,

Sometimes called Saint Anthony's Fire, is often caused by wounds and injuries, but in many cases the predisposing cause is bad blood, especially when the secretions are very impure. It is connected with bad diatetic habits, and is more common where fat and greasy foods and hogs' flesh are abundantly used. Alcoholic drinks also predispose to this affection, and vaccination often produces this painful and dangerous disease.

Treatment.—Open the bowels freely with tepid water injections. In the early stages, two or three wet sheet packs a day are desirable. When the patient is weak and feeble it would be well to apply the wet compress around the body, and renew it two or three times a day, in which case one pack per day will be quite sufficient. When the compress or pack is removed, the surface should be well sponged with tepid water. To *prevent* this disease, apply the Life-awaker over the back, stomach, and chest occasionally; also apply it over these parts every twelve days in all serious cases. Let the diet consist chiefly of fruit and vegetables, light puddings, brown bread, and wheat meal mush.

WHITLOW,

Sometimes called felon, bustion, &c. This acute inflammation is situated about the nails and ends of the fingers. In its early stage the hand and arm should be immersed into

hot water for a few seconds, after which a stream of cold water should be allowed to flow upon the parts. When there is a slight discoloration of the skin it indicates approaching suppuration, in which case the elbow should be held in as hot water as can be borne while the part affected is placed under the cold running tap. This will be very painful for a few seconds, but it is a very effectual remedy. Repeat this several times a day, and keep the part moist with a wet cloth covered with gutta percha tissue and dry flannel. Also keep the bowels open with tepid water injections, and by eating brown bread, stewed fruits, &c.

THE MUMPS.

This is an inflammation of the parotid gland, which is situated under the lower jaw, and which secretes the saliva or spittle which lubricates the mouth and reduces the starch of the food to the condition of sugar.

Cut (Fig. 47) exhibits the minute structure of one of these glands. The grape-like cells secrete the saliva which passes along the branching tubes into the mouth under the tongue.

This disease generally affects the young, and causes much pain and inflammation in the upper jaw, and retards the process of swallowing.

Treatment.—Apply the hot foot bath for eight minutes, then put the feet into cold water for one minute; take them out and rub them until quite warm and dry with a towel and the bare hands. Bathe the part affected with hot water for ten minutes, then apply a wet cloth, cover with flannel,

and renew these every two hours. The wet compress may be applied around the body nightly, and also during the day



FIG. 47.—Minute structure of the parotid gland.

in serious cases. When convenient, an application of the Life-awaker down the back, over the stomach, liver, and neck, would be highly beneficial.

SCROFULA.

The term Scrofula is derived from *Scrofus*, a sow, and is said to be a disease of the swine. Hogs are generally fed upon the worst kind of food, and are highly tainted with scrofulous affections, especially when fed in the ordinary way. If human beings will insist on eating the scrofulous carcase of the hog, they may naturally and reasonably expect to be troubled with similar diseases.

A scrofulous constitution means simply a frail, delicate, infirm, lax organisation. A condition of body possessing a predisposition to glandular swellings, tubercular formations, chronic ulcerations, skin diseases ; rickets, white swellings,

hip diseases, inflamed eyes, goitre, enlarged tonsils, tubercular consumption, &c.

This disease is transmitted from parent to child, besides which it may be developed by diseasing causes, as by eating pork; syphilis, excessive amatory indulgences, and very frequently by vaccination, &c.

Excessive Amativeness in parents produces scrofulous children, who in turn inherit strong amatory feelings as well as the disease. These transmitted conditions produce precocity of body and mind, and lay the foundation for serious and fatal diseases. Scrofulous infants die of convulsions, dropsy of the brain, consumption of the lungs, bowels, and spine, as also of cholera infantum. This disease causes sore eyes, running from the nose and ears, worms, whites, abscesses, eruptions on the skin, &c. It is to be regretted that this disease is greatly on the increase, and its ravages cannot be estimated, for it renders all diseases dangerous. It is also the chief cause of rheumatism, cancers, and kindred affections.

Treatment.—This is a disease of debility and obstruction—hence, purification and invigoration must constitute the cure. This is no ordinary disease to deal with, for the body is so full of impurity that it cannot make its exit through the natural channels, except by some extraordinary effort. Water treatment is effectual in removing the milder symptoms, but its influence is nearly nil when applied to hip diseases, goitre, white swellings, cancer, tumour, &c., all of which are scrofulous affections.

The Life-awaker, when applied at fortnightly intervals, is a potent antidote to nearly every phase of scrofulous disease, especially when it is supplemented with the water

treatment and a strict diet. On the seventh day after an application of the Life-awaker a vapour bath may be taken. On the eighth day a wet sheet pack may be applied at 11 a.m., and repeated at the same time every day till the Life-awaker is again applied. Apply the wet compress nightly after the seventh night, and, when convenient, a shallow, pouring, or half-bath may also be taken at 3 p.m. between the eighth and fourteenth days. The Life-awaker should be applied by experienced practitioners only, especially in serious cases of this kind. When it is not convenient to have the Life-awaker applied, the following water treatment will be very beneficial:—Three wet sheet packs per week at 11 a.m., daily sitz baths at 90 degrees, and reduced to 65 degrees, two or three general baths per week, as the vapour, hot-air, Turkish, or shallow baths. Apply the wet compress three or four nights weekly. This disease is very difficult to cure, but the above treatment will accomplish it, if steadily persisted in for a few months. Let the diet consist chiefly of fruit, vegetables, brown bread, light puddings, and a very small portion of lean meat. Fats and greases should be studiously avoided, especially bacon, pork, and ham.

GOITRE.

This is an enlargement of the thyroid gland, located in the neck. It is very common in the valleys of Switzerland, Savoy, and in some other places. In this country it is more common in Derbyshire than in other parts; hence, it is sometimes called "Derbyshire Neck." The reason that goitre is more common in valleys and near to the hills is

probably because there is a considerable amount of lime in the water; hence, those who live in mountainous regions should filter their water before use. This disorder most frequently affects young females.

Treatment.—This is a scrofulous disease, and not easy to cure, for it is not naturally of a self-healing character. Some cases require three or four months' treatment, while others yield in one or two months to the powerful effect of the Life-awaker and water cure processes. In order to treat it successfully, powerful douches should be applied to the spine and to the tumour itself. Let the parts be covered with three thicknesses of swansdown calico, wrung out of cold water, cover this with several thicknesses of dry flannel and bandage down tightly each night for a month. When these are taken off next morning the parts should be well washed with cold water and rubbed briskly with the bare hands. An occasional wet sheet pack is very beneficial, and also a sitz bath; but the Life-awaker is the most effectual remedy for this malady. This should be applied over the part affected, down the back and over the liver. It, however, requires great experience, and a thorough knowledge of this treatment, in order to produce successful results. If, when the glands of the neck begin to swell, cold wet cloths, covered with several thicknesses of dry flannel, and bandaged down, were applied nightly, and followed with a wet rubbing in the morning, this troublesome and disfiguring affection could easily be prevented, and, indeed, many mild cases have thus been cured with a few weeks' attention.

WHITE SWELLINGS.

There are two kinds of white swelling, the *scofulous* and *rheumatic*, each of which commonly affect the knee joints, and are very difficult to cure. The swelling comes on very slowly, and is attended with but little pain at first; gradually the pain increases till it becomes intense, especially at night. There is a constant sensation of heat in the part, and in time it has a white shining appearance, and is marked with varicose veins. Matter collects, and caries of the bone often ensue. In some cases a large quantity of matter accumulates, which becomes hardened, and causes intense pain. Sometimes this matter is discharged at various sinous openings, in which case the patient gradually loses strength—hectic fever ensues—and death soon relieves the sufferer.

Some ten years ago a young man consulted us whose case was the worst we ever had under treatment. Previous to his consulting us he had been under several doctors, each of whom declared that it would be necessary to amputate the leg above the knee. Even if amputation had taken place we question if the swelling would not have appeared above the amputation, as is frequently the case when the blood is impure; hence, we are strongly opposed to surgical operations for this affection.

When we undertook this case the knee was so large and painful that he could barely allow it to be touched. We applied the Life-awaker to the body, leg, and knee, and thereby reduced the inflammation, and the knee gradually improved; still the healing did not progress to our satisfaction, and we nearly gave up the case in despair;

but the ninth application of the Life-awaker produced the marvellous effect of causing there to be expelled several pounds of glutinous stringy matter from the knee; after which the inflammation subsided, the knee assumed its normal size and healed up, and now the young man is quite healthy, but the knee remains stiff.

We must confess, however, that white swellings, either of the knee, hip, ankle, or any other part, are very difficult to cure in all scrofulous natures; but when the swellings arise from rheumatism or kindred affections, three or four weeks' treatment is sufficient to effect a cure.

If, on the first appearance of white swellings, the parts were bathed, first with hot water and then with cold, followed with an abundance of friction, and the cold wet pad applied to the part, covered with dry flannel and bandaged down, and next morning the parts were sponged with cold water and rubbed well, repeating this treatment several nights per week, white swellings would be prevented, and mild cases cured in a very short time.

Treatment.—When the joint is very painful it should be bathed in hot water, or fomented until it is relieved. The Life-awaker may then be applied over the thigh, knee, and leg, as also each side of the spine of the back and over the stomach. In seven or eight days after the operation, the parts should be bathed with warm water, and followed with gentle friction. The hot-air bath once a week is very beneficial. A wet sheet pack should be applied every alternate day, *except* within eight days of the Life-awaker being applied. Previous to this invention, we considered white swellings to be literally incurable. Drug treatment does not pretend to cure it. Water treatment has very

little effect in most cases; but the Life-awaker, combined with water treatment, has made many important cures. Such has been our success in curing this and kindred affections with the above treatment, that we now very much doubt whether any case may be considered incurable, especially so long as there remains a fair stock of vitality to work upon. The Life-awaker should be repeated every fourteenth day till cured. We must admit, however, that sometimes the knee joint remains stiff after all the swelling and pain has subsided. Alcoholic drinks, highly-seasoned, rich, and greasy food, and the flesh of the "hog" should be strictly avoided.

HIP DISEASE.—COXARUM MORBUS.

Hip disease is also an indication of a scrofulous constitution; hence it is very difficult to cure. It consists of an abscess, originating from caries of the head of the *os-femoris*, which generally occasions a luxation of the hip joint and a permanent shortening of the limb. Its treatment is the same as that for a white swelling of the knee, except that the Life-awaker and bathing should extend to above and over the hips.

ABSCESSSES.

Abscesses are indicative of a scrofulous constitution. They are caused by a collection of purulent matter in a cavity, or in the substance of an organ or part of the body. The formation of an abscess is often preceded by chills or shivering fits, called rigors.

The blood must be thoroughly purified before an abscess can be eradicated. The Life-awaker should be thoroughly applied down each side of the spine of the back, over the stomach, and in the region of the abscess. Its application may be repeated every fifteenth day. On the eighth day after the first application a vapour bath may be taken. On the tenth, twelfth, and fourteenth days apply the wet sheet pack. On the eleventh day take a shallow bath. On the thirteenth day take a sitz bath, and re-apply the Life-awaker on the fifteenth day. The bowels should be kept regular by eating laxative food and by water injections. Several thicknesses of swansdown calico wrung out of cold water, covered with dry flannel, and bandaged down with a calico bandage, should be applied over the abscess on the sixth day after the application of the Life-awaker, and renewed several times a day until the Life-awaker is re-applied. Some time must of necessity elapse before an abscess can be thoroughly cured; for it indicates an impure condition of the blood, which will have to be purified before the patient can be restored.

When it is not possible to have the Life-awaker applied, water dressings may be resorted to. Let the part be bathed freely with warm water morning, noon, and night. Cover the parts with four thicknesses of swansdown calico wrung out of warm water, over which place several thicknesses of dry flannel, and bandage down snugly. Three shallow baths per week may be taken, the wet compress applied around the body nightly, and a Turkish, vapour, or hot-air bath about once a week.

Avoid eating bacon, pork, or ham, and all kinds of greasy food. When the abscess is nearly ready to burst, a linseed meal poultice, containing a little Castile soap, may

be applied; and when it bursts, apply the linseed meal poultice without the Castile soap, and renew it morning and night, so as to allow the purulent matter to escape. If the abscess does not heal up within eight or nine days after it has broken, the linseed meal poultice may be discontinued, and cold wet cloths, covered with two thicknesses of dry flannel, applied to the part, and changed twice or thrice a day.

ULCERS.

Ulcers are very common in weak and scrofulous persons, and they generally require a long course of treatment, but every case may be cured. The most effectual remedy for this biliary and scrofulous affection is a thorough application of the Life-awaker, in order to clear the blood of the morbid matter. In the course of eight days after its first application a thorough vapour bath should be taken, after which the wet sheet pack and warm shallow bath may be resorted to on alternate days. The wet compress should be worn around the body during the night, except within seven days after the application of the Life-awaker, till the symptoms are removed. Some obstinate cases will require several repetitions of the Life-awaker process before they are cured. As soon as the diseased conditions are removed, the ulcers will heal up. When it is not convenient to apply the Life-awaker take a wet sheet pack daily, forty minutes in duration; keep the compress on day and night, and change it every six or eight hours, and also take occasional pouring and half-baths.

The dietary should consist of plain and simple food,

avoiding bacon, pork, ham, and everything of a rich and greasy nature. Drink freely of warm water each morning on rising, and guard against alcholic drinks, which inflame the blood and increase the liability to these troublesome affections.

When an unpleasant odour is emitted by the discharges, either from abscesses or ulcers, wash them thoroughly twice a day in a weak solution of carbolic acid or permanganate of potash, to clear away the poisonous matter and eradicate the bad smell.

BAD BREATH.

Bad smelling breath is sometimes the result of catarrh in the nose, and is frequently caused by constipation, decayed teeth, and indigestion.

Treatment.—In every case tepid injections of water, accompanied with the use of the nose-bath, the removal of decayed teeth, and the avoidance of indigestible food, will soon remove the worst symptom. The teeth should be washed every night with cold water on retiring to bed, applied with a *soft* tooth brush, so as to remove all particles of food that may have accumulated between them. They should also be washed each morning on rising, but if the tooth brush be too hard it will irritate the gums and do them injury, by causing them to shrink from the teeth and expose them to cold. We have said that bad smelling breath is frequently caused by constipation and indigestion. This implies that the bowels should be kept quite regular, and this may be effected by eating bread containing the bran, and by drinking freely of warm

water each night on retiring to bed, and every morning on rising, or by water injections. The stomach should also be washed several times during the week with warm water and the stomach tube. It is surprising what a quantity of filth is brought from the stomach of a person whose breath is tainted, by this simple means ; therefore, the process of stomach washing should be within the reach of all who desire to be perfectly free from this affection. Every predisposing cause to bad smelling breath must be avoided, such as smoking, tobacco chewing, eating raw onions, garlic, and every other substance which has a tendency to taint the breath.

TUMOURS.

Dr. John Hunter says that “ a tumour is a circumscribed substance, and different in its nature and consistency to the adjacent parts.” This definition is very good so far as it goes, but he does not inform us how vessels of a part generate a substance different from that part ; it is evident, however, that tumours are commonly caused by injuries, as pressure, blows, bruises, falls, &c. ; they may also arise from capillary obstructions, and this is induced by eating unhealthy food, such as bacon, pork, ham, and other indigestible substances. Tumours usually indicate a scrofulous constitution, consequently their treatment should be of such a nature as to rid the system of its impurities and clear away obstructions. To a certain extent, the treatment is the same as for abscesses, ulcers, &c.

Tumours, for convenience, are divided into two classes —“ the *Malignant* and the *Non-malignant*.” A malignant

tumour has the power to affect the whole system: or, in other words, tumours become malignant when the blood is putrid or very impure. Many authors believe that the tumour has the marvellous power within itself to emit a peculiar kind of poison, which it sends through the blood vessels and poisons distant parts; but our experience, which has been very varied, convinces us that it is the impurity of the blood which imparts to the tumour its malignant qualities. This view of the subject is verified by the fact that malignant growths have a tendency to take on a sloughing action when they have reached the ulcerative stage.

Non-malignant tumours are always local, and generally enclosed in a cyst or sac, and affect the adjacent parts but little. We have sometimes heard doctors assert that a non-malignant tumour never becomes malignant. This is evidently a mistake, for several of such have been under our treatment. Dr. Patterson, who is a high authority on tumours, says: "Non-malignant tumours, however, through lapse of time, neglect, irritation, or mal-practice, may degenerate into the malignant type, when they become imbued with all the characteristics of primary malignant growths."

Adipose tumours, however, are collections of *fatty* matter inclosed in a cyst or sac of condensed cellular membrane. They are not painful, and only inconvenience the patient by their bulk, weight, or pressure. The Life-awaker process is probably the best, but it requires two or three months' treatment before a cure can be effectually accomplished. In some rare cases of this kind a surgical operation is necessary.

Wens or tumours on the head are usually contained in

a sac, and are composed of a substance resembling suet. These can easily be removed by a surgical operation without much, if any, pain, and without the least danger, especially when the operation is performed by a skilful practitioner. The Life-awaker is also very speedy in curing these unsightly protuberances.

Fibrous tumours are more difficult to cure, and when they are located in some part of the body that can be easily reached, a surgical operation may be performed on condition that the tumour is not of a malignant nature, in which case an operation would be very dangerous.

Treatment.—When the tumour first appears, let the parts be bathed freely with hot water, and rubbed gently with the bare hands. Four thicknesses of swansdown calico may then be wrung out of cold water and laid over the part, cover this with dry flannel, and bandage down tightly. This treatment, when persistently applied, will sometimes dissolve or cause the tumour to subside.

When tumours are of a malignant kind, water dressings will be very useful; but it is then also necessary to apply the Life-awaker, otherwise they may gradually develop into cancers, whereas the Life-awaker, when applied early, rids the system of the impurities which feed and develop cancer in its various forms, and thereby clears away that which would engender a malignant condition. We may here give the warning that surgical operations, in every case, should be avoided whenever possible, more especially when the blood is impure.

Malignant tumours are usually of a cancerous nature; still, every malignant tumour is not a cancer, although every cancer is a malignant growth; or, in other words,

the blood may be scrofulous and sufficiently impure to produce a malignant tumour, but not quite so strongly tainted or impure as to degenerate into cancer.

To make this a little more plain a person may have inherited a scrofulous condition of body from his or her parents, in which case the blood would be impure, but not so impure as to cause any visible derangement; but at length some blow, bruise, or other injury may occur to some part of the body, and, the blood being impure, the parts may swell or even gather, still no tumour appears; but if such articles of food are taken into the stomach that would add still further to the impurity of the blood, a bruise or pressure upon any part sufficient to impede the circulation might then lay the foundation for tumour either malignant or non-malignant, according to the amount of impurity there is contained in the blood; add to this the poison from syphilis, which may have tainted the blood of progenitors, or have been transmitted from husband to wife; or by vaccination, or by some other means, there will then be sufficient poison in the blood to produce a cancer of the most malignant type. When the blood is pure, neither bruises, pressure, nor age can produce either cancer or tumour.

Treatment.—All the excretory functions should be kept clear and free by frequent ablutions, injections, &c. The hot-air, vapour, or Turkish baths may be taken twice a week where there is strength to endure them, but when the patient is very weak the shallow, sitz, or pouring baths may be taken daily for a week or two. The Life-awaker may then be applied down the back, over the stomach and abdomen, to rid the system of its impurities. If the tumour is in the

breast it should be kept moist with wet cloths ; but the Life-awaker should not be applied directly over the hardened substance, lest a vein or artery be perforated, and thereby produce profuse bleeding. Let the dietary consist chiefly of ripe fruits, vegetables, a little lean meat, wheaten bread, and light puddings ; but highly-seasoned, rich, and greasy food and pastries should be studiously avoided. For further particulars see *treatment for cancer*, which will also be suitable for malignant tumours.

CANCERS

Are a concentration of morbid matter of intense malignity. No subject in therapeutics has received more attention from the ablest members of the medical profession than the cause and cure of cancer, and none with less satisfactory results. We hear at different times of the alleged discovery of a "certain cure" for cancer, but which invariably prove to be no cure at all. The majority of medical practitioners resort to the knife, and in many cases they appear to cure the disease for the time being, but they fail to remove the cause. When the cancer is located in the breast, this part is usually removed, the bones scraped, and the blood-vessels that have been severed are secured with fine silver wire. The severance of the blood-vessels prevents the blood from flowing uninterruptedly through the adjacent parts. Hence it will be seen that the course of the life current is changed ; and instead of the blood passing along its vessels without obstruction, it has to return the same way it came, thus throwing the circulation

out of balance, and in turn the blood throughout the system becomes more or less impure or poisoned.

It is quite evident that when a number of blood vessels in a given part have been severed and tied, that the veins and arteries in the adjacent parts are more than ordinarily distended and glutted with the blood that should have passed through the severed vessels. This being the case, it is not surprising that the extra pressure produced by such distension should conduce to either a new formation or to general glandular derangement, more especially when the blood is impure and tainted with scrofula.

We have said that *malignant tumours* usually originate in compression of the parts, from a bruise, blow, rent, scrofula, syphilis, hereditary taint, or some other cause. The same may also be said of cancer. In either case obstruction is produced, and the blood cannot circulate freely through the parts. This produces a kind of inflammation, and if the blood be impure its impurities are lodged in the part where the obstruction occurs; these impurities gradually congeal and form into a hard substance, and thereby produce tumour. If the blood is not quickly purified, or if the patient partakes freely of rich and greasy food, such as bacon, pork, ham, or anything that predisposes to a scrofulous condition of body, it will engender still more impurity, which will be carried by the blood to the weakest part, or rather to the seat of obstruction. The edges of the tumour gradually become jagged, and the enlargement or fulness extends along the blood vessels, which gives many people the impression that roots are being formed, and that they are likely to spread all over the body. The fact of the case is, that the morbid humours

which are contained in the blood are passed to this region, and cause the parts to swell out until the blood vessels throughout the system are more or less distended.

When the enlargement is local surgical operations may remove the obstruction for the time being, but they do not cleanse the blood nor connect the blood vessels so that the life current may pass unimpeded over the part where the surgical operation has been performed; consequently, the blood has to return the same way it came, and thereby conduces to inflammation and to the formation of pus, which in turn poisons the blood. This is one reason why cancers and tumours break out again, not necessarily in the same place, but in some other part of the body. And even if cancer does not again present itself, some other form of disease makes its appearance and carries off its victim. One of these other forms is called "Hodgkin's Disease," in consequence of a doctor of that name having been the first to describe it. In this phase of the disease the whole glandular system seems to be affected, and the various parts of the body become knotted. The nostrils and every section of the system are thereby affected, and the patient literally chokes or dies a miserable death.

Cancer of the womb is usually, but not always, caused by too *frequent sexual indulgence* and *inattention* to the laws of *cleanliness*. A many married ladies seem to be quite shocked when we advise them to apply water injections to the generative parts for the purpose of cleansing and strengthening those organs, just as though it was very wrong to think of such a thing, consequently it is not surprising that so many suffer from cancer and kindred disorders. Then, too, obstruction in the ovaries, and the

consequent retention of the *ova*, may lay the foundation both for tumour and cancer; hence, the necessity for frequent sitz baths and kneading of the lower part of the abdomen with the bare hands, for a few minutes daily, during the three or four days prior to menstruation.

Cancer in the breast is frequently caused by compressing and over-heating these parts with stays and pads.

Cancer in the lip and mouth are generally caused by smoking and by applying *plasters and ointment* to skin affections, which drive the poison into the blood, and thereby produce cancer.

Of all the diseases to which humanity is liable, cancer is perhaps the worst, and when surgical operations are performed not more than one per cent. of the patients live more than two years, while comparatively few live longer than twelve months, more especially when the blood is very impure.

We have sometimes heard doctors say that cancer seldom or never occurs before the age of forty. We have every reason to believe, however, that cancer sometimes manifests itself at a much earlier period, though such cases are not very common. A young lady, twenty-two years of age, now lies in the hospital at S——, suffering from a cancer of a most malignant type. From the information we have received, it is quite evident that she inherited it from her mother. During gestation her mother had an internal cancer, and on the birth of the child the cancer apparently disappeared, and the doctor in attendance was heard to remark "that it was good for the mother, but bad for the child," which it has proved to be. We could give many other instances where cancer has occurred before the

age of forty, but the space at our command will not permit.

In the rational treatment of cancer there are two stages of the disease which must be distinctly recognised. *First*, there is the *incipient* stage, when it is purely a local disorder; and *second*, the more advanced stage of the malady, when it has become a general disease through infection of the whole system.

Treatment.—While the disease is still a local affection it may be successfully treated by a process of purification and invigoration. This implies that the system must first be cleansed of its impurities by opening the pores of the skin and every other outlet, in order that the waste and morbid matter contained in the blood may be passed off with comparative ease and freedom. The bowels must be opened once or twice a day, and if they do not act freely without, tepid water injections may be administered. Let the patient have three wet sheet packs per week, and a hot-air, or vapour bath once a week. Apply the wet compress nightly around the body and a wet pad to the part affected both night and day, and change them every night and morning. If pimples or an eruption takes place the pads may be discontinued for three or four days, and then re-applied. A shallow bath at 95 degrees may be taken once or twice a week, followed with the pouring bath; a half-bath twice a week and occasional sitz baths may also be applied in every phase of cancer. In serious cases, however, it is essential that some skilful and *experienced* person should be consulted, in order that mistakes may be avoided, more especially when the application of acids is essential. There should be no blundering in cases of this kind.

If the cancer is internal a warm sitz bath may be taken

once or twice daily for fifteen minutes, and finish with a cold rising douche; but if this latter produces smarting, the chill may be taken off the water. The Life-awaker would benefit almost every case, because it rids the system of its impurities and prevents the morbid matter from accumulating in any part. On the sixth day after the application of the Life-awaker, the body may be sponged over with warm water, and on the seventh day a vapour bath may be taken. Afterwards the above water treatment may be continued until a second application of the Life-awaker takes place, which should be about the twelfth day after the preceding application.

When the cancer is external and in its incipient stage, it may be cured by a skilful application of acids and water treatment combined. We have cured several external cancers by this means, one of which was located upon the lip of a clergyman, who had become very nervous and alarmed about it, but five weeks of this treatment completely cured it. Most cases, however, require several months thorough treatment. Two of the worst cases we ever treated were under our care for about two years, but their cure appears to be permanent, for there has not been the least return of the symptoms during the last nine years. Sometimes internal and external cancer, and even the more advanced stages of the malady, yield to the potent effects of the Life-awaker. Two other cases of cancer which we treated successfully were under treatment for three months, and, strange to say, each case was cured by the outbreak of an abundant crop of boils. In one of these cases thirty-eight large boils made their appearance simultaneously; and in the other case thirty-two boils appeared, which cleared the

blood of its impurities, and the cancers thereupon disappeared.

The diet should consist chiefly of fruits, vegetables, soups, wheaten bread, and light puddings. Alcoholic drinks, highly-seasoned, rich, and greasy food must be totally avoided.

The advanced stage of cancer, when it occurs in very weakly persons, is very difficult to cure; in fact, some cases defy all medical and hygienic skill, and all that can be done for them is to alleviate and curtail the pain of the unfortunate sufferers as much as possible. We have had a little over three hundred cases of tumour and cancer under treatment, and have been successful in curing 66 per cent. The remainder have defied our skill.

LUPUS.

This is a term which the Romans gave to one phase of cancer, because it eats away the flesh like a wolf. It is a malignant disease, and usually occurs about the nose and mouth, commencing as a small humour and progressing to a foul ulcer.

Sometimes it first appears as a small dark sore, vesicle or tubercle; at other times as a wart, or nevis. Its general appearance is of a fiery red nature, with a depressed centre and a purple margin, which exudes a tenacious pus or ichorous matter. The pain is of a prickling or smarting kind, and sometimes it will seem as if a little insect was flickering or crawling about beneath the skin. In some cases a white-looking crystalised sort of egg may be squeezed

therefrom. When this kind of egg is placed under the microscope its appearance inclines one to believe that a species of animalculæ pervades the part, and that these animalculæ are thus propagated, rapidly causing the disease to extend at a proportionate rate. When the disease occurs near the eye it will, if not arrested, destroy that organ, and may extend to the brain. The general health is not much affected by this disorder. The knife or caustic is usually applied for the removal of Lupus, and in some cases doctors burn the region and surrounding parts with hot irons and scrape the bone; but such severe measures seldom eradicate the disease, though they may occasionally yield to this treatment, in which case the blood must be in a healthy condition.

Treatment.—Those who are troubled with this affection should be very careful what they eat and drink, avoiding everything of a very rich, greasy, and indigestible nature. It is also necessary to take an abundance of out-door exercise and breathe as much pure air as possible. We suspect that the blood throughout the system is more or less contaminated by the virus of this disease, consequently the most rational treatment is that which will purify and cleanse the blood and produce an equable circulation. This may be effected by frequent sitz, hot air, and shallow baths, and by wearing the wet compress around the body during the night.

The Life-awaker is almost indispensable in this disorder, and it should be freely applied to the part; also down the back, over the liver, chest, and stomach. In one or two days after the Life-awaker has been applied, a large quantity of bad-smelling pus exudes from the part, and then the disease

gradually subsides. Severe cases require patience and many applications of the Life-awaker for their complete eradication. Those who are *inexperienced* should not attempt to treat this disease.

BOILS

Are an indication of a sluggish liver, and they are one of nature's methods of expelling the morbid matter that has accumulated in the system.

The only medication demanded is hot fomentations, the application of a piece of swansdown-calico, wrung out of warm water, covered with several thicknesses of dry flannel, bandaged down, and worn during the night. On rising next morning the parts should be well bathed with hot water; a wet cloth covered with a little oil silk and dry flannel may also be worn during the day, and changed every five hours.

Continue this treatment until the boil is nearly ready to burst, at which time a linseed meal poultice, containing a little Castile soap, may be applied, and renewed every six or eight hours. In a day or two after the boil has broken, the core should be squeezed out, in order to facilitate its healing, but too much squeezing should be avoided. When the boil has run itself nearly, or quite clear, a little Burgundy pitch or sticking plaster may be put upon it. The excretory functions should be kept clear and free by frequent ablutions and the enema. The wet sheet pack may be taken twice a week; shallow or half-baths should be applied every alternate day, and occasional Turkish, hot-air, or vapour baths would be very beneficial. If the above treatment does not eradicate them apply the Life-awaker once a fortnight, and

wash the stomach several times a week with warm water and the stomach tube.

In order to prevent the recurrence of boils it will be necessary to avoid rich and greasy food, sudden heats and chills, and to breathe as much pure air as possible. Some people produce boils by sitting in a close room where the gas is burning, and every particle of the oxygen has been burnt up. This poisons the blood, and Nature tries to expel the impurity in the shape of boils, &c.

BLAINS.

There are several varieties of Blains, but they all consist of obicular elevations of the cuticle of the skin, and contain a watery fluid. The chief varieties are *water blebs*, *tetter* or *herpes*, *sordid blain*, and *heat eruption*.

Ringworm and shingles come under the head of *tetter* or *herpes*, so also does *salt rheum*. All these ailments are connected with a debilitated state of the system, and medicines are of little avail for their cure. The most rational

Treatment is first to tone up the body by frequent ablutions. A warm bath may be applied four times a week, followed with the pouring bath or dripping sheet. Put on the wet compress several nights weekly, and drink freely of warm water each morning on rising. Keep the bowels quite regular by eating laxative food, and with water injections; and last but not least, have the Life-awaker applied every twelfth day until the affection is overcome. If it is not convenient to have this instrument applied, the above

water treatment is the next best thing to do, but it is not so speedy a way of bringing about a cure. Avoid eating salt meats, greasy food, pastries, sweets, and hot cakes.

SKIN DISEASES.

The skin has many important duties to perform. It is the outer covering of the human body, which gives to it its smooth appearance. Not only is it a cleansing organ, but, like the lungs, it is a breathing organ, for it really absorbs oxygen, and throws off carbonic acid gas.

As before stated, much of the waste or refuse matters of the body are thrown off through the perspiratory ducts, and whenever the system is thrown out of condition, or is seriously impaired, the skin is sure to suffer. There are numerous phases of skin disease—some authors have even described three hundred distinct forms. Suffice it to say, that most of these affections are caused by want of circulation of nutritive blood in the skin, which causes the parts to become dry, dead, and scale off; or by stoppage of the capillary circulation. The blood in the fine arterial veins called capillaries, first becomes venous, then morbid, causing sores, salt rheum, sloughing, &c.

Skin diseases often lead to a most miserable state of suffering, for when the skin is very dry or is covered with dry, scaly matter, the two pounds of waste that should be passed off chiefly through the pores every twenty-four hours is retained in the blood, which conveys it to the liver, lungs, and kidneys, and brings on disease of those organs. This in turn debilitates the stomach, and causes the heart to

make greater efforts to propel the blood into the hardened scaly skin. This causes palpitation and waste of nervous power; hence, it is quite evident that the skin requires more than ordinary attention, and yet very few people care about lubricating and cleansing it by ablutions or by any other means.

Some phases of skin disease seem to indicate that they are easy outlets for the morbid humours which accumulate in the system, for so long as these skin affections are present other disorders are held in abeyance. If medical men or others apply ointment, arsenic, antimony, iodine, preparations of lead, copper, zinc, or other minerals to the skin when there is an eruption or running sore, the disease will be repelled into the internal parts, which will poison the blood, and thereby lay the foundation for many serious and fatal diseases.

Dr. Dio Lewis says, "A radical error underlies nearly all medical treatment."

"A salt rheum appears on the hand. An ignorant doctor says, "It is a disease of the skin." An ointment is applied. The eruption disappears. An ulcer appears on the ankle. The doctor says, "It is a disease of the ankle." He applies a salve. The sore disappears. The ear discharges. "The membranes of the ear passage are diseased," says the physician, and he prescribes an injection. The discharge is arrested. A case of nasal catarrh is presented. The medical man says, "This nose is sick." A snuff is prescribed. The discharge ceases. In each of these cases the doctor has entirely misapprehended the seat of the malady. Of course, his prescription is a blunder.

Salt rheum is not a disease of the skin. It is a disease

of the system, showing itself in the skin. The ulcer is not a disease of the ankle. It is a disease of the system, showing itself at the ankle. A ship's crew is seized with some fearful malady. They hang out a flag of distress. Another ship passes near the infected vessel. Its captain discovers the flag of distress. A boat's crew is sent to cut it down. The captain turns to his passengers with the triumphant exclamation, "We have saved them! All signs of distress have disappeared!" A human body is diseased in every part. A flag of distress is hung out in the form of an ulcer at the ankle. Some ignorant physician sees it. He covers it with a salve, which compels it to close. Then he cries, "See, it is all gone!"

Another illustration:—The ulcer upon the ankle is driven from that place by an ointment. Soon it appears in the lungs. The doctor cannot get at it there with his ointment, and resorts to inhalation. He is still determined to apply the drug to the local manifestation. Pulmonary consumption is not a disease of the lungs. It first pervades every part of every tissue of the entire organism. At length it assumes local expression in the lungs. How utterly blind to apply a drug to the ulcer, either when it is on the ankle or in the lungs; to dry it up, or drive it away, while the real disease is left in the system."

A short time ago an eruption broke out on the scalp of a promising youth. His mother consulted a doctor, who employed an ointment, and the disease was driven into the brain, producing fits, which continued for some years. At length the mother consulted us, and we applied the Life-awaker to the youth, and re-produced the discharge upon the scalp, when the fits ceased. After several applications

of the Life-awaker the blood was cleansed, and then both fits and the skin affection disappeared.

Treatment.—The hygienic treatment of skin diseases is intended to answer two purposes. First, to allay the local irritation. Second, to purify the blood, and to aid nature to expel the morbid matter. *We seek to clear the blood* by opening all the excretory functions, and by the avoidance of all such things and conditions as would aggravate the disease. In other words we help nature to expel the disease, while the doctors do all they can to keep it in the system. It is worse than useless to heal over a sore so long as the cause remains, otherwise it will break out in some other part, or assume some other form. In nearly all cases of excessive irritation of the skin, a tepid shallow bath should be taken two or three times a week, the wet sheet pack twice a week, a sulphur bath three times a week. Wet compresses should be applied over the parts affected and frequently renewed. After ten days of the above treatment apply the Life-awaker over the parts, and repeat every sixteenth day till cured. The above treatment is very efficacious in all kinds of skin affections, and there is nothing better for running of the ears, gatherings in the head, &c. In seven days after the Life-awaker has been applied, take a vapour bath; on the eighth day a half-bath or the wet sheet pack may be applied; between the ninth and sixteenth days alternate shallow, sitz, half, and vapour baths may be taken, and then the Life-awaker may be re-applied.

In some cases a little borax and glycerine, or a little vaseline, will cause the skin affection to disappear, in which case the parts should be bathed freely with warm water night

and morning, so as to liquify the blood and cleanse the skin of its impurities. The borax and glycerine, or vaseline, should be applied in the morning and on retiring to bed.

Another simple way is to wring a piece of swansdown calico out of tepid water and apply it to the part, cover it with several thicknesses of dry flannel, and bandage down and keep it on all night. This will facilitate the passing away of the morbid humours that have accumulated in the region, and the borax and glycerine, or vaseline, will have a soothing effect upon the part, and thereby facilitate the cure. This is effectual in a many mild cases, but so long as the blood is surfeited with morbid humours the skin affection will remain, and cannot be cured till the cause is removed, and until the impurity is cleared from the blood by the Life-awaker or by some other such means. So long as the skin remains dry or parched it is useless to try to cure eruptions, pimples, &c., hence the cause should be removed. The diet must consist chiefly of fruits, vegetables, and light puddings; whilst salt meat, rich and greasy food, pork, and ham must be studiously avoided.

DANDRUFF

Is a scaly eruption which appears in patches of fine bran-like scales. It usually affects the head, but it sometimes affects the trunk or whole body.

The wet compress worn during each night, and the wet sheet pack three or four times per week, will soon remove this affection from the body.

When the head is affected it should be thoroughly washed once or twice daily with warm soft water and Castile soap. Dr. Nichols' sanitary soap is preferable,

however, in most cases. The head should always be well rinsed with cold water and wiped quite dry after each washing. A little vaseline may also be rubbed over the part affected, especially in young children.

SCURVY.

There are three varieties of *scurvy*. The first is termed *petechial scurvy*, which manifests itself in small eruptions, resembling flea bites, and it usually appears upon the breast, arms, and legs. This phase of the disease usually follows fevers with which there is great debility.

The second variety is termed *land scurvy*, in which the spots are larger, and often occur in stripes or patches over the arms, thighs, and trunk of the body, and in some cases there is bleeding from the mouth, gums, nostrils, and other parts. This type of the disease is always accompanied with great debility and depression of spirits.

The third species is termed *sea scurvy*, in which the spots are of different hues, and chiefly manifests itself at the roots of the hair; the breath becomes highly offensive, the gums are more or less inflamed, spongy, and often bleed; the teeth are also loose. Extreme debility and depression of spirits invariably accompany this terrible affection.

Causes.—Salt meats, pork, ham, bacon, and white bread, *without vegetables* or fresh fruits, are perhaps the chief causes of these disorders. Add to these the free use of tea, coffee, and alcoholic drinks, more especially the use of spirits, combined with habitual gluttony, sedentary habits, uncleanness, impure air, and depressing influences, such

as care, worry, and anxiety of mind. We have here the primary, if not all, the causes which produce these very disagreeable skin affections.

Treatment.—The first condition is cleanliness and proper food. A shallow bath should be at once taken; the bowels must be opened with the enema at least once a day. The tepid wet sheet pack may be applied every alternate day, forty minutes in duration, and the wet compress worn nightly. During those days on which the wet sheet pack is not taken, a vapour, full, or half-bath may be applied.

After a week's water treatment as above, the Life-awaker should, if possible, be applied over the parts affected, and on the seventh day after its application a vapour bath may be taken; on the eighth day the wet sheet pack may be applied, and continue the baths as above advised during the ninth, tenth, eleventh, and twelfth days, after which the Life-awaker may again be applied if the affection has not in the meantime disappeared. The food should consist chiefly of fresh vegetables, such as potatoes, greens, celery, cabbage, turnips, green-sauce, and watercress, and of fruits containing a deal of acid. The patient should also drink freely of lime juice and lemon water. Jams, tarts, figs, raisins, dates, treacle, and very sweet food should be avoided.

The *second* condition is pure air, good ventilation, proper clothing, and a plentiful supply of clean linen, without which it would be next to impossible to bring about a cure.

I T C H.

Itch may be cured by thorough and frequent ablutions, a vegetable diet, and the frequent use of the wet compress, but the Life-awaker, when applied over the parts affected,

is the most potent remedy for this disorder. It should be borne in mind, however, that this affection cannot be permanently cured without frequent ablutions and thorough cleanliness.

It is said that Itch is caused by an insect (*acarus*) that burrows in the skin. This being the case, it may be cured in a short time by mixing one drachm of carbolic acid with a pint of water, with which the skin should be rubbed three or four times, and then wash it off. Repeat this daily until cured.

Another simple way of curing Itch is to mix one ounce of sulphur and one-eighth of an ounce of powdered sal-ammoniac with two ounces of lard. Mix well together and apply at night after thoroughly washing the parts with strong soap-suds. Keep the ointment on all night, and wash it off thoroughly in the morning, and put on clean linen. Repeat this treatment four or five nights in succession.

INFLAMMATION IN THE EYES

May be treated in the same way as skin diseases, with the addition of bathing the eyes in cold water several times daily, at which times the neck and back of the head should be bathed with tepid water, accompanied with friction. Also lay upon them two thicknesses of linen cloth wrung out of tepid spring, or soft water.

Smarting of the eyes when reading may be greatly relieved by frequently moistening them with cold water.

When particles of steel filings or particles of iron are in the eye, they may be removed by holding a large magnet close to the eye; other substances should be washed out

by syringing with tepid water. In order to strengthen and preserve the eyes, bathe them with cold water every morning on rising. In serious cases the "Life-awaker" may be applied to the temples and back of the ears with decided advantage. When inflammation of the eyes is accompanied with scurvy, or other skin affection, the Life-awaker should be applied over the back, chest, stomach, and liver, otherwise no good will be derived from its local application.

GRANULATED EYELIDS.

When the eyelids are granulated and a large quantity of matter accumulates, so that they become fastened together during the night, the eyes should be bathed with warm water for about five minutes. When they are cleared of the mucus they may be bathed with cold water. It is useless to put chemicals into the eyes for the purpose of clearing them, so long as morbid humours are contained in the blood. It would be far better to apply the Life-awaker to the temples, around the back of the ears, down the back, and over the liver and chest, so as to cleanse the blood and thereby remove the cause. Where this treatment is not possible, a piece of bleached cotton-wadding may be dipped into rain or spring water, squeezed slightly, and placed over the eyes; cover with a dry calico bandage to keep it in its place, wear it during the night, and next morning bathe the eyes well with soft or spring water. Bloodshot eyes may be treated in the same way. Some of the worst cases of eye affection that have come under our notice were produced by vaccination. In several instances syphilis had been transmitted from one child to

another, thereby literally poisoning the blood; in other cases the sight was completely destroyed by this State-endowed quackery.

Spots before the Eyes.—When dark or floating spots appear before the eyes they indicate that the liver is sluggish and that there is too much bile in the blood, in which case wash out the stomach with warm water and the stomach tube night and morning, bathe the eyes first with warm and then with cold water, and rub the temples and back of the ears well with the bare hands dipped in cold water. One or two applications of the Life awaker to the temples and back of the ears would also be helpful in clearing the vision.

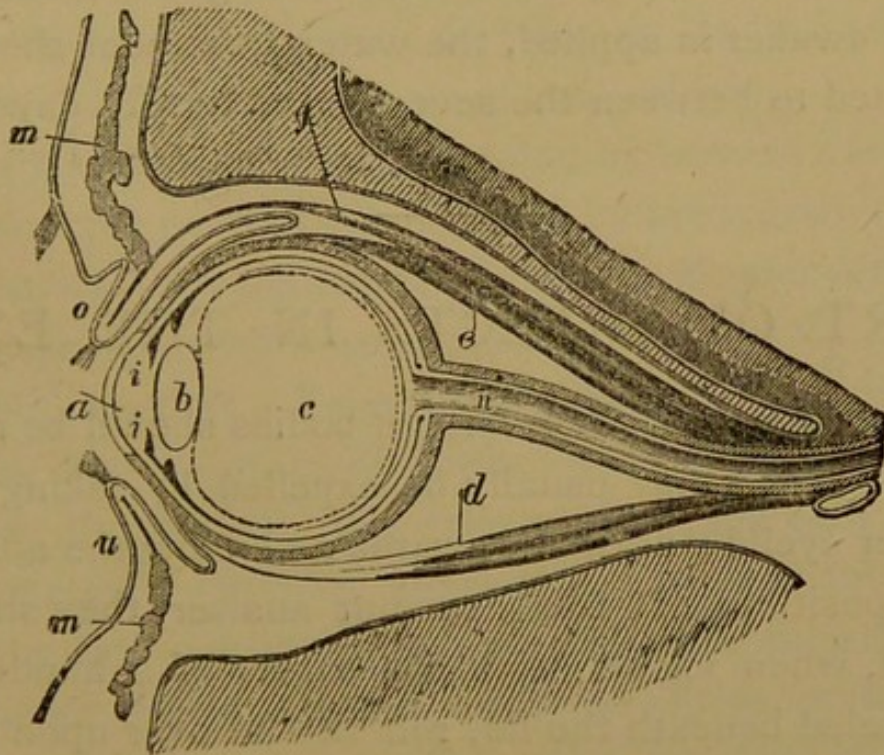


FIG. 48.—Longitudinal Section of the Human Eye.

[*a*—Cornea. *b*—Crystalline Lens. *c*—The Ball or Globe of the Eye. *d, e, g*—Muscles which move the Eyeball. *d*—The Inferior Rectus. *e*—Superior Rectus. *ii*—The Iris. *mm*—Lachrymal Glands. *n*—Optic Nerve.]

RUNNING OF THE EYES.

When a mattery effusion proceeds from the eyes, the diet should be plain and simple; fats and greasy food should be avoided, and the wet sheet pack applied three times weekly; the vapour, hot-air, half-bath, sitz bath and back sponge, or shallow baths four times a week. A clay poultice may be applied to the eyes during the night, and bathe them frequently during the day with cool spring or soft water. The Life-awaker should be applied to the nape of the neck, to the temples, over the stomach and liver, and down the back every twelfth day. Some bad cases require six months thorough treatment to clear the scrofulous matter from the blood, before the running will cease. When the Life-awaker is applied, the water treatment should only be resorted to between the seventh and twelfth days.

DIRT OR INSECTS IN THE EYE.

Dirt, insects, or other foreign bodies should be removed at once. They may usually be expelled by taking hold of the upper eyelid; draw it upwards and blow the nose while in this position. If this does not answer, they should be removed, when visible, with the corner of a handkerchief. If concealed beneath the lid, roll the lid over upon a pencil or penholder, or turn it outward with the finger, and remove it with the corner of a handkerchief, or with the edge of a piece of smooth and stiff note paper. Dirt beneath the upper eyelid can generally be removed by drawing the upper lid outward and downward over the under lid.

LIME IN THE EYE

Is very destructive to sight, and in numerous instances a small quantity of lime thrown into the eyes has resulted in total blindness. Whenever lime gets into the eye—by whatever means—the eyes should be bathed with diluted vinegar or a strong solution of sugar. Thoroughly wash them with soft or spring water while the lotion is in preparation, after bathing with the lotion, apply linen cloths wrung out of rain water, and change the cloths every half hour.

EAR DISCHARGES

Originate in an inflamed nose and throat, generally following scarlet fever, small pox, measles, or kindred affections, and are indicative of a scrofulous habit of body.

They may be successfully treated by carefully regulating the diet and the general habits of life, by astringent injections in the ear, as a weak solution of acetic acid, preceded by the use of a syringe, with a warm weak solution of Castile soap, night and morning. Each injection should always be followed by the insertion of cotton wool for several hours, otherwise the patient may take cold in the ears and the bad symptoms become aggravated. Keep the bowels regular by eating laxative food, or by water injections, and the sufferer should particularly avoid eating pork or anything of a fatty nature, as also eating between meals. In diseases of this description, or where there is any purulent discharge, the Life-awaker acts with marvellous power; but as the application of this valuable instrument is not within the reach of everyone, the above method will be

found beneficial, though not so effectual as the Life-awaker. These discharges cannot be cured, however, unless particular attention is paid to the dietary, and until the liver and all the depurating organs perform their functions aright, hence frequent wet compresses, and stomach washing will be invaluable.

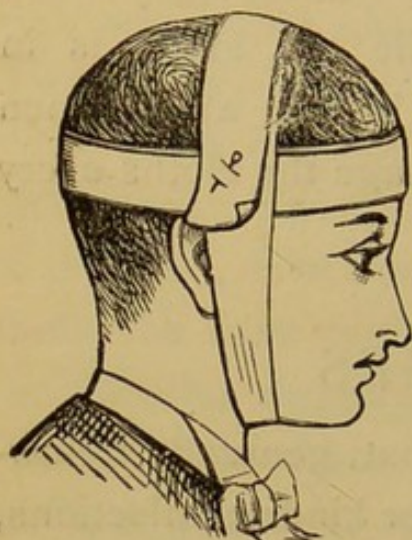


FIG. 49.

[The way to Bandage the face, ear, and head in cases of Ear Discharge, Neuralgia, and Headache. A wet cloth covered with flannel should be put underneath the bandage]

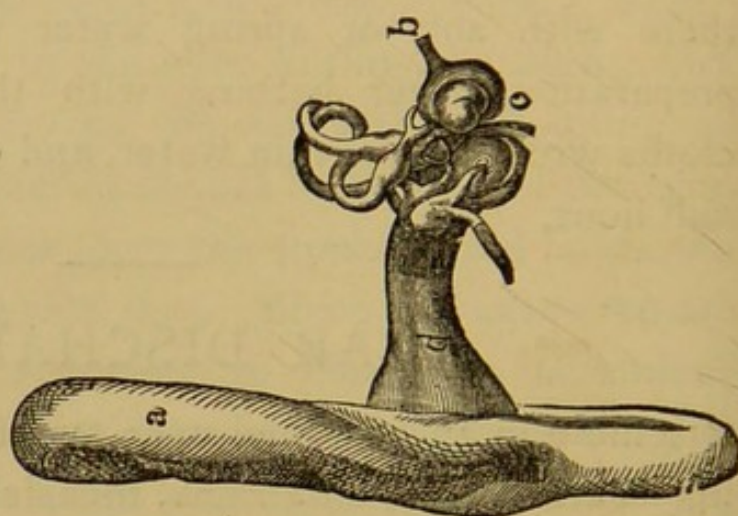


FIG. 50.—The Ear.

[*a*—The Concha or External Ear. *b*—Internal Auditory Meatus, through which the Auditory Nerve passes to the organ of hearing. *c*—Semi-circular Canals.]

EAR ACHE.

The ears should be syringed with warm water, accompanied with the hot and cold foot bath. After using the syringe, place a little cotton wadding in the ears to prevent the entrance of cold. If this does not cure it, bind half a boiled or roasted onion upon the ear, and sometimes apply a hot poultice, and frequently change it; after which a few drops of laudanum or glycerine may be dropped into the ear.

DEAFNESS,

When chronic, is very difficult to cure, but most cases yield to the Life-awaker, syringing the ears with a weak solution of acetic acid or Castile soap, and by strict attention to daily ablutions. A simple and strict dietary is also very beneficial. Most cases of deafness require three or four months thorough treatment in order to bring about a complete cure. A tepid nose bath should be taken every alternate day ; the Life-awaker may be applied at the back of the ears, to the nape of the neck, the front of the ears, and over the throat, down the back, and over the liver and stomach, and repeated every fifteenth day. Between the seventh and fifteenth days a vapour, shallow, sitz, wet sheet pack, and half-bath may be taken. During the time the first bath is being taken, the ears should be well steamed, a small piece of cotton wool may afterwards be put into the ears to keep out the cold.

Deafness sometimes arises from an obstruction in the glands of the throat ; at other times it is produced by an accumulation of wax around the drum of the ear. We have sometimes taken a large quantity of hard wax out of the ears of patients, after which the hearing has been restored. In order to soften the wax it is necessary to drop into the ears two or three drops of glycerine every alternate day, and to dip the thumbs into cold water and rub freely around and below the ears. The glycerine will soften the wax, and the rubbing will loosen it and facilitate its extraction. When it is necessary to have the wax withdrawn by force, a skilful surgeon or medical practitioner should be consulted, it being dangerous for an inexperienced

person to tamper with this delicate organ. This condition may produce inflammation of the brain in the region of the auditory nerve, and produce a buzzing or humming sensation, in which case, also, the above treatment will be very effectual.

POLYPUS.

There are two kinds of polypus tumours which affect the nostrils; one is soft and compressible, the other hard and cartilaginous. Very little is known about their origin and causes, but both are probably morbid growths of the mucous membrane, although the hard kind is generally connected with caries of the ethmoid or interior turbinated bones. They are generally very troublesome, frequently affecting the speech by obstructing the nasal cavities. The soft kind of polypus is unattended with pain, whilst the hard polypus is firm, of a highly dark red colour, and causes pain, with other disagreeable sensations in the nostrils and forehead, accompanied with coughing and sneezing.

The best *treatment* in their early stage is to sniff up the nostril tepid water, containing a little salt, for a few minutes, followed by sniffing up the coldest water for about ten seconds. The application of powdered caustic with a camel hair brush will be beneficial, but when the polypus has become very large and troublesome a surgical operation will be necessary. Some severe cases have been cured by pulling out the polypus, and applying a bit of sponge cut in a spiral form, steeped in brandy, pushed into the nostril and

kept in ten minutes every night and for a few minutes during the day for several weeks, during which time the patient should lie down upon his back.

CORNS AND WARTS.

Warts are rather excrescences than tumours, some are smooth and apparently filled with fatty matter; others, called *seed warts*, are rough, hard, and insensible.

Corns are produced by tight boots and shoes, or by friction of loosely-fitting foot-gear.

Treatment.—The cause should first be removed, then the feet should be soaked in warm water for several minutes, after which apply a little aromatic vinegar with a camel-hair brush; but if this does not prove effectual, a little nitro-muriatic acid may be applied night and morning until relieved. This treatment is effectual for both corns and warts.

Another simple way is to put a little powdered camphorated chalk on a bit of cotton-wool, and fasten it over the corn; keep it on night and day, and renew when necessary.

BALDNESS

Is frequently caused by wearing too much hair upon the head, and by keeping it too much covered by the hat, cap, or bonnet. The part most exposed to the air, and which is not covered by the head-dress, seldom or never becomes bald, and if people were to expose their heads more to the bracing atmosphere, they would be less susceptible to

baldness. The wearing of long and false hair has a tendency to debilitate the capillaries and predisposes to baldness. Over much mental anxiety also tends to this cranial disfigurement.

Treatment.—Cut the hair short, and frequently wash the head with warm water and Castile soap, and afterwards rinse with cold water, and wipe it till quite dry; this will prevent its falling off. When the head is quite bald, however, it should be shaved four or five times a week, in addition to the regular washing. Sometimes baldness is caused by skin diseases, and in such cases the Life-awaker should be applied to the parts affected, so as to clear the skin of its impurities, and thereby facilitate the growth of the hair.

THRUSH.

This affection is usually caused by eating rich and greasy foods, and by drinking hot drinks, constipation, overheated skin, &c.

Treatment.—Apply a wet compress around the body nightly, a wet sheet pack two or three times a week, and a warm water injection daily; drink frequent and copious draughts of warm water and live upon a strictly vegetable and fruit diet. A little borax and honey may also be applied to the tongue and over the roof of the mouth.

HICCOUGH.

This is a spasmodic action, principally produced by the diaphragm and external abdominal muscles.

Causes.—It is generally caused by over-eating, smoking,

and by partaking too freely of intoxicating drinks. It may also be caused by bile in the stomach, indigestible food, &c.

Treatment.—In many cases drinking a tumbler of warm water will remove it, and give immediate relief, but when that does not act, a cold wet compress should be applied around the body, accompanied with cold water injections. This affection may sometimes be easily cured by swallowing a lump of sugar saturated with lemon juice or vinegar; but when these fail the stomach should be washed with warm water and the stomach tube, and the spasm will at once subside.

WORMS.

No person living under healthy conditions ever suffers from worms. They trouble those chiefly who have a scrofulous constitution. Some people are very constipated, and when the fœces are retained in the intestines, worms are sometimes generated. *Seat worms* may be eradicated by warm water injections containing a little salt.

Alvine worms, which take up their abode in the stomach or alvine canal, can be got rid of by eating laxative food, or by eating a raw scraped carrot every morning an hour before breakfast. This would have a tendency to burst and expel them. When there is much pain experienced in the region of the stomach it would be advisable to take a tepid water injection, and also wash out the stomach with warm water and the stomach tube.

Tape worms are very difficult to expel, and they cause serious mischief to the body. A strict diet must be observed; the crusts of wheat meal bread and good, ripe, uncooked fruits should be eaten. Masticate the food thoroughly, and

eat slowly, and avoid overloading the stomach. Either tepid or warm water injections may be taken daily. It will be of no use applying any treatment for their eradication, however, unless the bowels are kept regular and strict attention is paid to the diet. A warm sitz bath of soap suds may be taken daily, and if the above treatment does not expel them apply the Life-awaker and a plentiful supply of the oil around the navel and over the stomach.

A very effectual way of expelling tape and other worms is by drinking one ounce of spirits of turpentine, fasting. An ounce is less dangerous than a smaller quantity. We have known turpentine to expel as many worms as would fill a quart basin. It must be borne in mind, however, that the worms will again accumulate unless the bowels are kept regular and a rational system of diet observed.

G O U T

Is mostly confined to the joints, and usually affects the big toe. When the gouty diathesis is strongly marked, the joints of the toes, and sometimes those of the fingers, become permanently enlarged and inflamed. Gout is caused by epicurean habits, eating rich and greasy food and drinking alcoholic beverages. Vegetarians and water drinkers are seldom or never troubled with this complaint. It is much easier to prevent than to cure it.

Treatment.—Plunge the foot into a bucket of cold water, allow it to remain until the pain subsides, or until the inflammation has abated, then apply wet cloths to the parts affected, cover them with several thicknesses of dry flannel, bandage down tightly with a calico bandage, and renew it

every hour. Apply a wet sheet pack, and follow with the dripping sheet or pouring bath daily, and wear the wet compress during the night. Vegetables, fruits, brown bread, and a little fish should be the chief articles of diet. Drink nothing stronger than water. Keep the bowels regular by water injections and by eating laxative food. The feet may be bathed in as hot water as can be borne for ten minutes, after which dash them into cold water for five seconds, take them out quickly, and rub well until quite dry and warm. The extremities, where the gout usually manifests itself, are not the only parts affected, for the gouty condition pervades the blood of the whole system, which, of course, must be purified. Wet sheet packs will have a cooling and soothing effect upon the blood and help to expel the morbid humours. We find, however, that the Life-awaker has the most powerful effect in ridding the system of its impurities. This instrument ought not to be applied to the extremities, but its application should be directed to the back, chest, stomach, abdomen, and to the calves of the legs.

Gangrene.—When gangrene is present the limb affected should be held in hot water, at a temperature of 112 degrees, for about three hours; it may then be taken out and wrapped in hot wet flannels for about one hour, after which it may be bathed in hot water for three hours longer. This process should be continued for several days, when the dead portion will separate from the living tissue, and a healthy condition will thereby be produced.

RHEUMATISM.

Rheumatic affections are generally connected with derangements of the digestive system. They are sometimes facilitated by colds, but we never knew a case of rheumatism which was not preceded by nervous exhaustion. Rheumatism attacks every part of the body, but more especially the arms, legs, knees, thighs, hips, &c., but gouty patients are liable to violent affections of the brain, heart, lungs, stomach, liver, and kidneys.

Treatment.—Open the bowels first with copious tepid water injections, apply the cold wet sheet pack every alternate day, and even daily in acute rheumatism or rheumatic fever. In chronic rheumatism the sheet should be wrung out of tepid water, and kept on for one hour or more, until the patient perspires freely; he should then be taken out of the pack, after which apply the cold dripping sheet, and follow with much friction, if the patient can bear it. The wet compress should be worn around the body, as also over the joints and parts most affected; let this be covered with several thicknesses of dry flannel, bandaged down tightly, and allowed to remain four or five hours, after which the compresses should be taken off, the parts well sponged with cold water, and rubbed freely and then renewed; the wet sheet pack may be repeated daily until the symptoms are removed. In most cases the Life-awaker should be occasionally applied over the body and to the parts affected.

If this is not convenient, a Turkish, vapour, or hot-air bath may be taken daily, either of which will cause the patient to perspire freely, and thus throw off the disease through every pore. Let the diet be plain and simple,

consisting chiefly of wheat meal mush, stewed fruits, and the higher class of vegetables. Sexual excesses, smoking and drinking must be studiously avoided.

LUMBAGO

Is a rheumatic affection of the muscles about the loins, or in the lumbar region.

Treatment.—Bathe the parts with hot water for fifteen or twenty minutes, follow with the cold wet compress, and renew it every two or four hours; each time the compress is renewed, wash the parts well with cold water, or, if it is convenient, apply the warm douche, and follow with the cold douche. Pay special attention to the condition of the bowels, and keep them open by means of laxative food and water injections. When the Life-awaker is applied down the back and over the stomach, it quickly removes this disorder, especially if the water treatment above prescribed be applied after the seventh day. When this is not convenient, a warm shallow bath, accompanied with a pouring bath, may be taken every alternate day; the sitz bath and back sponge may also be applied three times per week, and the wet compress worn day and night, and change them every six hours.

SCIATICA

Is a very painful disease, and difficult to cure. It is seldom or never cured by drug medication.

Causes.—This affection is usually caused by exhaustion, amatory excesses, bad food, and exposure to draughts. It

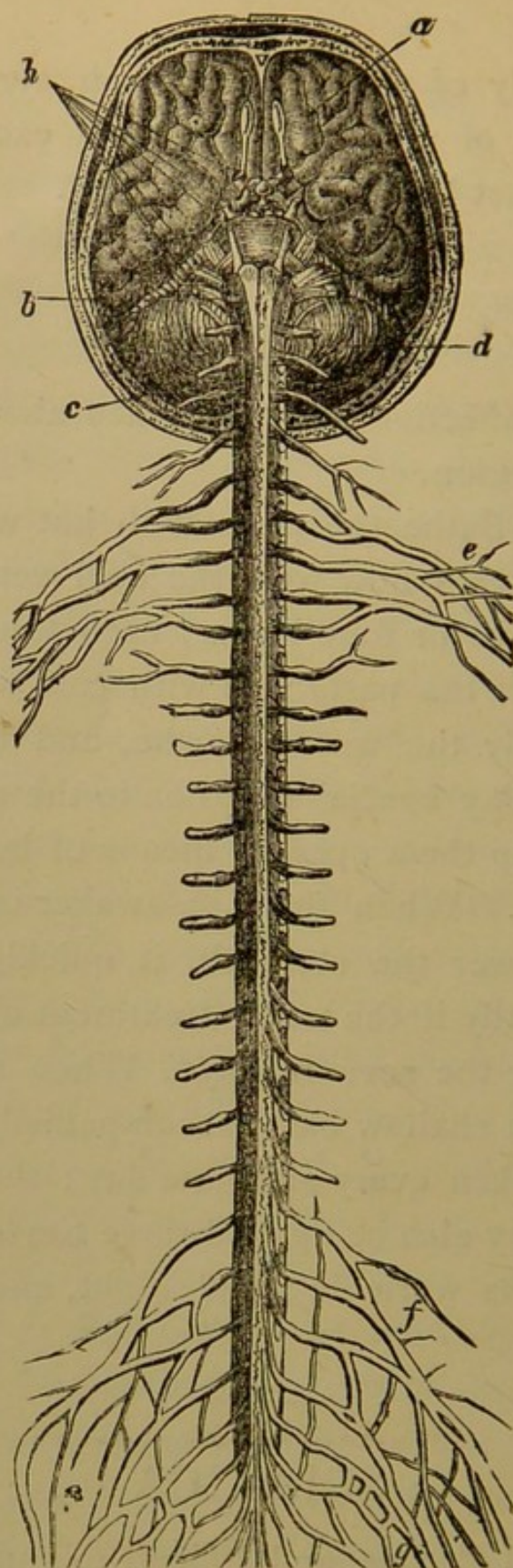


FIG. 51.—Brain and Spinal Cord, showing their intimate connection. The Brain being the centre of the Nervous System, it is usually the seat of Paralysis and other nervous affections.]

a The optic nerves and the front lobes of the brain. *b* The middle lobe. *c* The cerebellum. *d* The medulla oblongata. *e* Nerves of the neck and those connected with the arms. *f* Nerves of the hips. *g* The Sciatic nerve.

commences with a severe pain in the hips, striking downwards to the knee and the ankle, and is a rheumatic affection of the sciatic nerves.

Treatment.—It is almost impossible to bandage this part as in other cases of rheumatic affections, but a wet cloth covered with dry flannel may be kept upon the part by wearing a pair of tight drawers, which fasten around the waist. This should be renewed morning, noon, and night. Two or three sitz baths may be taken daily, commencing at 98 degrees Fahrenheit, remain in the warm water eight minutes, and gradually cool down until the water is quite cold, and rub the parts freely with the bare hands. Apply the wet sheet pack once a day—sixty minutes—follow with a pouring bath or dripping sheet. Avoid taking tea, coffee, alcoholic drinks, and everything of an exciting and irritating nature, as highly seasoned foods, condiments, &c. Keep the bowels regular, and avoid undue mental excitement. The wet compress may also be worn around the body during the night. If this treatment does not cure it, apply the Life-awaker down the back, over the hips, thighs, and calves of the legs once a fortnight. On the seventh day after its application take a vapour bath. A wet sheet pack on the eighth day, follow with a pouring bath, and a plentiful supply of cold water with a hose pipe to the part affected. A sitz, pack, or half bath may be taken on intervening days, and follow each with the pouring bath and hose pipe if convenient, and an abundance of friction.

NERVOUS DISEASES.

These affections are very prevalent, so much so in fact that very few people are exempt from their taint, either in one form or another. Youthful indiscretion is the most fertile source of weakened nerves, or, in other words, of "*Nervous Debility*," and consequently of a shattered constitution. In these days of fast living, highly seasoned

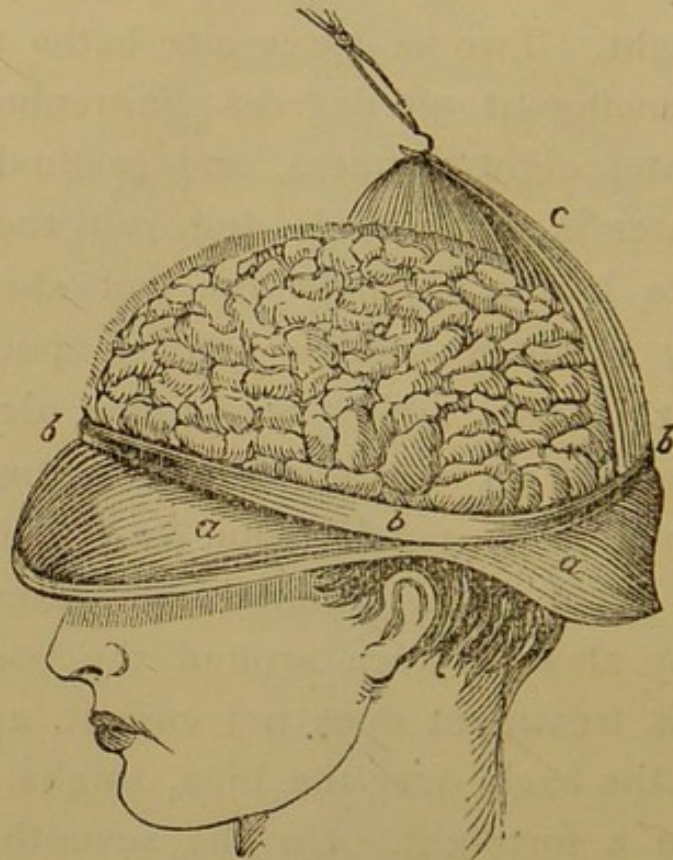


FIG. 52.—External view of the brain, showing the convolutions.

a a The scalp turned down. *b b b* Cut edges of the skull bone.
c The dura mater suspended by a hook. *d* The convolutions.

foods and stimulating drinks are the order of the day. So long as this is the case, there need be no expression of surprise at the increased licentiousness of the young and rising race; for condiments, highly seasoned foods, tobacco, and alcoholic drinks irritate and inflame the system, excite the passions, impair the circulation, derange the stomach,

pervert the appetite, and debilitate the nerves. Then, too, the increased consumption of tea and coffee in this country helps to swell the number of victims, and until people can be induced to restrain the passions, to eat the right kind of food, and drink the right kinds of drinks, so sure will insanity and other nervous disorders continue to increase.

HEADACHE

Is a form of Nervousness, which is caused either by indigestible food, acidity of the stomach, torpid liver, constipated bowels, irregular circulation, perverted amateness, obstructed skin, violent passions, inactive kidneys, drinking strong tea and coffee, or alcoholic drinks. Many who suffer from violent headache seem to think that, if the pain could only be relieved, nothing else would ail them; but in this they are mistaken, for whenever there is a violent pain in the head it indicates that the digestive, respiratory, and other functions are disturbed and impaired—hence, headache is only an indication or sign of internal derangement. Many people are accustomed to violate one or more of nature's laws, and when the penalties of such violation are inflicted, they expect to get cured of their aches and pains almost instantaneously, but they usually find out their mistake when it is too late to repair them. Strong tea or coffee will generally give immediate relief to headache, but they do not remove the cause; in fact they *aggravate* it, by exciting and irritating the nerves and benumbing the pain for the time being, but it afterwards returns with greater intensity. These stimulants also impair the circulation and gradually undermine the strongest constitutions (see Dr. Allcot's pamphlet on tea and coffee). When the system is thus

broken down, it requires some time to restore it to its normal condition.

The brain is the centre of the nervous system, and the spinal cord is connected directly with the brain—in fact, it has such a close connection that it is said by some to be a part and parcel of the brain; be this as it may, we certainly

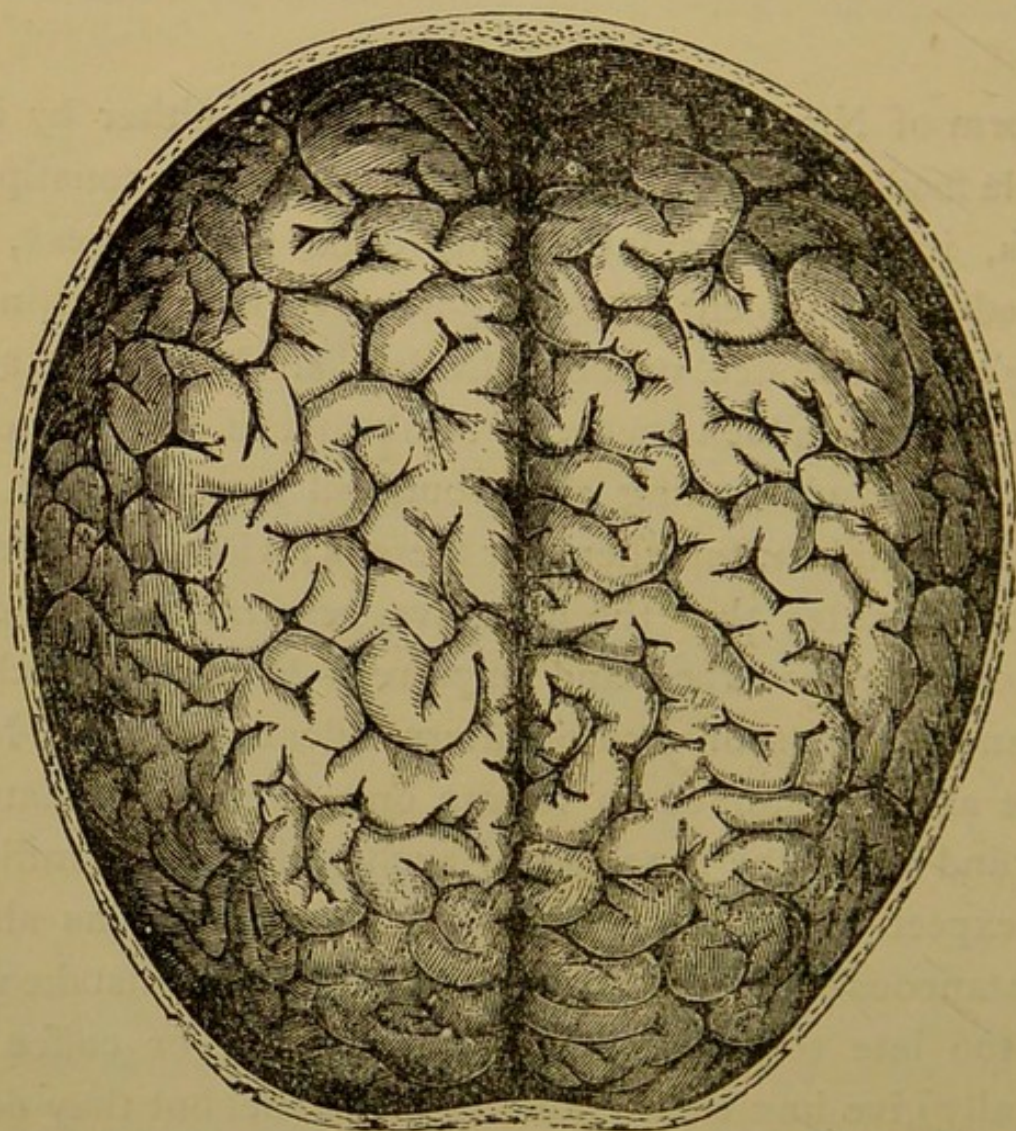


FIG. 53.

[Coronal Lobe of the Brain, showing the hemispheres and convolutions.]

do know that the nerves of the spine are composed of the same kind of material as are those of the brain, but few, if any, will presume to say that the mind is located in the spinal cord, or that the spine is the seat of the affections. When the brain

is seriously affected the nerves of the whole body seem to suffer, and whenever there is a headache, back-ache, or nerve-ache, is an indication of nervous exhaustion.

Treatment.—When there is much pain in the head, bathe the feet in as hot water as can be borne for ten minutes, then take them out and dash them into cold water for ten seconds, after which wipe them dry, and rub well with the bare hands until quite warm; then take half-an-hour's brisk out-door exercise. Wash the head with warm water and soap, and rinse it with cold water once a day, and occasionally take a tepid nose bath; also wash out the stomach daily, exercise freely out-door, and avoid eating too much rich and greasy food.

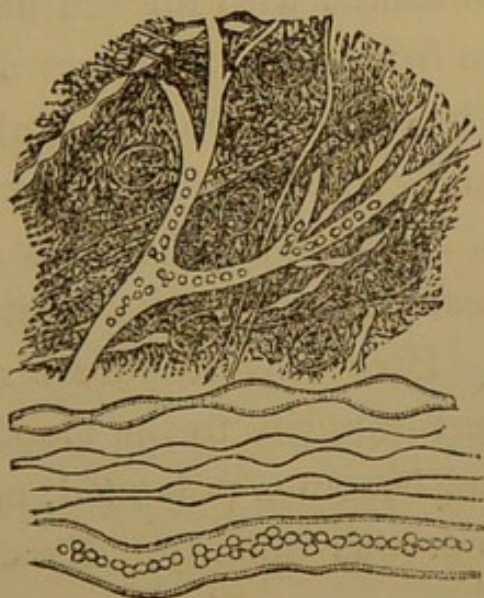


FIG. 54 represents a portion of nerve-tissue under the microscope. Mind is manifested by means of the formation and development of cells in the brain; these cells may be seen in the nerve tubes. The finer portion indicates the nerve-tissue, in which the tubes which convey sensations and volitions are mingling with those cells, by which impressions are received and the mandates of the will or the controlling force of the nerves are communicated to the muscles.

The nervous system is a very important study. The nerves permeate every part of the human structure, and

the finest needle point cannot prick the skin without piercing one or more of them. It would fill a large volume to describe the action of the mind upon the nerves, and *vice versa*, consequently, we shall content ourselves by giving an outline of the various nervous affections, and explain how to cure them. The nerves are fed and strengthened by the blood; if the blood be impure or impoverished, the nerves will also be weak and debilitated. Seeing, therefore, that the nerves must be supplied with pure blood, and in proper quantity, to enable them to do their duty, can we wonder that neglect of the common laws of health should cause a feeling of illness and an unstrung state of our system, and produce consequent misery and wretchedness? The nerves are poisoned with impure blood, and the blood is rendered impure from many causes. It can be poisoned with acrid bile, or by the use of tobacco, alcoholic drinks, tea and coffee, as also by the so-called narcotics, as henbane, chlorodyne, drugs, &c.; their influences are to deaden and benumb the nerves, rather than to strengthen, invigorate, or brace them up. Breathing impure air or neglect of the skin will also impart impurity to the blood, and by whatever influences the blood becomes poisoned, one thing is certain to follow, that is nervous debility. Excessive amateness is a great cause of nervous exhaustion; this has a tendency to take away the life-blood and to debilitate the nerves of the whole system. Mental anxiety and worry is also a cause of nervous debility, especially if continued for any great length of time.

The loss of sleep is another fertile source of weakness, and so in various degrees are excessive bodily fatigue and too much brain work. The symptoms of *NERVOUSNESS*

are almost too numerous to mention, and they vary in different subjects, and in the same subject at different times. The patient knows and feels that he is ill, yet he cannot easily tell why or where; he becomes fretful and peevish, and is often angry without a cause. His sleep is unrefreshing, and his rest is sometimes disturbed by frightful dreams. His memory becomes weakened, he feels timid, and is usually confused. He looks upon everything through the gloom of his imagination, and when left alone he is afraid of shadows. The appetite fails and becomes capricious and inconstant, and the patient often complains of pains in the head, irregularities in the bowels, flatulency, and general depression. If to such conditions he should indulge in alcoholic drinks, whether to encourage the appetite or to stimulate his failing energies, he is likely to bring on still greater misery.

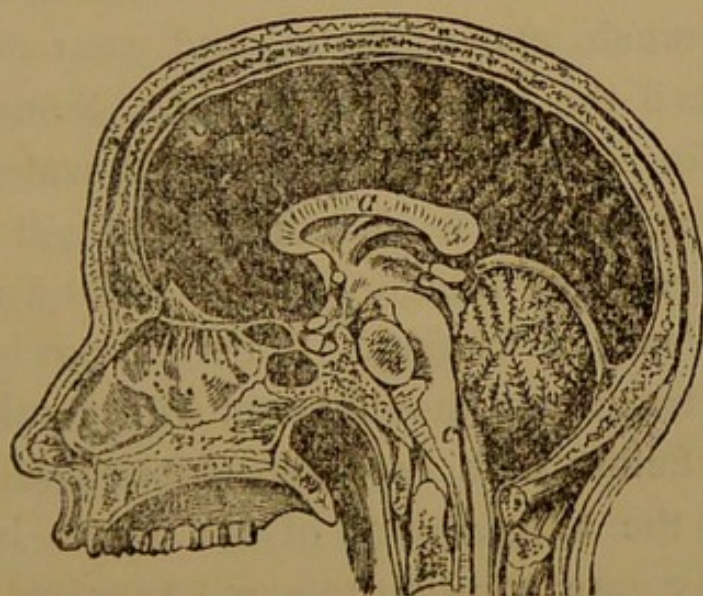


FIG. 55.—Side view of Brain and Skull.

Treatment.—In treating this malady, the first thing to be done is to remove the cause. All injurious habits, whatever they may be, must be given up—over-eating, drinking intoxicants, and the use of tobacco. Smoking should be studiously

avoided. Take an abundance of out-door exercise to brace up the nerves. Sponge the body all over every morning with cold water on rising and follow with dry rubbing and plenty of friction; and also pat and pound the chest, stomach, and abdomen with the bare hands. This will bring the blood more freely to the parts. Follow with ten minutes' exercise with chest expander, clubs, dumb-bells, &c. The patient should never be induced to take a sleeping draught, otherwise he will bring on still more exhaustion. A warm bath about ninety degrees should be taken two or three times a week, followed with a pouring or cold shower bath or a dashing on of cold water, followed with brisk friction.

Purgative medicines should be studiously avoided. If the bowels do not act freely take an injection of warm water; but it is better to eat bread containing the bran, wheat meal mush, stewed fruits, and wear the wet compress, &c., until the bowels act freely. Some people are afraid to take baths, especially if cold water has to be employed, imagining that such treatment will give them a cold; but there is no danger of that if they rub dry and follow with plenty of friction. If the patient is very weak, however, the treatment should begin with gentle bathing in tepid water, follow with moderate friction with the bare hands. Let the temperature of the water be gradually reduced, taking care however to avoid aggravating the pain by reducing the heat too suddenly. The sitz bath and back sponge is very beneficial, and may be used to great advantage. The temperature of the water should be about ninety degrees, and gradually cooled down to sixty-five degrees before he comes out. Galvanism and animal magnetism

are also very beneficial in most cases, and when available they may be resorted to with decided benefit.

NEURALGIA.

Neuralgia is a very distressing affection, and is generally caused by dyspepsia or anything which is conducive to nervous debility; but nothing is more certain to produce this disease than tea, coffee, alcoholic drinks, tobacco, excessive brain labour, amatory excesses, grief, fear, anxiety, and other depressing emotions.

Treatment.—When one or both of the jaws are affected with neuralgia, the face should be bathed with warm water for five minutes, after which three or four thicknesses of swansdown calico should be wrung out of cold water and applied to the parts affected, and covered with several thicknesses of dry flannel and bandaged down tightly. Keep this on during the night, and wash the parts well next morning on rising with cold water, and follow with considerable friction. Sometimes cold water, even in a local application, has cured cases which had defied all the usual remedies. The wet sheet pack daily, forty minutes in duration, is very beneficial. Keep the bowels regular by eating laxative food, and by the use of the enema. Serious and long standing cases will require very thorough and efficient treatment. Eating white bread is one cause of neuralgia, inasmuch as it contains no nerve food, thus the nerves are starved throughout the system; hence, neuralgia and other nervous affections is Nature's cry for more nerve food to strengthen them, and thereby remove the predisposing causes of this and kindred ailments. Remedial treatment should generally be applied to the whole system. The wet sheet pack will tend to

equalise the circulation and soothe every part of the body. The Life-awaker would prove very beneficial in nearly every case, especially when applied over the parts affected, down the back, and over the stomach and liver. This will rid the system of its impurities, and cause the blood to circulate more freely through the parts, and thereby heal the affection of the nerves and overcome the neuralgia. It is said that the application of finely scraped horse radish applied to the palms of the hands and to the parts affected for an hour daily will soon cure this very painful disorder.

PARALYSIS.

Paralysis is a disease of exhaustion. It may be attended with a partial or total loss of sensation in the part affected, or a loss of voluntary motion only. This disease comes on gradually, with an occasional sense of weakness. Sometimes one side of the body is affected, and this is called *hemiplegia*. This form frequently follows apoplexy. Sometimes the lower part of the body is paralysed on both sides, or any part below the head. This is called *paraplegia*, or palsy of the lower part of the body, from some point in the spinal cord. The special causes are constipation, venereal excesses, acrid medicines, injuries, intense mental emotion, excessive brain work, prolonged wakefulness, &c., each of these phases are difficult diseases to cure.

Treatment.—Whenever there is the least indication of paralysis the patient should take a warm sitz bath, the feet being put into hot water at the same time, during which sponge the back well with hot water for fifteen minutes, then throw a bucketful of cold water upon the spine, and follow with brisk friction. Apply the wet compress around

the body, and renew it every two hours. Wash the head with warm water and rinse with cold water daily. The wet sheet pack, forty minutes in duration each alternate day, for the first week or two, should be applied, followed with the dripping sheet and plenty of friction. Keep the bowels quite regular by daily injections, and let the patient breathe freely of pure fresh air. The Life-awaker acts like a charm upon these nervous affections, and if taken in time will prevent any serious results; but the above system of water treatment should always precede the application of the Life-awaker. Galvanism, electricity, and animal magnetism are also very beneficial when rightly applied. When galvanism is employed, the positive handle of the battery should be applied to the spine, and the negative to one foot while it is held in warm water. Apply the galvanism every eight hours, ten minutes each time. Magnetic rubbings by a strong and healthy man are perhaps more beneficial than anything else, especially if the rubbings are combined with such movements as will bring the muscles and nerves into play. These rubbings should be applied to the parts affected; and if the extremities are the weakest the bath attendant should dip his hands into cold water and rub freely down the spine and legs; but no person should attempt to do this who is weakly, sickly, or ailing. It is also necessary that the attendant should have some practical knowledge of rubbing and manipulating the human body.

Of late there has been a great increase in paralytic affections, more especially in the nerves that supply the muscles. This causes a gradual wasting and loss of muscular power, and this condition is produced chiefly by the use of tobacco, as it very rarely, if ever, occurs in non-smokers. Partial

paralysis of the optic nerve, occasioning near-sightedness, weak vision, and "colour blindness," is also very prevalent. This condition is also attributable to smoking and chewing tobacco. These cases generally recover when the use of tobacco is discontinued, but they will not recover so long as it is used.

APOPLEXY

Is a sudden paralysis, insensibility, or stupor, which resembles deep sleep. Sometimes it is accompanied with heavy breathing and irregular pulse, and may terminate in palsy or death. It is caused by pressure on the brain from obstruction or distention of the blood vessels; it may also be produced by alcoholic drinks, rich living, amatory excesses, violent emotions, tight lacing, too great physical exertion, and excessive mental taxation.

Treatment.—A sitz and foot bath, as hot as can be borne, should at once be applied, accompanied with hot water back sponging, and followed with friction. The wet compress around the body, changed morning, noon, and night, is also very beneficial. Let the patient lie in bed or on a couch. Be sure and keep the extremities quite warm, either by wrapping them in flannels or wringing a flannel out of hot water and applying thereto, cover with dry flannel, and change as often as needed. Bathe the head with warm water a few minutes daily, then follow with cold water bathing for 12 seconds. If convenient also apply the Life-awaker down the back and to the calves of the legs every fifteenth day, in which case the water treatment must cease till seven days after its application, then re-apply the water as above directed.

SOFTENING OF THE BRAIN

Is usually produced by inflammation, amatory excesses, and over-mental exertion. Some people take on so much care and anxiety as to literally congest their brains and bring on this fearful disorder.

Treatment.—First, remove all predisposing causes. Take frequent sitz baths and back spongings; commence with the water at 100 degrees, and gradually cool down. After the back has been sponged four or five minutes, cold water should be forcibly dashed upon the spine and followed with an abundance of friction. The wet compress may be worn around the body night and day, and changed every morning and night. If the crisis should appear upon the body, the compress may be discontinued for a few days, then repeated. The wet sheet pack is very beneficial, and may be taken three times per week, and one or more applications of the Life-awaker would greatly aid Nature in her restorative efforts. Indeed this has cured some of the worst cases in a remarkably short time. An abundance of physical recreation, cheerful company, and out-door exercise are very essential in this affection.

EPILEPSY.

Epileptic fits are amongst the most terrible of nervous affections, and present all degrees of violence. The patient is suddenly, with or without warning, attacked by violent convulsions, foaming at the mouth, grinding the teeth, contraction of the muscles of the face, and distortion of the countenance. Epileptic fits are caused in infants by worms and dentition, and sometimes precede or follow eruptive fevers. Occasionally they are caused by external injuries to the head, but more especially by amatory excitement;

or tobacco ; ardent spirits, indigestible food, &c., may also bring them on.

Treatment.—During the fit apply cold water freely to the head, a wet compress to the stomach, and warm applications to the feet. Amatory excitement must be specially avoided. Let the diet consist chiefly of coarse bread, wheat meal mush, and stewed fruits ; open the bowels with the enema, and avoid all indigestible food. Take a vapour or hot-air bath twice or thrice a week and wear the wet compress around the body during the night. On their removal next morning follow with a cold sponge bath and an abundance of friction. Wash the head daily with warm water and soap and rinse with cold water. If convenient, let the Life-awaker be applied down the back over the stomach, chest, and liver every ten days, or until the affection is overcome. We have cured many cases by this means, some of which were declared incurable by eminent medical men. We have only failed to cure twelve cases out of 633. One half of these failures consisted of stubborn or stupid people who would not submit to our treatment, and the other half of persons whose fits had been brought on by injury to the skull and pressure upon the brain. No treatment will be effectual in this disorder unless sexual abuses are avoided. The wet sheet pack is also very beneficial, and should be applied several times weekly, especially when the Life-awaker is not available.

HYSTERIA.

This disease generally affects the feminine gender, and seldom shows itself in the masculine. It may be distinguished from epilepsy by the insensibility being only partial,

by a peculiar trembling of the eyelid, and by the absence of distortion of the features. This painful disease is sometimes extremely violent; the trunk of the body is twisted backwards and forwards, the limbs are variously contorted, the muscles of the chest are agitated in every way, and the patient bursts into violent paroxysms of screaming, laughter, or sobbing, sometimes uttering incoherent expressions. On cessation of the spasm the patient usually lies stupid, and apparently almost lifeless, but in the course of an hour or so recovers the exercise of sense and motion, without any remembrance of what has taken place, but feeling a severe pain in the head and other parts of the body. This disease is caused by obstructed menses, the change of life, constipated bowels, intense mental emotion, indigestible food, alcoholic drinks, tea, coffee, and condiments, grief, care, worry, and mental anxiety.

Treatment.—When the fit is on place the head over a vessel, while the patient lies upon a couch, and pour cold water over the head and chest till they become chilly; rub the bowels with the bare hands; this will cause the free expulsion of wind, and give immediate relief. If the patient is much exhausted and feeble, the feet may be bathed in warm water for ten minutes and rubbed freely. Let all stimulating and exciting causes be studiously avoided. Apply the wet sheet pack every alternate day, and follow with the dripping sheet and brisk friction. Warm sitz baths are also very beneficial, especially if the bowels be regulated by the enema; apply the Life-awaker once a month in addition to the baths, and when there is much wind, wash out the stomach with warm water and the tube.

INFLUENCE OF THE IMAGINATION.

Imagination plays strange tricks with some people. An idea gets into their heads, and no amount of reasoning can remove it; on the contrary, the more you demonstrate its impossibility or unreasonableness, the more tenaciously they cling to it. Imagination is a divine and glorious faculty, when employed in conceiving and delineating the beautiful and the true; but when perverted and corrupted it is a prolific source of unhappiness.

In the child, imagination creates an ideal world, and when accompanied with the gift of language the little prattler becomes a "story-teller." Many children live in a veritable fairy world of imagination, and find their greatest pleasure in reading tales embodying marvellous creations of fancy, and also in concocting them "out of their own heads." There is no harm in this; for they will become soberised quite soon enough by the stern realities of life.

The poet, we have the highest authority for saying, is "of imagination all compact," and by its aid he gives to "airy nothings a local habitation and a name." The lover, too, often indulges his imagination both when present with, and absent from, the object of his attachment. He pictures his beloved in his "mind's eye," and imagines a charming future when love shall fulfil its vows. The lunatic also is full of strange fancies begotten of a diseased imagination. It is Shakespeare who says that—

The lunatic, the lover, and the poet
Are of imagination all compact.

The same great interpreter and observer of nature says that—

Dangerous conceits are in their nature poisons.

Hence, the importance of bridling these dangerous fancies. Sometimes such conceits are more ridiculous than dangerous. An anecdote will illustrate this.

Dr. Cabarus, of Paris, was one of those jovial physicians who effect more cures by humour and stratagem than by medicine and science. One of his patients, the Duchess of D., imagined that she had

SWALLOWED A FROG.

She declared that she felt the frog in her stomach, and the delusion robbed her of appetite, rest, and health. Several physicians whom she consulted tried to laugh her out of the idea, but this only confirmed her belief and increased her martyrdom. When she told her tale of woe to Dr. Cabarus he affected a due seriousness, felt her pulse, sympathised with her, and said, after a solemn pause, "Madame, the frog is there, but I will remove it." He prescribed an emetic, and when it began to work, and the eyes of the lady were blinded by tears and pain, he slyly slipped a frog into the basin. On seeing the frog, the duchess was delighted at her relief for a moment or two; then she turned pale, and exclaimed, "O, doctor, I am not cured, for the frog has left little ones." The doctor's presence of mind was equal to the occasion. He took up the frog, and having examined it, said firmly, "Madame, that is impossible, for the frog is a male!"

It is very improper and dangerous to impress upon patients the idea that they are very ill, for the simple reason that when the body is weak the imagination is often all the stronger; and these remarks, acting upon the fears of the patient, may actually cause disease. It is wrong even for

a visitor to a sick room to pull a long face and condole too much with the sufferer. Visitors would do infinitely more good if they came with a cheerful voice and face, and would take the patient by the hand and try to raise his or her spirits. There is a case recorded of a gentleman who was



FIG. 56.

[This figure indicates a man who is a slave to a morbid imagination, which has produced despondency, fear, and anxiety, and has thereby rendered him dyspeptic and miserable.]



FIG. 57.

[The above cut represents a man with a hopeful and cheerful nature, which renders him happy and contented, thereby producing harmony between body and brain.]

very ill, and as it was expected that he would die, his friends came to bid him a last farewell, which they performed with their handkerchiefs to their faces, and tears, real or pretended, trickling down their cheeks. When all with sorrowing words and looks had bade him adieu, the patient's pet monkey, having found a handkerchief, walked

sedately up to the bed upon its hind legs, and looked such a droll picture of misery that its master could not help laughing heartily; and by laughing he burst an abscess in his throat, after which he soon recovered. Physicians do more for their patients by kind words and cheerful looks than by their medicines; hence doctors have little chance of curing their patients if they wear the aspect of undertakers.

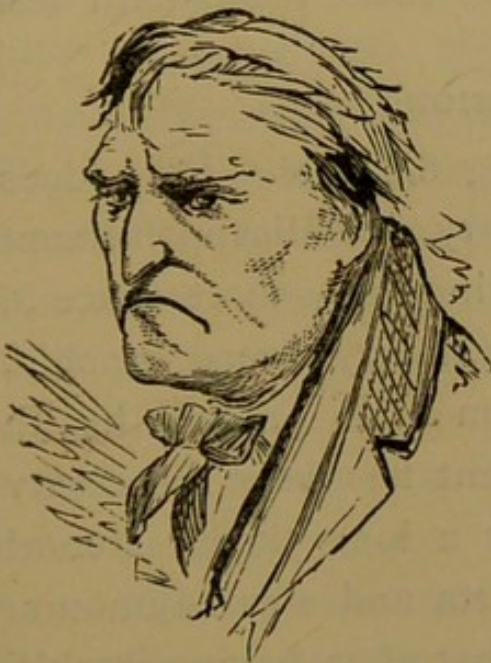


FIG. 58.

[Spite, malice, and revengeful feeling have so warped this man's mind, as to induce Dyspepsia and gloomy forebodings.]



FIG. 59.

[A bright, happy, and cheerful disposition, combined with an active nature, each of which conduce to health and longevity.]

FEAR IS ALSO A CAUSE OF DISEASE.

It is recorded that a person was so tortured with grief and fright that his hair turned grey in a single night; consequently, those who possess very large Cautiousness and small Hope are more subject to ailments than those

who have the former small and the latter large. Those who possess strong will-power, and a jolly, hopeful nature, must certainly exercise an astonishing influence both upon their own bodies and minds, and also those of others. It is stated that the "Laughing Doctor," in America, cures more patients by his mirth and joviality than any other dozen doctors in the States with all their medicines. We cannot too strongly condemn the practice of persons pulling long faces in the presence of a patient when they enter the sick room, inasmuch as their doleful countenances have a tendency to depress the spirits, and make the patient feel worse.

MENTAL IMPRESSIONS

greatly aid in curing or prolonging diseases. Who does not know that mental anxiety, worry, and disappointment produce the most painful disorders in a very short space of time? while good news, glad tidings, merry companionship, and laughter so act upon the system as to produce health and happiness, even when the patient has been in a very precarious and sickly condition for a long time. Mental impressions frequently remove warts and small tumours. Many persons have informed us that after having "sold" their warts, they gradually disappeared. We laugh at these things, and call them absurd, and so they appear to us; but such *cures* are not at all uncommon, and are occurring around us every day. But how is it done? When we seriously consider the intricate arrangement of nature by which the system is constantly being built up, and every part supplied with new material, we shall at once see how it is possible for the mind, in the exercise of its power, to effect the removal of a tumour or wart.

These cures are always *gradual* and *slow*; that is, the removal of a tumour, or wart by *selling*, or whatever it may be, takes time, because it is under the physiological law. But the impression from the mind *which changed the molecular action, and deprived it of its means of growth*, may have been instantaneous. There is in the living organism a constant waste of its material. This waste is so great as to consume the entire fleshy portion of the body in about twelve months. If the supply is not equal to the waste, there will be a gradual lessening and weakening of the body. The food that we eat, after being digested, becomes blood, tissue, muscle, bone, nerve, &c. There are regular channels through which this supply is carried to the minutest parts of the system, and if any portion of these becomes impaired or obstructed in any way, the part thus deprived must suffer. If the channel supplying any particular muscle, nerve, or organ becomes obstructed, we should have atrophy or wasting away of its substance, as a consequence. If it should be a set of muscles—a leg, for instance—the result would be the same, and would be called wasting palsy. If the mind becomes seriously impaired by fright, great anxiety, or a serious fever, the circulation of the blood through the head will be greatly affected, and the source of supply for the hair becomes impaired, the colouring matter, perhaps, would not be furnished, and the hair would turn white; or, if the obstruction be complete, the hair thus deprived of its material for growth would die, and baldness result. So also of the bony structure, the teeth, the nails, and every fibre of the system.

The Creator has so ordained that, for the perfect working of this physiological law, there should be not only blood

vessels through which the material for building up the system may be carried, but also a corresponding nervous circulation through which the vital force acts in supplying every part with necessary stimuli or power, to appropriate and use the material brought to it; hence, it will be seen that a part may be deprived of its supply either from the want of material or the power to use it.

The means by which warts, tumours, &c., are cured by strong mental impressions will now be apparent. By this means the warts are deprived at once, if not of the material, at least of the power to use it for its own growth; and being governed by the same law that governs every other part of the structure, it continues to throw off its substance; and being destitute of the power of supply, it gradually disappears.

If mental impressions are effectual in removing or wasting away such substances, it is reasonable to suppose that they will have a powerful influence upon other affections, and may be used as a means in assisting the physician to overcome the most serious diseases.

INSANITY.

Insanity is a nervous disorder, and is sadly on the increase. This appears to be a disease of exhaustion, and in many cases it is caused by masturbation. Madness is characterised as *furious*, when the patient is violent, mutters, jumps, cries, shrieks, &c.; *elevated*, when he is lively, merry, exulting in his own imaginary importance, which may make him a president, priest, prophet, or king; *demented* or *chaotic*, when the mind sinks into insensibility

and forgetfulness. Men may be insane upon many subjects, while they appear to be quite sane upon others. Insanity is frequently caused by hereditary predisposition, and, consequently, parents have grave responsibilities resting upon them, and each should live and act in such a way as to transmit healthy minds and bodies to their offspring, for much depends upon the health of the parents previous to the conception and birth of the child. This is fully explained in our work on "Marriage Physiologically Considered," to which the reader is referred.



FIG. 60.

[The offspring of warped parents. Having inherited a vitiated nature and a badly balanced brain, he is a candidate for the Prison, Workhouse, or Asylum.]



FIG. 61.

[The offspring of parents who have observed the laws of life and health, and who is organised for leading a pure life, and for becoming a useful citizen. No insanity or idiocy here!]

Idiocy is popularly and often rightly ascribed to fright. Not only a sudden shock, but a long continued strain may harm a child. Women who combine the bearing of children

with the anxieties and worry of business life, frequently bring into the world children suffering from this and other nervous disorders.

Not only may idiocy and insanity be transmitted from parent to child, but epilepsy, neuralgia, and hysteria may be the result of transmitted nervous disorder; hence, we maintain that it is the bounden duty of every prospective parent to arrest the transmission of unhealthy organisms, for when these nervous disorders are transmitted there is little hope of their complete eradication.

Tobacco smoking is said to produce more insanity than most people imagine. It most certainly enfeebles the nerves, debilitates the system, causes undue thirst, and thereby creates an abnormal craving for alcoholic drinks, which in turn still further excite and inflame the brain, and aid to throw the system out of balance.

Treatment.—The best cure with which we are acquainted for insanity is the wet sheet pack applied every alternate day; shallow, hip, pouring, head, and foot baths, combined with a judicious application of the Life-awaker. The cure of insanity is a slow and gradual process, and the patient should be kept from violent excitement and all kinds of disturbing causes. Tea, coffee, tobacco, and alcoholic drinks must be studiously avoided. An abundance of out-door exercise should be taken along with a lively, cheerful companion. Amatory excesses, highly seasoned food, late suppers, and pork must be strictly guarded against, otherwise it is questionable whether a cure can be produced. We have been successful in curing some very serious cases by these simple means.

DELIRIUM TREMENS.

This disease is unfortunately on the increase. It is a species of insanity, and is caused by the use of intoxicating drinks, which, when extensively used, act very deleteriously upon the susceptible and irritable condition of the brain; it is sometimes also caused by the use of tobacco, opium, tea, &c.

Treatment.—While the fit is on, cold wet cloths should be applied to the head; a shallow bath at 100 degrees, accompanied with much friction, and followed with the dripping sheet, are among the best appliances. When the patient is not ungovernable, a wet sheet pack may be given. Let him drink copious draughts of warm or hot water, apply the wet compress around the body, and keep it on during the night, and re-apply it each morning. Keep the bowels open with the enema, and let the patient live exclusively upon a vegetable diet, avoiding pepper, mustard, condiments, and late suppers. The cure would be more effectual and speedier if the stomach were washed out once or twice a day with warm water and the stomach tube.

ST. VITUS'S DANCE.

This disease generally attacks boys and girls of delicate and impaired constitutions, and usually makes its appearance from the eighth to the sixteenth year. It comes on gradually, and is marked by a variable and sometimes ravenous appetite, swelling and hardness of the abdomen, constipated bowels, involuntary motions of the different muscles, particularly those of the face. But as the disease becomes developed the convulsions are more violent. The patient walks unsteadily, his gait resembling starting or

jumpings, and sometimes walking is impossible. This nervous affection is consequent upon debility, particularly of the digestive apparatus, liver, or bowels.

Treatment. - On rising each morning apply a cold dripping sheet and brisk friction; a shallow bath at eleven o'clock in the morning, follow with a cold dripping sheet or pouring bath, accompanied with friction with a dry sheet and bare hands. A wet sheet pack may be applied twice a week; a sitz bath, at 90 degrees, and gradually cooled down to 65 degrees, at three o'clock each day. The bowels should be opened daily with tepid water injections or by eating laxative food. Let the dietary consist of brown bread, the higher class of vegetables, including wheat meal mush, roasted potatoes, ripe fruits, &c. When convenient the Life-awaker should be applied down the back and over the abdominal region once a fortnight, in which case the above water treatment may be applied between the seventh and fourteenth days.

STAMMERING.

This is a nervous affection of the vocal organs, and has sometimes been called "St. Vitus's Dance" of the vocal organs.

Treatment.—Stammerers are generally of an excitable temperament and seldom give themselves time to speak distinctly, hence they should try to speak slowly; inflate the lungs well before they attempt to speak, and when there is any difficulty they should strike the forefinger of the right hand upon the forefinger of the left, keeping time as in singing. Some time ago, a notable quack doctor made

quite a fortune by curing clergymen who had lost their voice and people who were given to stammering. Each patient was made to promise strict secrecy concerning his method of treatment. Hence, it was not generally known that the whole mystery consisted in teaching them to speak with the chest dilated, and thus to get rid not only of the sore throat and loss of voice, but of stammering, and a variety of other difficulties and impediments arising from feeble muscles. If people would constantly practise speaking in an erect position, and were to read and speak slowly and emphasise every word and syllable, a very speedy improvement would soon take place. The daily use of the chest expander, dumb-bells, or clubs, would have a tendency to increase the strength of the muscles of respiration, and also those of the voice box. Strong tea, coffee, and highly-seasoned food should be studiously avoided, otherwise a permanent cure need not be expected.

INVOLUNTARY SEMINAL EMISSIONS

Are caused by youthful indiscretion, masturbation, libidinous ideas, highly seasoned food, stimulating beverages, or by any unnatural excitement of the genital organs which induce considerable nervous debility and morbid irritability.

Treatment.—In each case the cause must first be removed. The patient should live on a plain vegetable, bread, mush, fruit, and fish diet. Bathe the genital organs with cold water night and morning, and when convenient sponge the body all over with cold water on rising, and follow with much friction with the bare hands. Considerable

out-door active exercise should be taken. When the weakness has been produced by self-pollution, many of the patients become fickle, vacillating, and unreliable. The mind partakes of the bodily degeneracy, and it requires a strong mind and favourable circumstances to keep them from running after those quack doctors who advertise to cure them with a single bottle of their nauseous medicines, which in most cases have a tendency to still further debilitate the system. If the bowels are constipated they may be regulated by tepid water injections. On retiring to bed rub the body briskly with a towel wrung out of cold water, and follow with a dry rubbing. Take the last meal three or four hours before retiring to bed; the patient should read but little between the last meal and retiring, otherwise the blood will accumulate in the head and the extremities feel chilly and cold, but brisk out-of-door exercise will have a bracing and invigorating effect upon the system. The patient should avoid sleeping on his back, or in contact with another person. Let there be very little clothing upon the bed, otherwise the body will be overheated and cause an emission. Keep the bedroom well ventilated, and sleep with the head direct north. Many of those who have weakened their genital organs become gloomy, desponding, and irritable, and seek solitude instead of coming in contact with society. This has a tendency to aggravate the symptoms; hence, the patient should seek cheerful society, and banish care and anxiety from his mind. The warm sitz bath, 90 degrees, ten minutes in duration, may be taken each night, one hour before retiring to bed, and gradually cooled down to 65 degrees; then wipe the body dry with a moderately rough towel, after which a short walk may be

taken. If there is much pain or weakness in the back, and, indeed in all cases of debility, the wet compress may be worn several nights weekly. When accompanied with dizziness, or floating specks before the eyes, the head may be washed with warm water and Castile soap, and then rinsed with cold water once a day; bathe the eyes and back of the head with cold water for one minute, morning and night. When the testicles are very pendulous the patient should take a *cold dipping sitz bath* both night and morning. This may be done by dipping the posterior part of the body into cold water a dozen or more times; let it be done slowly, and followed with friction so as to produce a good reaction. If the dipping bath is not convenient bathe the parts freely with cold water for several minutes night and morning. This will cause the blood to circulate freely through the parts, and thereby give strength and tone to the system. The Author's work on "Vital Force" gives full instructions for the cure of genital weakness.



THE HEART

is a very important organ, and its size is roughly estimated as being equal to that of the closed fist of the person to whom it belongs. It has a broad end, which is turned upwards and backwards, and inclined to the right side; this is called its *base*. The other end is somewhat pointed, and is turned downwards and forwards and to the left side, which is the chief reason why people can feel the pulsations of their hearts so much better on the left than on the right side; this end is called its *apex*. The heart is located between the two hemispheres of the lungs (as seen in Fig. 9, page 129). About one-third of it lies at the right of a line drawn through the centre of the breast-bone, and it lies obliquely across the chest, reaching from the second rib on the right side to between the fifth and sixth ribs on the left.

The upper end of the heart is held in its place by the larger blood-vessels which lead out of it, and the lower and smaller end is left free. The heart is enclosed in the *pericardium*, which is a kind of double bag or sac, and is composed of serous membranes, which are kept very soft and slippery by a fluid which prevents friction.

The function of the heart is to circulate the blood and regulate its passage through various parts of the body, and it is surprising what an amount of work it has to perform in a lifetime. In infancy it beats at the rate of about 130 strokes in a minute; at the age of three it makes nearly 100 strokes; whilst at the age of thirty the pulsations are reduced to about 75 per minute, and they gradually diminish till at the age of eighty they are scarcely 60 per

minute. It is calculated that from five to six cubic inches, or about 1,500 grains, of blood is driven from each ventricle by each stroke, and that the blood moves in the great arteries at about twelve inches in a second, and the whole of the blood is supposed to travel through the body in about thirty seconds. This may be very near the mark, but it is very difficult to arrive at an exact conclusion in regard thereto.

QUANTITY OR WEIGHT OF BLOOD IN THE HUMAN BODY.

Physiologists differ considerably in regard to the amount of blood contained in the human system. Huxley estimates it at about *one-thirteenth* the weight of the body, and others assert that there are from 25 lbs. to 30 lbs.; probably the former is too low, and the latter too high an estimate. Be this as it may, it is quite evident that the heart has a wonderful amount of work to perform, and it is unwise to increase its burden by over-eating, or by drinking alcoholic drinks, strong tea and coffee, or by any other means. Sitting cross-legged impedes the circulation of the blood through the extremities, whilst undue mental excitement, worry, and irritability of mind retards its action to such an extent as to produce an enfeebled condition, especially when the cause is long continued.

It is a well-known fact that posture has a considerable effect on the number of one's heart beats, and experiments of a very interesting character have been made by Dr. Guy and others, with a view to determine the difference in the pulsations when the body is in different positions. In the male there is a difference of about ten beats between sitting and standing, and fifteen between standing and lying; but

the difference is not so great in the female, as will be seen in the following table :—

HEART BEATS PER MINUTE.						
		Standing.		Sitting.		Lying.
Male	..	81	..	71	..	66
Female	..	91	..	84	..	80

It will thus be seen that a recumbent position gives more rest to the heart than any other position ; but if people were to yield very much to this position, the heart would become debilitated and get into a state of lethargy ; whilst too little rest and sleep would prematurely break it down.

The heart rests most at night when we are quiet and lying in bed, and the moment we sit or stand up it begins to beat faster, and it pounds away at a very rapid rate when we run up stairs or walk sharply up-hill. Moderate and quick exercise do a great amount of good, inasmuch as it stimulates and strengthens the action of the heart ; but when great physical effort is put forth continually, as by men who are engaged in walking matches, or running races, rowing matches, or kindred contests, too much stress is placed upon the heart, and this causes it to enlarge, and in a few years it becomes so weak and feeble as to lose most of its power.

Everybody who has studied the human system must appreciate the importance of this wonderful machine or organ ; hence the necessity of keeping it running smoothly.

Fig. 62 represents a section of the heart. It will be observed that there are four cavities—two on the right side and two on the left. The upper two are called *auricles*, and the lower two *ventricles*. The right auricle receives the blood from the great upper vein (*vena cava descendens*)

and from the lower vein (*vena cava ascendens*). The right auricle sends its blood through the tricuspid valve (which is located in the partition between the right auricle and right ventricle) into the right ventricle, from whence it is carried by the pulmonary arteries to the lungs, where it receives the oxygen, and when it is ærated it returns to the left auricle of the heart, passes through the mitral valve (which is located in the partition between the left auricle

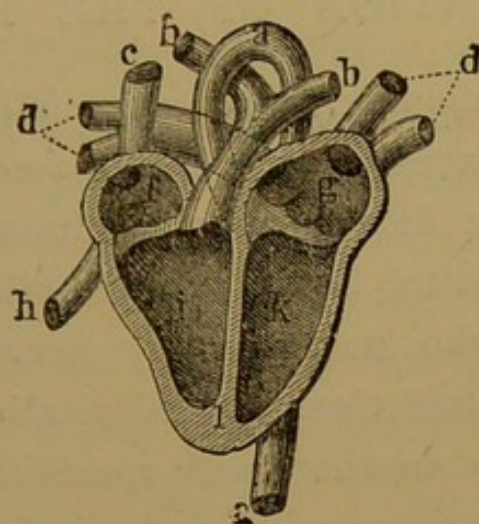


FIG. 62.—The Heart.

a—Arch of Aorta. *b b*—Pulmonary Arteries. *c*—Superior Vena Cava. *d d*—Pulmonary Veins. *g*—Aorta.
h—Tricuspid Valve.

and left ventricle) into the left ventricle, from whence it is projected into the Aorta, to be sent to the minutest parts of the body.

HEART DISEASE.

Disease of the heart is generally confounded with stomach derangements. If people would avoid amatory excesses, take frequent ablutions, avoid eating too much, too often, and too greasy and debilitating food, they would seldom or never be troubled with "heart disease," especially

if they also abstain from drinking strong tea, coffee, and alcoholic drinks.

Obese or fleshy persons are very liable to *Aneurism*, or distension of the organ, in consequence of the blood being too thick, and by the accumulation of fat about the heart, which prevents the valves and ventricles from performing their functions as they ought.

PALPITATION OF THE HEART

is a very common disorder, more especially with those who yield to amatory excesses, or partake freely of strong tea, coffee, or alcoholic drinks, as also those who yield to a morbid appetite, eat too heartily, or partake of late suppers, and with those who possess very nervous and irritable natures. In the latter class the palpitation usually shoots from one artery to another, and sometimes an unnatural pulsation pervades every part of the body, which in some cases can be very distinctly heard even by those who are in the same room.

Sometimes the pulsations are sharp and strong, and may be described as a *throbbing* of the heart, at other times they are soft and feeble, which may be said to be a *fluttering* movement. Sometimes the heart pulsates very rapidly, and occasionally loses a beat or two, in which case there will be an intermittent pulse, and the patient sometimes feels as if he was about to die.

Causes.—Indigestion, constipation, strong mental emotions, amatory excesses, the use of strong tea, coffee, tobacco, or ardent spirits, and close in-door confinement are the chief causes of this unpleasant affection.

Treatment.—Apply the wet compress around the body five nights weekly, and sponge the parts freely with cold water on its removal, take frequent hot and cold foot-baths; and also the tepid or cool sitz bath and back sponge four nights weekly. Plain, simple, and digestible food, an abundance of out-door exercise, loose clothing, the avoidance of all predisposing causes, an equable temper, and the avoidance of violent exertion after meals are amongst the best curative appliances.

When the palpitation arises from obstruction in any part, as by constipation, the bowels should be opened with daily injections of water, until the bowels act freely without. When the obstruction is in some other part of the body the life-awaker should be applied in order to clear away the waste matter that causes the difficulty, but in no case should an inexperienced person apply this instrument in this affection.

When the palpitation is excessive, it may be greatly relieved by bending double, the head down, and the hands hanging so as to produce a temporary congestion of the upper portion of the body. In nearly every instance of nervous palpitation, the heart immediately resumes its natural functions. If the breath is held during this action, the effect is still more rapid. Nothing will permanently cure palpitation however till the cause is removed.

A very simple way of curing palpitation is to wring a towel out of cold water, fold it into four thicknesses, and place it carefully around the region of the heart, and extend it to the left side of the spine, press it gently to the palpitating part, and let it remain until warm, then change it; repeat this till the heart works quietly, then smear olive oil over the part, and rub it quickly and gently in.

INFLAMMATION OF THE HEART—(*Pericarditis*).

Inflammation is one of the most common affections of the heart, and the part that is usually the seat of the disorder is the pericardium, or enveloping membrane of the organ.

Symptoms of Acute Inflammation, or Pericarditis.—There is more or less general fever, which is usually accompanied with a dull, or acute, lancinating pain in the region of the heart, which generally darts through to the left shoulder-blade, passing through the shoulder and part of the way down the arm, but it seldom reaches the elbow.

This affection may be distinguished from inflammation of the lungs by the respirations being much easier and less frequent than in the latter case. Pressure upon the heart or over its region augments the pain, and causes a very unpleasant prickling sensation. Some time ago, a gentleman, whose heart was very much affected, came to us for advice on health, saying that he felt as though he was about to die. I questioned him very closely as to whether there had been any pressure over the region of the heart, or whether he had anything in his inside vest pocket which pressed upon the part affected. He then confessed that for several days he had carried a bag of gold therein, thinking that it would be the safest place to carry it. I insisted on its immediate removal, and in less than half-an-hour the pain completely subsided. This implies that if any hard or cold substance be carried in the inside vest pocket, it should be on the right side of the body, otherwise serious injury may be produced. This affection may also be produced by tight lacing, padding the chest, and by caving in the vitals.

Treatment.—Remove all predisposing causes, take a sitz bath back and chest sponge at 102 deg., continue this for

8 or 10 minutes, then apply a chest and back pad wrung out of hot water, cover with dry flannel and bandage down snugly, but not too tightly ; keep this on from 3 to 8 hours and on its removal repeat the sitz bath back and chest sponging. If the pain becomes very acute while the pads are on remove them at once, and apply the sitz bath and spongings till relieved, then re-apply the pads, but in this case apply a hot wet pad between the shoulders, and a cold wet pad over the heart. When the inflammation subsides apply the tepid wet compress, over which a little of Dr. Nichol's, Pears', or any other good soap has been lathered, wear this night and day and change each morning, noon, and night, till all symptoms disappear.

Chronic Inflammation of the Heart is more difficult to cure, still judicious water treatment, combined with one or two applications of the Life-awaker renders even this disease within the reach of cure. In all serious cases a strict dietary must be observed, frequent wet-sheet-packs, 3 or 4 per week 40 minutes in duration ; the cold wet compress night and day for a few weeks ; two shallow or half baths per week, and 6 or 7 sitz baths per week, at 75 deg. for seven minutes in duration, an occasional application of the Life-awaker and gentle out-door exercise are amongst the best applications.

Rheumatism of the Heart is a very painful and even dangerous disease, and is usually produced by chronic inflammation, fast living, purgative medicines, mercury, opium, colchicum, &c., as also by damp beds, exposure to cold, &c.

Treatment.—Apply the wet sheet pack four times weekly ; wear the wet compress (wrung out of tepid water)

nightly ; two or three hot blanket packs (thirty-five minutes each) per week. Keep the bowels regular by eating laxative food and by water injections. A vapour or hot-air bath may be taken twice a week ; follow each of these baths with a cold dripping sheet or pouring bath.

The Life-awaker may be applied after a week's water treatment ; and the water treatment may be resumed in a week after the application of the Life-awaker.

Other diseases of this important organ may be induced by unphysiological habits, as by indolence, over-eating, worry, and violent temper.

There are many affections of the heart which I need not particularise, inasmuch as similar treatment is needed in each. The disorders to which I now refer are such as *softening, ossification, abscess, tubercles, atrophy or wasting, gangrene, dilatation, rupture, hypertrophy, &c., &c.*

In either case the patient should be surrounded by the best health conditions. All kinds of undue mental excitement must be avoided, strict temperance in eating and drinking observed, and all kinds of amatory excesses abandoned. Take a warm sitz bath when there is much fulness in the region of the heart, wear a wet compress around the body during the night, sponge the parts well on its removal on rising, and follow with plenty of friction. A wet sheet pack may be taken twice a week, a foot bath daily, a vapour or shallow bath once a week. Spend much of your time out of doors, and exercise freely but not violently ; avoid eating greasy food, late suppers, and do not drink stimulating beverages.

THE KIDNEYS.

The kidneys are located in the loins, along the sides of the last dorsal and first three lumbar vertebræ. The upper edge of the kidneys corresponds with the space between the eleventh and twelfth ribs, and the lower edge is nearly on a level with the middle of the third lumbar spine. The left

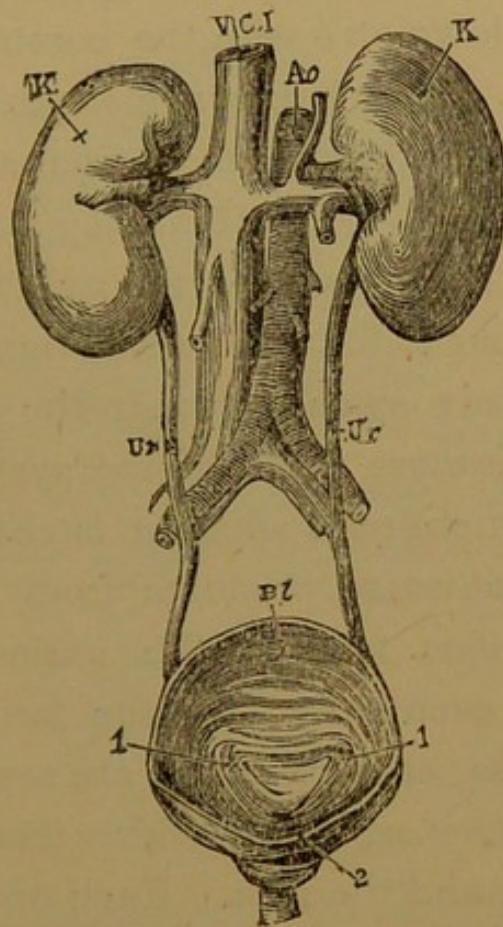


FIG. 63.—Kidneys, Aorta, Ureters, and Bladder.

k—The kidneys. *u r*—Ureters. *a o*—The Aorta. *v c i*—Vena cava inferior, and the renal arteries and veins. *b l*—The bladder, the top of which is cut off so as to show the openings of the ureters 1 1, and 2 that of the urethra.

kidney, owing to its more elongated shape, usually reaches lower than the right. The kidneys are enveloped in areolar tissue, which contains an abundance of fatty tissues in its meshes. It is thicker and more abundant posteriorly than

in front, but everywhere it completely surrounds the proper fibrous capsule of the gland, and sometimes after inflammatory changes have taken place in it the adhesion between them is very intimate and even inseparable. The front of the right kidney at its upper end touches the under surface of the liver, the front of the left kidney touches the fundus of the stomach and then comes in contact with the pancreas, and lower down still with the commencement of the descending colon. The kidneys measure about 4 inches in length, $2\frac{1}{2}$ inches in its tranverse axis, and from $1\frac{1}{4}$ to $1\frac{1}{2}$ inches in thickness. The left kidney is usually a little longer and a little narrower than the right. The weight of each being from four to four and a half ounces.

We have already explained that the heart forces the blood into the minutest parts of the system, to which it supplies the nutriment with which it is charged; the blood then takes up the waste products from these parts and returns by the veins loaded with useless and injurious excretions, which eventually take the form of water, carbonic acid, and urea, each of which are separated from the blood by the *excretory organs*, of which there are three—the *kidneys*, the *lungs*, and the *skin*. Each of these organs are especially concerned in the elimination of one of these waste products. The duty of the kidneys is to excrete urea and various saline matters. They also pass away a large quantity of water, and a small portion of carbonic acid. An average healthy man usually excretes by the kidneys about 50 ounces of water per day, about $97\frac{1}{2}$ per cent. of which is urea, and about $2\frac{1}{2}$ per cent. of uric acid. Urine is composed of a fluid which might be separated from the blood by any kind of filter which has the property of retaining the

corpuscles, fibrine, and albumen, which constitute the life principle of the blood, and allow the rest to flow off.

It will thus be seen that the urine may be said to be the blood devoid of its corpuscles, fibrine, and albumen. The kidneys are so perfectly adapted for this filtering process, that in a state of health they perform their work so admirably as to permit of there being no superfluous urea left in

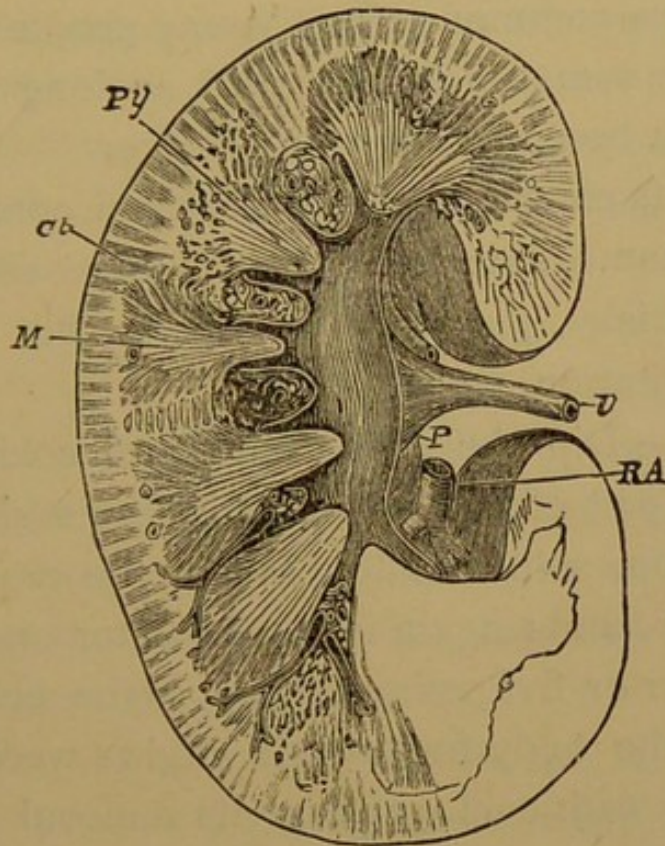


FIG. 64.—Longitudinal Section of the Human Kidney.

ct—The cortical substance. *m*—The medullary substance. *p*—The pelvis of the kidney. *u*—The ureter. *ra*—The renal artery. *py*—Pyramid.

the blood. This filtering process is constantly going on, and the urinary fluid is gradually passed, drop by drop from the kidneys through orifices in the *pyramids* of these organs into the *ureters*, which convey it to the bladder, where it is retained by means of muscular fibres arranged circularly around the part called the “neck” of the bladder,

forming what is termed the *sphincter*, until its quantity is sufficient to cause uneasy feelings which compel its expulsion, after which the *sphincter* again contracts, but when these fibres become relaxed the urine involuntarily passes away and produces the disorder termed *incontinence of the urine*, or

INABILITY TO RETAIN THE WATER.

This is more common among young people than in adult life; though it sometimes continues as long as a person lives, and even becomes worse in old age.

Causes.—Its chief causes are a relaxed condition of the fibres above named, alcoholic drinks, more especially that of gin and whisky, purgative medicines, hot liquids, self-abuse, local irritation, &c.

Treatment.—Dip the right hand into cold water, and rub the lower part of the abdomen in the region and over the bladder, from side to side. When the moisture is absorbed, dip the hands again into cold water and repeat the rubbing for four or five minutes; apply the cold wet compress around the body five or six nights weekly; sponge the parts freely with cold water on its removal each morning, and take frequent “dipping sitz baths”—that is, dip the lower part of the body slowly into cold water for three seconds, and repeat it a dozen times in succession, and follow with sufficient friction to produce a glow of warmth over the parts.

DROPSY.

Dropsical diseases are sadly too plentiful. They are characterised by a pale, indolent, and inelastic distension of some part, or, of the whole body, from the accumulation of a

watery fluid. This disease presents itself in several forms; hence, we have dropsy of the spine, dropsy of the chest, dropsy of the abdomen, dropsy of the head, cellular dropsy, inflammatory dropsy, and several other forms, which derive their names chiefly from the part affected. In every form they are diseases of exhaustion, general debility, or an affection of the kidneys. They are sometimes caused by pressure on the large veins, and by humourous obstructions, which prevents the return of blood to the heart. In dropsical affections of every description strong tea and coffee should be avoided, inasmuch as they have a very debilitating effect upon the kidneys.

HYDROCEPHALUS

is *dropsy of the brain*; sometimes the head is greatly enlarged, and it generally proves fatal in infancy and childhood. This disease is very difficult to cure, though the water treatment, combined with the Life-awaker, have cured many very bad cases. A warm bath on retiring to bed, and the warm wet compress during the night, with frequent head baths, are among the best applications. The head should always be rinsed with cold water after it has been washed with warm water and soap.

CELLULAR DROPSY

is indicated by a cold diffusive swelling or puffiness of the skin, and effusions of *leerons*, or watery matter, which generally accumulates around the feet and ankles, especially towards the evening, and decreases during the night. The skin is very pale, and when the internal pressure is great it assumes a shining appearance.

Treatment.—We have sometimes been called to patients whose legs were ready to burst, and whose bodies were greatly distended. In all such cases we aim at giving immediate relief by freely administering the Life-awaker all down the back, each side of the spine, and especially over the seat of the kidneys and calves of the legs.

The punctures produced by the Life-awaker allow the skin-water to escape, and give immediate relief to the patient. In some cases as much as four quarts of water have been passed off within six hours after its application. When the skin has been relieved by the above treatment, vapour baths should be given every alternate day, a wet sheet pack three times a week. The wet compress may be worn around the body during the night. Keep the bowels regular by tepid water injections; let the diet consist of dry and unconcentrated food, and drink water only to the extent demanded by actual thirst. Sometimes this kind of dropsy can be cured after three or four weeks' thorough treatment, but some very obstinate cases cannot be cured within six months. Still, ordinary dropsical affections may be cured within two or three weeks, especially if taken in the early period. The general *treatment* of this phase of dropsy should consist of four vapour baths per week, three sitz baths and back sponges per week, a wet compress around the body nightly, with cold sponging of the body when removed, and followed with an abundance of friction, more especially over the region of the kidneys. When convenient let the Life-awaker be freely applied to the legs, without the oil; but when this is not accessible, bathe the legs freely with warm water at night for ten minutes; then wrap a dry bandage about two inches wide and seven yards long

tightly around the leg, commencing at the foot, and gradually work it upwards till it reaches the knee. Keep it on all night, and when removed next morning sponge the legs with cold water; rub them upwards freely with the bare hands, and afterwards re-apply the bandage, and repeat night and day till well.

BRIGHT'S DISEASE

May be termed consumption of the kidneys, and was first described by Dr. Bright. It may be either acute or chronic; in the former there is fever, and the urine is scanty and loaded with albumen. In the chronic form the same symptoms are present, with more or less variation. Dropsical swellings of the abdomen or legs, or both, are usually associated with it, and the disease occasionally leads to other fatal maladies.

Treatment.—Prevention is far better than cure in this as in all other diseases; hence, it would be well to avoid unwholesome food, and particularly alcoholic drinks, condiments, coffee, &c. The wet compress may be worn around the body four or five nights weekly; the tepid wet sheet pack should be applied four times weekly, forty minutes in duration, followed with a pouring bath, and, if convenient, apply the Life-awaker over the regions of the kidneys and down the back every fourteenth day until the affection subsides. If it is not convenient to use the Life-awaker, hot and cold sitz baths and back sponge may be taken twice daily, accompanied with much friction, and followed with a gentle kneading over the region of the kidneys with the bare hands of a healthy person. A vapour bath may be

taken every fourth day, and when convenient take one or two magnetic rubbings daily; drink freely of pure, soft, or spring water; gentle exercise out of doors is also very beneficial; avoid strong tea, highly-seasoned food, tobacco, and purgative medicines.

GRAVEL.

Gravel is caused chiefly by drinking hard water, the free use of salt, strong acids, fermented liquors, &c.

Treatment.—Apply the wet compress around the body five nights per week, and on rising next morning a full warm bath or a hot sitz bath, followed with a cold dripping sheet or pouring bath, is very essential. The diet should consist chiefly of vegetables and fish, but a little lean meat is permissible; also drink a glass of lemon water occasionally. If much pain is experienced, apply the wet sheet pack every alternate day, and keep the bowels regular with laxative food and water injections. Drink nothing but pure filtered soft water. Avoid drinking coffee, alcoholic drinks, vinegar, &c., and frequently apply a wet rubbing over the whole body, more especially over the region of the kidneys, with the bare hands dipped in cold water.

STONE IN THE KIDNEYS

is indicated by severe pain in the loins, extending to the groin, testicles, and sometimes to the end of the penis. It is usually accompanied with vomiting, restlessness, some fever, painful and bloody urination, &c.

Treatment.—A surgical operation in skilful hands is very beneficial. The best home treatment is the hot and cold sitz bath twice a day, fifteen minutes in duration ; the warm wet compress nightly ; drink freely of pure filtered soft water ; eat freely of fruits, and avoid bodily fatigue. A daily wet sheet pack forty minutes in duration, occasional shallow baths, frequent injections to the bowels, and cold sitz baths—four minutes in duration—accompanied with friction with the bare hands, are also very beneficial in helping to expel the offending matters through the urinary channels.

STONE IN THE BLADDER.

In the milder forms of this affection there is usually an increased desire to urinate, and this act is followed with a slight irritation along the urethra, or of the cervix. The stone or calculus sometimes gets into the orifice of the urethra, closes it, and suddenly stops the flow of urine. Horse-back riding, jumping, rowing, &c., sometimes cause the urine to be bloody by increasing the irritation.

The more acute forms of this disorder are characterised by more frequent, urgent, sudden, and irresistible calls to make water, accompanied with pain in the groin, at the end of the penis, and in the region of the bladder while passing off urine.

As the calculus enlarges, the bladder becomes inflamed, and all the symptoms are aggravated to such an extent that the urine becomes mucous, alkaline, and bloody.

Treatment.—An ounce of prevention in this, as in all other disorders, is better than a pound of cure. This adage is more striking in this particular case, however, than in

any ordinary affection, inasmuch as when once a stone is formed in the bladder and attained considerable size, it is almost impossible to get rid of it without a surgical operation, which is highly dangerous, even in skilful hands, still, many successful operations have been performed by men who are expert in their profession. When it is certain that stone has formed, the patient should avoid all kinds of over-exertion and excitement, and guard against horse-back riding, bicycle or tricycle riding, jumping, &c. The diet should consist chiefly of fruits, vegetables, and a free use of pure soft water; if the latter is not attainable, hard water should be filtered; indeed, it would be better to filter all kinds of water before drinking it.

When the pain is very intense, take a hot sitz bath at 102 deg. for ten minutes, follow with a dashing on of cold water and gentle friction. Apply the wet compress nightly, and take a wet-sheet pack or shallow bath daily. When available the Life-awaker should be applied fortnightly to rid the system of its impurity and help nature to expel the calculus.

PAINFUL URINATION.

Stranguary or painful urination is generally caused by a spasmodic action in the muscles of some parts of the urinary apparatus; by a thickening of the mucous membrane of the urethra; by stricture; or from the use of blisters, worms, ulceration, &c.

Treatment.—This may generally be relieved by the warm sitz bath, and by drinking copious draughts of warm water; but in severe cases a full warm bath may be taken daily,

accompanied with considerable friction, and followed with a pouring bath, and then with the cold rising douche bath. If the latter is not available, rub the lower parts of the abdomen freely with the bare hands dipped in cold water. An onion roasted between the bars till it is quite soft may also be eaten, without salt, on retiring to bed. When the difficulty arises from ulceration or debility of the muscles, the Life-awaker should be applied every fourteenth day till the difficulty is overcome; but when it arises from a callous thickening of the mucous membrane, or from stricture, it will be necessary in very serious cases to resort to mechanical means, as the use of the catheter or a surgical operation.

THICK SEDIMENT IN THE URINE.

Considerable alarm is sometimes manifested when the urine is thick, and more especially when a thick deposit is separated from it when it stands for a time. Instead of this causing anxiety, it should be a source of gratification, for it shows that waste material is freely passing from this source, and it should be encouraged by drinking a cup of hot water every fifteen minutes for eight or nine hours daily for several days in succession. This would help nature to expel such waste as would, if retained, produce more or less injury.

Abundant urinary discharges should not be discouraged, nor even cause the least alarm, except in diabetes, for they merely show that nature is sufficiently powerful to expel that which would otherwise be injurious. Frequent draughts of hot water, especially if it has been filtered, or is soft,

would dilute the overflow, soothe the urinary passage, relieve the system, remove the cause, and help to restore health.

INFLAMMATORY SENSITIVENESS OF THE BLADDER

is very common, more especially in the feminine gender. Whenever this affection is present, the patient has little or no rest, night or day.

Treatment.—First take a sitz bath at 100 deg. five minutes in duration ; after this apply a hot bran poultice, or a wet hot sand bag to the lower part of the back, so that the heat may strike through to the front. Then apply four thicknesses of swansdown calico wrung out of cold water over the front and lower part of the body, and change it as often as it gets hot. Repeat this till the pain subsides. In very obstinate cases the above treatment may be applied six or seven hours daily for several weeks. When the symptoms have nearly subsided the tepid compress may be applied during the night, and too much standing and physical exertion should be avoided till the cure is complete. Avoid all kinds of drugs and alcoholic drinks, and do not fail to drink freely of hot, soft, or filtered water at frequent intervals.

TOO SCANTY A FLOW OF URINE

very frequently arises from debilitated nerves, an affected spine, or from weak kidneys. The brain is connected with other parts of the body through the instrumentality of the

spinal cord, hence it is not surprising that the urinary organs are dependent upon the spinal cord for their power to perform their function aright. The nerve force being sent from the brain to the urinary parts through the spinal nerves, it is quite evident that whenever the brain, nerves, or spinal cord are affected, there will be a corresponding diminution of urinal secretion in consequence of there being too little nerve force sent from the spinal cord, to render the urinary organs subservient to the will ; hence the inference is clear that our chief restorative efforts should be directed to the spine and nerves.

Treatment.—First take a hot sitz bath and back sponge 104 deg. fifteen minutes in duration. While the patient is in the sitz bath a hot wet sand bag or bran bag, about 16 inches square, should be laid upon the bed, upon which the back of the patient should be laid for an hour or eighty minutes, after which a tepid compress should be applied and renewed every six hours.

When there is *swelling of the bladder*, a cold wet cloth, four thicknesses, should be placed over the bladder while lying upon the hot bran or sand bag, and let it be renewed every ten minutes. If the swelling remains after an hour of such treatment, the parts may be gently and skilfully manipulated with the bare wet hands ; that is, the attendant should take hold of the swollen part and press it gently in various directions, and thereby assist the weakened nerves to gain and retain their natural grip upon the parts. Repeat the manipulations for two or three minutes every two hours, between which the bran bags may be applied.

HYDROPHOBIA.

This disease is easily cured if taken in time. Whenever a person has been bitten by a dog, he should take a vapour or hot-air bath, which should be repeated daily for a month. We have never known this treatment to fail in curing the worst cases. When there are strong indications of the disease being present, the hot-air or vapour bath should be taken until the patient freely perspires, after which the tepid dripping sheet may be given, and followed with plenty of friction. Repeat this every five hours, until all symptoms disappear. The vapour bath has never been known to fail in any case of hydrophobia. When convenient the Life-awaker may also be applied a time or two. It is better than all the vaccination or inoculation in creation, for it helps nature to expel the poisonous matter from the blood, and thereby facilitates the cure.

SUNSTROKE.

Sunstroke and apoplexy are hardly distinguishable one from the other, the only apparent difference being the more sudden access and violence of the former.

Treatment.—Apply cold water to the head, and tepid ablutions to the whole surface of the skin, and follow with active, but gentle rubbing with dry towels. The patient should be made to breathe as much pure air as possible, and for this purpose he may be vigorously fanned. Sunstroke may be prevented by avoiding a constipated state of the bowels, abstinence from eating indigestible food, and thirst provoking condiments. It is better to drink warm water, than that which is quite cold, but the latter may be

drunk on condition that it is taken in sips. Those who use alcoholic beverages, tobacco, salted meats, and highly-seasoned dishes are infinitely more susceptible to affections of this description than those who abstain from their use. Those who are easily affected by the heat of the sun should put a green cabbage or plantain leaf in their hats each morning, and remove them at night. An application of the Life-awaker would also be very useful in all serious cases.

CRAMP.

The symptoms of cramp consist of a sudden contraction of one or more muscles of the body, attended with extreme but temporary pain. It frequently attacks the legs, toes, and stomach. When the latter is affected the breathing is short and difficult.

Causes.—The principal causes of cramp are sudden exposure to cold or damp when the body is relaxed ; flatulency *in the stomach or bowels*. Acrid bile caused by taking injurious drugs, also produces cramp of the stomach.

Treatment.—When the seat of the affection is in the calves of the legs it can easily be relieved by pressing the big toe upwards, either with the hand or by pressing it tightly against any hard resisting body. Cramp in the legs may be prevented by bathing them freely in as hot water as can be borne for ten minutes, after which a bucket of cold water should be thrown upon them ; or they may be immersed into a bucket of cold water and rubbed until quite warm, dry, and red. Wet cloths may then be wrapped around the legs, covered with several thicknesses of dry flannel, and bandaged down tightly ; keep them on all night, and on

removal next morning sponge the parts freely with cold water, and follow with much friction. When convenient, the Life-awaker may be used on the parts affected and the oil well rubbed in. Nearly every case of cramp in the legs may be cured by the above treatment, even without the Life-awaker.

When the cramp is in the stomach or bowels hot water should be drunk freely, and hot fomentations applied to the stomach and abdomen. Take sitz and foot baths, 100 degrees, accompanied with the back sponge and plenty of friction, a time or two daily, and follow with dashing on an abundance of cold water. Do not fail to wash out the stomach with warm water and the tube whenever these symptoms appear.

BACK-ACHE.

For this affection apply the wet compress around the body during the night. Take a Turkish, vapour, or hot-air bath once a week. Sponge the body well each morning on rising, and rub the parts freely with the bare hands after having been well dried with a rough towel.

Aching backs are very common and distressing ailments, especially amongst women, and we believe they have increased in force and frequency with the foolish fashions of modern times. In the days of our grandmothers aching backs were the exception, now they are the rule. The principal causes of weak and aching backs are sedentary habits, improper dress and diet, bad positions in reading, writing, walking, working, riding, &c. High

heeled boots, tight-lacing, the Grecian bend, coffee drinking, and other feminine eccentricities and fashionable follies have increased the number of aching backs.

Treatment.—One way of strengthening the back is to take gymnastic exercises, and walk round the room with a weight in each hand and a book or plate on the head, so as to keep the body erect and well balanced. The wet compress is invaluable and should be worn around the body six nights weekly, and also during the day in all serious cases. If this treatment does not cure it, the Life-awaker should be applied a time or two. Another way to give relief is to take a sitz bath and back sponge daily, and follow with a douche of cold water to the part affected.

VENEREAL DISEASES.

It is with feelings of great reluctance that we speak of the diseases which are usually classed under this head. It is very sad and distressing to contemplate the fearful consequences of illicit sexual intercourse, which may be transmitted even to the third and fourth generation. Men, women, and children are sometimes innocent victims to venereal diseases which may have been transmitted to them. In these days of lax morals, high living, and perverted tastes, people revel in licentiousness and imagine that it is the right thing to do. Some think it no crime to ignore nature's laws, and, as a result, they contract those loathsome diseases which are a scourge to the human race. If the effects of one sin is more easy of transmission than another, it is that of sexual vice. The diseases which result from impure sexual intercourse are

amongst the most loathsome in appearance, and the most deplorable in their consequences that afflict erring humanity. Quack doctors profess to cure these diseases in a few days, but they usually give nauseous medicines which do considerably more harm than good. Drugs may, for a time, stop the running from the genital organs, but they do not remove the cause; the virus is repelled to some other part of the system. Sometimes it lurks in the blood, and, as a result, boils, and other eruptions manifest themselves; while in other cases it is taken to the lungs, where ulcers are formed, and the victim dies at an early age from a supposed consumption. In some instances the disease penetrates the bones and affects the various joints, which predisposes to rheumatism and kindred disorders. Sometimes it produces a terrible skin affection, and eats away the nose, or destroys other organs of the body, as the eyes, lungs, kidneys, &c., and lays the foundation of many very serious diseases. Scrofulous diseases are frequently the result of venereal taint, which may be transmitted from parent to child. Until there is a complete reformation in the dietetic habits of the people, so long will sensuality, illicit sexual intercourse, and scrofula be on the increase.

We have dwelt upon these subjects, as also upon the evils of perverted sexuality, in our works on "Vital Force" and "Marriage." These books contain much valuable information, which is of the highest importance to the human race; but, alas! the medical profession consider that the information they impart to be an infringement upon their rights, and that if this class of literature was freely circulated amongst the masses there will be no need to pay heavy fees either for medicine or for advice; conse-

quently, the magistrates in several large towns have been stimulated to seize and condemn such works, under a plea of obscenity. The language employed in them is neither so strong or so emphatic as that used by Dr. Carpenter and other authors who have written upon the human system; neither is there anything so denunciatory as may be found in Holy writ; yet we have been, and still are, persecuted by some of the faculty for trying to enlighten the people upon these important subjects.

There are two distinct forms of venereal disease, namely, syphilis and gonorrhœa. The latter is a local disease, which does not extend beyond the genital organs, and culminates in the groin. This is a very troublesome disease, sometimes causing a thickening of the membrane in the male urethra, and consequent stricture or stoppage of the urine.

Treatment.—It is quite evident that when the disease has taken root in the system, every effort should be made to expel it from the body. It is unwise to stop a running in any part of the body until the cause is removed, or until the morbid matter has been cleared away. Water treatment is very beneficial in curing many bad cases, especially where a strict diet is observed. The genital organs may be bathed with warm water and milk several times a day. Cold or tepid wet cloths may be placed over the genital parts, covered with dry flannel, and kept on during the night. The wet compress may be worn around the body nightly, the wet sheet pack applied twice a week, the vapour bath every alternate day, and two shallow baths a week. A sitz bath at 90 degrees may also be taken an hour before retiring to bed. Open the bowels twice a day

with tepid water injections. Avoid all kinds of highly-seasoned, rich, and greasy foods, alcoholic drinks, and late suppers. The food should consist chiefly of wheat meal mush, ripe fruits, and the higher class of vegetables; a little lean mutton, fish, or fowl once a day. Mustard and condiments of every description should be studiously avoided. Drink plentifully of warm water, and if the symptoms do not disappear have the Life-awaker applied down the spine, and over the stomach and abdomen, every fourteenth day till the symptoms disappear. This treatment is suited to both sexes, but women should syringe the parts freely several times a day with tepid water. When the venereal taint produces a skin affection, boils, or other eruptions, the Life-awaker should be applied every ten days until they are eradicated.

BUBOES

Are produced by Gonorrhœa. They are very painful, and partially impede and render locomotion difficult.

Treatment.—Bathe the parts freely with warm water for half-an-hour, then apply a linseed meal poultice, containing a little Castile soap, and renew twice a day; or, if convenient, have the Life-awaker applied over the stomach, down the back, and near to the parts affected. By this means the poisonous matter will be removed more effectually than by any other treatment, especially if sitz baths and the water treatment above recommended be applied after the eighth day of its application. Cold wet cloths may also be applied over the parts both night and day and changed every six hours. Cover the wet cloths with dry flannel and the apron, and change them every four hours.

POSSIBLE CONTINGENCIES.

It frequently happens in these fast times, when so much travelling is done by railway and steamboat, and when people want to move at a rapid rate, that they meet with accidents, which in many cases prove fatal, whereas if a little timely aid were rendered many valuable lives might be saved ; but very few persons know how to act in cases of emergency ; hence, we have given the following instructions with a view of meeting such cases :—

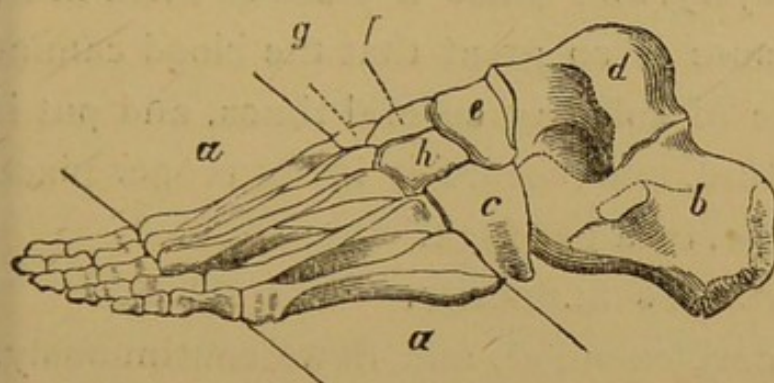


FIG. 65.—Bones of the Human Foot.

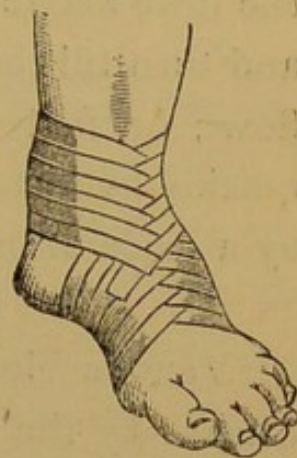


FIG. 66.—Ankle Bandaged.

SPRAINS.

Sprains are strainings of the tendons and ligaments. Time is always required for their complete recovery. Keep the limb at rest, uncovered with anything but a cloth dipped in cold water. Allow a stream of cold water to fall on the part three or four times daily—for about five minutes each time ; after a few days the parts may be enveloped with a wet cloth covered with flannel and fastened with a calico bandage.

BLEEDING.

Bleeding occurs either from an artery, vein, or the small vessels which join the arteries with the veins. It may take

place as the result of injury, or spontaneously, from various internal organs. If the injured person shows signs of fainting, do but little to rally him, as fainting tends to stop bleeding.

Arterial bleeding is known from the bright scarlet colour of the blood, and from its issuing in jerks. To stop it, put your finger in the wound and press upon the bleeding aperture, and as long as this pressure is properly applied bleeding cannot occur; or, tie a handkerchief twice round the limb above the injury, and place a piece of stick in it, and turn till the pressure is so great that the blood cannot flow; or, fold a piece of soft rag several times, and put it quickly over the aperture, and secure it in its proper place by a piece of broad tape, or a bandage.

VENOUS BLEEDING.

Venous blood is dark-coloured, and flows continuously. Stop it by the pressure of the finger, or a piece of linen dipped in cold spring water, and bandage down tightly; change the wet cloths every three hours, or oftener, till the parts are healed.

INTERNAL BLEEDING.

Bleeding sometimes occurs profusely from the nose, mouth, throat, lungs, stomach, etc. Put the patient in bed with the head slightly raised, keep the room cool, enjoin absolute quiet, give a drink of the coldest water or a lump of ice frequently.

CUTS OR INCISIONS.

Cuts are made with sharp edges, and are mostly accompanied by bleeding, and sometimes by the lodgment of foreign bodies in the wound.

Do not be in a hurry ; carefully clean the wound from dirt or other extraneous matter, and dab with a sponge, dipped in cold water, till all bleeding stops. If the wound be extensive, you may leave it open for half an hour, then bring the edges exactly together ; then dip a piece of cotton wadding into cold, soft, or spring water, and apply it to the parts, and change it every ten minutes till the inflammation subsides, then apply a piece of old soft wet linen over the part and encircle with a bandage, which also answers well for cuts about the hand.

SHOCK.

A severe accident of any kind, as a bruise, fracture, scald, burn, or a sudden emotion, as that of joy, grief, or rage, or even a sudden attack of a serious disease, prostrates the vital powers. The face and lips turn pale, the pulse becomes scarcely perceptible, the body and extremities turn very cold.

Place the patient flat. Enjoin absolute quiet. Apply warmth to all parts of the body. Employ very gentle friction to the surface. Constant care and attention will alone preserve the patient.

SUPPOSED DEATH.

DROWNING.

Strip off the wet clothes, cover the body with other clothes to maintain heat, wrap up in blankets, and give warmth by hot bottles placed in contact with all parts of the body. A hot bath is also of great value. Have several assistants to rub the body with their hands. Clear the mucous from the mouth, hold the nose, and then suck out the foul air with a tube, and blow in fresh air in the same manner.

Restoration has followed after eight hours' perseverance. Attempts at resuscitation had better always be continued for twelve hours, or longer, if there be any signs of life.

HANGING.

Loose immediately the cord; proceed as for drowning. The immediate attendance of a surgeon is very important, as these cases are worse than those of drowning.

In all cases, when the party begins to show signs of life, absolute quiet must be enjoined, and not even talking should be allowed.

CARBONIC ACID OR CHARCOAL FUMES.

Carbonic acid drowns a man as rapidly as immersion in water. Proceed as for drowning; also dash a little cold water upon the face, but not sufficient to depress the warmth of the body. Stoves burning charcoal, or prepared fuel, are very dangerous in bedrooms or close apartments.

STILL BIRTH.

Proceed as for drowning. Warmth, friction, and gentle inflation of the lungs are most to be relied on. One or two gentle slaps will sometimes at once cause the infant to breathe, as also will cold water suddenly sprinkled over the chest.

NOXIOUS VAPOURS.

Various vapours and gases can cause apparent death. Remove quickly into the fresh air; dash cold water, as for carbonic acid; but, if necessary, keep up the heat by bottles, &c.

COLD.

It is certain death to go to sleep in intense cold. If a person be found under such circumstances, remove him to

a room where the temperature is moderate, and very gradually increase the heat. Where the party is already apparently dead, proceed with great caution. Place the body in a cold room, cover with a blanket, and very gently rub the body. The sudden application of warmth after exposure to intense cold, often causes immediate death. Ladies' maids, travelling in a cold night outside carriages, have died from this cause.

SUDDEN DEATH.

There are many cases where supposed death is only suspended life, and which by care may rally.

In every instance where anyone dies suddenly, without a clear equivalent cause which is irremediable, the heat of the body should be maintained at least twelve hours by hot bottles, and artificial respiration should be attempted as for drowning. Remember that death may be only apparent, and your care may be repaid by the inexpressible delight of seeing life gradually resumed, and the party restored to his family. Nothing should be taken internally but sips of cool water.

COLD APPLICATIONS.

After sprains, bruises, or other injuries calculated to lead to inflammation, cold applications are particularly valuable. When a piece of lint is dipped in cold water and laid over the part, the evaporation will still further increase the cold, and by wetting the lint continually the desired effect will be produced. In summer, if ice can be procured, it is a good plan to put some into the water.

HEAT.

In all cases of apparent death, sudden death, or shock, it is very important to keep up the heat of the body, for

which purpose nothing is better than India-rubber bags, or common wine bottles filled with boiling water. If the latter are used they should be wrapped round several times with flannel, to prevent them from burning the patient. Hot bricks may be used in a similar manner. They should be applied to the feet, calves, thighs, sides, hands, arms, and arm-pits, but not so as to interfere with breathing. Without care, patients have sometimes been severely burned.

DRUNKENNESS.

The breath smells of liquor, and you will find, upon inquiry, that the person has been drinking.

Place the patient quietly in bed, with the head raised. Loosen the clothes and watch. If the extremities turn very cold, apply warmth. When the patient can swallow, give a warm-water emetic, or wash out the stomach with warm water and the stomach tube.

The following is a novel cure for drunkenness. A gentleman was taken home in a very helpless condition, and his wife thought it was an attack of apoplexy, and besought the doctor to use extreme measures, though he suspected it was merely a case of intoxication. However, at the wife's solicitation, he applied a strong blister to the unconscious patient, bled him, and shaved his head. On recovering his consciousness, the sufferer was horrified to find his head shaved, and that he had been bled and blistered, and demanded an explanation. The sequel of the story was that the joke made at his expense, and this drastic treatment, cured him of drinking to excess. If all drinkers were similarly treated there would be much less drunkenness, but it would not answer in every case.

CLOTHES ON FIRE.

When the clothes catch fire, roll the person in the carpet, or hearth-rug, or bed blanket as quickly as possible, to stifle the flames, leaving only the head out for breathing.

BAD-SMELLING FEET.

The forced companionship with persons who are troubled with bad-smelling feet, especially at night, is a very unpleasant experience. The annoyance arises from profuse perspiration and uncleanness. Various methods of preventive and curative treatment have been recommended, one of which is the following:—Wash the feet twice a day in a weak solution of vinegar. Change the stockings twice a day, and let the feet of the discarded stockings be washed in a vessel containing a solution of either borax or boracic acid; when dried they will be fit for wear again, because the acid destroys the smell. The boots or shoes worn also need cleansing in the same way, as the leather becomes saturated with the perspiration. Cork soles will help to overcome the difficulty; by having half-a-dozen pairs they can be frequently changed and cleansed in the solution before named. It would also be well to bathe and wash the feet in water as hot as can be borne, accompanied with a good soaping. The feet may then be dashed into cold water and rubbed freely with a dry towel and the bare hands till quite warm and dry; take care to wipe dry between the toes, to prevent undue loss of electricity.

CHILBLAINS.

This disorder is caused by the effects of cold and a too sudden exposure of the affected part to heat. The feet

and hands of some people are very liable to be affected by chilblains, which occasionally attack the bodies of very delicate and infirm persons.

Treatment.—On removing the boots and stockings at night the parts affected should be bathed in water as hot as can be borne for fifteen minutes, and then dashed into cold water, followed with an abundance of friction. A cold wet cloth may then be placed over the part, and covered with two thicknesses of dry flannel, and bandaged down snugly. This may be worn all night, and on removal in the morning take a cold foot bath, and accompany with considerable friction. During the day the part may be protected by wearing the skin of the fat that is over a sheep's kidney.

The following applications are said to heal the worst cases in a few days:—Mutton tallow and lard, of each $\frac{1}{2}$ lb.; melt them in an iron vessel, and add hydrated oxide of iron 2 oz. Stir with an iron spoon until the mass is of a uniform black colour. Let it cool, and add Venice turpentine 2 oz., Armenian bole and oil of bergamot, 1 drachm. Rub up the bole with a little olive oil before putting it in. Put a portion upon linen, and apply several times a day.

Another simple way is to prepare two vessels for a foot bath. Put hot water 106 degrees into one, and cold water into the other, and place them side by side. Place the feet first in the hot water for two minutes, then in the cold water for the same length of time; then put them into the hot water again for two minutes, and afterwards in the cold for the same period. Continue this five or six times, taking the precaution to immerse the feet into cold water for half a minute only the last time, then wipe them dry. Repeat

this treatment every night until the cure is effected. A shallow, hot-air, or some other general bath should also be taken twice a week.

CHAPPED HANDS, LIPS, &c.

The following is a simple remedy for chapped hands. Take some common starch and pulverize it with a strong knife into a fine powder; fill a little box with it ready for use, and every time the hands are washed or used in washing dishes, clothes, &c., rub the starch powder over the hands while they are still damp, and the effect will be to relieve the smarting and heal the chaps.

Washing the hands with water to which a handful of bran or corn-meal has been added is also a good remedy. The above treatment may be used for the face and lips as well as for the hands.

When cracks occur, keep the edges together by means of adhesive plaster.

POISONED WOUNDS.

Sometimes great injury arises from poison being introduced into a wound, such as dead animal matter, &c. When this is the case, place a ligature tightly round the limb, a little way above the point of injury, and only so tight that it shall favour but not stop the bleeding. Wash well with warm water, and place one end of a large quill, or small tube, over the wound, and keep sucking at the other; this will produce a vacuum, and act as a cupping glass. When the wound is poisoned, the parts around speedily swell to an alarming extent, requiring the constant care of the surgeon to prevent its extension over the whole body. If the poison extends, take vapour or hot-air baths

once or twice every twenty-four hours, and apply the wet compress around the body after each bath, and renew it three or four times daily. The Life-awaker should also be applied every fourteenth day if the poison extends over the whole body.

INSECT BITES AND STINGS.

There are two great classes of insects which give rise to poisoned wounds—those which sting, as bees, wasps, hornets, ichneumons, &c., and have a set of lancets at the mouth to pierce the skin; and those which suck, as the gnat, horsefly, flea, bug, &c. For stings, examine if the sting be left in the wound, and remove it, if necessary. Apply as quickly as possible hot fomentations, followed by bathing or douching in the coldest water. For bites, squeeze out a little watery fluid, which is generally formed; and to allay the irritation, treat it as for stings.

EXTERNAL INFLAMMATION.

Inflammation may be known by the presence of pain, heat, redness, swelling, throbbing, or formation of matter. At the commencement of these symptoms, especially after injuries, use cold applications for the first thirty-six hours, and take care that the bandages are not too tight. After the first thirty-six hours, hot water and fomentations are the best adapted, especially when followed with the cold wet bandages.

FLATULENCY.

Apply hot fomentations to the abdomen; drink freely of warm water, and wash out the stomach with the tube; apply tepid injections. If the abdomen is hot, take a warm sitz bath twenty minutes, and apply the wet bandage

around the body, and cover with several thicknesses of dry flannel, and bandage down tightly; wear this night and day, and change it both morning, noon, and night. If the stomach tube is not at hand excite vomiting by drinking a quart of warm water, and tickle the throat with a feather.

CHOKING.

Foreign bodies are apt to stick in the throat and cause suffocation. Pass your finger immediately down the throat as far as possible, and you may often remove them. When a fish bone has stuck in the throat, take a mass of bread, chew it quickly and swallow it; this will generally carry it down. Parts of apples, pieces of meat, &c., can often be removed with the handle of a teaspoon or a common eating fork.

TO EXCITE VOMITING.

EMETICS.

You may excite vomiting by tickling the back part of the mouth, as far as you can reach, with a feather or the tip of the finger, and giving plenty of warm water to drink. It would be much better, however, to wash out the stomach with warm water and the tube, and thereby prevent the retching and spraining, and also procure a much better effect.

POISONS.

ARSENIC AND MINERAL POISONS.

When these poisons have been taken, give immediately olive oil, milk, white of egg and water, or flour and water, and excite instant vomiting by tickling the throat with a feather. Make the patient drink and vomit till the surgeon arrives; or better still, wash out the stomach freely with warm water and the tube.

OXALIC ACID—POISON.

Give whiting, or chalk and water, and excite vomiting.

PRUSSIC ACID—POISON.

Dash cold water upon the spine and face, to rouse, but not to chill the patient. Also use active friction externally with warm flannels. Wash out the stomach a time or two.

VEGETABLE POISONS.

Excite vomiting by drinking largely of warm water and tickling the throat, or use the stomach tube. Use the cold dash and friction. Every surgeon should always have pure animal charcoal by him to administer in large quantities in these cases.

FISH AND MUSHROOMS.

Excite vomiting. Also apply same treatment as for "*shock*."

OPIUM—LAUDANUM.

Excite vomiting. Dash cold water over the face; make the patient walk between two persons, pull the hair, or otherwise inflict pain to prevent sleep. This treatment must be pursued for many hours; also wash out the stomach two or three times in quick succession.

STUNNING.

Place the patient in bed with head slightly raised. Apply warmth to the feet and legs. Sprinkle cold water on the face, and apply a cold wet cloth to the forehead. Keep very quiet. If the head be manifestly broken, look to bleeding. Place the patient in the same position as for apoplexy.

CONVULSIONS.

Convulsions frequently occur in children when cutting their teeth. The different parts of the patient are drawn

up in various ways. Immerse the sufferer up to the neck, immediately, in a warm bath. Apply the wet compress nightly.

STABS.

Stabs are more dangerous than common wounds. Stop the bleeding; do not attempt to bring the edges together, but rather keep them apart; lay a rag over the wound dipped in cold water, and change it every half-hour. Place the wounded person at once in bed, and enjoin quiet. If fainting or inflammation takes place, act accordingly.

TEARS OR LACERATIONS.

It frequently happens that parts are lacerated or torn by blunt instruments, or by the action of machinery. Bring the parts into apposition gently, but do not let the plasters or sutures exert much strain upon them. Bleeding does not occur to any extent after tears, even when a whole limb has been torn off; also apply cold wet cloths to the parts, and change every half-hour.

BRUISES.

Slight bruises simply cause numbness. Keep the part at rest, and it will probably do well.

Bruises are often attended with the rupture of small blood-vessels, which bleed internally and cause discoloration. Put the patient in bed, cover the injured part with a cloth dipped in cold water, and change the cloth every few minutes. If the bleeding increases rapidly, send off with all possible haste to the surgeon, as life will be risked if the vessel is not tied. Use, if possible, the handkerchief and stick, recommended for bleeding.

WOUNDS

Are similar in nature to bruises, but sometimes they may be produced by a cut, or knocking the part against a nail or other sharp obstruction. When the blood is in a bad state wounds do not readily heal, and sometimes hot poultices are applied, but this treatment aggravates the injury. The water dressings advised for bruises will be beneficial, but the following will give the greatest relief:— Take a piece of old flannel, warm it till quite dry; make a fire of shavings and sticks, cut pieces from the flannel, and put them upon the fire, and hold the wounded part over the smoke. This will soon relieve the pain and cause the swelling to disappear by its deodorising effect, during which a little bloody water will escape from the wound. The smoking process may be repeated three or four times a day, and a cold wet cloth applied over the part during the night, covered with dry flannel to keep it at an equable temperature.

CRUSHED PARTS.

Very severe blows may utterly destroy the part injured. Apply a cold wet linen cloth covered with a dry one. Renew the dressing often. If inflammation or fainting ensue, act accordingly.

BURNS AND SCALDS.

Apply powdered charcoal and olive oil. Wrap around with a piece of white linen. If the skin is destroyed, the temperature of the room should be at 75 or 80 degrees, or the pain may be aggravated. If powdered charcoal is not at hand, apply cold water until the pain is relieved, then cover the part with fine flour. Strict attention should be paid to the temperature of the room.

SEA SICKNESS.

Very few persons are free from this distressing malady when they venture upon the sea for the first time, and many voyagers have a recurrence of sickness as often as they take a sail, becoming nauseated at the first rolling of the ship. Others can cross and re-cross the Atlantic ocean in the roughest weather without a qualm of the stomach. The liability to this agonising sickness detracts materially from the comfort and benefit of a sea voyage, and the apprehension of it prevents a great many people ever setting foot upon the deck of a sea-going vessel. The immediate cause of sea-sickness is, of course, the rising and falling motion of the vessel. Head winds, which make the ship pitch, do not cause so much motion and sickness as side winds, which make the vessel roll more violently. The effect of the motion is to throw the large viscera of the abdomen into unusual activity, the result being congestion of the liver, followed by vomiting and retching, which is Nature's effort to produce a remedial effect. A plethoric state of the body and a bilious condition of the blood predispose to sea-sickness.

A simple and abstemious diet for a few days before embarking, with the avoidance of constipating and greasy food, will be found preventive or ameliorative. After embarkation, those who are unaccustomed to the sea should keep on deck as much as possible, for the sake of the fresh air, but if overcome they may go below, and lie down full length upon their back, keeping the head moderately low. Should the sea continue rough, it will be well to fast for a day, and if stormy weather continues take only one meal per day for the first week, by which time the motion will have

become somewhat familiar. A handkerchief or girdle tied tightly around the body, with the knot over the region of the stomach, will often prevent sickness. The mind should also be kept as much occupied as possible. It is said that Charles Dickens found baked apples a sovereign remedy for sea-sickness. Retching may be relieved by drinking warm water and washing out the stomach occasionally.

MORBID THIRST.

Inordinate thirst is chiefly a symptom of an over-heated body, as in fever, diabetes, dropsy, cholera, dysentery, diarrhœa, and other exhausting discharges. Sometimes it is produced by drinking alcoholic beverages and partaking too freely of salt and condiments, which inflame the stomach and over-heat the system. Whatever may be the predisposing cause of excessive thirst, it is reasonable to gratify it to a fair extent; but, unfortunately, many people find that the more they drink the more they want to drink. The most effectual remedy for great thirst is to drink a quart of warm water, and bring it up again, along with the contents of the stomach, by means of the stomach tube. Repeat the operation a second time if necessary. A full warm bath, or a sitz bath and the wet compress are also very beneficial, and speedily overcome the difficulty.

WEAK ANKLES

Are not uncommon amongst boys and girls. The best treatment is that which will cause the blood to pass more freely through the parts, and thereby strengthen the muscles, bone, and fibres. Let the feet and ankles be bathed in hot water a few minutes daily, and afterwards held under the cold running tap for a few minutes; or, if

this is not convenient, a stream of cold water may be applied thereto, followed with much friction. The wet bandage around the legs and ankles during the night, with flannel sufficient to keep it warm, will also be very serviceable. Always begin to wrap on the bandage at the ankle, and work it upwards to prevent forcing too much blood into the foot. On its removal next morning hold the ankle under the cold running tap for a few minutes, or dash it into cold water, and follow with much friction. Judicious treatment should be applied to the whole body, as the warm shallow bath twice a week, followed by the pouring bath and hand friction. This treatment will cure nearly every case.

VARICOSE VEINS.

The most frequent form of this disease is what is termed *Varix*, a swollen state of these vessels, which usually manifests itself in the lower parts of the body, such as the rectum, scrotum, and lower limbs. It may be noted, however, that when there are varicose veins upon the lower limbs the whole system is more or less in the same condition. Varicose veins are sometimes inherited; at other times they are produced by undue fatigue, standing too much upon the feet, constipation, cramps, sitting cross-legged, or by any other kind of pressure, such as tight-fitting garters, &c.

During pregnancy, varicose veins are often caused by pressure of the foetus upon the large veins running up from the lower extremities, and preventing the free flow of blood towards the heart. This happens chiefly, however, with women of enfeebled health.

When varicose veins appear upon the lower extremities

the whole leg is apt to become more or less covered with a net-work of swollen veins, which run in almost every direction, sometimes causing the limb to swell enormously, more especially towards the evening. Veins of this nature occasionally burst, and a large quantity of blood is suddenly lost.

Those who are troubled with varicose veins usually labour under the impression that the disease is purely local, and that the veins are the only vessels affected ; this is a great mistake, for it is the impurity of the blood that produces this disorder. The blood is rendered impure by a sluggish condition of the excretory organs, breathing impure air, eating indigestible food, and inattention to the calls of nature.

Elastic Stockings are generally recommended, both by regular and irregular practitioners for this affection, but they do far more harm than good. It is true, however, that they frequently give a feeling of relief, but we never knew them to permanently cure a single case. It should be noted that those who have varicose veins have too much "*venus*" blood in their system ; this is indicated by the very dark appearance of the veins of the legs and surrounding parts where the affection shows itself. When the blood is healthy and well arterialised it is of a bright red colour. If it remained in this condition there would be no difficulty with the veins, but when the blood becomes impure and surcharged with organic matter or carbonic acid, by which the blood is darkened, the veins become distended, and if allowed to remain in this condition for several years they become very difficult to cure, though we have the satisfaction of knowing that by our mode of treatment we have cured many very serious cases.

One remarkable fact in connection with this disorder is, that when a person is lying quietly in bed, the swelling of the veins usually subsides. If at this time you take a quantity of blood from the veins it would appear to be red and healthy, but whenever the patient begins to walk or to exert himself the veins fill with blood, and after a great deal of exertion the blood in the veins becomes nearly black ; this is caused by the contraction of the muscles, which throw into the blood the waste matter that darkens it and lessens its vitality. When the skin is in a healthy condition, much of this waste is passed off through its pores by way of insensible perspiration, in which case the blood will be red and healthy, more especially if there is no obstruction to prevent the blood from flowing freely to and from the parts. We have already stated that pressure upon the blood vessels prevent the blood from circulating through the system so freely as to ensure its becoming thoroughly arterialised ; this shows that by sitting cross-legged we prevent the impure blood from passing freely from the extremities, which eventually produces partial or complete stagnation, and hence impurity and debility. This debilitated and stagnant condition of the blood naturally distends the blood vessels, and produces the knotted condition of the veins which constitutes the disorder now under consideration. This implies that tight-fitting garters, sitting cross-legged, and all other pressure must be abandoned before a cure can be produced. Elastic stockings are open to the same objection as sitting cross-legged, but to a greater extent, inasmuch as they press upon the blood vessels of the whole leg, and both impedes the circulation of the blood and prevents the perspiratory action of the skin.

Treatment.—First remove the cause, then take a good general bath as the vapour, shallow, or hot air bath, to tone up the skin and stimulate it to pass off the morbid humours. If the blood is very impure the Life-awaker should be applied to the body, to clear the blood of its impurity, but do not apply it to the knotted veins. If the Life-awaker is not attainable, take a wet sheet pack three times per week, wear the wet compress six nights weekly, and on its removal next morning sponge the parts freely with cold water, wipe dry, and then rub the body all over with warm olive oil; repeat the olive oil dressings four mornings weekly, and also rub white wine vinegar over the body three mornings per week to freshen and tone up the skin. Hand-rubbings are also very beneficial in helping the blood to pass from the extremities; this should be done by moistening your hands with olive oil, let the patient lie all his length on a bed, then

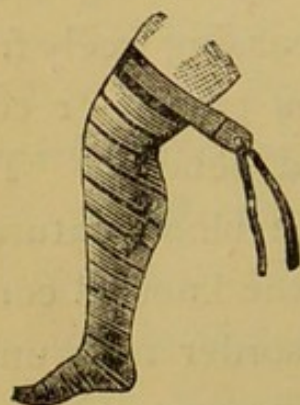


FIG. 67.—Porous Bandage Applied.

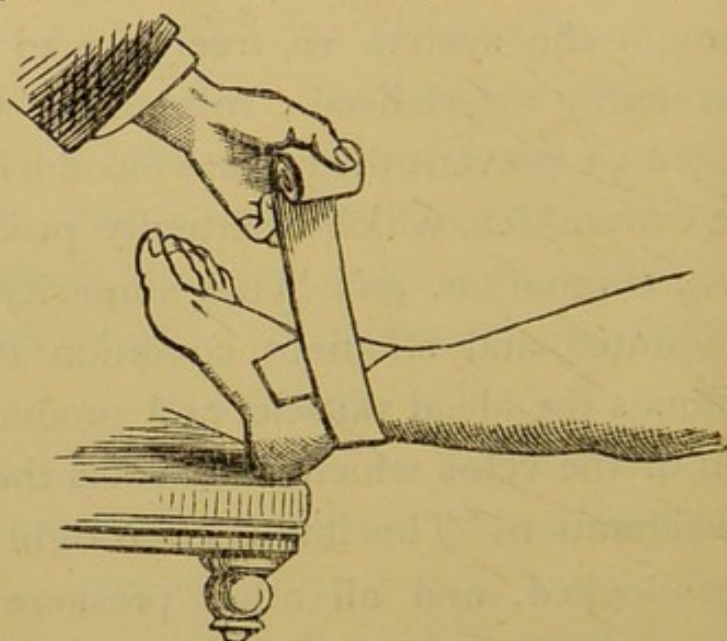


FIG. 68.—How to put on the Calico Bandage.

begin to rub gently *above* the *highest knot*, rub upwards to aid the ascending flow of blood, and when the upper veins are unloaded of the superfluous blood, serve the next highest

knotted vein in the same way, and follow down until they are all emptied. When this is accomplished rub the whole limb gently upwards so as to reduce all the swellings, then wrap on a porous elastic band, commencing at the ankle and work it upwards as seen in Fig. 67. If you have not got an elastic band the following may be substituted, but it is not so effectual:—When the legs are the seat of the affection, secure a flannel or calico bandage about two inches wide, wrap it around the ankle and around the leg; commence this process at the ankle, as seen in Fig. 68, and gradually work it upwards till the whole leg is bandaged to the knee, and keep it on during the day. On its removal at night the leg may be bathed, first in hot water and afterwards in cold, and rubbed freely with a dry towel and the bare hands until quite warm and red. A cold wet cloth may be applied over the parts during the night, covered with several thicknesses of dry flannel, and bandaged down. Next morning sponge the parts well with cold water, and accompany with sufficient friction to produce warmth, and repeat the bandage. Remember that *local* treatment is very beneficial, but it will never cure the disorder unless such water treatment is applied to the whole body as will equalise the circulation and produce a healthy condition of the blood.

It should be borne in mind that when the legs are rubbed in affections of this kind, the rubbing should be upwards, so as to bring the blood from the ankles to the upper parts. When they are rubbed downwards the blood is sometimes pressed into the lower blood-vessels to such an extent as to do serious mischief.

When an enlarged vein bursts, the bleeding may be very

profuse, in which case the patient should at once lie upon his back, hold his leg rather high, and have cold water freely poured over it. An attendant should also press the tip of his finger upon the bleeding spot, and after the bleeding is checked a small pad of lint should be bound upon the bleeding orifice, and bandaged down tightly. If the part does not heal quickly, let it be frequently bared, bathed freely with cold water, and then covered with cold wet cloths and bandaged down tightly; change the cloths every four or six hours, but care should be taken not to walk about too soon, otherwise its progress may be retarded.

SOAP.

The medical value of soap is considerable, being only secondary to its importance as a sanitary agent. It must not be inferred from our remarks in a previous chapter, on applying water previous to the application of soap, that we undervalue this lubricating and cleansing agent. As cleanliness is preventive of disease, anything which promotes cleanliness cannot be too highly appreciated. The investigations of science and the revelations of the microscope demonstrate that millions of minute germs or spores pervade the air. It is impossible to evade and very difficult to destroy these germs, but soap is one of the things which will kill them. So inconceivably small are these germs that 50,000 of them might lodge on a pin's head, and they are so volatile that they fly about everywhere as light as thistle-down, and take possession of everything, getting into one's nose, and flying down an open throat. These spores originate and thrive in low conditions of life, and though they cannot be altogether exterminated, soap

and water are two of their strongest antagonists. Soap chemically poisons them, and thus sanitary and microscopic science aid each other. Hot and cold water and soap are spore antidotes; we must therefore fight typhus, small-pox, fevers, and all kinds of zymotic or filth diseases with soap and water, or rather water and soap, more especially when the latter does not contain ingredients that are injurious to the skin, as is the case with many of the cheap or inferior articles. Then, too, good soap has very good lubricating and healing qualities which cannot be too highly appreciated.

WRY NECK

Is produced by a contraction of the flexor muscles on either side of the neck, which draws the head obliquely in the same direction. This affection is sometimes caused by colds, inflammation, carrying too heavy weights upon the head, or from strain.

Treatment.—When wry neck arises from cold, bathe the parts freely with hot water, and then place over four thicknesses of swansdown calico wrung out of hot water; cover with dry flannel and bandage down tightly. Keep it on all night, and sponge the parts freely with cold water next morning. If it is a case of long standing, or has been caused by sprains, the only safe and effectual treatment is several applications of the Life-awaker, which should be followed with bathing, first with hot, then with cold water, brisk friction and the wet cloths. This treatment, however, must be deferred till a week after the application of the Life-awaker. We have cured some of the worst cases with these valuable remedial agents. If prompt action be taken by applying the bath and wet cloths as soon as the affection

appears, it will generally bring about a cure in a very short time.

BEAUTY,

Or rather perfection of form, is the harmony of development produced by the exercise of one and every part of the body and mind. Great muscular exercise has a tendency to develop the arm of the blacksmith much more effectually than if he were working with a small hammer in a joiner's shop. The man who would resolutely set to work with a pair of clubs, dumb-bells, chest expander, or other gymnastic appliances, and an average stock of patience, would in six months reap a golden harvest of health and strength for his exertions.

Vigorous bodily exercise, or walking five miles an hour, causes the blood to pass through the lungs every half minute, while during moderate exercise the time is extended to one-and-a-half minutes, and when the body is in a passive state to about four minutes. The more frequently the blood is passed through the lungs, the more pure and healthy will it be. Plump, beautiful muscles are produced by vigorous and continuous activity of every part of the physical man, but avoid exhaustion.

It is advisable to retire to rest at one regular hour, and to take eight hours sleep in every twenty-four. Wash the entire person with cold water every morning, and follow with vigorous friction with the bare hands after the morning bath. On rising and before bedtime rub the whole body well with the bare hands for four or five minutes, until a regular glow is produced. If the sun shines in your bed-

room, let its rays come right upon your body while the process of rubbing is taking place. The tepid, sitz, or shallow bath should be taken daily by invalids, either at 11 a.m. or 3 p.m. After the morning wash exercise three to five minutes with the chest expander, dumb-bells, or clubs, breathe copiously and deeply; repeat this operation half-an-hour before dinner and tea, as also a few minutes before you retire to rest. Use no tobacco or alcoholic stimulants, as they have a tendency to weaken the nervous system and to debilitate the mind. Do not compel children to think and study at too early an age. Many a child has been prematurely broken down and sent to an early grave by the persistence of parents in cramming the mind at too early an age.

Those who would be beautiful should cultivate a sweet temper, a forgiving spirit, a smiling countenance, an active mind and body. Eat just enough nourishing food to sustain the system, but not so much as to produce plethora or obesity. Avoid drinking tea, coffee, alcoholic drinks, &c.; attend well to daily ablutions; remember that an indolent life, a sullen temper, a morose disposition, and a malicious spirit are the greatest foes to real beauty.

GOOD LOOKING.

Temperance and religion have a wonderful power in adorning people or improving their appearance. It gives them "a meek and quiet spirit," and this the Bible calls an "ornament which is, in the sight of God, of great price." Temperance and religion make the eye look brighter, and the complexion clearer, and the smile sweeter, and the voice softer, and everything about our person better looking than it otherwise would have been.

CRISIS IN WATER CURE.

Authors and hydropathic practitioners differ in opinion as to the utility or efficacy of what is called "*crisis*"—some assert that it is impossible to cure serious diseases without a crisis of some kind—others contend that cures can be made without them, whilst others regard the crisis as the result of injudicious and excessive treatment.

Medical practitioners generally produce an artificial crisis by dosing with purgative medicines, which irritate, inflame, and debilitate the stomach and the whole alimentary canal. By this means the food is hurried off the stomach, passed along the intestines, and out of the system before it has been thoroughly assimilated. Such treatment has a tendency to relieve the stomach of a quantity of superfluous food, and give momentary relief to the digestive apparatus, while at the same time it inflames, debilitates, and weakens the stomach, and lays the foundation for indigestion and other serious diseases; hence, this form of crisis should never be produced. It would be a great deal better to eat less food and allow the stomach to take a little rest, than to surfeit the system by eating too heartily, and purging it off.

When the blood is surcharged with morbid matter, however, it is necessary to produce a crisis of some kind; but it would be simply absurd to attempt to cleanse the blood either with purgative medicines, blistering, or by inflaming the skin with mustard plasters, chillies, or mustard baths. Such treatment produces sores even on HEALTHY people, which, in many cases, reduces the vital powers to a perilous extent.

Sometimes nature produces a crisis, and throws off offending matters by way of diarrhoea, which may last for a week or more, sometimes by vomiting, often by violent sweatings, very commonly by an eruption on the skin, and in many cases by an abundant crop of boils. These are very unpleasant, but they indicate that there is a sudden breaking up of morbid humours, which will come away in a mass when the boils are matured, especially if rightly treated. A crisis of this kind is very beneficial in every case where nature needs relief. When there is much morbid matter in the system it must be liberated and expelled before the health can be restored, and we occasionally find that at the end of two or three weeks' active treatment such people are apparently in a worse condition than before they commenced. Some of our patients have had as many as thirty-eight boils upon their bodies at the same time.

A case in point—a young gentleman came to our establishment, who had been suffering from a severe pain and dizziness in the head for nine years. It was so bad that he dare not venture to walk far without assistance. He had consulted thirty-two doctors, none of whom did him any good, and, as a last resource (as is generally the case with our patients), he submitted himself to our treatment. We applied the hot-air, vapour, shallow, sitz, and pack baths, each of which had a soothing effect upon his system, but they did not cure his head. We then applied the Life-awaker, and in ten days a large abcess made its appearance between his shoulders; in ten days more, it burst, and two quarts of matter passed off. The running continued for nine weeks, during which time two baths were given daily; the abcess then healed up, the dizziness and pain in the

head completely subsided, and he now says that he never enjoyed better health in his life. He has followed his employment ever since, and none of the old symptoms are ever felt. Nine weeks may appear to be a long time for an abscess to run, but when the system is "slimed up" with morbid matter, it must have time to pass off; and it usually keeps up ulcerations, boils, and abscesses till it is cleared away. It will now be quite evident that active treatment should continue so long as boils, abscesses, or eruptions affect the body. As soon as the blood is purified, they will disappear. Some persons, however, who have been suffering for many years from pains in the head and other chronic affections, get out of patience with such treatment before it has had time to bring about a complete restoration. We have had patients under treatment who had previously been under the treatment of medical practitioners for several years and got no better; and because we failed to cure them in three or four weeks, they manifested considerable dissatisfaction, even when they were making very rapid progress. Chronic diseases require both time, patience, and judicious treatment for a radical cure to be made.

When a crisis is produced by wearing a wet compress during the night, it indicates that the blood is in a bad condition, and such treatment should be continued; but we are not in favour of exhausting the system by producing a crisis by such means as are usually applied, inasmuch as they are very debilitating even to healthy persons; neither are we in favour of a long crisis, and, as a rule, the shorter the better, so long as the morbid humours can be cleared away. We have known a crisis to be continued for twelve months, but such is very debilitating and injurious.

The Life-awaker produces a crisis in two or three days, and in eight days it is healed up again, having cleared the body of more disease in so short a time than the ordinary water cure crisis can accomplish in a month, besides being less unpleasant.

THE LIFE-AWAKER

Is the invention of a very ingenious student of nature, of German nationality. Some years ago (about the year 1850) he was suffering from a tenacious gout, which had attacked his left arm, below the elbow, and which at last had assumed the form of a chronic ulcer on the hand. Having tried many methods of cure, and consulted many physicians, none of whom were capable of suppressing the malady—in this condition, whilst quietly sitting in his room meditating on the true nature, character, and course of flexuous rheumatic diseases, the bad hand resting on a cushion on the table, and his eye fixed on the gouty tumour on the suffering hand, a swarm of large gnats came into the room by the open window, making a buzzing noise around the suffering hand, which was highly swollen, and at last settled on it; the hand was thickly covered by the molesting insects. Instead of driving them away, he permitted them to remain as uninvited guests. They perforated the hand all over with their little stings, and after they had done their work and flown away, the back of the hand was speckled over like the top of a thimble. But how brightened with joy was the eye of the examining thinker, when in a few seconds afterwards he perceived that the whole of the pain in his hand had passed away through the openings

made by the stings of the gnats. This accidental circumstance served him as a basis whereon to found the invention of the Life-awaker, which is calculated at all times to apply artificially the salutary stings of the gnat, and by such means to awaken again into life the benumbed limbs. The inventor investigated the matter still further, and produced his famous oil, which supplies the kind of liquid left in the wounds by the little pierces of the gnats, and which conveys it into the channels of the rheumatic substances. After many trials it was found that this mode of treating nearly all kinds of diseases had such a beneficial effect as to induce the inventor to call his instrument the Life-awaker, because of its power to awaken into life benumbed and almost deadened limbs. He does not go so far as to say that it will bring the dead to life, but asserts that where there is *any* life, there may be hope in the Life-awaker bringing about a complete restoration.

We have used this instrument for a number of years, and successfully treated some thousands of patients, who had tried in vain to get relief from the popular medical practice. It is generally admitted that the skin is one of the most important parts of the body, upon which depends, to a great extent, the healthy or unhealthy state of the organisation. We have before stated that when the pores of the skin are closed, that which is wasted in the body cannot escape, and the morbid matter accumulates in the system, and stuffs up the blood with diseased particles. The skin of some persons is so scaly, dry, and inelastic as to render a number of the pores literally useless, but the Life-awaker produces artificial pores, through which the waste matter may escape. When the oil is applied over

these artificial pores, an eruption appears upon the surface of the skin, bringing out a large quantity of diseased matter, but when the operation is performed, and the oil applied to a healthy person, no eruption will appear. It is a remarkable fact that this instrument will only affect those who are diseased, or those parts of the body in which the disease is located. In two days after its application to a diseased person the skin will be covered with pustules, from about the size of a pin's head to that of a pea. The difference in the results will depend upon the virulency of the disease and upon the vital activity. On the sixth day the pustules begin to form scales, and by the tenth day they will have fallen off, and then the skin assumes its natural appearance. For some time I was very sceptical as to the advisability of using the Life-awaker; but while attending a case of leprosy, which required three months' water treatment, I happened to scratch the back of my neck, which communicated the disease to my skin, and it began to spread all over my body at a rapid rate. Having engaged to lecture in several large towns, I could not spare the time to return home to undergo the necessary water cure treatment, without sustaining very serious loss. Fortunately, at that time a particular friend, whom I had known for some years, introduced to my notice the Life-awaker, and assured me that it would cure my skin affection in fourteen days. After much persuasion I agreed to undergo the operation, which I imagined would be a very painful ordeal, but to my great and pleasant surprise, it gave me no pain; but on the second day a peculiar sensation pervaded my body—this sensation, as near as I can describe, was between an itch and a smart. On the second day the cotton wadding which

had been applied over the back, chest, and stomach after the operation, was removed, and to our surprise it was quite saturated with matter that had been expelled from the leprous affection. A fresh supply of cotton wadding was put on, and in twenty-four hours it was again completely saturated with matter, which necessitated its removal, to be followed with a fresh lot. On the fifth day the scales upon the skin began to die, and if there had been a thousand fleas biting my body they could not have produced more itching. On the sixth day, after the removal of the wadding, the body was sponged with warm water, which appeased the itching, and the scales began to fall off. The warm water sponging was repeated on the seventh, eighth, and ninth days, and on the tenth day I took a vapour bath, and applied the wet compress around my body during the night, followed with a shallow bath on rising, and on the twelfth day my body was free from the affection.

This gave us confidence in its curative properties, and since that time we have successfully treated several thousands of cases. Our experience has convinced us that when the Life-awaker is used in conjunction with the water treatment, it is the most powerful remedial agent at present known. We have cured more than six hundred cases of epileptic fits by these means, and when the patients have fully given themselves up to be cured we have had no failures, except where there has been fracture of the skull; but sometimes patients want us to treat them in *their* own way, and unless we give way to their whims and ideas they either become impatient or dissatisfied with our treatment. When such is the case we either ask them to treat themselves or to go to some other practitioner who will cater to

their peculiar sentiments. It is useless for persons to go anywhere else to get cured if they think that they know better than anybody else what should be done; this discontented class should save the expense, and cure themselves, instead of finding fault with those who happen to treat their patients different to their own pre-conceived notions. Notwithstanding these deterrent obstacles, we have only failed in curing twelve cases of epilepsy since we commenced to apply the Life-awaker in conjunction with the water treatment.

The Life-awaker is a powerful remedial agent in all kinds of scrofulous affections, hip diseases, white swellings, goitre, rheumatism, gout, paralysis, abscesses, tumours, cancers, inflamed eyes, running of the ears, cramp, dropsy, bronchitis, and kindred disorders.

It should be applied with skill, and by a person who has a thorough knowledge of its principles, in order to bring about the highest results, though it may be used with safety even to the weakest child; but we do not recommend its use in some few nervous diseases, especially when the heart is greatly affected. From the foregoing remarks it will be seen that this treatment helps Nature to rid the system of its impurities, and that the rejected matters accumulate, form scales, and dry upon the surface of the skin, and unless some form of water treatment be applied to soften and wash off this scaly matter, there is danger in its preventing other waste matters, which are being constantly produced, from escaping through the natural outlet—as in the case of confluent small-pox when the pustules harden, flatten, run together, and keep in that which should be passed off through the pores of the skin, and thereby

still further poisons the blood and retards the cure. This is the chief reason why we so strongly advocate the free use of baths in a week after an application of the Life-awaker. The scales then form and begin to harden, and should be washed off. For particulars of baths to be applied in conjunction with the Life-awaker, see instructions given under the heading of each disease named in this book.

It will be observed that we have recommended this treatment for nearly every case of disease which have their origin in impurities of the blood. A cure can be made, however, in the majority of cases with the water treatment we have recommended without its use; but the cure is much more speedily, easily, and permanently effected by its judicious application. This, like the water treatment, requires skill and discrimination in its application in order to bring about a cure, especially in critical cases. It is to be regretted, however, that some people apply this instrument in a haphazard sort of way, and thereby bring it into disrepute.

It is thought by some that the Life-awaker treatment must be very painful, but this is a mistake, for it is very easy to undergo—in fact many people scarcely feel that it is being applied; but when the system is surcharged with disease the sensation in a few hours after its application is rather unpleasant, more especially when the itching commences; still it is not half so bad to bear as the water cure crisis, and its effect is more certain, besides which its duration is limited to a week: then, too, the crisis in this case is produced in a few hours, especially when applied to a diseased person, whereas the water cure crisis is very difficult to produce in many who need relief.

DYSENTERY

is an inflammatory affection of the lower part of the large intestines, and is always accompanied with more or less fever of a low or typhoid character. It is a violent and dangerous disease, more distressing and fatal in this country than even cholera, and from being usually attended by sanguinary discharges, it is popularly termed

“ BLOODY FLUX.”

Flesh eaters are most liable to dysentery, as, in fact, they are to all inflammatory diseases. Amongst the causes of dysentery are bad air, food, and water, damp dwellings and unclean habits. Children are more liable to this disease than adults. In the milder forms of dysentery a large majority of the cases recover; but in malignant cases the mortality, under ordinary treatment, averages fifty per cent. Yet the disease is not intrinsically dangerous, however violent may be its symptoms.

In the treatment of dysentery the hygienic system is almost uniformly successful. Our remedial plan is very simple. The first requirement in the febrile stage is to keep the temperature of the whole body well balanced, and as near to the normal heat standard as possible. This can be effected by means of warm or tepid ablutions, keeping the abdomen constantly enveloped in wet cloths, to be changed as often as they become dry, until the inflammation subsides. In *extreme cases*, hot cloths, bricks, bottles, or sand bags may be applied to the extremities, and cold wet cloths to the head. Chills should be avoided lest they increase internal congestion. Apply the warm sitz bath and back sponge for two or three minutes, twice daily, after

which dash a bucket of cold water upon the back and another upon the chest, and follow with dry rubbing and gentle friction. When there is very little heat in the system, the warm blanket pack may be taken every alternate day; and when perspiration has been produced, finish off with a tepid dripping sheet, or a tepid pouring bath. Keep the wet compress around the body night and day, and change it morning, noon, and night.

Cold injections may be taken twice or three times a-day. Let the dietary be very limited. During the first few days the patient should fast from everything except filtered water or a few ripe grapes. When the fever has abated and appetite returns, digestive biscuits, baked apples, grapes, strawberries, &c., may be taken in limited quantities.

If attention be paid to the dietary, and medicines avoided, there will be no danger of relapse or chronic diarrhœa.

When the tongue is coated the stomach may be cleansed twice a-day with warm water and the stomach tube.

If the extremities are cold and chilly, let them be wrapped in warm, dry flannels. The hot and cold foot and leg bath may also be applied two or three times a-day.



STRICTURE OF THE RECTUM

is a partial or total closure of the rectum, which render expulsion of the fœces very difficult and painful; this condition is produced by a morbid thickening of the mucous membrane, and its most frequent cause is the use of irritating drugs, whilst highly-seasoned foods, sedentary habits,

and inattention to the calls of nature conduce to its formation. The stricture may usually be felt with the finger, about four inches above the orifice. In some instances this is one of the most troublesome and painful of all the affections to which humanity is liable. There are two varieties, *first*, the spasmodic, when the pain in the rectum is sometimes remittant and at other times intermittant, and is increased during the expulsion of the fœces.

The *second* form is callous, with difficult and painful evacuations of rather a lax nature and of invariable slenderness. The former is the most common and perhaps the most obstinate form of the disease, yet it is more readily relieved than the latter.

Treatment.—Keep the bowels regular by eating laxative food; wear the wet compress five nights weekly, take three or four sitz baths per week, commencing at 90 degrees and gradually reduce the temperature to 65 degrees. Also take tepid water injections when there is much pain in evacuation. Do not walk too much, nor exhaust the body by any other physical exercise. Where accessible, the tepid *Rising Douche* bath is very beneficial. This may be applied for four successive minutes three times daily; but when this is not at hand, the running sitz bath may be substituted twice daily, commencing at 85 degrees and reduced to 60 degrees. The *Rising Douche* and running sitz baths should be frequently used whenever they are procurable, but sometimes it is necessary for the parts to be dilated with the bougie.

PRURITUS ANI,

which simply means an itching of the anus, is sometimes a very troublesome affection, and its cure depends chiefly

upon a correction of the humours of the body. Local treatment in the form of frequent warm and cold sitz baths are generally very beneficial in relieving the symptoms, but we very much question whether it is possible to bring about a permanent cure until the blood is cleansed of its impurities. The following is the most effectual way of accomplishing this object:—First, take a vapour or hot-air bath, then have the Life-awaker applied over the chest, stomach, liver, abdomen, down the back, and over the parts affected. If the Life-awaker is not attainable, take a daily sitz bath at 98 degrees, and reduce to 60 degrees before leaving it; wear the wet compress nightly, take a sweating bath three times weekly, and sit over the fumes of sulphur for a few minutes a time or two in the week. Keep the bowels regular by eating laxative food and by water injections, and guard against eating anything that is very greasy or highly seasoned.

PROLAPSUS ANI

is usually a disorder of childhood, but we sometimes meet with it in adult life. Whenever the rectum descends it should at once be returned, otherwise the pressure of the “sphincter ani” will cause it to swell and inflame and render a cure far more difficult.

Place the patient, if a child, across the lap, with its head lower than its hips; if an adult, let him lie on a bed or couch; then lubricate the parts with olive oil, place a piece of fine and soft linen over the prolapsed part, and press it gently in such a way as to return the bowel within the sphincter ani, but great care should be taken not to perforate or injure the part. If more convenient, after the lubrication of the part with olive oil, the point of the fore-

finger may be pressed upon the upper part of the prolapsed bowel, and pressed upwards till it passes the constricted part, after which a further portion may be served in the same way; repeat this till the whole is replaced, then apply cold water injections several times a day, for they will strengthen the parts and prevent future falling, especially if the cold rising douche is also applied a time or two daily. When there is much pain and inflammation warm sitz baths at 80 degrees, fifteen minutes in duration, should be given once every four hours, and, when possible, give one or two wet sheet packs daily and the wet compress night and day. The diet should consist chiefly of wheat meal mush, sweetened with treacle or brown sugar, ripe fruits, and brown bread and milk; but the less food there is eaten the better till the difficulty completely disappears.

RICKETS—HUNCHBACK

is a scrofulous affection, and is indicated or usually preceded by a puffiness and paleness of the countenance and a yellow, sulphur hue of the cheeks. The flesh becomes flaccid, the lower limbs grow thin, the forehead becomes prominent, the spine bends, and the joints grow spongy and loose, whilst the brain manifests more than ordinary activity, so much so, in many cases as to evince wonderful originality and precocity.

Causes.—This affection is frequently transmitted from parent to child; in fact, we are acquainted with several families where two or more children are afflicted in the same way, and in one case *hunchbacks* have run in the family for seven generations, and it originates more frequently from mothers than from fathers. Amatory excesses are doubtless one of the chief causes of this affection.

When a child comes into this breathing world "scarcely half made up," we frequently find that the bones are soft and spongy, and sometimes even affected with *Caries* or other unhealthy conditions, which lead to mis-ossification and premature decay. When a child inherits a strong constitution it seldom becomes ricketty, especially if it is well nursed, properly fed, and kept clean. Some parents allow their children to keep wet underclothing on all day, which, when it comes in contact with their legs and hips, causes a chill, and thereby predisposes to this affection; hence, the inference is clear that every child should be kept quite clean and dry, and that unhealthy positions in nursing should be avoided.

Treatment.—Give the child a warm bath at bedtime, and then lay it upon the knee and rub its back freely and gently upwards and downwards to help the circulation; apply the wet compress nightly for a week, and if the symptoms do not subside apply the Life-awaker on each side of the spine every fourteenth day for three or four months. The baths and compresses above named may be applied between the seventh and fourteenth days. The diet should consist chiefly of brown bread, mush, fruit, milk, puddings, &c., but highly-seasoned food, pastries, salt meats, &c., must be studiously avoided. Let the patient take plenty of exercise in the fresh air, use the chest expander freely each day, also wear chest-expanding braces, and perform very little mental labour.

CURVATURE OF THE SPINE

arises chiefly from weakness, a scrofulous condition of body, caries or injuries of the vertebral column, muscular debility, &c.

Young girls at boarding schools are sometimes affected with what is called a *compound lateral curvature*, as seen in Fig. 69. This is owing chiefly to "over-study," taking too little physical exercise, wearing high-heeled boots, tight lacing, and sitting in crooked positions.

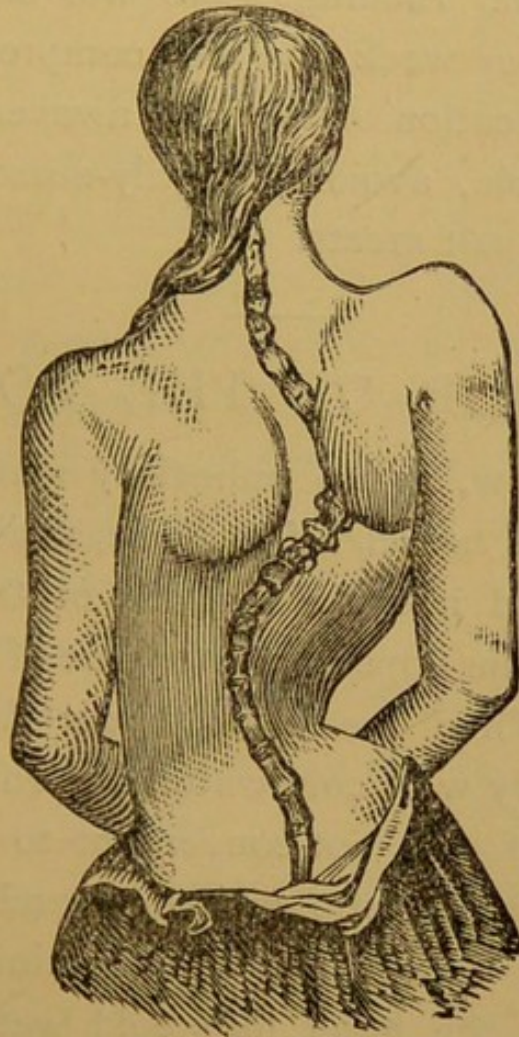


FIG. 69.—Double Curvature of the Spine.

Single curvature may be produced by carrying heavy weights on one side, as by nursing, as also by lying too much in one posture.

Treatment.—First remove all predisposing causes. Exercise freely out of doors, stand and walk erect, exercise half-an-hour daily with the chest expander, dumb-bells, or clubs. Remove all superfluous clothing, and let the blood circulate freely through every part of the body; sleep upon a spring bed or hair mattress, change positions a time or two each night, and practise lying upon both sides, and also upon your back, and do not raise the head too high while lying in bed. Take four sitz baths and back sponges weekly, three spinal rubbings, two wet sheet packs and spinal slappings per week, the wet compress nightly, and an occasional application of the Life awaker. Let the diet be plain and simple, avoiding highly-seasoned food, tea, coffee, pastry, and salt meats.

TUMOUR OF THE BONE.

Pressure, a blow, or an unhealthy state of the blood sometimes produce *tumour of the bone*, which consists of a hard, indolent, and irregular growth of the bone. This usually occurs on the upper or lower part of the thigh bone.

Treatment.—When the enlargement first commences bathe the part freely with cold water, and rub it briskly with the bare hands. If it is not convenient to bathe the part, the hand may be dipped into cold water and the part freely rubbed therewith; repeat this a few minutes night and morning, and dip the hand into cold water whenever it becomes dry. When the enlarged bone has fully hardened it would be well to apply the Life-awaker a time or two, or to undergo a surgical operation. When this affection is the result of impurity of the blood, the wet sheet pack, vapour baths, and the Life-awaker are invaluable.

THINGS TO BE REMEMBERED BY THOSE WHO WOULD BE HEALTHY.

Both sickly and healthy people need, for soundness of body and brain and an enjoyable life, a plentiful supply of sunshine, cleanliness, pure air day and night; exercise out of doors as well as work in the house; noon-day rest in place of a heavy meal; food that will build up body and brain without irritating either; pure water to drink; low-heeled, broad-toed shoes and loose-fitting garments: rather a large waist; a warm loving nature; social enjoyment and innocent recreation; faith in God and immortality, and humanity; a determination to be obedient to nature's laws; a capacity to look on the bright side of everything, and a firm resolve never to find fault. It is easy to say that nobody is honest, or that the Church would be better if the minister would do as he ought, but it is not so easy to look on the best side of things and to see that there are hundreds of faithful preachers, and thousands of honest, sincere men and women, doing countless acts of justice, charity, and humanity, which outweigh all the fault-finding of the grumblers. Let us be charitable in our judgment, fair in our actions, cheerful in our demeanour, and remember that the world is not all wrong. Never suspect that your neighbours are trying to cheat you or that everybody is a rascal. If we would perfect our natures, and live truly healthy and happy lives, we must bear and forbear, make trouble of nothing, have something to love and something to hope for.

HEALTH MAXIMS.

1. Never stand or sit with your back to a window or door, even if closed, for even a small current of air blowing directly upon the back will quickly give cold ; the portion of the body which most requires protection against cold is that between the shoulder-blades behind, for at this point the lungs are attached to the body, and a direct current soon chills the blood. When a cold has been contracted by this means, sponge well between the shoulders and over the chest, night and morning, with warm or cold water, and follow with an abundance of friction.

2. Many worthless remedies are advertised as being sure cures for certain diseases, but we generally find that they have been taken about the time the disease was at its crisis, or was just on turn and point of disappearing, and then the one employed is heralded as a wonderful cure ; such nostrums usually debilitate the system, and retard nature in her restorative efforts to expel the diseased matters, but in many cases nature heals herself in spite of them.

3. Wiry little men who habitually walk with a quick step, usually live to a good old age, while stout, plethoric men die at an early age.

4. Cultivate an even temper if you would promote longevity, many a man has dropped dead whilst in a fit of passion.

5. Keep the mouth shut, and breathe through your nostrils, for by these means the air will be warmed while passing from the nostrils to your lungs ; but when breathed in through the mouth, the air is so cold as to congest the blood, and thereby to produce bronchitis.

6. That man (or woman) lives the longest who wisely divides the occupations of life between muscular and mental exercise. Too much thinking and study have a tendency to debilitate the body, whilst too little has a tendency to corrode the mental powers.

7. Some people cause themselves much unnecessary anxiety if they do not increase in weight, just as though they were like pigs, to be measured by fat. Such persons should remember that lean people outlive the fat ones.

8. It is said that pigeons will never eat anything when they are exhausted, neither is it good for man to do so, it should be remembered that a hearty meal taken whilst in a state of exhaustion, has often destroyed life.

9. Worry, care, and anxiety are the handmaids of disease and death. Those who would be healthy should cultivate a cheerful spirit, for health, good nature, and joviality are generally associated.

10. Those who are troubled with sleeplessness, should remember that to sleep well a man should work hard at something requiring physical exertion.

11. Dyspepsia is caused by eating too fast, too much, and too often.

12. Many men are very anxious to amass a fortune, and then to retire from the active pursuits of life. Such people generally die early, for sudden cessation from active business habits to one of comparative indolence, brings on general debility, and cuts life short.

13. When people spit blood, especially those who are predisposed to consumption, they become unnecessarily alarmed. A consumptive who spits blood occasionally will have less cough and live longer than when he does not have any hemorrhage.

14. The breaking out of rashes on the body is a good sign, it is an indication that the blood is surfeited, and that nature is expelling the offending matter. In all such cases nature should be assisted to throw off, rather than to retain these injurious substances.

15. Never make a child sit still, but encourage laughter and joking amongst children at table, in order to retard fast eating and promote circulation.

16. As a rule two persons should not sleep together in the same bed; even man and wife do not do so on the continent, which is more promotive of health than the English custom.

17. Onions should never be kept in a sick chamber on account of their absorbing qualities.

18. Sluggish people should take warm baths, but excitable persons will be better with cool or cold ones.

19. Quick purging is sure to weaken a patient, and give an impetus to disease.

20. Those who are afflicted with fits should know that cold feet and cramps in the calves are predisposing causes, which should be checked at once. Children who suffer from fits should drink as little as possible at meals, and occasionally have the Life-awaker applied in addition to the baths recommended under their respective headings.

21. Blistering is very injurious to the system, inasmuch as those parts of the body which have been blistered are generally weakened.

22. Preserve under all circumstances a composure of mind which no happiness or misfortune can too much disturb. Love nothing too violently; hate nothing too passionately; fear nothing too strongly; and keep the mind

in as equable a condition as possible. It is not well, however, to be too cool, quiet and tame; hence a reasonable amount of hilarity, joyous conversation, pleasant recreation, frolicsomeness and fun have a tendency to promote health and prolong life.

23. Never enter a sick room in a state of perspiration, for the moment you become cool your pores absorb. Do not approach contagious diseases with an empty stomach, nor sit between sick people and the fire, because the heat attracts their vapours.

24. Remember that profound mental emotions and exercises have a very disturbing effect upon the system. When the emotions and passions, such as jealousy and anger, are very frequently indulged, with undue excitement of any description, the brain becomes irritated and exhaustion follows. Vexations, crosses and losses sometimes upset men's minds to such an extent as to cut short their lives; but their impression upon a well-balanced mind will be but as a ruffle of the summer breeze upon a placid lake. Never allow weeping and sorrow to last even a single hour, for they only tend to make matters worse.

25. The temperature of the body in health is $98\frac{1}{4}$ deg.; when it falls below 97 deg., or exceeds 100 deg., it is an indication that health is impaired, and remedial efforts should at once be sought.

26. The temperature of the body may be ascertained by applying the bulb of a *clinical thermometer* in the armpit next to the skin, for five minutes, during which the arm should be drawn over the chest.

27. When the temperature of the body reaches 103 deg. it is accompanied with fever, inflammation, or severe

constitutional disturbance; when it exceeds 105 deg. it is very dangerous, and usually fatal when it reaches 107 deg., and death may be expected (in either sex) within a few hours when it reaches 108 deg.

28. Improper feeding of infants and children produces many derangements, one of which is "tooth-rash," or an eruption of small, hard, red pimples which may appear on a portion or over the whole of the body; whenever this is the case give it a warm bath, and then apply the tepid wet compress nightly; also add a tablespoonful of lime water to each pint of milk.

29. Boiled oatmeal or whole wheat meal mush are the most wholesome articles of diet for children of tender age. During infancy, however, "Mellins' food" is the best substitute for, and also the most suitable supplement to the mother's milk, with which we are acquainted.

30. Undiluted cow's milk should never be given to infants, inasmuch as it produces a plethoric condition of body, and slays its thousands; hence the inference is clear that milk should be freely diluted with water before it is given to a child.

31. Never box a child's ears, as the skull-cap is very thin, and many a child has been ruined for life by this foolish practice.

32. Curtains round the bed are injurious to health, for they prevent the free access of fresh air to the sleeper, and thereby impoverish the blood.

33. Those of a phlegmatic temperament frequently complain of being too *weak* to take exercise, but this is a mistake, for they are too *indolent* to do so. No amount of

in-door work will compensate for want of out-door exercise, and sound health cannot be attained without it.

34. A spirometer is very valuable in testing the breathing capacity of both sexes, and when possible it should be brought into frequent requisition by those who would have sound and healthy lungs. Every healthy adult should be capable of breathing from 174 to 262 cubic inches of air, according to stature, and whenever there is any falling off from this standard the breathing capacity should be enlarged by deep and copious breathing, suitable baths, out-door exercise, and the free use of dumb-bells, chest-expander, clubs, &c.

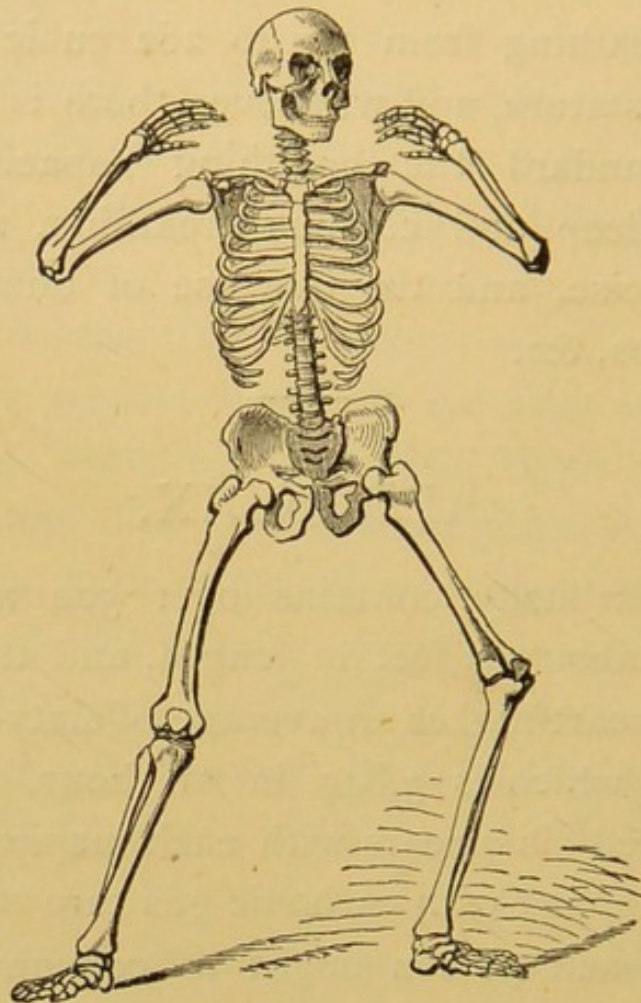
APPENDIX.

The human body contains over 500 muscles. The intestines are about 25 feet in length, and the colon about 9 feet. The heart makes an average of sixty-five pulsations in a minute, which is 3,840 in an hour. Two-fifths of oxygen inspired disappears with each inspiration, the place of which is supplied with carbonic gas thrown off by expiration. Thus each person ought to consume 4,600 cubic inches of oxygen every twenty-four hours, and in the same time he generates 18,200 inches of carbonic gas.

FACTS ABOUT THE HUMAN BODY.

The number of bones in the framework of the human body is 260, of which 108 are in the feet and hands, there being in each twenty-seven. The quantity of blood in adults varies from fourteen to twenty-eight pounds, and it should pass through the heart once every three-and-a-half

or four minutes. Only one-tenth of the human body is solid matter. A dead body weighing 120 pounds was dried in an oven till all the moisture was expelled, and its weight was reduced to twelve pounds. Egyptian mummies are bodies thoroughly dried, and usually weigh about seven



W.B

FIG. 70.—Human Skeleton.

[Truly, I am fearfully and wonderfully made.]

pounds. The lungs of an adult ordinarily inhale twenty cubic inches of air at once, and if we breathe twenty times in a minute, the quantity of air consumed in an hour will be 48,000 cubic inches, or 1,152,000 inches in a day, which is equal to eighty-six hogsheads.

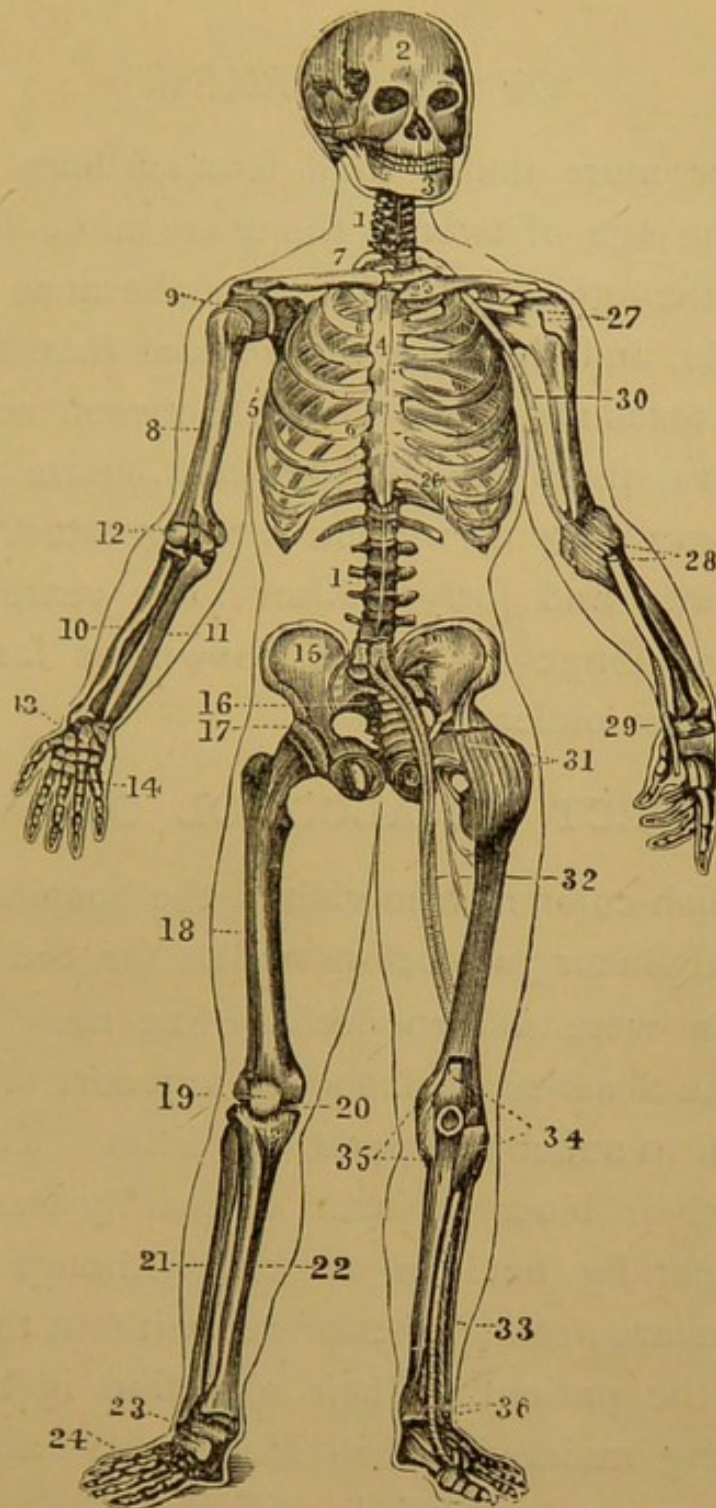


FIG. 71.—Human Skeleton, which also shows the outline of fleshy parts.

- | | | |
|----------------------------|--------------------------|---------------------------|
| 1. Cervical Vertebrae. | 15. Ilium. | 28. Muscles of the Elbow. |
| 2. Frontal Bone of Skull. | 16. Sacrum. | 29. Ligament around the |
| 3. Lower Jaw. | 17. Hip Joint. | Wrist. |
| 4. Sternum or Breast Bone. | 18. Femur or Thigh Bone. | 30. Muscle of the Arm. |
| 5. External of the Ribs. | 19. Knee Cap. | 31. Muscles of the Hip. |
| 6. Ribs. | 20. Knee Joint. | 32. Muscles of the Thigh. |
| 7. Shoulder Blade. | 21. Tibia. | 33. Muscles of the Leg. |
| 8. Arm. | 22. Fibula. | 34. Muscle connected with |
| 9. Shoulder Joint. | 23. Ankle. | the Knee Cap. |
| 10 & 11. Fore Arm. | 24. Foot. | 35. Patella. |
| 12. Elbow. | 25. Collar Bone. | 36. Ligament around the |
| 13. Wrist Bones. | 26. False Ribs. | Ankle. |
| 14. Hand. | 27. Shoulder. | |

OF THE SEXES.

There are more males than females born by four per cent. At the age of twenty there are more females than males. At the age of forty the preponderance is again on the other side, and there are more males than females. At seventy the sexes are again even. Between seventy and a hundred years, there are five per cent. more women than men. The mortality of women is the greatest between the ages of twenty and forty. After forty years of age the probability of longevity, as is shown, is far greater for females than for males.

THE EFFECT OF ALCOHOL ON WOUNDS

An English colonel, who visited the hospital at Scutari with General Baker just before he left for the front, says: "The Turks were all wonderfully fine men in physique, and, from the absence of alcohol or any sort of intoxicating drinks, seem to suffer comparatively little. The lives they lead keeps their blood in such a healthy state that their wounds generally heal in an extraordinary short time. Amputations are not here performed without the permission or wish of the patient. Their objection is based on the idea of 'going maimed before Mahomet;' and this is so strong that, as a rule, death is preferred."

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HEALTH
AND
ECONOMY
IN THE
SELECTION OF FOOD.

BY R. B. D. WELLS,
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SCARBOROUGH.

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P R E F A C E.

THE Author and Compiler of the following pages has undertaken this task for the purpose of showing that a simple and cheap diet is not only in accordance with the laws of life and health, but that it is conducive to strength of body—essential to mental vigour—a prolonger of life—a safe-guard against intemperance—a stimulus to chastity—and an incentive to morality.

Most physiologists are aware that costly and pernicious luxuries and highly-seasoned food have a tendency to inflame the blood—to surfeit the system—irritate the stomach, excite the passions—create an unnatural thirst—to blight the intellect—and is the forerunner of many evils that afflict society.

The greasy and indigestible food of the labourer is also a frequent source of sickness—a foe to human progression, vigour, vivacity, brilliancy of mind—a check to intellectual expansion—and a stumbling block to noble and lofty sentiments.

Human beings, like all animals, require food to supply matter for the growth of the body, and to make up for their daily loss of substance by the exercise of each muscle, nerve, and function, otherwise, exhaustion, prostration, and death would ensue.

Growing people and adults who perform much muscular labour require a more plentiful supply of nutritious aliment than persons whose labour pertains chiefly to mental or to a sedentary vocation. Then, too, the inhabitants of populous towns and cities cannot digest the same kind of food as the residents of thinly-populated districts, for persons who are surrounded with the hurry, bustle, and excitement of commercial strife have less power to digest

indigestible food than those individuals who have less to disturb their mental equilibrium. Farm labourers, and those who work out of doors may eat bacon, pork, and fat meats, which will *seem* to agree with them, but if a clerk, literary character, or those who are engaged in a sedentary vocation were to feed upon such things they would soon be troubled with biliousness, indigestion, &c. I feel assured that if the former class were to live upon more suitable food that they would be more active, versatile, clear-headed, and wide awake than when fed upon such gross material.

An old adage says—"that what is one man's meat is another man's poison." This may apply to bad food, but it will scarcely apply to good food; we seldom or never hear of good bread, fruits, and the higher class of vegetables disagreeing with, or poisoning those who partake of them; but we frequently hear of pork disagreeing with peoples' stomachs, and rendering sleep unrefreshing; this is evidently the voice of nature loudly protesting that such material is not fit for the human system. Even if some individuals can eat it without much apparent injury, it is no proof that the stomach of man should receive that which was never intended for it. The following pages will deal with the subject of a healthy and natural dietary, and give reasons why bad food should never be introduced into the human body. I have explained what I consider to be good food, but I do not expect every one to agree with me even in this, for tastes vary as do characters and dispositions, still I feel certain that all intelligent people who have unperturbed appetites and non-prejudiced minds, will weigh the matter well over, and after due deliberation will readily admit that there is great need for a reformation in the regimen of the people.

I am indebted to Messrs. S. R. Wells; Wood and Holbrook, New York; and to Dr. Nichol's publications for several excellent articles which I trust may be of lasting benefit to my readers.

HEALTH

AND

ECONOMY IN THE SELECTION OF FOOD.



INTRODUCTORY CHAPTER.

What must I eat and drink, and how many meals should I take daily to build up a healthy and strong body, so as to secure a vigorous mind? These are questions which we are daily asked to answer. The majority of such enquirers have an impression that they need an abundance of rich and greasy food, ham and eggs *ad libitum*, a plentiful supply of alcoholic drinks, beef tea, bitters to give them an appetite, sumptuous dinners, hot and strong tea and coffee, late suppers, condiments, sweets, pickles, jams, and tarts to tempt the appetite, lest they should die of starvation. They generally procure the finest wheaten flour, from which every particle of bran has been extracted, their bread is made of this material, which is the reverse of nourishing to

the human body. It is said, by those who have experimented upon animals, that if a dog is fed upon bread made of this fine flour for forty days, that it will die of starvation; but if the bran is retained in the bread the dog will live and be quite healthy; thus proving conclusively that the bran should never be taken from the starchy material of which fine bread is composed. Again, too many weak and sickly people are in the habit of eating hot new cakes, which, being saturated with butter, become still more indigestible, and when they have thus surfeited and debilitated their stomachs with this food, they think they require something still more greasy and unnatural to make them well again. They immediately consult the doctor, who in many cases panders to the morbid appetites of his patients, and recommends cod liver oil, purgative medicines, and alcoholic drinks, which have a stimulating but enfeebling effect upon those who take them.

For some years we have been laboring to show that highly seasoned, costly and pernicious luxuries have a tendency to inflame the stomach, to impair the indigestion, and to create an abnormal thirst, which lays the foundation for dyspepsia and intemperance.

Dr. J. Turner, of New York, when speaking of drunkenness, declares that having become convinced that a vegetarian diet would support a person in health and strength, he put it in practice with two intemperate brothers, who are cured and restored to society, and that he has since applied it to upwards of one thousand cases of intemperance with marked success. Some persons who have been thus cured, have presented him with a silver epergne, costing five hundred dollars, and an illuminated address, in which they thanked him for having been the means of saving them from utter ruin.

Dr. Turner says that he has made notes of each of the thousand

cases, sufficient to fill an octavo book of 600 pages, which he intends to bring out in England. Surely this is worth looking into. Drunkards are patients to be cured. Five shilling fines and ten days imprisonments do not cure disease. Preaching does not cure them. Drunkenness is a stomach disease, and a pure diet is one of the best means of curing it.

The above extract fully accords with statements made by many eminent medical men in England; and to my mind it is a convincing proof that if inebriates were to restrict their food to vegetables, fruits, and grain diet, drunkenness would soon be a thing of the past, and the health of the community would be greatly improved. The gastric juices cannot easily blend with fatty and oily substances, consequently when the latter are freely taken, the fat will swim upon the stomach, thereby producing acidity, flatulency, indigestion, and kindred affections. The appetite under such conditions soon becomes impaired, and the victim loses strength, spirit, and energy, and becomes a slave to dyspepsia. The doctor is then consulted, who, too frequently recommends two or three mutton chops or beef steaks daily, as also eggs and alcoholic drinks; and if the stomach refuses to take them, bitters, condiments, pickles, and nauseous medicines are resorted to, in order to sharpen the appetite or to create an abnormal craving for food, when the stomach really needs rest; hence, every ounce of food taken under such conditions produces an alarming amount of mischief. There would be quite as much sense in putting a bag of beans upon a donkey's back to make it strong, as to load a weak stomach with rich and indigestible food in order to strengthen a weak person. Those who are subject to indigestion, a sinking sensation at the stomach, weakness and lassitude, should take such foods only as will digest easily. They would be greatly benefited if they were to dispense with flesh

meat entirely, until the stomach has been rested and better prepared to digest stronger food. It would be too much for us to expect everybody to become vegetarians, neither do we recommend all people to do so, for those who perform hard muscular labor may eat a little meat with advantage both to body and mind; but it should never be taken more than once a day, and as a rule the less the better.

Fish contains a greater proportion of phosphorus than any other class of animal food, and, consequently may be considered choice brain food. Some kinds of fish are, however, much richer in phosphorus than others, and this element, as a general rule, varies accordingly as the fish is lively or slow in its movements or habits. The most active fish have the greatest amount of phosphorus, and are more valuable as an article of diet than the slow and less agile kind. Those nations who eat fish with one meal each day are undoubtedly the most active in intellect, and the most capable of brain labor without exhaustion or fatigue. Not only is such phosphoric food conducive to the activity of the brain, but it promotes fecundity, and increases the ability to endure cold, fatigue, &c.

Cheese is a fine article of diet, but some people cannot digest it, hence they should avoid it, still it will disagree with very few persons if they will grate and intermix it with their food instead of eating it in lumps. Milk is very beneficial to many people; but as a rule it will not agree with those who are bilious, neither is it advisable for very fleshy people to partake of it freely, inasmuch as it inclines to obesity. Pastries, new bread, highly seasoned food, and late suppers are especially objectionable to weakly persons. These articles should be avoided by those who are healthy, otherwise they cannot expect long to remain so. Vinegar and pickles have a tendency to destroy the coating of the

stomach and intestines, while tea and coffee do a serious injury to the nerves and impair the health.

Bacon, pork, and ham, are especially objectionable to the human stomach, and one or more of the following articles will explain the reason why. Suffice it to say, that we never allow a particle of either to enter our doors neither for ourselves nor for our patients. Some of our readers will probably think that we condemn all good things; but to this we demur, and in order that their minds may be disabused of such thoughts, I will here enumerate several articles of food which we highly recommend. Previous to doing so, however, I may state that most of our patients are allowed three meals per day: breakfast at 8-30, dinner at 1-0, and supper at 5-45 p.m. Dyspeptic patients are advised to eat one or two meals per day only, and it is surprising how rapidly they improve, and even gain weight and strength on this. I never eat more than two meals per day, and I can do more work, and think more clearly than if I partook of food more frequently.

Our meals are composed chiefly of the following articles:—for breakfast, a selection from wheatmeal mush, stewed fruits, as apples, pears, currants, strawberries, raspberries, prunes, &c., brown bread and butter, grated cheese, cocoa, milk and water, watercress, lettuce, stewed rhubarb, &c., &c. For dinner, a small quantity of lean beef, mutton, fish, or fowl, haricot beans, peas, broad beans, tomatoes, potatoes, cabbage, cauliflower, parsnips, beetroot, turnips, carrots, and other vegetables; rice, sago, semolina, tapioca, bread, maccaroni, light custards, and other puddings, stewed fruits, &c. Condiments, highly seasoned food, hog, tobacco, and alcoholic drinks are strictly prohibited. For supper, milk, cocoa, bread and butter, salads, stewed fruits, and in some cases wheatmeal mush, or oatmeal porridge. There is a

great art in cooking, and when food is rightly prepared, condiments are never needed. Our work on "The Best Food, and How to Cook It," will give full instructions for cooking food hygienically. After eating such food as above enumerated, very few of our patients ever feel thirsty. We do not recommend people to drink much at meal times; but the food should be thoroughly masticated.

The following rules in regard to eating are indispensable for the promotion of health and strength of body:—

1.—Avoid stimulation produced by drinking spirits of any kind, as also strong tea and coffee, opium, and tobacco.

2.—Never eat more than three meals per day, and never eat between meals; drink very little while eating.

3.—One hearty meal per day is sufficient, the other two should be spare, but meat should never be taken more than once a day, and in small quantity.

4.—Avoid late hearty suppers, pork, spices and pepper, rich pastry, and imperfectly cooked beans.

5.—Wheat, oat, and barley meal, beans, peas, lentils, lean meat, fish, and wild fowl are the best articles of diet.

6.—Fruits are cooling to the blood, nourishing to the system, and specially adapted to warm weather.

7.—Eat slowly, masticate your food thoroughly, and eat nothing during the last three hours before retiring to rest.

8.—Let the time spent at table be happy; laugh and joke at meal times, but do not argue. Encourage pleasant, cheerful, conversation, and rest half an hour after every hearty meal.

9.—Sleep from 7 to 8½ hours of each day.

10.—Brain workers should have different food from the muscle workers; the latter should eat more strong food than the former; but the brain worker should eat that kind of food which contains

a full proportion of phosphorus, as fish, wheat meal mush, and the higher class of vegetables, fruits, &c.

11.—The proper time for drinking is one hour after meals, and in cold weather very cold water should be avoided, it is better to take off the chill; but when cold water is drunk it should be taken in sips rather than in a hearty draught.

12.—When patients are troubled with flatulency, heartburn, or an uncomfortable fulness at the stomach, it is quite evident they have eaten too heartily. Drinking a tumblerful of tepid water will generally give immediate relief; but it is advisable in all such cases to avoid eating so heartily in future.

Further instructions in the selection of food will be given in my work on "Good Health, and How to Secure It." Price 2s. post free.

F O O D.

Last month we gave an illustrated article on the teeth. Now we offer a few remarks on the subject of food. "Give us this day our daily bread," expresses the oft-recurring want, the need of food. It is thought by many that instinct in man is sufficient to guide him in reference to the amount or character of his food, the proper time for taking it, and the amount required. As man has been endowed with reason, and as he makes his home in the tropics, in the temperate and in the frigid zones of the earth; as he is a being of enterprise, and changes his locality, and diversifies his mode of life, the reason in part takes the place in man which instinct occupies in animals in respect to the selection of food. Animals left to themselves to dwell under certain conditions without material change are endowed by instinct to make a proper selection of their food, and never go astray. If we work a horse hard for hours until he gets very hungry and thirsty, he will drink too much, and if the food be rich will eat too much; but let the

horse have access to a flowing river and wide domains of pasturage, and entire leisure to go and come, to eat and rest, to drink and refrain as he pleases, and he will never eat and drink wrongly ; moreover, if he had a bin of grain to go to at pleasure from colthood to old age, he would never get foundered ; he would eat a little grain and take as much grass and water as would be promotive of his health. Even the choice of the dog is so strongly fixed in instinct that though he may be compelled to eat the highly-seasoned meat of his master, or go without, he eats it under protest with long teeth, but instinctively returns to nature whenever he can have the opportunity of eating meat that is neither salted nor peppered, nor smeared with mustard or Worcestershire sauce. Man having reason to adapt him to all places and conditions, can substitute one kind of food for another, and with this liberty, through the action of reason, his instincts are modified. Pope says of reason and instinct, " This must go right, the other may go wrong ;" hence man forms artificial appetites ; he becomes accustomed to coffee, alcoholic liquors, opium, arsenic. Animals can hardly be taught habits of appetite from which they will not instinctively recoil to nature as soon as they have liberty to do so. Man forms a habit which becomes his master, and often overcomes his reason and makes him a slave, therefore men need to be educated and trained in reference to their food and all their dietary habits. The way to do this is to train up children in the way they should go, " so that when they are old they will not depart from it." The injunction is to train but not instruct entirely, it means instruction and practice combined.

A simple, nutritious diet, which contains all the elements required for health, strength, and longevity, should be selected, and children should be reared in the habit of eating such appro-

priate food. If this were done, nine-tenths of all the intemperance which curses and scourges the human race would, at a single blow, be swept away. Children of five years of age, and even younger, will demand the Worcestershire sauce, the chow-chow, the pepper, the vinegar on their food, and, if they see their parents and grandparents use them, why should not they call for them? They must have their coffee and tea, they must sip their wine, lager-beer, or ale like their elders, and thus they are perverted in appetite and constitution from the very cradle; thus their nervous system is kept in a state of irritation and excitement, their digestive system is deranged, and the children by inheritance and by practice are early ruined in health. Many a little child of eleven years of age has confirmed dyspepsia, and it is no wonder that the human race should be short lived, and that life to most persons should be "a vale of tears and sorrow."

If animals were fed as badly as children are they would have similar complaints. Occasionally animals are thus treated, poodle-dogs for instance, and they suffer from dyspepsia and nervous irritability and untimely death, (if an early death of a poodle is untimely.) So prevalent indeed is dyspepsia and other chronic diseases in the poodle family, that in New York a shrewd dog-doctor makes his fortune by treating the dear pets of wealthy ladies. A lady will come in her carriage with her sick dog, with a lace-fringed pillow for his bed, and a pound of candy for his delectation, with orders to procure more when that is gone. The dog-doctor keeps the poodle on the bare floor and makes him gnaw bones for a fortnight, when behold his dyspepsia is gone, his sore eyes have become cured, and he is as bright as ever. He is as sprightly as a cricket, and so happy to see his mistress; she pays twenty dollars for two weeks' treatment, and takes her darling home and feeds him on cake and candy, to come back at

some future time to receive the skilful treatment of the dog-doctor.

We are aware that dogs and children are not organised to eat precisely the same food ; meat is the natural food of the dog, while a human being can flourish on a mixed diet of meat, vegetables, fruits, and farinacea. But wealthy and intelligent people who will so far violate known laws as to keep a poodle-dog on cakes, coffee and the like, will not be very apt to respect the known laws in regard to children.—From *Science of Health*, New York.

THE HOG, AND THE HOG EATER

We are taught by Nature and Science that a certain class of animals were created to subsist on the refuse matters and decomposing bodies of other animals. They maintain a proper equilibrium between the two great kingdoms of vegetable and animal life. They promote the requisite changes of the primary elements, which successively become the constituents of vegetable and animal organisations. In the sea or on the land—wherever there is decaying matter—these useful creatures may be found at the work Nature has assigned them. But for them the ocean would in time become a vast putrid pool, and the very atmosphere would be transformed into a great pestilential effluvium. They are called *scavengers*. Their mission is to purify. Their food is the filth and nastiness of the earth ; and in their service to the human family, we have another overwhelming proof of Divine wisdom and benevolence. They constitute no part of our natural and proper food, and it is only through depravity of our taste that we become the gross gormandisers of their filthy carcasses

But of all the four-footed scavengers, we consider the *hog* the most disgustingly loathsome. He is the very essence of the quintessence of filth. The odious excretions and putrescent matters on which he delights to glut himself, are scarcely more offensive to our palate and olfactories. We can indeed not think of the great service of scavengers without a feeling of thankfulness, but spare us from subsisting on the filthy creature who stands in the foremost rank of his class. Verily, the hog is an abomination! And yet there are many good Christians who consider his flesh, blood, grease, and even his very entrails, the daintiest luxuries of their tables. Oh! how can they be so cannibal-like, so beast-like, so scavenger-like, so hog-like! Have they no compunction of conscience when the morbid humors and foul secretions of the unclean beast is between their teeth? Do they never pause to reflect that Nature, Science, and Revelation do not sanction the filthy practice?

Let us go to the pen where the imprisoned hog undergoes the process of fattening. See, there he lies, the stupid, gluttonous beast, with his snout buried in his own filth, and so fat that he can hardly walk. At every breath he inhales some of the foul emanation from his offal. What a picture! Now, it is one of the inflexible and self-evident truths of physiology that an animal thus fattened is *diseased*. For the want of proper health-promoting conditions, morbid matters accumulate, and prevent the healthful performance of the various vital functions and processes. Health under such unfavourable circumstances is impossible. Look into the swill-barrel—it is full of the foulest matter. The strong sour stench that greets your nose, indicates fermentation—a *rotting process*. See how it attracts swarms of maggot flies! They revel in such corruption. How can an animal like the hog constantly live on such putrid food and be healthy? He is indeed

by nature a scavenger, but nature never designed him to be cooped up and live all his days in his own excrement, and then be stuffed daily with such abominable slop. Perhaps, reader, you are a flesh-eater, and are among those who classify man with the omnivorous portion of the animal kingdom. Then you must regard the hog as an intimate relation. You must claim for him and yourself a physiological and anatomical adaptation to the same kind of aliment. Well, if you believe you are so very much alike, suppose now you were penned up like that hog, and fed two or three times a day out of that nauseous swill-barrel. Ah ! such talk disturbs you about the epigastrium ! You have a very delicate stomach, I must confess, especially for a *hog-eater*. Well, I will not press you to imagine yourself in the hog's place—but let us take another look at your omnivorous relative. Just reach in your hand and scratch him. His whole body is covered with scabby matter, and he will highly enjoy your scratching—just as you would if your skin was in the same condition. As his entire cutaneous surface is diseased, it cannot half perform its depurating function. The liver is consequently burthened with extra work. It has more than it can do, and soon becomes *enlarged*, and when he is butchered you will also find his entrails tender and easily torn. In fact, the foul-fed mass can scarcely resist putrefaction ! If he were not killed with the knife, he would certainly die of disease ! Scrofula kills thousands ! Say, dear reader, can you live on such a diseased carcass, and have pure blood and healthy secretions ?

It is a fact I believe generally understood by the intelligent, that the nature of man depends somewhat on the aliment he uses. Now pork forms a staple food in this country. It is the working man's *main* meat. Every household has its pork-barrel. In some sections the inhabitants live almost on "*pork* and beans ;" in

others the favourite dish is “*ham and eggs* ;” and with us nothing is relished better than “*speck and sour kroust*.” Our cooks scarcely prepare a dish in which *grease* is not the principal ingredient. Our pies and cakes are *shortened* with it ; our mush and potatoes are *fried* in it ; our pans, griddles, and bread are *greased* with it ; and your gravies are nearly all *grease* ! Our tables are nearly always loaded with *sausages, worsts, boiled ribs, pig’s feet, souse, pon-hos*, or something in the hog line. Why, indeed, almost the first thing our children learn to grasp in their clutches is *pig-tail*. Is it any wonder then that foreigners should call Americans “*hoggish* !” Like causes produce like results. This is as true physiologically, as in any other branch of physics. If, therefore, we live on such grovelling and sensual beasts, we are truly just as “*hoggish*.” And the *biggest hog*, we think, is the *biggest hog-eater* ! He may well claim to be a near relation !

If I were to advocate exclusive *vegetarianism*, on moral grounds, the Christian reader, if a hog-eater, would no doubt appeal to the Holy Bible and show me the *permission to eat animal food*. When you make such an appeal I dare hardly question that you regard the sacred volume as your rule of practice. Why then defile your prayerful mouth with swine’s flesh ? or I may add, even with the blood, or fat, of any animal ? Was not the flesh of the hog considered an abomination, and its use specially prohibited for physiological reasons ? Are not those reasons as good to-day as they were in the days of Moses ? I think it is possible that you have, in this particular, a little more regard for your depraved stomach than you have for your Bible. How easy the ejaculation slides from your greasy lips that “the Bible does not forbid meat-eating.” Most sanctimonious gormandiser of hog meat ! How meekly and humbly you convert your stomach into a “*catacomb*” for the interment of the diseased dead. What a

picture of contentment you are, when, like some old cow chewing her cud, you deliberately masticate morsel after morsel of the unclean carcass. You think you have a right to eat hog because God told Peter to *kill and eat*. "If all manner of four-footed beasts were in the sheets, was not the hog there?" True enough. But why did Peter refuse to eat? His reply was: "*Not so, Lord; for I have never eaten anything that is common or unclean.*" He was a vegetarian I dare say. Thrice he refused. But what did the vision mean? Just this. The Jews are no better than Gentiles. All men are corrupt, but whom God hath cleansed, let no man call unclean. God is no respecter of persons. This is what he demonstrated to Peter in the vision. He used a powerful illustration, for what better type of uncleanness than all manner of beasts and every creeping thing—*especially the hog?* But Peter had too much good sense to eat of his vile flesh. There are but few like him in this God-forsaken hog-eating generation. And it was no more God's will that he should eat hog, than it was that Abraham should kill Isaac, though His command was as positive in one case as in the other.

Sad comment, indeed, on the genial and purifying influences of Christianity. The great obstacle to moral reform is *sensualism*, and one of the most revolting forms of sensualism is hog-eating. Man has arrogated to himself the title of "Lord of Creation," but how much more truly is he the "Scavenger of Creation." Dr. Adam Clarke, who abhorred swine's flesh and tobacco, once said: "If I were to offer a sacrifice to the devil, it should be a roasted pig, stuffed with tobacco." At another time, when invited to ask a blessing at a table, on which there was a roaster, he solemnly said: "O Lord, if thou canst bless under the Gospel what thou didst curse under the Law, bless this pig." Verily, the sacrifices to the devil now-a-days are numerous. Oh, how he

must delight in the brutalising and degrading effects of our swinish carnalism ! To prove that the practice of feasting on hog is unfavourable to spirituality and intellectual development it is only necessary to point to the abject arguments used in vindication of the demoralising practice. For instance, in conversation with a hog-eater, who claims some distinction because he is the possessor of a "sheep-skin," which he *bought* at some Medical College, I was asked, "If we abandon the use of flesh-meat, what in the world would we live on ? and besides, what would *become* of all the hogs ?" Oh, dear ! The idea of making room in our stomachs for hogs, that *we* may monopolise more room on the earth ! Talk of progress ! Fie ! Flesh has again "corrupted his way" as bad as in the days of Noah !—*New York Herald of Health*.

RESTLESS NIGHTS.

Some persons "toss and tumble" half the night, and get up in the morning weary, unrefreshed, and dispirited, wholly unfit, either in body or mind, for the duties of the day ; they are not only incapacitated for business, but are often rendered so ungracious in their manners, so irritable and fretful, as to spread a gloom and a cloud over the whole household. To be able to go to bed and be in a sound sleep, an unconscious deliciousness, in five minutes, but enjoyed in its remembrance, is a great happiness, an incalculable blessing, and one for which the most sincere and affectionate thanks should habitually go up to that beneficent Providence which vouchsafes the same through the instrumentalities of a wise and self-denying attention to the laws of our being.

Restless nights as to persons apparently in good health, arise from, first, an overloaded stomach ; second, from worldly care ; third, from want of muscular activities proportioned to the needs of the system. Few will have restless nights who take dinner at midday, and nothing after that except a piece of cold bread and a sip of soft, pure water ; anything beyond that, as cake, pie, chipped beef, dough-nuts, preserves, and the like, only tempt nature to eat when there is really no call for it, thus engendering dyspepsia and all its train of evils.

Worldly care. For those who cannot sleep from the unsatisfactory condition of their affairs ; who feel as if they were going behindhand ; or that they were about to encounter great losses, whether from their own remissness, the perfidy of friends, or unavoidable circumstances, we have a deep and sincere sympathy. To such we say : Live hopefully for better days ahead, and meanwhile strive diligently, persistently, and with a brave heart to that end.

But the more common cause of restless nights is, that exercise has not been taken to make the body tired enough to demand sound sleep. Many spoil all their sleep by attempting to force more on nature than she requires. Few persons will fail to sleep soundly, while they do sleep, if they avoid sleeping in the daytime, and will go to bed at a regular hour, and heroically resolve to get up the moment they wake, whether it is at two, four, or six o'clock in the morning. In less than a week each one will find how much sleep his system requires ; thereafter give it that, and no more.—From *Herald of Health*, New York.

MORE COMFORT FOR PORK-EATERS.

We clip the following from the *Evening Post* of New York :

“ The *Buffalo Medical Journal* describes a new disease which has appeared at Cheaktawga in Erie county, of which several persons have died. It commences with a diarrhœa, and is followed by emaciation till death supervenes. The autopsy revealed the cause of death to be the presence of the worm *Trichina Spiralis* in the striated muscles. The same parasite was also shown in a sausage, of which one of the dead persons had eaten, and without doubt originated from pork. The worm was probably set free in the process of digestion, and immediately pierced the walls of the intestines, creating the diarrhœa, and passed through the peritoneum into the muscles. It is very tenacious of life, and will resist a strong heat. The parasites were found in the muscles of the dead persons in large numbers. The medical men had no doubt the use of pork as an article of diet was the cause of the disease. Tape-worm is believed to originate in a similar manner.”

FAT AND ITS USES.

Fat is popularly considered an accompaniment of youth, of health, and of happiness. Ever prone to judge by the external appearance, we confound the plumpness of youth, which springs from an abundance of healthful juices, as well as the firm, vigorous muscles of more matured years, with the stuffiness of a system that is too weak to clear itself, either on account of its own lymphatic tendencies, or of being poisoned. When the waste-matter of the muscles and the blood is not carried out, it is

tucked away for the time being in the most convenient place, which happens to be the cellular or adipose tissue. This stuffs out the skin and give the appearance of plumpness ; but it is, so far as we know, of no use whatever, except in a few cases to cushion some important organs. The brain and spinal marrow are also composed of a substance called fat, but it is very different from the fat of the cellular tissue, for they are very highly organised, while the latter is not. The brain receives much blood ; the cellular deposits almost none at all ; no more, perhaps, than enough to keep the tissue that contains them alive. Fat is not muscle ; it has no fibre. It is not bone, nor sinew, nor cartilage, nor tendon, nor skin ; it can *do* nothing ; it does nothing ; it just fills out. There is a theory that it is or may eventually be used up as food for the system, but there is no proof that this is so. In cases of starvation, the fat men do not live any longer than the lean ones, usually not quite so long. They lose weight faster. The vital powers, no longer overtaxed with disposing of superabundant nutrition, set to work to clean out the system of this waste matter. And it is done so effectively as to suggest an excellent remedy for obesity, namely, a judicious course of starvation. For obesity is a disease. The accumulation of fat is the accumulation of foulness.

ORIGIN OF FAT.

Take but a glance at the well-known origin of some kinds of fat, that of the beer-drinker, for example. The alcohol in the blood kills the living particles that carry the nutrition to the various tissues, and they turn into fat. At the same time the circulation is rendered so sluggish that the waste matter is not carried off as it usually is in the case of more fiery drinks. It is lazily tucked into the first convenient corner, and it stuffs out the

skin and rounds the contour, and the subject persuades himself that he is in high health because he is growing fat.

We are sorry to dispel the pretty little conceit with which the fat man consoles himself, that he is carrying around a stock of provisions against some fancied time of need ; but the fact is, his provisions are all spoiled, and when he is sick, or when he is starved, all hands will be obliged to fall to work and carry them out. His conceit is about as valuable as that of the tobacco-eater, who flatters himself that if he should fall into the hands of the cannibals, they would not be able to eat his body after they had taken the trouble to cook it. The idea of eating this stuff is exceedingly repulsive ; the idea of its being nutritious is exceedingly ridiculous. Yet that is a prevailing idea, and it is acted upon on a very large scale.

THE FATTENING PROCESS.

All domestic animals, before they are slaughtered for the table, are put through the fattening process. They are not usually fed with anything poisonous, like alcohol, though this is sometimes the case with distillery-fed hogs. The process in their case commonly involves the overloading of the digestive apparatus with food, and such restrictions of exercise as will prevent their working it off healthily. The consequent diseased state of the system is frequently very evident in the condition of the liver, but that does not prevent people from eating the carcass. If the liver is very bad, they throw that aside and regret the loss, but the remainder of the animal is all the richer for the fattening. The prevalent idea seems to be that the animal, after eating more than it needs, lays up the surplus nutrition for the benefit of his eater, and this fat, which is so abundant, is one of the richest deposits.

NO NUTRITION IN FAT.

Now, if fat is dead matter, it cannot afford nutrition. I know there are some pretty theories about its burning up in the system to keep it warm; but if that is true, why do not some of the animals who eat food similar to our own, and who need to keep warm, eat it too. We do not expect sheep and cows and monkeys to eat it, but why should dogs and cats refuse it?

Still men eat it, you will say, and therefore it must be good. No, that does not follow. Men eat and drink a good many things that do them no good, that they would be better off without.

But they tell us an Esquimaux can eat immense quantities of fat; fairly live on it. Well, if it were very nutritious, he could not eat immense quantities; and, besides, his eating it does not prove that it is necessarily of much benefit to him, any more than the taking of alcohol and tobacco proves that they benefit some of our near and wiser neighbours. The Esquimaux eats seal's flesh and bear's meat enough to support common men, leaving out the fat.

EATING FAT.

But suppose fat were food, who would wish to live on it and make an Esquimaux of himself? Shall we try it? If it be as nutritious as our use of it would seem to indicate, we ought to be able to make at least one comfortable meal of it. So now, what will you have—lard, tallow, goose oil, bear's grease?—one or all of them? We can serve it warm or cold; we will mould and curl and decorate it as tastefully as possible. To what will you be helped? You do not seem to eat heartily! In fact, you only taste and nibble—hardly that. You are not accustomed to such food.

Well, here is some sausage grease, such as you may have sauced your griddle cakes with some morning. Here is the top of the chicken gravy that was on somebody's table to-day. Better still, here is some fresh fish oil, just such as the Esquimaux drink by the gallon. I do not see that any of these sharpen your appetite. Do you give it up? You are "not an Esquimaux!" Well, if you were, you could not *live* on such diet.

But the doctors (some of them) say that cod-liver oil is very strengthening, fattening. *Do they?* Well, let them prove it. No, better still, you may prove it. We will get some for you if that will help you to make out a meal. You beg to be excused. It is a great pity indeed that it is no more inviting, since it is so *very* wholesome!

FAT IN DIGESTION.

On further reflection, the apologist for fat may say that it is taken as a relish, and (if he has read it somewhere) to aid digestion. Let us see how much it aids digestion. The gastric juice cannot digest it—has no power over it. Does that seem to indicate that it is good food, suited to the human stomach? It passes out of the stomach as fat still, and there is no proof that it nourishes the system in any way. But the greatest delusion of all is that of supposing that it betters the matter to coat it over or cook it into our other food, which the gastric juice must digest, if it be digested at all. So, instead of helping the digestion, the stomach is obliged to set to work with its muscular power and rub and beat the aliment to get the fat out. Some say it calls in the bile to help, but the bile and the gastric juice do not work together cordially, while the bile and the fat get up a suds. That will clean the stomach out, you say. Well, then, be consistent, and send down a scrubbing brush to help the operation.

DELUSIVE THEORIES.

Seriously, one of the most astonishing things in dietetics is the sway which fat holds over cookery, the taste, and the imagination. All sorts of excuses are invented for using it, and all sorts of benefits are supposed to be derived from it. We have not time to examine the half of them, but will mention just one, as an example. Fat is supposed to be a heat-producer in the system, necessary to keep it warm—something that will produce as much heat by combustion in the system as by burning out of it. This is taking into account the chemistry and not the vitality of the matter. Can charcoal be judged in that way? But fat is dead matter as well as charcoal. And, to support the assertion that vitality makes the difference, we have the well-attested fact that people who eat no fat keep warm even better than when they ate fat, and as well as those who eat fat.

There are many very plausible theories as to the use of fat in the system, but it is yet to be proved that it has any real value as nutrition. Theories are worth nothing unless they are proven. They are worth less than nothing when they do not harmonise with facts.—*Science of Health*.

HOW OFTEN SHALL WE EAT?

Progress! "Never too old to learn," is as true in California as elsewhere. We have just made the acquaintance of a lady nearly sixty years of age, who, having exhausted the whole bill of specifics for dyspepsia, found herself debilitated, emaciated, and discouraged. Some old numbers of a Health Journal were placed in her hands. She read them as hungry men eat bread, and

immediately adopted the “two-meal a-day system.” She followed this plan for two years, and improved all the time, but still continued to have flatulence, headaches, and periodic sick stomach.

Satisfied that the final issues of life and death were in her own hands, she determined to adopt the “one-meal-a-day system.” For one year past this white-headed mother has taken but one meal in twenty-four hours—that at noon. She says : “From the first day, I began to feel like a new being, full of spring and elasticity. I have not had a headache or sour stomach ; no ringing in the ears, or motes before my eyes. No troubled dreams or bad taste in my mouth. I work early and late. I visit and walk, and outrank in vigour and endurance all women of my age, and by far the largest number of the young women of the town and county.”

Gems and fruit, or gems and vegetables, boiled meats and roasts, taken deliberately and well chewed, are used at noon.

We saw her, and neighbours who had known her many years. They say her restoration is a marvel and wonder to them. Her complexion is clear and rosy after a walk. She sleeps well. Her muscles are firm and general health excellent.

She is well satisfied that for fifty years of her life usefulness and vigour were both impaired by taking too much food. In other words, she was all that time trying to “dig her grave with her teeth !” This may seem harsh, but it is a fact known to many people, that the best of food, taken in excess, becomes an element of death rather than of life.

Whether one meal, or two, or three best suit, each person must carefully observe and decide for themselves.

We know persons who constitutionally have a weak and slow pulse. Digestion and assimilation will be, or may be, correspondingly slow. If of sedentary habits and brain-wise active—if, as

soon as they read or converse, hands and feet become decidedly cold, then they better at least limit themselves to two meals, and a part of each should consist of crisp, dry food, to insure thorough mastication. Walking and working in the sunshine, both morning and evening, with rest in the middle of the day, will suit them best.

CASE SECOND.—A lady of forty-six years, who, by five years of regular life, taking but two meals a day, has overcome her constitutional difficulties (of a serious and complicated nature), and bids fair for a long life of useful activities. She has not taken tea or coffee in that time, or eaten food after one o'clock p.m. She has a family to care for, and a medicine-taking, coffee-drinking, sick husband to be patient with and take care of. If men, as a rule, respected their wives and mothers as much as they do a Patent Medicine Almanack, then, in these cases and thousands of others, a revolution would be effected in the habits and incentives to action of the family; new and living streams of influence would flow out to bless the world. But while husbands are found who persist in questioning the wisdom of their wives, even when this wisdom is born of experience, boys will follow their own wild ways in spite of expostulation and prayers. Girls will eat the food and drink the beverages "that father drinks, because it tastes good, and father knows just as much as mother." Sinning, they, too, shall suffer. We know these histories, where boys and girls are both ruined through lack of harmony in respect to home habits and home influences.

CASE THIRD.—A woman who for five years has steadily, faithfully, squared her every-day life by the philosophy and principles she has learned from stray numbers of Health Journals. From a nervous, weakly invalid, she has grown health-wise to be a strong, vigorous woman. She is saving for her husband in wages and

board of a servant at least six hundred dollars a year. In doctor's bills, as compared with her former life, at least as much more. Continued and confining housework consumes her vitality about as fast as she saves it; but she says her life is very pleasant now, compared with the past. Remembering that self-preservation is one of the first laws of life, and also remembering that each soul must stand or fall for itself, rejoice that these mothers have the courage to persist in the new life, and come up to the levels where there is joy and satisfaction.

That tens of thousands of desponding women may also come out of shadows into sunshine, circulate your Health Journals! Call attention to the facts and principles that suit individuals. Never grow weary in proving that God and nature are willing to bless and heal all who will obey the divine laws of health.

A PLEA FOR HYGIENIC LIVING.

“What do hygienists eat?” “What do people live on at water-cures?” Gormandiser, who lives only to eat, or Epicure, who thinks more of appetite than health or happiness, answers: “Oh, they eat bran bread, saw-dust pudding, a little fruit, and vegetables, perhaps. A kind of low diet. They don't have anything good.” “Low diet,” indeed! I object to the assertion. The “low diet” folks are those who do not live hygienically, but stuff their gastric cavities with white flour bread, saturated with butter, or mixed with the fat of swine, the filthiest portion of its putrescent carcass, dough-nuts, greasy pie, cake, pastry, old cheese, animal flesh, narcotics, stimulants, and condiments—as

salt, pepper, spices,—and many other pernicious things that the system cannot use or appropriate. And this they are pleased to call “high living.” I demur to the conclusion.

It is a serious mistake, which has cost the human family dearly, filled our land with sin, drunkenness, debauchery, and licentiousness, our bodies with the causes of disease, suffering, and premature death.

Verily, parents make drunkards and invalids of their children by the pernicious dietary called “high living.” One stimulant calls for another a little stronger, this for another still stronger, to satisfy the craving of perverted appetites which it has produced.

Many young men are led along, step by step, not duly exercising the power of self-control, ignorant of the evil effects of unphysiological habits, until tobacco, whisky, and all the vile drinks of the rum-shop are resorted to to appease the demands of perverted, abnormal bodily conditions, the result of this so-called, but false, system of “high living.” False to everything good, elevating, ennobling, and enduring, even to “a crown of life that fadeth not away.”

Oh, parents, if you would save your sons from the curse of intemperance, yourselves from grief and shame, step at once on the true temperance platform, which embraces hygiene, the basis of all true reform, and drunkenness will vanish, and humanity become elevated to a better and higher degree of existence. Reformation should begin at our tables, by discarding stimulants and condiments, and using food best adapted to the wants of the vital economy.

Who ever saw a true hygienist lying drunk in the gutter, or reeling home to abuse his family, or with a quid of tobacco in his mouth, squirting his nasty spittle in our public halls and churches, or along the side-walks where decent people travel, or with his old

pipe or cigar, poisoning the pure air of heaven, the very breath of life, and befouling his system with its impurities? Yet ignoramuses, and some good people, laugh at us hygienists because we propose to correct these enormities and abuses.

Ben Franklin did not disdain to eat "saw-dust" pudding, as you call it, or to call himself a vegetarian; and he was quite as profound as those who laugh at hygienists. But we must forgive them, they "know not what they do;"—don't know that hygiene is the art of preserving health, and that our health depends largely upon our own actions, our obedience or disobedience of the laws of Hygeia, which embrace good, wholesome food, pure air and water, exercise, sunshine, and cleanliness, which are akin to godliness.

But "what *do* hygienists eat?" They eat the very best of food that a bountiful land can afford. Instead of making a sepulchre of their stomachs and a tomb of their bellies, by devouring flesh, they find the best aliment in grains, fruits, vegetables, and that which is best adapted to the physiological wants of the body; which experience, comparative anatomy, and physiology abundantly prove. "But," says carnivora in human form, "I'd starve on that kind of diet." I answer, No; according to chemical analysis of food, it is the very best, and certainly makes the best blood, bone, muscle, and tissue, as is shown by the fact that animals and men who live on grain, fruits, and vegetables, have greater powers of endurance, and the blood of a vegetarian will not decompose, or rot, more than half as readily as that of one who lives on animal flesh. In the sayings of Graham, "Is it true that we must become associated in our dietetic habits with the hyena, the wolf, and other beasts of prey?—the vulture, the owl, the bat, and other harpies of the winged kind? Nature shudders, recoils, and answers no, in the deepest tones of loathing

and abhorrence, and points us to her beautiful mother earth, and asks us to contemplate all her bountiful bosom, and the still greater capabilities of her soil, which in our putrescent sensuality we have too long and too ungratefully neglected and despised. Talk about starving, in the very face of Heaven, when God in His infinite wisdom and goodness has given us grains, fruits, and vegetables, which may be cultivated in kind and variety without bounds, and best adapted to the physiological wants of our bodies.—*New York Herald of Health.*

REGULARITY OF MEALS.

It has been demonstrated that, at certain intervals, when food is received into the stomach, gastric juice is secreted to digest it, and that no more gastric juice is secreted than is required for the digestion of the proper quantity of food.

If a person eat twice or thrice a day, at regular periods, the gastric juice is secreted by the stomach to digest the food it has received. If, while the food is being digested, more food is introduced into the stomach, digestion, in relation to the food already in the stomach, is arrested. For instance: a person takes in the morning a piece of bread and several potatoes; now, it will take about three hours for the stomach to dispose of the food. Suppose the person, about an hour after eating this food, takes a piece of bread and an apple or two; what would happen? The digestion that was going on in the stomach would immediately stop, and not be resumed until the food that was received last was brought into the condition of the first. Suppose he took food

every hour, what would be the consequence ? The stomach would become prematurely worn out, and could do nothing perfectly—working all of the time without rest. But if the person possessed a good constitution and a large amount of vital power, he would not feel, at first, this drain upon his system, but sooner or later he would have to pay the penalty of outraged nature. For instance : a person may have a large capital in bank ; he can live upon the interest very well, but he draws upon his capital. He does not feel this drain, at first, because he has so large a bank account ; but if he keeps on, he will become, sooner or later, a bankrupt. Some persons have an enormous amount of vitality—good constitutions. It is said of these persons nothing hurts them ; they can eat and drink anything with impunity. This is a fatal mistake ; see how many years of life they are cutting off by such foolishness. If such persons live to the age of seventy or eighty, they might have reached the age of one hundred or more years, by better dietetic habits.

A person may drink liquor, use tobacco, be intemperate in all things, drunk nearly all of his later years, and live to be eighty or more years of age, while another person, who lives a regular and temperate life, dies at fifty or sixty. Now does this prove “ What is one’s meat is another’s poison ? ” Let us see. Each person is born into this world with just so much vital power. We will take, for a case, the person spoken of first. He is born into this world with a comparatively sound organisation. Now, who would not say that by taking care of his constitution from childhood onward—by being “ temperate in all things ”—he might not have reached the age of one hundred or more years ? But he abuses himself through life, not only in eating and drinking improperly, but in many things that tend to exhaust vitality, and dies prematurely.

Now we will take the other case. This person is born into this world with a poor constitution ; he inherits consumption or scrofula from his parents ; but, by living exactly right, he prolongs his life. Now, had he not taken care of his constitution, he would have lived to be only twenty or thirty years of age. The intemperate person, by taking care of his constitution, might have lived one hundred years or more, and died a natural death. But he cuts short his life twenty or thirty years, and dies at seventy or eighty, while the other person, if he had lived intemperately, might only have reached the age of twenty or thirty years ; but, as it was, he lived to be fifty or sixty.

The labourer, as all know, must have periods of rest ; but there is some difference between the work of the voluntary muscles and that of the stomach. One does not know when the stomach completes its work, or disposes of the food. But he knows exactly when he finishes his work, and while he is only half through one job, if he take some other, he has to leave the first to turn to the latter. He can do nothing completely, if he keeps on working in this manner.

One may say, " It is certainly right to eat when the appetite calls for food." In some cases it is ; not, most certainly, in all. If a person were to eat at all hours of the day, he would feel hungry at all times. This does not prove that his system needs food at all hours. Suppose a person takes three meals a day ; if he eats nothing between them, and takes them at regular periods, he will feel the sensation of hunger at the usual time of meals. He satisfies this hunger, and it does not return until his next meal-time. If he leaves off suppers for a few days, his system will become agreeably accustomed to the change, and only twice a day, at regular periods, will he feel the sensation of hunger.

A person may accustom himself to taking four or six meals a day, and at four or six times a day will he feel hungry ; or he may eat at all hours of the day, and at all hours of the day will he feel hungry. But does this prove that he should do these things ? I think not.

Why is not twice a day, or even once, enough for anyone to eat ? One may say “ a person may eat twice a day, or once, and eat just as much or more than a person who eats three times.” This may be so ; and the person who eats but twice may not eat too much, while the person who eats three or four times may.

It depends upon how much the system requires—a strong, labouring man requiring more food than a weak, sedentary person. There is certainly less danger of eating too much in taking one or two meals in the twenty-four hours, than there is in eating three or four times.—*Science of Health*.

THE DANGER OF EATING TOO MUCH.

“ Nobody ever repented of eating too little,” was the sage remark of an old gentleman on the verge of ninety, next to whom the writer had the pleasure of sitting at dinner the other night. The host was pressing him to take more, and urging him in the usual phrase, “ Why, you have eaten scarcely anything ! ” Now, it is to be assumed that the old gentleman’s words indicated one of the by-ways to good health, along which he had travelled through his long life, and to which he owed his present remarkably hearty condition ; so it was suggested to him interrogatively that he had always been a small feeder. “ Yes,” he answered, “ ever since I was two or three and twenty ; up to that time I was a weakly young fellow enough, and I used to make the great

mistake of trying to eat and drink as much as I could, in the hope of becoming strong. All my friends and the doctors backed me in my error; but, fortunately, I found it out in time, and 'knocked off'—as your modern slang has it. I gave up the idea of making myself strong, and merely strove to make myself well, and was contented with eating just as much as I could digest and no more. Of course, it took a little time and experience to discover the precise limits; I could not adopt the golden rule of always leaving off with an appetite, because I never began with one; but, by persistently erring on the right side, I got hold of one of the greatest secrets of life—the secret of knowing when one has enough—and, after a year or two, I found myself so much better that I used to find myself ready to eat a meal at any time, and by degrees actually acquired an appetite. Naturally temptation grew stronger, but I was firm. I did not behave ungratefully to my stomach and impose upon its increased powers by overloading it." Here, indeed, is the secret of a great deal that is amiss with many of us. We are in the habit of eating too much, more than our digestive powers can tackle, and that which is not assimilated, more or less poisons. The system becomes overcharged, and gives any latent tendency to disease within us every faculty for developing itself.—*Tinsley's Magazine*.

The following are good Books on the Preparation of Food, and on the Treatment of Diseases, and should be read by all:—

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HOW TO APPLY IT



PREFACE TO THIS EDITION.

SINCE writing the first edition of this work, an important change has taken place in public opinion regarding the remedial effects of water-treatment. When we commenced to lecture and write upon this subject, both auditors and readers were disposed to treat our doctrines with sneers and ridicule. This is not at all surprising—indeed it was the natural outcome of centuries of irrational teaching in regard to the nature of diseases and their treatment.

For many years medical practitioners have taught that disease is a something which must be poisoned and expelled from the human body by purgative medicines or pernicious drugs. Such teachings have been so freely promulgated that people of all classes have imbibed the idea that it is necessary to have a good “scouring out” at short intervals, to prevent diseases of a more or less malignant kind. This purging system has been carried to such an extent by some people that the coating of their stomachs has been destroyed, and the whole intestinal canal more or less inflamed and ulcerated. At the present time, however, the more intelligent part of the community, who have witnessed or experienced the debilitating

and poisonous effects of such treatment, are discarding it altogether, and turning their attention to the more rational curative process of water, which, when judiciously applied, is Nature's most powerful curative agent.

This book is written for the purpose of elucidating how water may be applied in such a way as to rid the body of the morbid humours which accumulate therein, as also to produce an equable circulation, and stimulate every organ of the body to perform its work aright, and thereby conduce to a healthy condition. The water-treatment is now appreciated by all classes and water-cure establishments are springing up on every hand. It is to be regretted, however, that at some of these hydropathic establishments beer and other intoxicants are provided and smoking permitted, and we also sometimes hear of the head physician prescribing bacon, and other rich and greasy foods, as part of the patients' diet.

It is self-evident that the first condition of cure is a pure, simple, temperate, and natural regimen, for this alone will in time relieve many diseases; and the water-treatment greatly expedites and perfects the cure. The object of the proprietors of many of these hydropathic retreats seems to be to make them into luxurious hotels, adding to the attractions of fine scenery and pure air, the means of social enjoyment, and especially a well-furnished table, the baths and other water-treatment being quite a secondary consideration to those who merely seek rest and recreation. There is a great deal of hard work connected with the effective administration of the water-treatment,

when applied on strictly scientific and hygienic principles. The benefit derived from ordinary baths is considerable, but it is much greater when accompanied with an abundance of friction by the hands of a healthy bath attendant.

Just in proportion to the thoroughness, efficiency, and discrimination in applying the baths will cures be brought about ; hence, it is not surprising that even in the present day the hydropathic system is looked upon by many as a luxurious indulgence, and more suitable for physical enjoyment than powerful to restore diseased persons to a healthy condition.

During our abode in Scarboro' we have endeavoured to carry out the water-cure treatment on a scientific basis, and we have the satisfaction of knowing that several thousands of sufferers from various diseases have been cured by the rational means employed. At the present time we are providing further facilities for applying the water-treatment more completely, so that the marvellous effects of water as a curative agent may be still better exemplified.

We trust that the additional information contained in this edition may increase its popularity, and render it of still greater practical utility to those of our readers who would avail themselves of so simple, natural, and effectual a process.

The information imparted is of such a nature that people of medium intelligence may cure themselves of ordinary ailments ; and instructions are also given by which the professional hydropathic practitioner may cure all the curable ailments to which humanity is liable.



PREFACE TO PREVIOUS EDITIONS.

THE following pages are written with a desire to give the benefit of our experience to the public, so that our fellow creatures may know how to ward off disease, and also how to recover (when lost) the priceless blessing of health by means of a simple, rational, certain, and inexpensive mode of water treatment, and not merely to display pretensions to originality and learning.

Some writers on the Water Treatment claim entire originality for their mode of administering hydropathic remedies, and they have carried their whims and fancies so far as to introduce appliances which are more novel than beneficial. We have endeavoured to steer clear of everything that would be hurtful to the human system, and have adhered to that which we have proved to be successful in restoring health. Our aim is to simplify the application of water as a curative agent rather than to mystify the reader with elaborate descriptions, latin quotations, or abstruse technicalities.

The water treatment carried out at our Hygienic Establishment at Scarborough has been remarkably

successful in curing complicated, long-standing, and dangerous diseases. We have not followed slavishly the routine of the advocates of the warm and hot water system, because our experience and observation indicate that the body is thereby enfeebled, the nerves weakened, and the system generally relaxed. Neither have we advocated the free use of mustard liver-packs, which have a tendency to debilitate both body and mind, and to do needless violence to the skin. Nor have we followed servilely in the path of those who prescribe cold water as an antidote to all kinds of disease. When cold water is applied indiscriminately and injudiciously, it has a tendency to congest the organs and to do more harm than good ; but when used in conjunction with warm water, and when scientifically applied, it has always produced the most beneficial results. The rules and directions given in these pages are such as the Author can confidently recommend as being those best suited to the varied requirements of the human system.

We have no desire to find fault with other modes of treatment, nor with any other practitioner, some of whom have done a great deal of good, and cannot be too highly eulogised, having been of great service to the human race and a blessing to humanity. They have fought ardently and manfully for Health Reform, and have exposed the absurdity of placing implicit faith in drug medication. We desire to co-operate and work harmoniously with all true Health Reformers, and to give them credit for sincerity in their mission of human redemption from the thralldom of disease.

Allopathic practitioners are, many of them, highly

educated, well trained, sincere, and able men, and are worthy of the esteem and confidence of the public. The following pages are not written with a desire to detract from their character and usefulness, neither are we wishful to conflict with their interests ; but we are anxious to be co-workers, and to assist in alleviating and mitigating the sufferings of persons who are in ill-health.

It may be urged that we are strongly opposed to drug medication, and therefore, to be consistent, we ought to be hostile to medical men who practice that to which we are opposed. This is not a portion of our creed, however ; for we have every reason to believe that medical men of experience would prescribe very little (if any) medicine to their patients, were it not for the prejudice of their patrons, who think that unless they take some nauseous medicine they cannot be restored to health. Such persons would not be satisfied with the doctor who advised the bath, or a strict dietary, out-of-door exercise, or change of air. Medical men know quite well that the majority of their patients would think that too much trouble would be entailed by taking a bath ; hence they sometimes give harmless medicines to appease the morbid desires of their patients rather than give such drugs as would retard nature in her work of restoration. This is no reason why we should be antagonistic to high-class medical men, who only give medicine when their patients demand it.

Very few of the faculty have sufficient faith in physic, however, to take it themselves. They usually resort to daily ablutions, out-door exercises, health-giving

recreations, and to a strict dietary, knowing quite well that these simple hygienic measures are far better, as remedial agents, than all the drugs named in pharmacopœia. It is true that some of the faculty are highly prejudiced against baths, and against any other system of treatment that is different to their own; as also against any class of practitioners who are outside the pale of their charmed circle. We trust, however, that the jealousy and intolerant spirit which pervades the minds of such is rapidly passing away, and that a better feeling will be engendered between all classes of practitioners before the lapse of many years.

Our sincere aspiration is that this book may contribute to the health, happiness, and well-being of the public, and that it may aid in hastening the happy time when allopathic and all other practitioners will join hand in hand, and work harmoniously together by scientifically applying water as a remedial agent for the alleviation of human suffering.





WATER, & HOW TO APPLY IT

IN

HEALTH AND DISEASE.

INTRODUCTORY CHAPTER.

HISTORICAL ACCOUNT OF BATHING.

FROM the earliest ages of the world water has been employed both internally and externally as a remedial agent. The universality of water seemed to indicate that no other substance was so likely to prove a panacea for the "ills that flesh is heir to." Water when warm, or cold, has a magical effect in soothing and invigorating the human body, and also in removing obstructions and impurities. No wonder that nearly all nations have more or less practised the water treatment, and used their best exertions to obtain and preserve a bountiful supply of this life-giving element.

We naturally turn to the East in writing a brief historical account of bathing. We read in the Bible of the daughter of Pharaoh and her maidens bathing in the Nile, and of the treasured wells of Elim. The sacred Scriptures are full of beautiful allusions to the

preciousness of water both for quenching thirst and for cleanliness. The baths of India, Rome, and Greece excite our wonder and admiration. In all nations bathing has been practised for personal cleanliness, enjoyment, or as a religious rite. The Hebrews had it prescribed by Divine direction both for bodily and spiritual purification.

The healing power of water is not a modern discovery. Physicians of ancient time lauded the virtues of water most enthusiastically. Hippocrates, Galen, Celsus, Rhazes, and other eminent "fathers of medicine," employed water extensively for the cure of many ailments. In modern times the hygienic value of water in surgical operations has been demonstrated; and the whole world is gradually coming to the belief that water is also the best drink for man.

It was not until the advent of Vincent Preissnitz, however, that water was employed as a remedial agent for all kinds of diseases, and until within the last seventy years the curative power of water was very imperfectly understood. Some of our readers will perhaps be interested with an account of Preissnitz, and how he discovered the healing powers of water. The following is from the pen of Captain Claridge :—

"Vincent Preissnitz, the discoverer of the Water Cure, was born at Grafenberg, in Silesia, October 4th, 1800. His father farmed 180 acres of his own land. Preissnitz began dabbling in the Water Cure when only twelve or thirteen years old. Having sprained his wrist, he pumped upon it and applied a wet bandage, which produced an *ausschlag* or eruption; he not knowing whether it would be beneficial or otherwise.

The question was, however, soon decided, for the sprain was cured. Finding that the same plan, in other sprains, cuts, and bruises, invariably succeeded, he recommended its adoption to his neighbours.

“ He next applied the wet bandage to swollen joints and local pains, and was gradually led to its application in gout and rheumatism. Observing that the wet bandage remained cold from want of heat in the part affected, he covered it with a dry one to prevent evaporation and to confine the heat. The appearance of eruption in many cases before the amelioration or cure, led him to suppose that there was generally some peccant or foreign matter required to be drawn out or eliminated. Thus drawn on to think and reason on the subject, his powers of invention were kept in constant activity to find new expedients for producing the desired effects in the fresh cases presented to him, until the present complete system, or science, was gradually developed and matured.

“ In treating a cut hand, in one person he found it to heal kindly, in another it became angry and inflamed ; hence he concluded that the blood of the one was healthy, and of the other impure. Reflecting on the effect of bandages and baths, in extracting and attracting heat and exciting eruptions when applied, he resorted to the elbow bath, and bandages up the arm, to relieve the hand. Other modes of treatment were progressively discovered and added.

“ When sixteen years of age, after loading a waggon with hay, Preissnitz was standing at the horse's head, whilst his companions were cogging the wheel ; before this was effected the horse struggled and overcame

him, and rushed down the hill, which was very steep. Unwilling that the animal should destroy itself, Preissnitz would not relinquish his hold, his foot caught in a bush, and he fell between the horse's feet, was dragged, trampled upon, and severely bruised. He was taken up insensible, with two of his front teeth gone, and three ribs on the left side broken ; he was carried home and a doctor sent for, who, after causing great pain by probing and punching the side, applied his remedies, at the same time prognosticating that his patient would never perfectly recover. Preissnitz, having no respect for treatment or opinion, declined the doctor's further attendance.

“ He then began to manage himself. By frequently holding his breath, and pressing his abdomen on the side of a table for a painful length of time, he forced back the ribs into their proper position. Wet bandages were constantly applied and changed, and water drank in abundance. By perseverance in these means he rapidly mended, and in twelve months his health was completely restored.

“ His own faith, and that of many of his neighbours, in the power of water was thus established, and, ere long, the peasantry from all sides flocked to him for aid. His reputation rose high and spread far and wide. Strangers from distant parts came to Grafenberg, so that he was compelled to increase the size of his house for their accommodation, and thus his establishment commenced.

“ Some thought him endowed with the power of witchcraft ; others honoured him as a prophet ; all wondering at his success in curing disease. Sponges

used by him in washing his patients were regarded as talismans—as containing within them a mysterious and marvellous power.”

Preissnitz met with considerable opposition from the legalised medical practitioners. The following sketch is from the pen of A. J. Colvin, and will be instructive, if not interesting :—

“The Medical Faculty were not slow to perceive the tendency of these discoveries to the overthrow of their unprogressive system, which had for centuries, like a pall, covered the earth. As early as 1821 the three practising physicians of Freiwaldau—Dietrich, the brother-in-law of the Burgomaster, and two brothers by the name of Gunter—formed the nucleus of a plot to destroy him. Every person to whom he had administered was secretly inquired of whether the *umschlag*, the *sponges*, or the baths, were not medicated, or whether Preissnitz did not make use of some other agent than water, or some herb, or drug, in connection with the water. Could such a fact have been established, the overthrow of Preissnitz had been certain, for in no country are the laws against empiricism more stringent than in Austria. He was thus constantly upon his guard, and his utmost ingenuity and invention were required to make water alone supply the place of every other remedy. Between the years 1821 and 1828 these physicians had him brought several times before the Syndic, or Chief Justice of the town, to answer for unlawful practice, but he was always acquitted. In the year 1828, however, the most determined effort was made to crush him. The country was scoured for witnesses, and a large number were examined, to prove

he had done them injury. Not one, however, but acknowledged he had received benefit. One, a miller by occupation, who had been cured of gout, as one of the Gunters declared, by him, on being asked, 'Who had helped him?' replied, 'Both : Gunter helped me out of money, Preissnitz out of my disease.' On being again asked 'What he paid Preissnitz?' he replied, 'Nothing ; I still owe him thanks, which I now return him for the first time.' But what availed testimony ? The Syndic was in the interests of his persecutors, and Preissnitz was impotent against their wealth and influence. He was declared to be illegally tampering with the public health, and ordered to be arrested. From a sentence so manifestly partial and unjust Preissnitz appealed to the tribunal of Brunn. This judicature reversed the judgment of the Syndic, and decided that, as it appeared Preissnitz made use of nothing in his practice except water, he was at liberty to pursue it. His persecutions did not terminate here ; the faculty still followed him ; their ancient and cherished system was in danger ; and the arrogant innovator must be silenced. He was complained of before the tribunal of Wiedenau, a neighbouring province. His accusers, however, unable to bring any proof other than such as they had before produced, the complaint was dismissed ; but he was forbidden to treat any patients out of his own district. Preissnitz replied, with spirit, that water was free to all, and he would not inquire whence the patients came. But the malevolence of his enemies was sleepless. They resolved that the matter should be brought to the notice of the court at Vienna. For this purpose, the

medical faculty there were appealed to. They interfered, and succeeded in bringing the subject before the Emperor Francis. Baron Turckheim, of the Aulic Council, together with a commission of district and staff surgeons, were appointed to proceed to Grafenberg to make investigations, and report the result. They went strongly prejudiced, both against Preissnitz and his system.

“At this time, Preissnitz had at his establishment quite a number of patients, or cure-guests, as they are universally termed at Grafenberg; and his success in curing disease, which had baffled the arts of the most eminent of the faculty, was decisive.

“The commission examined his *baths*, his *leintuchs*, his *switzens*, analysed the water, and interrogated the badedieners, or bath-servants and patients. But nothing was elicited to convict the audacious peasant. The bath-tubs were made of wood, the *leintuchs* of linen, the *switzens* of wool, the water was pure and unadulterated, gushing from the thousand springs of the mountain; and to the interrogatories the badedieners and patients replied that no agent except water was employed in the treatment. So favourable were the reports made by the commission, that he was permitted not only to continue his practice, but he was authorized to give certificates of inability for service to military officers who might place themselves under his care, with the like effect as staff surgeons; a result of the efforts of his accusers as unexpected as it was galling to them. Instead of his condemnation, which they had confidently anticipated, behold! he was exalted to an equality with themselves. This was too

much for endurance. He must be deprived at least of the countenance of the Government. In 1834, therefore, after the death of the Emperor Francis, the head of the Department of Brunn was prevailed upon to withdraw it. Preissnitz was advised strongly to make an appeal to Vienna, but, disgusted with this exhibition of petty envy, he refused. It was not long before the military, numbers of whom from all parts of Europe were now his patients, assailed the invidious interference of the authorities of Brunn. The ambassadors from the different courts at Vienna were induced to interpose, and Preissnitz was restored to the favour of which he had been so unjustly deprived. But it is a significant sign of the apprehensions entertained of the ultimate triumph of the water-cure, that, to this day, all publications in favour of it, and the establishment at Grafenberg, are expressly forbidden in the Austrian dominions, through the influence of the medical fraternity.

“Thus terminated in disaster, after thirteen years of opposition, the attempts to destroy the new system. Henceforth, its disciples have only to be true to it, to witness its final consummation.

“Preissnitz was married in the year 1828 to Miss Sophia Preissnitz, a distant relation, the daughter of the chief justice of the adjacent village of Bochmishdorf. By her he has had eight children, the eldest only being a son. This son, while an infant, died from a spasm induced by the administration of a dose of medicine; the mother and friends insisting that water was not calculated for the case. Preissnitz with reluctance yielded to their prejudices. Not anticipating

so rapid a termination, he thought he might interpose in time to save, but the fatal dose had sped its errand, and the little sufferer was beyond even the power of water. From that day to this, no medical practitioner has darkened his threshold, except to study his system, or become his patient."

We agree with Dr. Hoffman that water may be called a "universal remedy," for it is suited to all persons at all times, both in acute and chronic cases, and alike for the prevention and cure of diseases. We may safely predict that while the world lasts the value of this all-pervading element will become more and more conspicuous and appreciated.

CHAPTER II.

THE TRUE THEORY OF WATER CURE.

THE physiological effects of bathing are three-fold: First, as a means of cleanliness; secondly, as a tonic; and lastly as a delightful source of recreation and enjoyment. Let us first consider the action of water upon the skin. In our work on "Good Health and how to secure it," we have shown how important is the office of the skin in the act of breathing. When the lungs are weak or diseased the skin has to do the chief work of purifying the blood, by passing off the waste matter of the body through the pores. But this purifying process is checked when the pores of the skin are clogged with waste matter; hence the utility of water in cleansing the skin.

Most persons have experienced the soothing effects of a warm or tepid bath; but not so many we fear know by experience the bracing and invigorating action of cold water. It is unequalled as a tonic, and its action on the human system may be thus described: When the body is sponged with cold water or rained on from the shower bath, the skin shrinks and the tissues contract, causing the blood to flow to the internal organs. The effect on the nerves still further stimulates this afflux, causing a more vigorous action of the heart, and a rush of blood back to the surface of the skin. This is called "reaction," and is the main object of bathing and the test of its efficiency. The reaction causes a healthful glow on the skin and a pleasant feeling of warmth. Relief is thus afforded to the internal organs, respiration is strengthened, the heart beats more calmly and vigorously, the mental functions are enlivened, the appetite sharpened, and the whole organisation feels invigorated.

CHAPTER III.

THE PHILOSOPHY OF WATER CURE.

HYGIENIC medication by means of water is based on the principle that all curative virtue is inherent in the living organism, and that remedial agents are useful in proportion as they supply favourable conditions for the successful manifestation of that curative power. Drugs have no curative power; they only substitute one disease or class of symptoms

for another. Curative agencies exist only in such appliances as the body uses in its normal state—food, air, water, light, exercise, &c. Water cure consequently embraces a multitude of agencies. It uses what is kindred to nature, and discards only what nature rejects.

There is no philosophy in the drug system, the practice of which is destructive, not re-creative. On this point we agree with Dr. Trall, who says: “It is taught that nature has provided remedies for diseases in the things *outside the domains of organic life*. The truth is exactly the contrary. Nature has provided *penalties*—and among them sickness—as the consequences of disobedience to organic law; but she has not provided *remedies to do away with the penalties!* It is also taught that disease is an entity, a thing foreign to the living organism, and an enemy to the life-principle. The truth is exactly the contrary. Disease is the *life-principle itself at war with an enemy*. It is the defender and protector of the living organism. It is a process of purification, or, an effort of nature to remove foreign and offensive matter from the system, and to repair the damages it has done to the vital machinery. It is *remedial effort*. Disease, therefore, is not a foe to be subdued, or “cured,” or killed, but a friendly office, to be directed and regulated. And every attempt to cure disease with drug-poisons is nothing more nor less than a war on the human constitution.

“It is further taught that medicines have specific relations to the various parts, organs, or structures of the living system. This absurd notion is the groundwork of the classification of the *materia medica* into emetics,

cathartics, diuretics, &c. Now the truth is exactly the contrary. So far from there being any such special affinity between a poison and a living tissue, the relation between them is one of absolute and eternal antagonism. *The drugs do not act at all.* All the action is on the part of the living organism ; and it ejects, rejects, casts out, and expels these poisons as best it can, by vomiting, purging, sweating, &c., and the doctors have mistaken this warfare *against* their medicines for their action on the living system."

On the other hand, the treatment of diseases with natural agencies is founded on the laws of physiology, and consequently the hygienic system of water cure is reducible to rule, and capable of demonstration as being true scientific healing.

The hygienic mode of cure will be universally adopted when people become fully enlightened upon its merits. Already it forms the only valuable part of the ordinary system of medicine, which is successful just in proportion as the hygienic theory is thoroughly carried out.

It is true that certain drugs have a tendency to give relief for the time being. Chlorodyne, for instance, will relieve difficult breathing and produce sleep, yet it has a bad effect upon the system, making the mouth dry, the saliva acrid, the head to ache, and causes general debility.

It is a notable fact that many of the most eminent medical men are becoming more sceptical of the virtues of drug medication, and more disposed to trust to the powers of nature. Even the quacks who advertise their nostrums so extensively, take the precaution of prescribing certain baths in conjunction therewith ;

and when under this treatment their patients recover, the drugs unfairly get the credit instead of the baths.

A notorious pill-puffer, who advertises his nostrums as a specific for gout and kindred affections, gives strict injunctions that no alcoholic drinks must be taken while swallowing his medicines. Now it is a well-known fact that alcoholic drinks produce gout and kindred affections ; therefore when the cause is removed the effect must cease. Why not abstain from the disease-producing drinks and let the pills alone also, thus saving your money in both ways, and preserving your health ?

GENERAL REMARKS ON HYDROPATHY.

WATER-CURE treatment has now become popular, but many persons who are desirous of availing themselves of its beneficial effects, administer the water in such an absurd and impracticable manner as to do more harm than good. While lecturing in a populous district where small-pox was raging, I applied the water treatment successfully to several hundreds of cases. After this, some of the inhabitants thought themselves clever enough to apply the wet sheet pack to themselves. One poorly and venturesome lady actually damped a sheet in cold water, wrapped it round her, and then went to bed ! This, of course, gave her a cold, and made her so much worse that she was glad to call in our aid. We then gave her a wet sheet pack in the proper way, and she was surprised to experience such a wonderful change for the better in a very short

time. Mistakes are constantly made in using wet compresses, and sometimes they are put on so tightly as to impede the circulation and retard respiration, the result being congestion. Hence, it will be seen how necessary it is that hydropathic applications should be properly understood and carefully administered.

The patient should in all cases take sufficient exercise to excite a vigorous reaction after every bath. But if patients are unable to take out-door exercise, they may wrap a blanket around them and sit for fifteen or twenty minutes in the middle of the room, the doors and windows of which should be open, breathe copiously and deeply, filling the lungs full at every inspiration and emptying them completely at every expiration. This will enable the patient to take in sufficient oxygen to revitalise the blood and to warm up the body. If possible, this rest should be followed by in-door walking or gymnastic exercise, after which the windows may be closed, except for an inch or two at the top.

In cases of internal congestion, great exhaustion and collapse, without the strength to cause a reaction, the temperature of the bath should be from seventy-five to ninety-five degrees. Some inexperienced persons have applied *cold* water in such cases, which has been a source of great danger, if not of permanent injury, showing, again, the necessity of possessing a thorough knowledge of the healing art before anyone attempts to practice it.

We do not say that men and women should not apply simple remedial water-appliances to themselves and families without a thorough knowledge of hydropathy,

but we emphatically assert that it is unwise for any person to attempt to treat people who are *seriously* ill, without scientific knowledge based on experience in the water treatment, lest they do more harm than good. This opinion will be supported by the following case : A Town Councillor had a serious attack of confluent small-pox, and after three doctors had given him up as incurable, a person whom we had initiated into the practice of water cure, gave the patient several wet sheet packs, which placed him out of danger. Having to leave him for a few hours, strict injunctions were given that cold wet cloths should be applied around the neck, and changed every half-hour. During the absence of the bath-attendant the family doctor came to see the patient, and was surprised to find him so much better, but thinking he must do something towards his further recovery, he insisted on the cloths that were applied to the neck being wrung out of warm water ; and this so relaxed the patient as to cause a relapse. The bath-attendant, on his return, found the patient much worse than when he left him—in fact he was in great danger. The warm wet cloths were instantly removed, and the wet sheet pack and cold wet cloths applied as before, which soon subdued the fever, and the man is now a living monument to the efficacy of proper water treatment. Had the warm wet cloths been continued, it is questionable if the patient would have survived. We are acquainted with a number of persons who apply hot cloths in such cases, and the result is that a large percentage of those so treated die.

. Almost any person has sufficient intelligence to apply

a cold wet cloth to the throat when it is sore or inflamed, but it requires an experienced hydropathic practitioner to determine what sort of bath is necessary to bring about a cure in a many serious phases of disease ; for the treatment that might be remedial in one case would be fatal in another. It would be unwise to give a vapour or shallow bath to a man who had a very moist skin, inasmuch as more moisture would be added—and the system is already overcharged with it—and thereby throw it still further out of balance.

It would be equally unwise to give a man who has a very *dry* skin a bath which would still further dry up the fluids of the system, such as a Turkish or hot-air bath, and thereby induce to his diseased condition. Hence the necessity for science and experience in administering these baths and other water cure appliances. When the skin is very dry, it is evident that a lubricating bath is needed, such as a shallow, half, or vapour bath, or a wet sheet pack, dripping sheet, wet compress, &c. But when the skin is very moist, a hot-air, Turkish, or even a pouring bath may be taken, each of which should be followed by a cold or cool pouring, dripping sheet, shower, or douche bath, and much friction.

Again, when the patient has a very moist skin, he will throw off electricity too rapidly, and thereby debilitate the body, and render it negative to surrounding influences. In this case some astringent is necessary, and a little white wine vinegar may be smeared over the body and rubbed well in. When the patient is very weak, and troubled with night sweats, the body may be sponged over with warm water on

retiring to bed, and follow with an application of the vinegar. This will have a tendency to tone up and strengthen the body, and thereby prevent the undue loss of electricity and animal life.

THE MORNING BATH.

EVERY man, woman, and child should take a bath of some kind every morning of their lives. Very few persons, however, think it necessary to wash their entire body daily. They feel uncomfortable if they do not wash their hands and face; but why should the rest of the body remain uncleansed? The fact is that the covered parts of the body need washing even more than the exposed parts. Washing the hands and face only is too often done by indolent people, merely to appear clean and respectable. But we maintain that no one can be considered perfectly clean who does not wash the whole body daily.

HOW TO WASH THE BODY.

STARTLING as the assertion may seem, we consider that very few persons know how to wash themselves properly. It is a great mistake to lather the body with soap at first, for the soap rather clogs the pores and prevents the removal of the dirt. Little or no soap should be used, until the skin has been well wetted with water, applied by the hand, sponge, or towel.

It is no excuse for not taking a daily entire washing to say that bathing conveniences are wanting, for a cleansing and invigorating ablution can be taken in any bedroom with a quart or two of water.

The easiest method of applying water to the skin where there is no regular bath is by a sponge. A part only of the body need be wetted at a time, and it may be carried out in the following manner: First wet the hands and arms with cold water; afterwards rub on the soap and wash them clean. Then wet the head, so as to prevent effusion of blood to the brain. After this apply water to the face and neck; then use soap, and rub it freely over the parts; then rinse well with cold water before drying with a soft towel. After this apply water to the trunk, commencing at the chest, and extending the ablution all round the body as low as the hips; follow with a soap rubbing and rinsing. In this operation, if a sponge be used, dip it into the cold water and squeeze it a little, then soap only one side of it, and apply the side that is not soaped to the chest, and extend the sponging over the trunk of the body, and afterwards rub over the body with the soapy side of the sponge. When the body has been well rubbed, wring out the sponge, wash off the soap, rub the body with the bare hands, and afterwards wipe it quite dry with a rough towel. One foot may then be placed in the wash-bowl, the leg and thigh washed in the same way, and rubbed dry, especially between the toes. Serve the other leg the same, and follow with rubbing by the hands and towel, so as to produce dryness and warmth.

The object of applying water to the skin before using

soap is to prevent the soap clogging up the pores of the skin, which would be the case if the soap were applied to the face and other parts of the body before the water. Most people lather soap profusely upon their hands, and apply it to the face before the face has been first wetted with clean water ; when this is done it is very difficult to cleanse the pores of the skin. The same rule applies to washing linen. Every laundress knows that she can wash her linen much cleaner and easier by soaking it in water overnight ; but if she applied the soap before putting the clothes into the water, she would soon wash all the white out of her linen. The same principle is applicable to washing the human body.

Those who are weak and easily chilled should cover the upper part of the body with the garment worn during the day, or a dry blanket, while they wash their legs and feet. This process will occupy five or six minutes, and if the person should feel very cold after his washing, a little olive oil (if the skin is very dry), or white wine vinegar (if the skin is very moist), may be smeared over the body and rubbed well in. The olive oil will act as a lubricant, and the white wine vinegar as an astringent to the skin, thereby warding off colds, chills, &c., more especially if followed by outdoor exercise, and accompanied by copious and deep breathing. This mode of bathing is as efficacious in cleansing and toning up the body as the most elaborate bath, and should never be omitted, summer or winter.

Erasmus Wilson advises the following mode of ablution :—" Let the reader divest himself of all his

clothing, and, in the uniform of Adam, bend over his hip-bath and give his face and neck a good wash. By the side of the wash-basin the hip-bath is a small ocean, in which he can souse and snort like a sea-god. After such a wash he must feel as I did when I first tried it—that I had never had a wash before. Then, the head and face washed and dried, let him rub his soap-cake into the arm-pits and all the creases of the body, and with the hand raise a good lather; then let him sit in the hip-bath, and with a sponge, spread a stream over the shoulders and trunk, and thoroughly rinse away the soap. Next, let him stand up in the bath and flood the legs with the sponge; then soap the feet and toes with as much care as he would his hands, first one foot and then the other, still standing in the bath; then let him rinse the soap from his feet, and step out upon the woollen rug on which the bath stands. Let him take his seven feet long bath-cloth and throw it, mantle-wise, over his shoulders, and dry himself leisurely—first the arms, then the trunk, next the feet, and then the legs. Then he will be ready to admit that he has enjoyed the perfection of a bath, and regard the hip-bath with the veneration which it deserves. A gallon or two of water has given him a sense of comfort that will hardly wear off with the day. After the bath the clothing should not be put on too hastily, to give time to the air to make acquaintance with the skin.”

The same writer thus describes what he calls the right way of washing the face:—“There are many wrong ways of effecting so simple a purpose; there is but one right way. I will tell you. Fill your basin about two-thirds full with fresh water; dip your face in

the water, and then your hands ; soap the hands well and pass the soaped hands with gentle friction over the whole face. Having performed this operation thoroughly, dip the face in the water a second time and rinse it completely ; you may add very much to the luxury of the latter part of the process by having a second basin ready, with fresh water, to perform a final rinsing. And now, you will say, what are the wrong ways of washing the face ? Why, the wrong ways are :—Using the towel, sponge, or a flannel as a means of conveying the soap to the face, and omitting the rinsing at the conclusion. If you reflect, you will see at once that the hands are the softest, the smoothest, and the most perfect means of carrying the soap and employing that amount of friction to the surface, with the soap, which is necessary to remove the old and dirty scarf, and bring out the new and clean one below. Moreover the hand is a sentient rubber, a rubber endowed with mind ; it knows when and where to rub hard, where softly, where to bend, here or there, into the little hollows and crevices where dust is apt to congregate, or where to find little ugly clusters of black-nosed grubs, the which are rubbed out and off, and dissolved by soap and friction. In a word, the hand enables you to combine efficient friction of the skin with complete ablution, whereas, in every other way ablution must be imperfect. Then, as regards drying the face, a moderately and soft thick towel should be used ; a very rough towel is not desirable, nor one of thin texture. After drying, friction may be performed with the hands. In washing the face you have three objects to fulfil : to remove the dirt, to give freshness, and to impart tone and vigour to the skin.”

HYGIENIC BATHING.

SEEKERS of health and pleasure at the sea-side and inland watering places during the summer months do not always know how to bathe hygienically, so as to obtain the greatest benefit from a swim or plunge in the sea or the thermal bath, and avoid the risk of injury from a violation of hygienic laws. It may seem a simple thing to most persons to take a sea bath, but it may be done in one right way or many wrong ways. In the first place bathing should be performed at the proper time and when the body is in the fittest condition. Observance of the following rules will render bathing safe and pleasant to young and old of either sex.

- (1) Do not bathe immediately after a meal.
- (2) Never eat directly after bathing.
- (3) The best time for bathing is an hour before breakfast, mid-forenoon, or two hours after dinner.
- (4) Do not remain too long in the water.
- (5) The body should be uniformly warm at the time of bathing.
- (6) Do not bathe when very much fatigued, except a short warm bath, which is permissible, in which case retire to bed at once.
- (7) After bathing keep the body warm by exercise.
- (8) Bathing in a state of perspiration is not dangerous provided the respiration and circulation are not disturbed.
- (9) Before taking a sea bath fill the ears with cotton wadding.

When bathing is hurtful it is because the bather has broken one or more of the above rules and directions. Cramp in the legs, which is very dangerous and often fatal when the bather is in deep water, is generally caused by bathing when the body is in an unfit condition. It is a common belief that to bathe when perspiring is dangerous ; and as a preparation persons sometimes cool themselves by sitting in the shade and perhaps in a draught of chilling air, which is one of the likeliest modes of inducing cramp. Another common error is to sit in a cool room or draught of air after bathing. This sends the blood from the surface to the internal organs with such suddenness as to predispose to congestion of the brain, lungs, or liver.

Swimming is violent exercise, especially to the beginner, hence it is a mistake to remain in the water too long. An expert swimmer can exercise himself in the water for an hour with pleasure and benefit, but a novice in natation should limit himself to five or ten minutes immersion. It is safest to commence with a dip or two, and gradually increase the time and degree of exercise taken in the water.

Cheap trippers, who have little time to spare, generally overdo bathing, and often take a long journey, a full meal, and a prolonged walk, all within the space of a few hours. Those who cannot indulge in a sojourn at the sea side, and bathing in the briny ocean, may get a refreshing and cleansing bath at home in the way described in the following pages.

COLD BATHS.

THE right kinds of baths for ordinary cases are those of a temperature less than that of the body. Such baths are tonic in character, and are as much superior to all the bitters and other compounds ever concocted as light is superior to darkness. It is unfortunate that so many people are afraid of cold water ; indeed some fear even to wash their faces in cold water lest it should give them a chill ; and they scarcely dare venture to put their hands into water lower than 90 degrees of heat. When these timid people take a bath it consists of warm water rather than cold. Warm water has a very relaxing effect upon the system ; for it opens the pores of the skin and renders the body more susceptible to colds and chills.

Cold water, on the other hand, has a bracing and tonic effect upon the system. If the hands and face are washed in warm water in frosty weather the cold atmosphere affects them much more than when they are washed in cold water. It is a well-known fact that if a person rub his face with snow, it will produce quite a glow, and when he goes out into the cold air the bleakest wind will have very little chilling effect upon him. Again, warm water lowers the tone and temperature of the body, and whoever washes himself with warm water, or takes warm baths, without following with cold water, either in one form or another, will soon or late be troubled with nervous affections, general debility, and probably rheumatism, neuralgia, and kindred disorders. If a person take a warm sitz bath daily and does not follow with cold water, sciatica or

general debility of the parts would be almost sure to follow. This is one reason why we do not advise many warm or hot baths for sciatica, unless followed with an abundance of cold water and friction.

The water used ordinarily for bathing should be soft, clean, and freshly drawn. Soft water is best both for drinking and bathing; but hard water and salt water have no less invigorating, if less cleansing, qualities. We have said that the temperature of water for ordinary bathing should be considerably below that of the body. The temperature of the blood is about 98 degrees. A feeble person may have the water raised to 90 degrees, but those who are strong should use water as cold as they can bear it; in fact, the colder it is and the greater the shock the more rapid and complete is the reaction. The application of cold water to the body has the effect of driving the blood from the surface, when the nerves of sensation feel the want of this warming element of vitality they call the blood back to the surface, producing what is termed "reaction," the symptoms of which are a returning glow, redness, and delightful feeling of warmth and vigour.

Thus cold water tones up the feeling through the nerves of sensation, quickens the action of the capillaries, and invigorates the whole system; while the effect of warm water is rather lowering and enfeebling. It is true that hot water is momentarily stimulating, but its subsequent effects are debilitating; cold water, on the contrary, is for the moment chilling, but its ultimate effects are bracing and exhilarating. Cold water is only dangerous in cases of extreme exhaustion, internal

congestion and collapse, when the patient has not vitality enough to secure a reaction. Yet, even under these depressing conditions we have known cold water, when judiciously and quickly applied, produce sufficient reaction to render great benefit to the patient.

Every man, woman, and child ought to have a thorough wash all over at least once a day; and when ailing, twice a day—morning and evening—is better than once. Well or sick the daily bath should not be omitted; indeed a sick person can generally be washed into health. The best time to take the daily bath is immediately on rising in the morning. Where there is bodily debility, however, it may be postponed until an hour or more after breakfast.

We are not in favour of sickly people immersing their bodies into cold water, however—nor, indeed, any healthy person when it is very cold, as is usually the case in winter, but the cold sponge bath may be applied with decided advantage by almost every member of the community, and even cold sitz baths of short duration, from one to five minutes, have a very beneficial effect when a good reaction follows.

Sickly people are most benefited however by a combination of *hot* and *cold* water, as elucidated in these pages, but for ordinary purposes washing in cold water is far more refreshing, beneficial, and strengthening than when applied in any other way.

THE TOWEL BATH.

WE have already stated that every person should have some kind of a bath each morning on rising. If the patient is weakly and unable to rise, the body should be rubbed all over in bed with a wet towel or sponge ; the towel is preferable in such cases, because the water is retained in it and does not drip upon the bed. Let the head be wetted and the face washed, then the arms, wiping each part dry as soon as washed. The trunk of the body should then be washed, finishing with the lower extremities. It would be well to wring out the towel or sponge for each application. In most cases cold water is preferable, but if the patient feels very chilly after, then warm or tepid water may be used. There is more danger, however, in a person taking cold after a warm or tepid than after a cold towel bath.

Nervous and debilitated persons would do well to wring a towel out of cold water each night on retiring to bed, rub themselves over briskly, and follow with a dry towelling. This will equalize the circulation and render sleep more sound and refreshing. It is also a fine tonic bath when taken each morning on rising ; and those who practice it feel greatly invigorated and better fitted for the active duties of life than when it is omitted. This is perhaps the most convenient way of taking a bath ; and wherever there is a quart of water at hand, no person need be without this delicious luxury.

DRIPPING SHEET BATH.

THIS is an invaluable bath with which to commence treatment in cases of extreme weakness and of excessive dryness of the skin, especially when it has become bloodless and has lost vitality. It is a good bath for fevers, and to follow a hot air bath, wet sheet pack, or vapour bath. It may be employed as a substitute for the half bath in feeble states of the circulation, and also when it is desirable to administer active friction to the whole body.

The patient may stand either in a tub or sponge bath, dip the sheet in cold water, then draw it out and throw it over the shoulders and around the patient. The attendant should rub *over* the sheet and not *with* it, the patient at the same time exercising himself by rubbing over the sheet in front; this may be continued from one to three minutes, followed with a dry towelling.

Where there is a feeble circulation and a low temperature of the skin, the sheet may be *wrung out* of the water, and the patient may stand upon the carpet or rug provided for the purpose, having the sheet thrown over him and rubbed for a few minutes; but most patients can endure it dripping, and derive greater benefit therefrom.

In cases where there is weak vitality, the sheet should be drawn out of warm water instead of cold. In this case let the water be 100 degrees, and the sheet applied in the same manner as the cold one; this may be followed by a cool or cold dripping sheet, or with a bucket of cool or cold water flung over the body, so as to produce a good reaction, and follow with friction.

DRY RUBBING OR FRICTION BATH.

THIS is, properly speaking, a friction or air bath. The patient should have a sheet thrown over the body, and both patient and attendant should rub the surface over the sheet; this will increase the circulation in the capillary vessels of the minute glandular structure of the skin. In some cases the circulation is so sluggish that water baths cannot be borne more than two or three times a week; but this bath may be applied two or three times a day to great advantage. It would be well to give the dry rubbing sheet occasionally instead of a water bath, even to the most robust patients. Unbleached cotton sheets are the best for either the wet, or dry, rubbing sheet baths, because they are not so cold to the skin as linen sheets, while they absorb the moisture better and produce a quicker reaction.



Fig. 1.

THE WET SHEET PACK.

SPREAD a mackintosh sheet on the bed or mattress—the latter is the best—with three or four pillows

under it, so as to keep the head raised; then place three or four dry and warm blankets over the mackintosh sheet. Take a large linen or cotton sheet and wring it tightly out of cold water, spread it on the blankets, and let the patient lie down at full length on the sheet, holding up the arms so that the sheet can be folded under the arm-pits. A wet towel may be wrapped round each arm. The arms may then be folded across the chest, with the elbows projecting a little to prevent the blankets and sheets from being wrapped round so tightly as to impede respiration. One side of the blanket may be close drawn around the patient, and let it be well tucked in around the neck, so as to prevent the escape of the vapour. It should be tucked in snugly all down, and drawn tightly around the ankles and feet. The other side of the blanket should then be served in the same way, and each blanket wrapped around consecutively and tucked in carefully, after which the mackintosh sheet should also be wrapped around and tucked in tightly. A cold wet cloth should be placed upon the forehead. If the patient feels cold or chilly after he has been in this pack for ten minutes, hot water bottles may be applied to the feet and stomach, and more blankets tucked around tightly. We usually apply a hot pan to the feet whenever we give the wet sheet pack, unless the patient has strong reactive power in the system. It is not necessary to apply the hot bottles, however, in cases of high fever, small-pox, and kindred ailments; but in cases of low or typhoid fever, it is essential to apply artificial heat.

When there is but little reactive power in the system

the sheet should be wrung out of *tepid* or warm water, and the patient's feet must always be warm when the wet sheet pack is applied. If the feet are cold, place them in hot water for a few minutes, then wipe them with cold wet cloths and dry towels, and rub freely with the bare hands so as to produce considerable heat. The patient should not be allowed to remain chilly after the first ten minutes, but must be warmed by some means or other, or taken out; otherwise the pack will not do much good. Some patients cannot get up sufficient reaction; and in such cases the sheet should only reach to the ankles, but let the blankets be well wrapped around the feet as well as the body. In most cases the sensations of the patient in the pack are delightful, after the first shock of the wet sheet.

This bath is a grand equaliser of the circulation, and a curative agent of astonishing efficacy.

In fevers and small-pox the packs may be of short duration and given frequently; but in all chronic cases they should be long enough for full action on the skin.

In acute rheumatism the pack should be repeated daily, lasting from forty to sixty minutes.

In colds, lung affections, &c., the pack may be taken every other day, alternating with the blanket pack. Immediately after coming out of the wet sheet, the patient should take a pail or pouring bath, or the dripping sheet, douche, or shower bath, followed with much friction.

It is a common error in giving this pack to bind it too tightly around the patient, thus interfering with free respiration and rendering the patient uneasy. Sometimes patients have felt so oppressed in this way,

that in the absence of the attendant they have in their struggles to free themselves rolled off the bed on to the floor.

The patient should not be packed like a mummy, or bandaged like a broken limb. The object of the wrapping is attained if the air be excluded. To accomplish this purpose it is sufficient to adjust the clothing, as described, completely round the neck and feet, but it may be left rather loose about the chest. The wet sheet pack may be taken without the use of a mackintosh sheet, but in such case more blankets should be used.

Where much fever is present a cold wet cloth may also be applied to the head during the time the patient is in the pack. This wet cloth should be changed every ten minutes in cases of small-pox, fever, and kindred disorders. When it is accompanied with much thirst, frequent draughts of warm, tepid, or cold water may be drank. In the first stages of fever, when there is much heat, or a burning of the skin, the wet sheet should be wrung out of cold water; but when there is but feeble vitality it would be better to wring it out of warm water. The cold wet sheet pack should be applied during the first few days of small-pox, measles, and kindred disorders; but when the patient is feeble, or the small-pox is at its height, the sheet should then be wrung out of warm water. If the throat be also sore a piece of swansdown calico, wrung out of cold water, must be applied to the throat, covered with several thicknesses of dry flannel, and worn during the time the patient is in the pack.

THE HOT BLANKET PACK.

THE hot pack is an important healing process, and very powerful and efficient when rightly applied. Proceed exactly as in the wet sheet pack, excepting that a wet blanket should be substituted for the wet sheet. The patient should be undressed and ready to lie down the instant the wet blanket is put upon the bed, for it will be too cold in thirty seconds. Have the blanket in straight folds, so as to go readily through a wringing machine, and lay it in a tub so that it can be run through the machine without tangling; pour on boiling water, and as quickly as possible lay it straight on the bed the instant it has passed through the wringing machine, and wrap the patient in it; cover with dry blankets as described for the wet sheet pack. This pack will impart quite a hot sensation for an instant, and that will ensure a powerful reaction. Lay a cold wet cloth over the forehead, and if it feels unpleasant to the patient cover it with two or three thicknesses of dry flannel. The patient may stay in this pack for thirty minutes, and if he be very weak, one foot should be uncovered at a time, wetted by the hand with cold water and rubbed till quite dry. Rub as far up the leg as you can, without loosening the blanket too much. Cover the foot and serve the other foot and leg in the same way. Then do the arms, neck, breast, and abdomen, uncovering as little as possible at a time, and covering as soon as the scarf skin is rubbed off. The feet of the patient may then be lifted off the bed so as to hang down, and while he sits on the side of the bed, the back should be well rubbed with the bare

hands, the other parts of the body remaining covered. After this, rub the body over briskly with a towel wrung out of cold water, and follow with friction with a dry towel and the bare hands till perfectly dry and red. This bath should be given by a strong, healthy person, because it is exhausting to the operator, and the bath will be proportionately beneficial to the patient. This pack will speedily relieve a cold and hoarseness, or inflammation of the lungs, and will be more efficacious if the patient fasts for one to three days, not taking a particle of solid food, but drinking freely of warm water. This bath will be more speedy in its effects if an India-rubber sheet is placed between the dry blankets, so as to confine the steam about the person. The hot blanket pack may be used in the very first stage of small-pox, also congestion of the lungs, hoarseness, bronchitis, and kindred ailments. Where there is strength enough to withstand it, this pack may be followed with a pouring or dripping sheet bath, and accompanied with considerable friction (except where there is an eruption upon the skin) with a dry towel and the bare hands. In this case the patient should be taken out of the pack as expeditiously as possible, and the cold water applied as soon as the blankets are removed, in order to prevent chill.

THE HOT BLANKET PACK AND HEAD BATH.

IN congestion of the brain, apoplexy, &c., it is sometimes necessary to apply the bath in the following way. When the patient is in the hot blanket

pack, place the back of his head in cold water (which should be contained in a basin or bath designed for the purpose), sponge the fore part of his head with cold water, or pour cold water upon the fore and upper part of the head for ten or fifteen minutes. Wipe dry, and place over the part a cold wet cloth. Be sure and keep the extremities of the patient warm after he comes out of this pack, otherwise the congestion of the brain may be increased.

THE HALF-SHEET PACK

THIS pack is employed when the patient is too feeble and the circulation too low for the full pack, as in cases of extreme weakness, and when the vital and reactive power is very small. The advantage of this bath is that it is quickly warmed by the heat of the body. It may be applied in the same way as the wet sheet pack, with the exception that the neck and extremities are not covered by the wet sheet. It is only applied to the trunk of the body, from the arm-pits to the hips, or it may extend even as low as the knees. The dry blankets should cover the arms, neck, and extremities. Let the after treatment be the same as with the full pack, excepting in severe cases of fever, when it would not be safe for the patient to take exercise, in which case the towel bath, with water at a temperature of seventy to eighty degrees should follow while the patient lies in bed ; after which all the damp things must be cleared away and be replaced by dry ones. Keep the feet warm, and after the pack, when

the patient has returned to bed, extra blankets may be placed upon him for twenty minutes, so as to produce a reaction.

THE DRY BLANKET PACK AND WET FLANNEL PAD.

FOLD eight thicknesses of flannel, two feet long and twenty inches wide, and place them on the top of a dry blanket in such a position as to fit between the shoulders and pass over the region of the liver. The patient should lie down quickly and have the blanket folded speedily over him. Fold the remainder of the blankets quickly so as to prevent chill. When the kidneys are also affected, the wet flannel may be so large as to cover the lower part of the back. These pads are invaluable for congested liver, inflammation of the kidneys, bronchitis, and kindred disorders.

THE DRY BLANKET PACK.

THIS pack is given in the same way as the hot blanket pack, except that the blankets should be dry. It usually produces a free perspiration. Some persons will perspire in half-an-hour, while others may require from one to two hours to produce the same result. The patient should stay in this pack until he sweats; and if not very weak he may sweat from fifteen to twenty minutes. This pack is used when we wish to purify the system rapidly by the action of the skin, and where

we wish to excite this organ. It may be used alternately with the wet sheet pack in skin diseases, chronic rheumatism, bronchitis, affections of the throat and kindred ailments. Finish the same as with the wet sheet pack. This is perhaps the severest form of the water cure process, and is very seldom called for; but in some severe cases it is very beneficial in relieving the system of morbid humours. Some patients cannot endure this pack in consequence of the dry blankets irritating their skin, in which case it should be discontinued.

THE HOT WET FLANNEL PAD.

PROCURE six or eight folds of flannel, twenty inches square; wring them tightly out of hot water and apply to the part affected. These pads are invaluable for inflammation of the bowels and stomach and kindred disorders. They should be applied as hot as can be borne, and changed every five minutes until the pain subsides; after which, if the parts are very tender and chilly, apply the tepid wet calico pad, and cover with six thicknesses of dry flannel, and bandage down snugly.

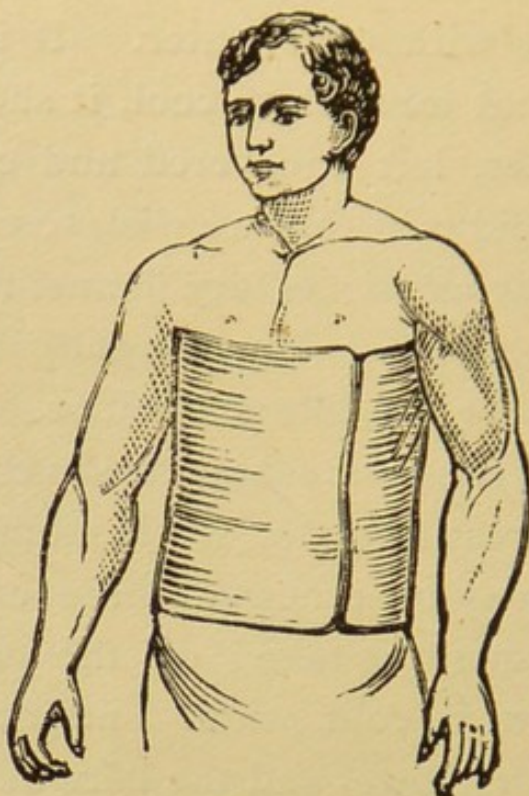
THE ORDINARY WET PAD.

THIS consists of $1\frac{1}{4}$ yards of swansdown calico, folded into four or eight thicknesses, wrung out of cold water and applied to the part affected. Cover this

with six thicknesses of dry flannel and bandage down snugly with a calico bandage. When removed sponge the parts freely with cold water. If it is simply an inflamed part that we wish to cool, it should be wrung out of cold water, left uncovered and often renewed ; but if it is a torpid part that we wish to excite to action, three or four thicknesses of dry flannel must be placed over it and bandaged down tightly with a calico bandage, so as to act like a poultice. This mode of application is of the greatest service in cases of indolent swellings, rheumatic joints, weak stomachs, sluggish livers, &c. ; it may be renewed three or four times a day, and each time it is taken off the parts should be well sponged with cold water and accompanied by friction with a dry towel and the bare hands.

Many ladies suffer from pain in the lower part of the abdomen, which may generally be cured by a wet pad being applied to the part and worn during the day ; let it be covered with several thicknesses of dry flannel and kept in its place by a girdle passing around the lower part of the trunk. When it is necessary to apply the wet pad lower down, a wet girdle does not then answer the purpose so well ; we have, however, designed an apron for fastening it in the right place, and it may be worn during the day without incommoding the patient.

THE WET COMPRESS.

*Fig. 2.*

THIS is, perhaps, the most popular and useful hydropathic appliance. It is no sooner known than appreciated. There are few ailments or casualties in which it cannot be applied with advantage, and it will often afford instantaneous relief.

ARTICLES REQUIRED.— $1\frac{1}{4}$ yards of Swansdown Calico, 6 yards of Flannel, and a Bandage, 12 yards long. If these are not accessible—a Towel, one-half of an old Blanket, and a Shawl may be substituted.

Wring the swansdown calico out of cold water, if the patient is pretty strong, but if very weak and feeble, it may be wrung out of warm water—then double it half its width, and wrap carefully around the body from the hips upwards, as seen in Fig. 2.

Cover this with four or six thicknesses of dry flannel, which should be about 4 to 6 inches wider than the swansdown calico, so as to extend a little above and

below it, as seen in Fig. 3, in order to keep in the warmth; then completely cover the wet cloth, and bandage it down snugly with a calico bandage, beginning at the bottom and working the bandage upwards, as seen in Fig. 4.

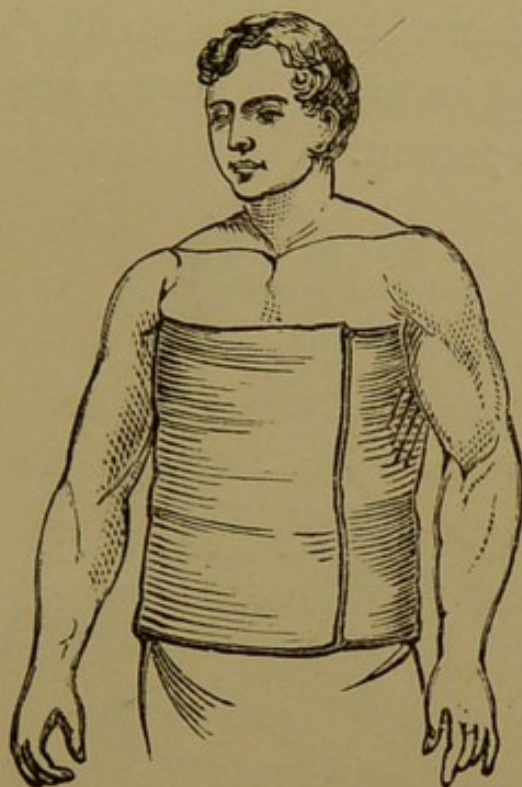


Fig. 3

Keep this on during the night, and if the parts feel chilly or cold apply more flannel, or a stomach pan filled with hot water. On rising from bed remove the compress, and sponge the parts which it has covered with cold water, and afterwards rub dry with a rough towel, and produce warmth by considerable friction with the bare hands. If the cold water is omitted the patient is likely to contract a cold, but not otherwise.

In cases of cramp, wring two thicknesses of swans-down calico out of cold water and apply it to the part affected. Cover this with four thicknesses of dry flannel, and bandage down snugly. Keep it on all night, and

next morning sponge the parts freely with cold water, and follow it with much friction. Repeat this nightly till the affection is cured.

When there is difficulty of breathing, it should not be bandaged so tightly as to impede respiration, for in that case it would do more harm than good. All bandages, packs, &c., should be given in such a way as not to be oppressive to the patient.



Fig. 4.

The compress, as above described, will aid digestion, quicken the action of the liver, assist the bowels, relieve the kidneys, and render sleep more refreshing. Mr. Constantine, in his "Hydropathy at Home," says:—"Its timely application will often save a world of trouble, suffering, and expense. It is the best possible *poultice*—a local application of the wet sheet pack. It assists digestion, quickens the action of the liver, and opens the bowels. A broad compress will produce all these effects, but when specially

intended to relieve the bowels, place it directly on the abdomen. Two or three applications, on successive nights, will generally suffice to create a healthy action, without any risk of a return of constipation, the invariable and natural consequence of the administration of purgatives. If mothers were but aware of the soothing power of a piece of wet rag, they might avoid many sleepless nights both for themselves and their offspring, for the skin of infants and children being particularly delicate, they are the more keenly susceptible of the influence of water treatment. Innumerable instances have come under observation where infants, when racked with violent pain, after the application of the compress, have gone to sleep in a few minutes."

Sometimes the wet compress produces what is called the "crisis," or a number of pimples appear upon the skin. But this never occurs where the blood is in a healthy condition. If the compresses are continued, when the crisis occurs a quantity of matter will ooze from the parts, accompanied by an itching and smarting sensation. Those who do not wish to bring out the "crisis" may discontinue the compresses for a few days, when the pimples appear, and on their disappearance the compresses may again be reapplied.

When the wet compress is applied to children, the wet cloth, or swansdown calico, should not exceed *nine* inches in width; and when applied to babies, six inches wide will be quite enough. Sufficient flannel and bandaging should be used to keep the child warm, but not so much as to produce discomfort. The wet compress is invaluable to children when teething; very beneficial to women during pregnancy, and their

importance cannot be over estimated in cases of rheumatism, dropsy, and all other affections of the nerves, stomach, kidneys, and liver.

We cannot too strongly urge the necessity for perfect cleanliness, in regard to washing the swansdown calico or towel, that has been next to the skin, every time it is taken off, and the flannel should be well aired before it is put on again.

THE WET GIRDLE.

THE wet girdle may be applied in the same way as the wet compress, with a slight difference. It should consist of three yards of the best swansdown calico, one-half wetted, doubled half its width, and applied to the skin, while the other half covers it and protects the clothing from moisture. The girdle should be wrung so as not to drip. Apply the wetted end to the abdomen, and carry the remainder round the body. This mode of fixing it will place four folds of wetted cloth in front, and only two behind ; but feeble invalids, who are inclined to chilliness, should apply the wet swansdown over the abdomen only, and cover with dry flannel.

Dr. Trall, in his work on "The Bath," says : "The wet girdle is useful in nearly all morbid conditions of the abdominal and pelvic viscera, and in almost all states of weakened, relaxed, or torpid abdominal muscles. Hence it is applicable to dyspepsia, liver complaint, constipation, affections of the spleen and kidneys, in uterine derangements, and menstrual

disorders. It is useful, also, in the early stages of cholera, diarrhœa, dysentery, gastritis, and enteritis. In affections of the kidneys and bladder, especially albuminuria, and catarrh of the bladder, it is one of the best appliances.

“The wet girdle should either be removed or re-wetted whenever it becomes dry or uncomfortably warm; and whenever removed, the surface of the body which has been covered by it should be sponged or washed with tepid or cold water.

“Mischief has sometimes been done by continuing the wet girdle too long. In some cases it has been worn day and night for months. This is all wrong, and cannot fail to debilitate the skin. When a prolonged employment of it is required, it should be occasionally omitted. It should never be worn continuously more than a week or two; and whenever the skin becomes papulous or inflamed, it should be omitted until the skin recovers the normal condition. The proper way of managing it in cases requiring prolonged treatment is to wear it only during the night, or only during the day, or every other day, or during the middle of each day. In the majority of chronic diseases it may be employed, with most advantage, from three to six hours, during the middle of each day, re-wetting it once or twice, meanwhile. In acute diseases it may be applied continuously until the symptoms which necessitated its employment have subsided.”

Whenever the wet girdle is accompanied by prolonged chilliness, it should be discontinued. If the patient be too feeble to get up sufficient heat to maintain a

comfortable sense of warmth, it should not be applied until the circulation is improved ; or the stomach pan, containing hot water, may be applied over the girdle, to produce artificial heat.

THE WET BANDAGE

is one of the easiest and simplest, if not one of the best, water cure appliances. If the throat is sore, a piece of swansdown calico, or other cloth, about four inches wide, should be wrung out of cold water and wrapped around the throat at bed-time, in two to four thicknesses ; cover this with four thicknesses of dry flannel, and bandage down tightly, and keep it on all night. Sponge the part with cold water on its removal next morning, and rub the neck briskly with the bare hands. This will generally cure a sore throat after one or two applications ; but in severe cases it should be applied nightly till a cure is effected ; in fact, it may then be worn night and day—in which case, the wet cloth must be changed morning, noon, and night.

When the wrist or any other limb has been sprained, bruised, or crushed, the wet bandage should be applied, without delay.

When the legs swell, a dry bandage about two and a half inches wide should be wrapped carefully around the leg, commencing at the ankle. When this is applied at bed time, a wet cloth, covered with dry flannel, should be placed underneath the dry bandage, but when worn during the day, the dry bandage will be sufficient. This is, also, very beneficial treatment for varicose veins.

In *acute* or *chronic rheumatism*, a wet broad bandage may be applied to the affected joints both day and night, for a week in succession ; change the wet cloths three times a day.

After the first week leave them off for a day or two—then apply them again.

If a cure is desired, the same wet cloths must not be applied a second time till they have been thoroughly washed.

HOT FOMENTATIONS.

THESE appliances are used to relieve pain or to stimulate action. Spread a mackintosh sheet upon the bed, then two blankets, on which the patient reclines. Flannels twelve inches square and four to six thicknesses should be immersed into hot water, and placed under the back and over the chest and bowels ; then bring one side of the top blanket over and lay the hot can upon it and draw the other side of the blanket over it, afterwards cover with the second blanket and the mackintosh sheet. The patient should lie quiet from thirty to sixty minutes. Afterwards wipe the trunk of the body with a towel wrung out of cold water, or have a dripping sheet, or cold or tepid wash over, accompanied by friction. Hot fomentations may be applied to the extremities by using three folds of flannel twelve inches square, immersed in hot water, wrung out, and placed upon the part affected ; this should be covered with dry flannel to keep in the heat, and renewed as often as required. This fomentation is usually continued from

ten to thirty minutes, and should be followed by a cold sponging. Fomentations when too prolonged are debilitating, and they should only be regarded as temporary expedients. They are suited to spasmodic affections, chronic inflammations attended with much pain and little heat ; they are also beneficial for all local pains, aches, cramps, gripings, contracted muscles, rheumatic affections, &c. Abdominal fomentations are serviceable in jaundice, inflammation, hysteria, obstinate constipations, &c. When the pain is very intense the flannels may be wrung out of the hottest water, especially when it does not cause perceptible pain of scalding to the patient. After the symptoms have disappeared, always follow hot fomentations with the application of cold water, laid on with the sponge or by the wet compress.

THE WET HEAD CAP.

THIS cap is frequently employed in cases of congestion of the brain, periodical headache, rush of blood to the head, inflammation of the brain, &c. It consists of two or three thicknesses of linen made into a cap to cover the head above the ears ; it is dipped in cold water and re-wetted whenever it becomes dry. It is useful as a temporary application, but we do not recommend its frequent use. In the majority of cases a piece of swansdown calico wrung out of cold water and applied to the head would be more beneficial, and allow the freer ingress of air and egress of vapour. In most cases wetting the head and allowing the water to

evaporate is even better than the wet cap, and is not liable to its objections. The wet head cap may be advantageously worn while taking shower or rain baths, to break the force of the water and to prevent it from doing an injury to the head.

THE CHEST AND BACK PAD.

This appliance is very beneficial in asthmatic affections, bronchitis, pleurisy, &c. The pad is made of one yard of swansdown calico, folded nicely so as to completely cover the chest. A piece of the same size should be placed on the back, extending from the neck, over and between the shoulders as low as the loins. These pieces of calico should be wrung out of warm or hot water and applied as above described, covered with four to six thicknesses of dry flannel, and fastened down with a calico bandage twelve or fourteen yards long. Let this bandage be rolled up before the process of fastening is begun, in order to facilitate its application. When the pads are put into position, as above indicated, the bandage may first be wrapped around the lower part of the body, so as to cover the bottom of the pads, and gradually raised as it is wound around the body. When it has been wrapped nearly up to the armpits, it should be passed over the right shoulder, underneath the left arm, round the body, and then over the left shoulder, and so continuing to wrap it round the body and over the shoulders until the patient feels comfortably warm. Great care should be taken to adjust the wet cloth over the shoulders, and cover them

in such a way that the cold air will not chill the parts. These pads will have a very soothing effect upon the lungs, and usually give speedy relief. Keep them on all night, and on their removal next morning sponge the parts with cold water, rub freely with a dry towel and the bare hands. Feeble persons with defective circulation should only wear these pads while walking or riding on horseback, and when taken off sponge over with water at 70 degrees.

THE COOLING BANDAGE.

This bandage is frequently used for burns, scalds, &c. It consists of a piece of swansdown calico, doubled, the size required, and repeatedly moistened *without being taken off*, and without any dry covering. It should be wrung out of tepid water and immediately applied to the burn or scald, and no blister will follow, and consequently no wound will be left.

THE CHEST WRAPPER OR JACKET.

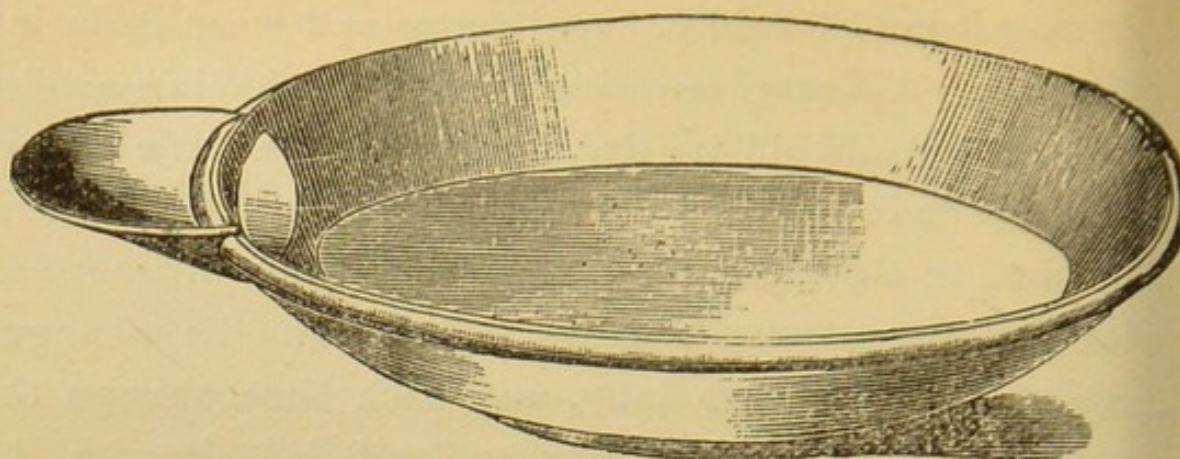
This contrivance is adapted to diseases of the chest, when the circulation is not too low. It is also applicable to asthmatic affections, incipient consumption, bronchitis, &c. It should be made of two or three folds of swansdown calico fitted with armholes and applied to the thorax, and reach from the neck to the hips. Tapes should be attached, so that it may be drawn completely round the parts and tied at the side.

Wring it out of cold or tepid water and wear it during the day. A *flannel* covering may be applied in a similar way, but it should be dry, and extend a little higher and a little lower than the wet calico. If the patient is inclined to chilliness, wet the wrapper only in front and leave it dry over the spine. This may be changed twice or three times daily, and each time sponge the parts freely with cold water and rub briskly with the bare hands, so as to get up a good reaction.

THE WET DRESS BATH.

This bath may be used by patients without the assistance of an attendant. A linen sheet or swansdown calico is made into the form of a night dress with large sleeves, and after the bed is prepared the dress is wetted and put on ; the patient then gets into bed and wraps himself in several blankets. On leaving this bath, which should not exceed one hour in duration, the cold dripping sheet may then be applied, followed with plenty of friction.

This bath has a soothing effect upon the skin where there is excessive dryness and heat.

*Fig. 5.*

THE SPONGE BATH.

The Sponge Bath is a very easy way of applying water to the whole surface of the body. It is usually applied with a sponge. The head, face, and upper part of the body are sponged and wiped dry. The lower extremities may then be served in the same way, and followed with plenty of friction with the bare hands. This bath can be taken at any time and place, and whenever desired. It has a tonic and soothing effect upon the skin, and is very beneficial as an equaliser of the circulation when accompanied with an abundance of friction. Those who are not accustomed to take any other kind of bath, should not fail to make use of the sponge bath each morning on rising.

The above is an illustration of the Sponge Bath which we usually employ when giving a sponge or pouring bath. When this bath is at hand a large sponge may be drawn out of tepid or cold water and squeezed over the head and shoulders while the patient stands or sits in the bath.

This bath is well adapted for catching the water, and for preventing a splash on the floor or carpets.

Such an appliance should be in every house, and very

few people will be without these useful articles when their value is known.

The temperature of this bath should vary from 60 degrees to 90 degrees Fahrenheit. Those who have a fair stock of vitality may take it quite cold, whilst those who cannot easily get up a reaction, or those to whom it gives quite a shock, may raise the temperature to the standard which agrees with them best, but it should never exceed 90 degrees. This bath is very beneficial whenever there is an abnormal degree of bodily heat, and in such cases may be applied every forty minutes. It is also useful in cases of nervousness, depression of spirits, sleeplessness, and kindred disorders. The time required for this bath averages about five minutes. It is better to apply it rapidly so as to produce a good reaction, than to linger over it and produce a chill, and thereby do more harm than good.

THE TOWEL BATH.

The Towel Bath is in many cases preferable to the sponge bath because its friction is more perfect and uniform. A towel from one and a half to three yards long is wrung out of cold water and rubbed briskly over the body for about two minutes. Follow with a dry towelling, and an abundance of friction with the bare hands.

This bath may be taken on rising as a substitute for the sponge bath, and in cases of nervous debility, depression of spirits, and a loss of vital energy, this bath should be taken on retiring to bed. It will render

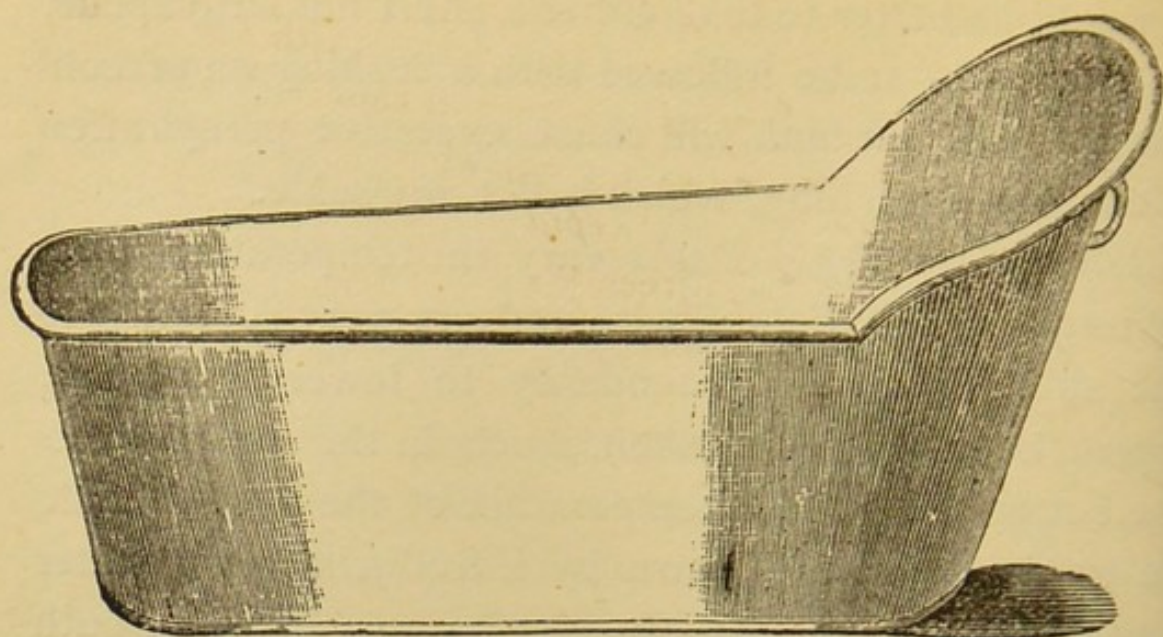
sleep more refreshing, and prevent many troublesome dreams, especially if the patient does not eat late suppers.

HOT, WARM, AND TEMPERATE BATHS.

Hot Baths are very comforting to persons who are wearied, or whose skins are very dry, and the excretory functions in a torpid condition. The usual way of taking the hot bath is to fill an ordinary bath with water from 98 to 100 degrees Fahrenheit, and get into the bath bodily. A blanket may be thrown across the bath to prevent the cold air from coming into contact with any part of the body excepting the head and face; a cold wet cloth may be applied around the head. Let the patient remain in this bath from ten to twenty minutes. Soap and brush the body well while in the water, and follow with a cold dripping sheet and an abundance of friction; or the bath may be followed by two or three buckets of cold water forcibly dashed upon the body, after which, a dry sheet should be enveloped around the person from the neck downwards, and rubbed until the body is quite dry. Some prefer to take a cold plunge on leaving the hot bath; this is very beneficial to those who possess an ordinary stock of vitality, but it would be very dangerous where there is but slight reactive power, and to persons who are subject to bronchitis and kindred affections. Those who are liable to congestion of the lungs will generally find that if they remain in the hot bath very long it will do more harm than good. When the skin is very moist

it would be better to take either a short hot air, vapour, or sitz bath, to be followed with a dashing on of cold water. The hot bath will cause excessive perspiration if continued too long, which is not advisable.

Warm and Tepid Baths vary in temperature from 85 to 98 degrees Fahrenheit, and are very soothing to the skin, and have a tendency to lower the pulse. These baths may be taken much in the same way as the hot baths, but the temperature of the water should be gradually cooled down by introducing cold water into the warm water; afterwards, a cold shower bath or a cold dripping sheet may be taken, or several buckets of cold water may be thrown over the body; this, followed by a dry rubbing, will bring to a close a most delightful bath. In hot weather, a bath from 90 to 95 degrees is very refreshing, especially at night, after perspiring much during the day; but if the temperature of the water is any higher, it will have a tendency to lower the tone of the system and to render sleep less refreshing.

*Fig. 6.*

THE FULL BATH.

PROCURE a bath pan the full length of the body, as seen in cut, Fig. 6. Pour into the bath sufficient water to cover the body of the patient, with the exception of his head, when he lies upon his back. After he has lain in the bath for five minutes, his body should be well rubbed by the hands of a healthy bath attendant, and also by his own. It will add materially to the effect of the bath if the bowels or abdomen be gently, but thoroughly, manipulated and kneaded. The temperature of the bath for ordinary purposes may commence at 95 or 100 degrees, and should be reduced down to 90 degrees before leaving, and, if convenient, follow with a cool or cold pouring bath, or dripping sheet. If neither of the latter are available the bath may be reduced to 70 degrees, by adding cold water, before leaving it.

This bath is one of the most refreshing of all baths, and also one of the most agreeable. When employed

at a low temperature (75 to 85 degrees) it is a powerful means of reducing excessive heat in fevers, whilst at 100 degrees it speedily reduces the pains of acute rheumatism; and at 98 degrees it is very beneficial in colds, especially when taken just before retiring to bed. In this case it is not necessary to follow with warm water, on conditions that as soon as the body is wiped dry, the patient gets into bed.

THE SHALLOW BATH.

THIS bath is so called on account of the small quantity of water employed. It is very useful in cases where there is but little reactive power, and when increased friction is necessary. In many cases a cold shallow bath is very beneficial, especially when there is a good circulation. It is one of the finest tonic baths known to hydropathists. It would not be advisable, however, for a weakly or debilitated person to take a *cold* shallow bath, otherwise it might do more harm than good.

HOW TO TAKE A SHALLOW BATH.

AN ordinary lounge bath may be used (Fig. 6) for this purpose. The water may be from five to eight inches deep. The patient should undress quickly, and thereby avoid any chill. The head, chest, and arms may be bathed with a towel drawn out of the water, and rubbed freely with the bare hands. Then step into the bath and rub the legs and body vigorously.

When the bather is seated, the attendant should bathe the back with a sponge drawn out of the water, and follow with a little brisk rubbing, which should be applied all round the trunk and body, and may be two to five minutes in duration, according to the nature of the case. The bather may then lie down for three or four minutes. On leaving the bath, the cold dripping sheet, or a pouring bath may be applied, a large dry sheet should then be enveloped around the body and rubbed outside of it until it has absorbed the moisture from the skin. After this, the body may be rubbed well with the bare hands until it is quite warm, dry, and comfortable. This treatment will make the skin quite red, indicating that it is charged with blood, and a feeling of renovated strength is directly experienced.

When it is not convenient to have an attendant, the bather should, as much as possible, perform the sponging and friction himself; and on leaving the bath wipe himself quite dry, rub himself freely with his bare hands, and follow with a brisk walk of fifteen or thirty minutes.

Weakly patients may take this bath from 75 to 95 degrees; and as they gain strength the temperature may be gradually reduced until they can take it quite cold.

The time for administering it should not exceed fifteen minutes. This bath is especially adapted for cases of nervous headache, feverish condition of body, rush of blood to the head, sun stroke, apoplectic tendencies, neuralgic affections, *delirium tremens*, &c.

THE HALF BATH.

This bath is simply a curtailment of the shallow bath; that is to say, the patient should have his head wetted, and then sit in a lounge bath or tub made for the purpose, with the water three to five inches deep; the trunk should then be sponged with tepid water while the patient sits in an upright position, and rubbed briskly for two minutes; a bucket of cool or cold water should then be dashed forcibly against the body and the rubbing continued, and the patient, if able, should assist in the rubbing. When sufficient reaction has been produced after this application of cold water and the friction, then a second and even a third bucket of cool or cold water may be thrown upon the body, and the rubbing continued for two to ten minutes longer, according to the severity of the case. When the patient leaves the bath let him be rubbed quite dry and wrapped in blankets should he feel exhausted; the blankets should not be wrapped tightly around him, but let him be simply covered up in bed so as to induce a comfortable warmth of the body. This is one of the most powerful means of acting upon the whole system—reducing fever, equalising the circulation, removing engorgements of the liver, spleen, and kidneys, spinal irritation, uterine diseases, and weakness or torpor of the abdominal muscles. As a rule, the temperature should range from 70 to 95 degrees. The tepid half bath is well adapted to the early stage of typhoid fever, cholera morbus, colic, inflammations of the abdominal viscera; in these cases the patient may remain in the bath from thirty to sixty minutes, provided it is so arranged as not to fatigue, chill, or over-heat him.

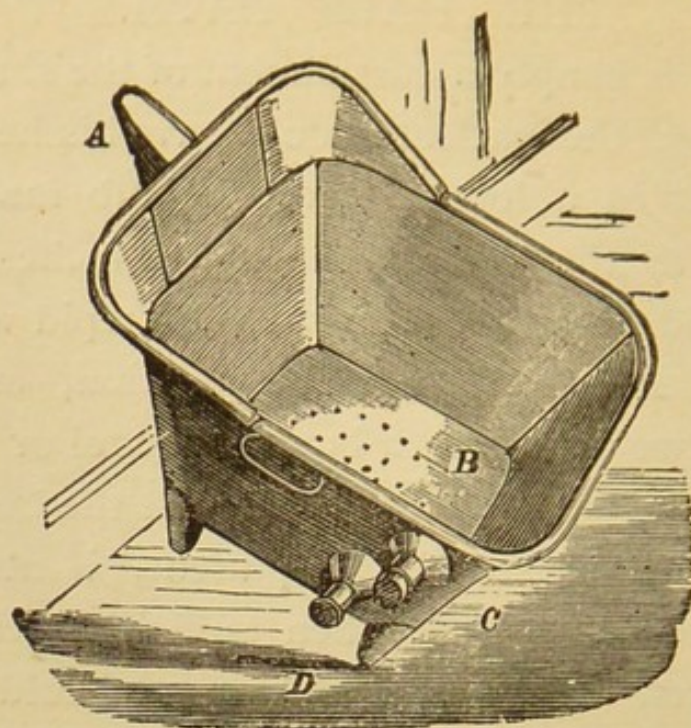


Fig. 7.

THE SITTING OR SITZ BATH.

THE sitz bath is a japanned tin vessel about fourteen inches deep in front, eighteen inches at the back, sixteen inches square on the bottom inside, and twenty-two inches in width at the front and back ; it should contain a false bottom through which cold water may flow when poured down the funnel behind ; it is not necessary to make use of this part of the bath at all times, but for piles, dysentery, congestion of the brain, &c., it is very serviceable, as will hereafter be seen.

Cold Sitz Bath.—Sit in water sufficient to cover the groins and no more. A dry blanket may be wrapped over the shoulders, legs, and feet. Remain in this for three to six minutes, and if chilly rub the abdomen and back freely with the bare hands. Follow the bath with dry rubbing and a brisk walk so as to produce a reaction. This bath is beneficial to people who have sufficient reactive power to get up a speedy warmth of

body, as also weakness of the generative organs, ovarian diseases, and falling of the womb; and may be taken for one or two minutes daily during gestation to lessen the pain and difficulty* of parturition.

Tepid Sitz.—(80 degrees) for ten minutes and reduced during the last two minutes to 60 degrees, by pouring cold water down the funnel behind, so that it may come up underneath. This bath is very beneficial for those who have a poor circulation and dry skin, or are troubled with inordinate thirst.

Running Sitz simply means a stream of cold water kept running through the bath all the time. In cases of debility the patient should sit in warm water, about 90 degrees, for one or two minutes. Then unscrew the plug at the side and pour cold water down the funnel behind, so that it may flow underneath and come in direct contact with the genital organs. The flow of cold water may be continued for two to ten minutes, according to the strength of the patient. When there is little reactive power, this method is a great improvement on the old plan of taking the cold sitz bath, inasmuch as sitting in the cold water sometimes causes weakly persons to feel cold and incapable of getting up speedy reaction; but when they first sit in warm water it has a tendency to liquify the blood and draw a plentiful supply to the submerged parts, while the cold-running sitz produces a speedy reaction, and usually makes the bath pleasant rather than disagreeable. In the early history of hydropathy, many practitioners who regarded the system solely as a *cold* water cure, applied these baths too cold and too long a time; even feeble dyspeptics were sometimes

subjected to a two-hours sitting in water at fifty degrees. This caused, as it was certain to do, sad derangement throughout the system. Taken in the form here recommended, it will strengthen the whole pelvic region and cure piles and weakness in the lower parts of the body of both sexes. It also relieves congestion and irritation of the brain, and is beneficial in cases of bronchitis and kindred affections, especially when it is accompanied with a back-sponging, and followed with an abundance of friction. During the time the patient is in this bath he should rub the submerged parts with the bare hands.

Hot Sitz.—(104 degrees.) Put sufficient hot water into the bath to half fill it, and place a foot bath in front with water at 106 degrees. Put the feet in the foot bath and then sit in the water contained in the sitz bath, wrapped from neck to feet in a warm dry blanket, a wet cloth being placed around the head. Remain in for eight or ten minutes, and if chilly, a pint of boiling water may be poured slowly against the side of the bath and the heat increased to 115 degrees. When there is very little vitality in the patient some six thicknesses of flannel may be folded into a pad, about six inches wide and twelve inches long. Wring this out of hot water, and place it over the back, and let it remain while in the sitz bath; follow with a hot and cold dripping sheet, or with the pouring bath. This is very beneficial for acute inflammation of the womb and ovaries, but it should not be too frequently applied.

Hot Sitz Bath and Back Sponge.—While sitting in the hot water (102 degrees), let the back be sponged

from the neck downwards from three to five minutes. Cold water may then be dashed forcibly upon the back, or it may be followed with a pouring bath. This is very beneficial treatment for general debility, congestion of the brain, and kindred disorders.

Dipping Sitz is a term applied to dipping the posterior part of the body a dozen or more times into cold water. This should be done slowly, and followed with friction. It is highly beneficial in cases of nervous debility or a relaxed condition of the generative parts.

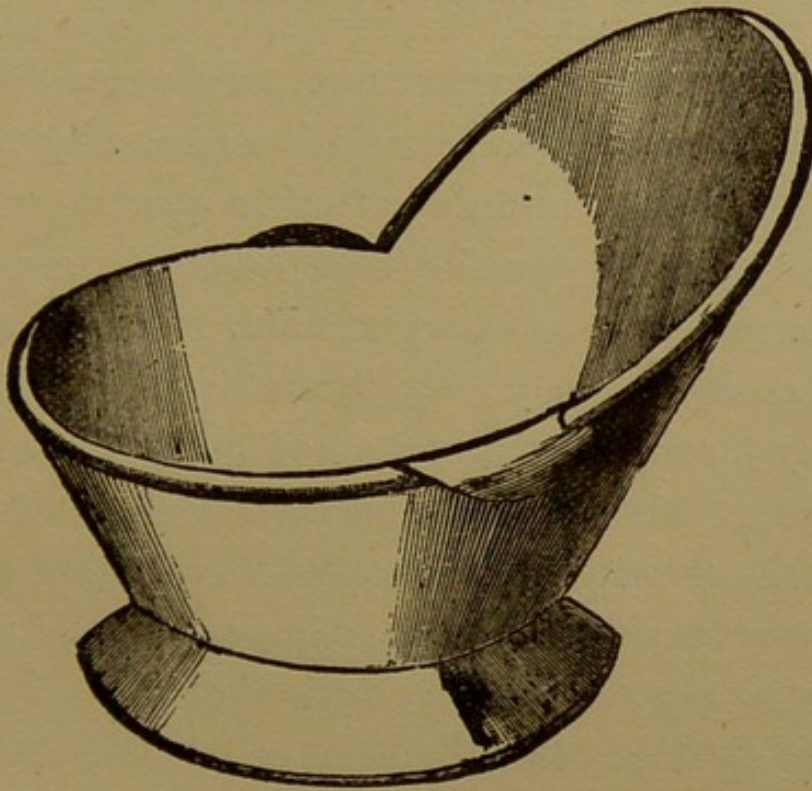


Fig. 8.

THE HIP BATH.

The hip bath is somewhat similar to the sitz bath without a double bottom. It has a higher back, and is constructed to permit the water to cover the hips. It is very beneficial in various forms of cholera, colic, liver complaints, diarrhœa, and disordered conditions

of the kidneys and bladder ; as also for uterine affections and ulcerations, mismenstruation, and sprained back. This bath is applied in a similar way to the sitz bath—and for nearly every disorder incidental to the human system, except where a greater depth of water is essential, as in sprained back, &c., it may preferably be substituted by the sitz bath, which is more convenient, occupies less space, and better adapted for home treatment.

AIR AND SUN BATHS.

The primary sustaining element of human life is the air or atmosphere, which is universally diffused throughout Nature, and unlimited in quantity. Fresh air is more necessary to life than food ; we are obliged to breathe many times every minute, but can fast from food for comparatively long intervals. Man breathes not merely through the nostrils and mouth, but through every pore of his skin ; consequently when the pores are choked up with effete matter, respiration through the millions of skin mouths is impossible. The more the body is exposed to the action of the air, taking precaution against cold, the greater will be the benefit derived from the oxygenising qualities of the atmosphere. It is not exposure to the air which causes cold, but wrapping up the body. The parts most exposed to the action of the air, as the face and hands, feel the cold the least. Thousands of people lead miserable lives of weakness and prostration because they do not breathe the fresh air of heaven through their millions of mouths.

The air-bath is most conveniently taken in the morning, instantly on rising. Open the bedroom windows to admit as much air as possible, but do not stand in a draught, then strip and rub the body with a glove or Loofah, and afterwards with the bare hands, while walking about the room, until tired; then rest for a minute and resume the rubbing. During the first week the exposure and rubbing may last five minutes; after practice a quarter of an hour of this exercise will be enjoyable and beneficial. In cold weather persons who are of a weak and chilly nature may keep part of the body covered; but the larger the surface exposed to the air the greater will be the benefit. Rub first with one hand and then with the other, and sometimes with both at once. After a few experiments with this cheap and refreshing bath, it will be enjoyed as a new pleasure and delightful rejuvenator of the blood.

Another of Nature's curative agents is *sunshine*. The sun-bath has similar effects to the air-bath, but unfortunately under the cloudy skies of our northern latitude the sun does not always shine even in summer. When sunshine is available, take the air-bath and sun-bath at the same time by letting the sunshine into the bedroom. The actinic rays of the sun have a wonderful vivifying effect upon the nude body. Walt Whitman, the American poet, gives a charmingly graphic description of the exhilarating effects he felt from the air and sun upon his nude body after a bath in the sea.

THE SUN-BATHS OF GERMANY

are deservedly popular, and many important cures of nymphomania, scrofula, nervousness, and kindred

disorders have been made thereby. The whole or certain parts of the body are exposed to the direct rays of the sun, which have a peculiar yet curative effect upon the system. As plants cannot thrive in darkness, so the light and warmth of the sun are just as essential to the health and growth of human beings. Cures made by sunshine are necessarily slow, but they may be more permanent on that account. The diet has to be regulated, as in water treatment, according to the condition of the patient.

It is not wise to expose the bare head to the ardent rays of the sun while in a state of perspiration from severe physical exercise, or sunstroke may be produced.

Sunshine as a remedial agent is not sufficiently appreciated. Exposing the nude figure to the rays of the sun will stimulate the external or superficial circulation. Our dwelling-houses have been healthier since the abolition of the tax upon glass, but more light and sunshine might still be admitted with advantage. In warm weather the body may be exposed to the sun's rays either in-doors or out, as long as the sensation is agreeable. Five to fifteen minutes, however, are sufficient for therapeutic purposes. Apply friction with the hand or towel. The sun-bath is most serviceable to scrofulous, dropsical, and plethoric persons. Children who play much in the sun are always the healthiest.

THE HOT AIR BATH.

THE hot air bath is of great antiquity, and it is perhaps as beneficial as any bath mentioned in this book. It is far preferable to the Turkish bath, especially when the patient can have the same attendance—shampooing, &c. In taking the hot air bath the patient does not inhale the hot air, as in the Turkish bath, but it affects the skin primarily, while the heat insensibly and gradually permeates the interior parts of the body.

In taking the hot air the patient undresses quickly and sits upon a chair with a padded or wooden seat, under which there has previously been lighted a gas or spirit lamp; and a pan of hot water put in front into which the feet are placed. Instantly the patient is seated the attendant places over him an inflammable robe, resting upon an iron frame-work which holds it a sufficient distance from the body to allow the hot air to come into contact with every part, the object of the robe is to retain the heat, and at the same time allow a certain degree of transpiration. This covering fits close round the neck and completely covers the patient and chair. A wet cloth is placed upon the head, which has a soothing effect and prevents the blood rushing to the brain. The patient is able to breathe freely, and there is an entire absence of that suffocating feeling which is so painful to most persons who take Turkish baths, or the ordinary box vapour bath. The patient can regulate the heat at pleasure. The inside air soon becomes so warm that perspiration commences and quickly increases, so that in fifteen or twenty minutes,

which is about the time this bath should last, the perspiration flows down the body in streams. The patient, on emerging from the hot air covering, sits on a stool in a sponge bath, and two buckets of warm water (95 to 100 degrees) are first poured over him, accompanied with soaping and brushing; after which, three buckets of cold water are thrown forcibly over the body, followed by a dry sheet rubbing, shampooing, &c. When it is not convenient to have the buckets of water thrown over the body, a cold dripping sheet, shower, or douche bath may be substituted, followed with rubbing and friction.

THE TURKISH BATH.

THIS bath has now been introduced throughout Europe. It is a great luxury, and thousands have been greatly benefited thereby. The heat employed is from 120 to 250 degrees, which produces profuse perspiration, and causes the accumulation of morbid matter to be expelled from the pores of the skin. This bath is very beneficial as a purifying and invigorating agent, and when judiciously applied it has many curative qualities. But unless used with discrimination it can easily, and frequently does cause much mischief. When a patient has congested lungs, and is troubled with bronchial affections, this bath is very beneficial when the weather is warm, or even in cold weather when the patient can remain in a warm atmosphere. When such a person remains an hour or more in a hot room, the muscular nervous power of the blood vessels will be relaxed, as

will also the respiratory functions, and it would be highly dangerous for such an individual to go direct into a cold atmosphere, either in-doors or out, because it would suddenly contract the blood vessels, and cause congestion to the already overburdened and inflamed lungs.

Some people injudiciously drink cold water while they are in the hot room of the Turkish bath. This is too sudden a change for the internal parts of the system. At such times tepid water should be drunk and cold wet cloths applied to the head. It may be said that the drinking of cold water during the sweating will have a contracting and tonic effect upon the system, but it should be borne in mind that when the internal parts are relaxed by inhaling hot air, it is not wise to suddenly chill them by drinking cold water, and afterwards relax them by breathing more hot air ; inasmuch as this has an enfeebling and damaging effect upon the respiratory and digestive organs. It is true that some persons can *endure* this violation of physiological law for some time without feeling any ill effects, but the day of reckoning will come, sooner or later, with its train of diseases. We do not object to the drinking of cold water when persons are cool, and when they have not been breathing hot air, especially when strong enough to endure it ; but thousands of healthy people have been permanently injured by drinking cold water while in a free perspiration. Some learned men are opposed to the Turkish bath in consequence of the body being exposed for too long a time to the hot air, which has an enfeebling effect upon the system. The hot-air bath is more speedy in bringing about the

desired result ; and hence it is considered by many to be more beneficial than the Turkish bath.

It is true that the hot air bath is not open to the same objections as the Turkish bath, inasmuch as the patient does not there inhale the hot air, which comes in contact only with the skin, and hence it does not relax and enfeeble the internal respiratory organs. In nine cases out of ten, however, the Turkish bath may be taken to great advantage, and is especially beneficial in cases of rheumatism, gout, congested liver, spasms, and kindred affections.

After the patient has had a good sweating in the hot room, he undergoes the process of shampooing or muscular manipulation, which materially assists in removing the impurities from the pores, whilst it calls into activity the sinews of the muscles that in many persons remain inert during the greater part of their existence. This process is highly beneficial to the human system, after which a warm and cold shower bath, and in some cases a douche bath is applied, and the patient feels to have taken a new lease of life. It should here be noted that the hot air bath answers all the purposes of the above, on condition that the shampooing and finishing treatment be as effectually applied.

The Russian Bath is heated with a combination of hot air and steam, and it is similar to the Turkish bath in its curative qualities, but it is of shorter duration.

THE VAPOUR BATH.

THE vapour bath is efficacious in colds, dropsy, rheumatism, feverishness, hydrophobia, &c. The usual way of taking this bath is by sitting in a box with the head projecting through a hole in the cover, which will lift up. The vapour or steam is introduced by means of a pipe, the tap being inserted in the box, so that the bather can regulate the heat at pleasure, and thus undergo its searching action and influence. We are not much in favour of this way of taking the vapour bath, for we feel as though we were prisoners; and we much prefer our own method of giving this beneficial bath. We seat the patient in a common cane-bottom chair, under which there is a tin vessel of water placed over a lamp or gas jets, which emits steam. The feet are put in a warm foot bath, or on flannel pads wrung out of hot water. Then two or three blankets are wrapped round the patient, from the neck to the ground, to prevent the escape of steam and exclude the cold air. When convenient, the inflammable covering, as described in the hot air bath, may be substituted for the blankets. To save time, the water may be brought to the boiling point before the patient enters. In a few minutes perspiration begins, and it should be prolonged for ten or twenty minutes. On leaving this bath, pour a bucket of warm water over the body, and accompany with a soaping and brushing. Two or three buckets of cold water then be thrown over the body, back and front, and may then be followed with a dry rubbing and friction.

If the cold water is not applied after the vapour bath

the patient is liable to take a severe cold : hence this should never be neglected, otherwise alarming results may follow. This bath has a purifying and invigorating effect upon the system when rightly applied, and is very useful where a quick and powerful action of the skin is desired, as in severe colds, chilly extremities, and dry skin. But when it is taken very frequently it has an unfavourable and debilitating effect upon the system, predisposing to the ailments which its judicious administration will mitigate.

THE LAMP BATH.

The lamp bath is given in the same way as the above, but the lamp contains only burning spirits, without water. It is efficacious in reducing fat and hardening the muscles. Mid-forenoon or mid-afternoon is the best time to take it. Apply a wet cloth around the head, and let the patient drink freely of warm water while taking it, or if this is not convenient, sips of cold water may be substituted. It is useful in cases of dropsy, and chronic liver disease. This bath is not very popular, however, with many practical hydro-pathists ; its effects are too debilitating upon the system for ordinary treatment.

WARM AND HOT BATHS.

Warm and hot baths are more cleansing than tepid or cold baths, but they are also more debilitating if too prolonged. Generally speaking, invalids of feeble

circulation cannot bear extremes of either heat or cold ; hence a temperature varying from eighty to ninety degrees is best adapted to them. At some water-cure establishments, hot, vapour, or Turkish baths are given daily even to weak and debilitated persons. Such baths have a tendency to debilitate them still more, consequently they do more harm than good. Very weak people should take but few sweating baths, and resort more freely to cool or tepid spongings, bathings, rubbing, &c.

It is true that warm bathing and the hot sweating baths, with air, vapour, spirits, or water, are useful when employed with proper discrimination, but they should never be abused. If a patient take these baths daily, the skin soon becomes so congested with blood as to lose its normal sensibility ; and the more sweating and hot baths a person takes, the more susceptible to cold will he become, especially if they are not followed by a thoroughly cold bath, as the pail or pouring bath, dripping sheet, douche, or some other efficient cold bath, so as to tone and invigorate the skin.

Dr. Trall says :—" When the surface of the body is exposed to heat many degrees above the temperature of the blood, the vessels of the skin soon become congested and engorged, and so long as the application of heat continues, the congestion will increase. Ultimately the vessels become so over-heated and relaxed that their vital property of contractibility is in a degree lost, and they remain permanently congested, with corresponding loss of function. The idea that extreme heat is in any sense re-vitalising is ridiculous. The experience of every person who labours during the

heated term, and the condition of every person who suffers from sunstroke ought to teach a different lesson."

Some water-cure practitioners assert that if a vapour or Turkish bath were taken daily, it would not signify much whether the bowels were torpid or otherwise, inasmuch as the waste matter would then be passed off through the pores of the skin. This is a dangerous doctrine, however, for every organ ought to perform its own function. If the skin was ordained to be the sole excretory organ, the Creator would not have made any other special outlet for the purpose. Moreover, thin persons, or those who are very weakly, should rarely undergo sweating processes, otherwise they will find that hot sweating baths, if taken frequently, will still further debilitate the system.

THE ELECTRIC BATH.

THE electric bath is very beneficial when scientifically applied. The patient should lie or sit in a lounge or shallow bath of a temperature of ninety degrees. Let one pole of the magnet come in contact with the feet or legs, while the other pole is applied to various parts of the body through the medium of a wet sponge held in the hand of the operator. In cases of paralysis one pole should be placed on the feet in a foot bath, while the other is applied to the spine or other parts of the body. This may be done with a sponge. The shock should at first be very gentle and pleasant to the patient, otherwise it will do more harm than good.

The battery from which the electricity is passed should be of superior make, otherwise the shocks will be too severe and interrupted. The galvanic current can produce powerful effects on the brain, spinal cord, central organs, and in contracting paralysed muscles. It is not advisable to take this bath too frequently. In the worst cases it should not be longer than ten to fifteen minutes at any one time, and not oftener than twice a week.

THE SULPHUR BATH.

THE sulphur bath is sometimes recommended for scurvy and cutaneous diseases. It is not much used by hygienic practitioners, and is not well adapted for home treatment, except when it is only required for a local disorder. It may be had, however, in many large towns and cities. Great care and judgment are necessary in the administration of this bath. It is used chiefly for skin diseases, and kindred affections. When there is considerable itching about the seat it may be greatly relieved, if not completely cured, by sitting over the fumes of sulphur a few minutes daily.

THE PLUNGE BATH.

THOSE who enjoy robust health may take the plunge bath to advantage, for it is very bracing. It has the recommendation of exercising the limbs whilst in the water, and it has an invigorating effect upon the system. It is not advisable, however, for people to stay in this

bath too long ; two to fifteen minutes is quite sufficient even in summer, and a longer period is sure to be attended with injury, even to those who have a fair stock of vitality. When weak persons remain in this bath longer than five to twelve minutes its action becomes sedative, and, by abstracting heat from the body, it destroys the regular action of the heart, lungs, and stomach, leading in some cases to cramp. Those who have low vitality should seldom or never take this bath. Cold baths of this description ought to be generally preceded by warm ones, otherwise congestion of some of the organs may ensue, especially where there is not much reactive power in the system.

THE SWIMMING BATH.

UNDER proper conditions the swimming bath is an invigorating and beneficial exercise, and with judicious regulations may be resorted to by chronic invalids, especially if the water is not too cold. Few exercises are better adapted to expand the chest and energise the abdominal muscles, and it is generally considered a very healthy and delightful enjoyment. Even those who are predisposed to consumption, or suffer from constipated bowels, may derive great benefit from the exercise of swimming, but such patients should not remain in the water more than ten minutes at any one time. Those who are desirous to learn the art of swimming should wear the inflated collar or swimming belt, which are sold for this purpose. These contrivances support the body while in the water and prevent the wearer from drowning.

SEA BATHING.

SEA bathing is very invigorating, but for hygienic or therapeutic purposes it has no advantage over fresh-water bathing in any case; in fact, there are some disadvantages connected with sea bathing. The first is that the saline matter contained in the sea water is highly irritating to the ears, and many persons who practise sea bathing have become deaf in consequence of the irritability caused by the sea water upon the drum of the ear. A patient some time ago begged our permission for him to take a sea bath. At length we yielded, giving him strict precautions not to remain in longer than ten minutes, and to be sure to put a little cotton wadding in his ears to keep out the sea water. He obeyed our instructions as regards the length of time for staying in the water, but he omitted to put the cotton wadding into his ears, and on his return he had a singing in those organs which became very troublesome. After this his sense of hearing was not so acute as it had previously been. However, the measures we resorted to for his relief answered admirably. Since this occurrence we have given strict injunctions that if any of our patients take a sea bath they must first fill their ears with cotton wadding. This misadventure induced us to make inquiries as to the effects of salt water upon the ears of other people, and we have been informed by many who have taken sea baths that they experienced the same annoyance; and many cases of deafness can even be traced to it. Many invalids go to the sea shore to bathe under the mistaken notion that there is some special virtue in the

salt or other ingredients of the sea water ; but we are convinced that the only benefit that can be derived from sea bathing, in addition to what could be gained by fresh-water bathing, is the exposure of the skin to air and sunshine, the change of scene, the novelty of the enjoyment, and the absence of home cares and business vexations. Those who have eruptions of the skin and feeble circulation should avoid sea bathing, as the irritating briny matter contained in the sea water tends to repel the humours, while fresh water has a soothing and eliminating effect. Some bathers at the sea side are accustomed to go from their sea bath and from the hot sun, when fatigued with the exercise and excitement of frolicking in the water, to the shade where the breeze is strong and chilling. This practise often produces sickness, and has a tendency to lay the foundation for many serious diseases. Sea bathers should not remain in the water more than twelve or fifteen minutes, after which they should take some invigorating exercise, and avoid going into draughts or sitting upon cold seats in the shade, otherwise their bathing will do them more harm than good.

THE RIVER PLUNGE BATH.

SOME robust people have practised river bathing the year round for many years in succession with apparent impunity, even cutting through the ice in midwinter and plunging into the freezing water. This may be very well for those who are healthy, vigorous, and robust, but all others would be injured thereby,

while to some the experiment would be dangerous, if not fatal. There is no benefit to be derived from such exposure that cannot be obtained in a more pleasant manner. This is thought to be a hardening process, and some of its advocates have laughed at me when I have pointed out its dangers, or endeavoured to convince them of its imprudence. A river plunge bath, however, is very pleasant and refreshing on a warm day, more especially when the bed of the river is sandy, and free from obstructions which would be injurious to the feet; but it must not be indulged in too long. We have known those who have practised river bathing with great benefit during the summer of each year; but when this pastime is continued during very cold weather, and where a good reaction cannot be got up, it has been attended with injury to health.

THE FOOT BATH.

THE foot bath is specially adapted to cases of chronic headache, habitual coldness of the feet, croupy diphtheria, and hemorrhage from the nose or lungs. When the head is overheated by brain work, a foot bath before retiring to bed is very beneficial. Any kind of tub or vessel large enough to admit the feet, and a gallon of water, will answer the purpose. The feet should be immersed a little more than ankle deep in water as hot as can be borne. Keep the feet and toes in motion during the bath, which should last about ten minutes, and when they are taken out dash them into cold water for half-a-minute or less, wipe dry, and rub

briskly with a dry towel and the bare hands ; after which half-an-hour's out-door exercise may be taken. This will draw the blood from the head to the feet and render sleep more refreshing, at the same time relieving the ailments above enumerated. This bath will also cure chilblains on the feet if frequently repeated.

THE FOOT PACK.

WHEN the feet are habitually cold, the foot pack will have a tendency to draw the blood to the part, and thereby equalise its circulation, especially in the extremities. Procure a piece of cotton wadding or flannel, and saturate it with hot water. Elevate the leg, and wrap the wadding or flannel quickly around the foot ; draw over it a waterproof bag, and tie it snugly around the ankle. Let it remain in for three or four hours, when the wrapping should be wetted again. Of course this only applies to a person who is too ill to take exercise. When there is sufficient strength to walk about, the foot pack may be applied on going to bed, taken off next morning, and the feet freely sponged with cold water.

WET SOCKS.

WRING a large pair of cotton socks out of cold or tepid water, and put them on the feet ; draw over them two pairs of lamb's wool or woollen stockings, and keep them on all night. Before putting on the wet

socks it would be well to take a hot foot bath, to produce warmth in the feet. On removal next morning sponge freely with cold water, and wipe dry with a rough towel. Wet socks are very serviceable when the feet are habitually cold, and when there is a tendency to headache. When there is much inflammation or unnatural heat in the feet, a waterproof sheet may be laid upon a chair, the feet placed upon it, and kept moist with warm water. Leave the feet uncovered to allow free evaporation.

THE LEG BATH.

THE leg bath is an extension of the foot bath. The tub or other vessel should be sufficiently deep to hold two or three gallons of water, which may reach to the knees. The hot leg bath does much to equalise the circulation and relieve congestion of the head, throat, and lungs. In the latter affections cold wet cloths may be applied to the head and throat while taking this bath. It is also very beneficial in gout and rheumatic swellings and chronic ulcers of the lower extremities, as also for chronic inflammation of the membrane of the knee joints. The bath should last from ten to forty minutes. At first it may be from 100 to 106 degrees; after which pour a quantity of cold water upon the legs from a bucket or a hose-pipe, and thereby produce a glowing and pleasant sensation over the whole body.

THE LEG PACK

consists of flannel pads, each 24 inches square, and of six or eight thicknesses. Wring them out of very hot water, and wrap around the legs so as to overlap at the sides. Four or six thicknesses of dry flannel may be wrapped over this, and secured down tightly with a calico bandage, commencing the wrapping at the ankle. Keep them on for fifteen or twenty minutes, then sponge freely with cold water, and rub till quite warm and dry. These pads are invaluable in cases of cramp, congestion of the brain, and kindred disorders.

The Cold Wet Cloth is very beneficial as a leg pack where there is weakness of the ankles and a dry skin. Apply a fourfold piece of swansdown calico or towelling, wrung out of cold water, around each leg and foot. A single piece of flannel may then be placed loosely over the wet cloth; cover this with a piece of waterproof cloth, and bandage down snugly with a calico bandage. Re-wet these when they become dry or uncomfortable. This treatment is also beneficial in cases of bad legs and kindred disorders.

The Hot Bran Pad.—Make a pad fourteen inches square, and fill it with bran. Dip it into hot water and apply over the region of the stomach. This is remedial in cases of cramp and severe inflammations. Keep it on for five or ten minutes according to the severity of the attack; then re-wet it, and apply it again. On its removal cover the part with four thicknesses of swansdown calico wrung out of warm water, cover with dry flannel, and bandage down snugly. Let it remain on for six hours. On removal sponge freely with cold water, and, if necessary, re-apply.

THE ARM BATH.

THE arm bath may be conveniently applied by holding the arms in water 105 degrees. We have appliances on purpose for this bath, which is very beneficial in old ulcers, inflammatory affections of the upper extremities, wounds, bruises, chronic swellings, boils, abscesses, &c. After the arms have been held in the water for ten or fifteen minutes, the parts should either be wrapped in swansdown calico wrung out of cold water, with several thicknesses of dry flannel wrapped over and bandaged tightly with a calico bandage, or the arms may be immersed into cold water for three or four seconds. This will close the pores of the skin and cause a reaction, and thereby prevent taking cold and check further inflammation.

THE HEAD WASH.

APPLY cold water to the head daily, and rub well in either with a sponge or with the hands, so as to reach the roots of the hair, and thereby remove dandruff and everything of an irritating nature. Two or three times a week the head should be washed with warm water and soap and rinsed well with cold water, and afterwards rubbed dry. Whenever I wash my face I throw water over my head, and it has a salutary effect, answering the threefold purpose of cooling and soothing the head, when the brain has been overworked; promoting the growth of the hair, and enabling it to be easily arranged; or in other words it answers for hair oil, and is far preferable to the preparations usually

sold for that purpose. Those who are subject to baldness should make it a rule to wash their heads daily.

THE HEAD BATH.

THE head bath may be administered in two different ways. First, the pouring head bath may be given when the patient is lying with his face downward, the head projecting over the side of the bed and supported by an attendant. A tub or earthenware vessel is placed under the head in order to catch the water. The water should first be warm and gradually cooled down till quite cold. Then pour cold water upon the back of the head from a pitcher for several minutes, or until the head is sufficiently cold. This kind of bath is applicable to hysteria, delirium tremens, apoplexy, cholera, and to fevers attended with a determination of blood to the head.

Another way of taking the head bath, available in acute inflammation of the brain and kindred affections, is to let the patient lie upon his back and rest the back part of his head in a bowl of cool water. A little cold water may be poured over the forehead, but it should not be allowed to pass into the mouth. In this bath apply no soap, and follow with dry rubbing. It will add to the effect if a wet compress is applied around the body as quickly as possible after the head bath has been taken.

THE DOUCHE BATH.

THE principal object of the douche bath is to arouse the absorbent system into activity. This bath is very efficacious in spinal weakness, muscular contraction, weak joints, sprained ankles, gout and rheumatic affections, chronic enlargement of the viscera, stiffness of the joints, and many other diseases. This bath consists of a jet of water passing through a flexible tube at a convenient height to admit of its being directly projected on the spine and other parts of the body. The stream of water should be from one to three inches in diameter. The force and duration of the stream must be carefully adapted to the strength of the patient, and should generally be directed to the back of the neck and along the spine, over the hips and shoulders, or to any part affected.

In cases of torpid bowels a moderate stream may be applied to the abdominal muscles ; but very nervous persons, and those subject to a determination of blood to the head, should resort to it with extreme caution. The douche should not be taken on the head, nor be long continued on any part of the spine or backbone ; though for sprained ankles and kindred affections it may be applied as long as the patient can bear it. In some cases of weakness smaller streams are beneficial, and ought not to exceed half-an-inch in diameter. In most cases it would be advisable to commence with the warm water douche and finish with cold. The small douche, applied as above, is very beneficial in neuralgic affections and extreme nervous irritability, as also in spasmodic and bilious colic.

THE EYE DOUCHE.

consists of a piece of India-rubber tubing about $4\frac{1}{2}$ feet long, with a rose at one end, and at the other a metallic pipe, which is placed in an elevated jug of water. A fine jet of water is thrown up 12 inches high, which is allowed to play upon the closed eye, the force being regulated by the distance of the eye from the jet. This is better than applying the jet close to the eye with a cup; the force in the latter case rather increases than alleviates the irritation. The eye douche may be given night and morning for two or three minutes at a time.

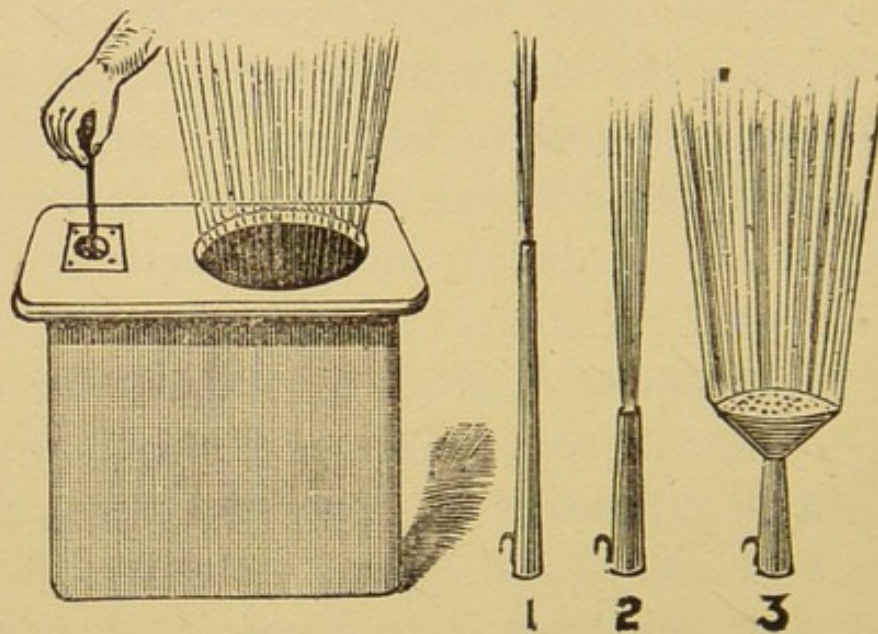


Fig. 9.

THE ASCENDING DOUCHE OR FOUNTAIN BATH.

THIS bath consists of a jet of water rising either from the floor or from an ordinary fountain bath, over which the patient sits, while the stream or spray of water plays upon the parts exposed to its action. It is

very beneficial for piles, diseases of the prostrate, seminal weakness of men, and for corresponding affections in women. It has a tendency to allay any irritability about the anus, to prevent *prolapsus ani*, and for strengthening the generative parts of both sexes. We usually employ a portable bath for this purpose, which may be used without much difficulty even in a bedroom. It may be taken in four different ways—first, as a fine spray; second, as a jet or stream for giving tone to the parts; third, as an injection to the rectum or seat; and fourth, as a clyster to the vagina or womb.

Ascending Spray.—This is a kind of rising rain bath, which plays upon the fundament, and has a very salutary effect in cases of weakness in that region, more especially when there is inability to retain the fœces. At first it may be taken at 80 degrees for about $1\frac{1}{2}$ minutes, and afterwards cold for half a minute. For *external piles* apply the tepid spray for a few minutes, then take off the jet and substitute the tube, and force a stream of cold water upon the part for a few seconds. This should not be used with so much force, however, as to penetrate to the bowels, unless the intestines are very weak. In case of *prolapsus uteri*, ulceration of the womb, and kindred disorders, the vagina pipe may be attached to an India-rubber tube, and the stream taken per vagina.

THE NOSE BATH.

THE nose bath is beneficial for catarrhal affections, or cold in the head, and in some forms of deafness, loss of smell, and dryness of the mucous membrane, from the use of snuff, or from breathing pungent vapours. Its application consists in holding the nose in tepid water, about seventy to eighty degrees Fahrenheit. The water should be drawn into the nostrils with a steady and gentle motion by inhalation. The nose should then be taken out of the water and the effete matter blown away. Put the nose again into the water and inhale more liquid into the nostrils and blow it away as before. Repeat the inhaling of the water until a clear passage is made to the roof of the mouth; after which a little sniffing up of water at sixty degrees will be beneficial. The temperature of the water should never be so cold as to cause pain or smarting. This bath, when conjoined with bathing of the head and neck, is generally efficient in cases of nasal hemorrhage or nose bleeding. In these cases the water must be as cold as can be borne. In case of *polypus*, a teaspoonful of common salt may be applied to a pint of tepid water.

Reduce the temperature of the water and the quantity of salt each day, until clear cool water is used.

This useful bath, without the salt, may also be taken with a syphon of India-rubber tubing, $\frac{1}{4}$ in. bore, one end of which is sunk by a weight to the bottom of an elevated vessel and the other end applied to the nostrils, one after the other for half a minute, and on the air being removed by suction from the tube, the water passes up one nostril and down the other. This is very beneficial in catarrh, hay fever, and kindred affections.

THE MOUTH, THROAT, OR GARGLING BATH.

HOLDING warm, tepid, or cold water in the mouth is useful in cases of swollen gums, hoarseness, and tooth-ache. When the throat is very much inflamed, gargle warm water in the throat for about one minute ; after which cold water may take its place and be gargled for three or four minutes. In cases of quinsy and diphtheria much benefit is obtained from gargling with tepid water for twenty minutes and then with cold water or ice held in the mouth, in connection with cold water applications around the throat. Public speakers and singers will find that cold water gargling will clear and greatly strengthen the vocal organs.

EYE AND EAR BATHS.

THE application of wet cloths wrung out of water at about seventy degrees and applied to the eye or ear in cases of inflammation, gives immediate relief, and in many cases no other local treatment is needed. As a rule inflammations of the conjunctiva and *external* structures of the eye require *cold* applications, during which the back part of the head should be bathed with warm water ; whilst inflammations of the cornea, iris, and other *internal* structures, require *hot* applications.

For dimness of sight, debility and relaxation of the vessels, the eyes should be bathed with cold water night and morning ; or they may be held in moderately cool water, opening and closing them while immersed. This

has a wonderfully strengthening effect upon the optic nerve, and we have known it to cure many cases of defective vision.

In cases of *deafness* warm water may be injected into the *ears* for about two minutes ; after which a little cold water may be injected so as to prevent the patient taking cold.

In abscesses of the internal ear, after the acute inflammatory stage has subsided, and suppuration has taken place, or is about to occur, apply warm wet cloths externally and renew every two hours.

THE SHOWER BATH.

THE shower bath is highly beneficial in many cases of nervous debility, especially when there is fair recuperative power in the system. When a shower bath is taken, place a waterproof covering on the head. It is dangerous to allow water to fall upon the bare head from a shower bath in consequence of its tendency to produce congestion, or a determination of blood to the head. We are not much in favour of this bath for general use ; and consider that its effect is sometimes injurious from the chill it produces, without exciting sufficient reaction, excepting where there is great pressure of water, in which case we should be in favour of its application, especially when a warm shower bath precedes the cold.

THE RAIN BATH.

THE rain bath may be described as a spray or shower bath, according as it sprinkles or pours. It is taken in the open air, and if the patient is able to maintain a good circulation by active exercise, it is a fine invigorating bath for any atmosphere ; only strong persons, however, could enjoy it in very cold weather. The clothing worn during this bath should be thin and adapted for allowing the rain to penetrate quickly to the skin, in order that it may not be too long and too wearying a process. After the bath, undress quickly, rub dry with towel and bare hands, and after dressing take a brisk walk, and if it still rains make use of an umbrella, or take brisk indoor exercise, so as to produce a good reaction.

THE SPRAY BATH.

To receive the spray bath the patient enters, unclothed, a small circular apartment, around which a number of perforated iron tubes are fixed so as to send sprays of water upon the body in every direction. There are means for regulating the temperature of the water. The spray bath has a rather suffocating effect at first, but use makes it pleasant, and its influence is salutary when the water is gradually reduced from 100 degrees to cold. This bath may properly follow the hot air, vapour, or Turkish bath. It acts powerfully upon the capillaries, and benefits the system generally.

THE BRAN BATH.

THE bran bath is frequently used by some hygienic practitioners, and is very useful in most cases of local inflammation. It consists of a coarse linen bag containing from three to four pounds of bran dipped into boiling water. It should then be pressed well with a stick for three or four minutes, to thoroughly wet the bran, a quantity of the moisture is then wrung away, and the bran bag is then applied to the part affected. Finish as in hot fomentations.

THE MUD BATH.

THE name of this bath would imply that it is not very pleasant to take; but it has recently been ascertained that dry earth applied to foul ulcers is a better deodoriser and disinfectant than all the powders, ointments, and poultices of the drug shops. Collect a quantity of dry and good soil and apply it in the same way as a poultice. The earth absorbs the gases which would otherwise render the atmosphere offensive and unwholesome.

It is also very beneficial for inflamed eyes. For this purpose a little moist and tempered clay should be procured and applied to the eyes on retiring to bed. On removing it next morning wash the eyes well and bathe them with cold water.

This bath combines many of the healing qualities of the wet sheet pack and the mild vapour bath, with the addition of the remedial virtue of the earth.

In some cases of skin disease it is very beneficial, but its property is perhaps most manifest in healing ulcers and abscesses.

WATER DRINKING.

WATER is the natural drink of man, but it is not wise to drink too much cold water, inasmuch as it chills the stomach, retards digestion, and diminishes the vital heat and tone of the system. Neither is it wise to drink much at meals, for the liquid has to be absorbed before the process of digestion commences. It is better to drink warm or hot than cold water, except when warm water cannot be taken, because the former slakes the thirst more effectually, and also soothes and warms the stomach. Some persons are afraid to drink warm water lest it should cause them to vomit. If this should occur, the stomach has been surfeited by eating greasy and highly-seasoned food. In such cases it would be better to drink the warm water as an emetic, and thereby relieve the stomach of that which it cannot assimilate. Many persons drink more water than they need as a mere matter of habit. It is not advisable to take large quantities of water when in a state of health; though a tumbler of warm water on rising and another on retiring to bed is very beneficial, having a soothing effect upon the stomach and tending to prevent constipation. In cases of extreme thirst, with a tendency to nausea and vomiting, as in cholera, water should be taken in small quantities frequently repeated. In fevers, small-pox, inflammatory and febrile diseases, cold water may

be taken freely and without restraint. In cases of spasms, griping pains, profuse discharges, as in diarrhœa, sick headache, cholera, colic, &c., warm water may be taken as freely as the stomach can bear it. In dyspepsia and kindred affections, water drinking must be regulated by thirst, but it should be drunk in sips rather than rapidly. Those who are troubled with a cough should frequently drink sips of warm water. This will relieve both stomach and liver cough better than all the medicines advertised; and it will even ameliorate consumptive and nervous coughs better than anything else with which we are acquainted. When the kidneys are debilitated, except in dropsical affections, several tumblers of warm water may be taken between meals, as also when the urine is thick, or when there is difficulty in passing it off.

EMETICS.

It is sometimes requisite to produce vomiting, but the less frequently this is done the better. In cases of spasms, over-eating, inflammation of the stomach and flatulency, emetics may sometimes be resorted to. Warm water is the best emetic. The patient should drink freely of water about eighty-five degrees, then tickle the throat with a feather, camel-hair brush, or finger, and the stomach will soon reject its undesirable contents.

Emetics have a tendency to cause straining and retching, which sometimes do a great amount of injury to the internal parts. This difficulty is now overcome, for those whose stomachs need relief can produce the effect of an emetic by

WASHING OUT THE STOMACH

with warm water, and the stomach tube. It may be done as follows. Drink a pint and a half of warm water, soak the stomach tube in warm water to soften and moisten it; pass the end of this tube down the throat into the stomach, and the contractions will expel the water and the contents of the stomach through the tube. If there is a quantity of acrid bile upon the stomach it will be expelled. Sometimes this bile is green. At other times a large quantity of phlegm and undigested food are passed up the tube. Flatulency is generally produced by the fermentation of food upon the stomach. In this case the gastric juice cannot intermix freely with the food, and the stomach cannot churn and move the food about so as to ensure perfect assimilation. By the judicious application of the stomach tube this undigested food is brought up and nature is thereby relieved. If a person has the stomach-ache it will give almost instantaneous relief. If troubled with painter's colic it will act like magic. Dyspeptic and bilious affections are speedily relieved thereby. When the stomach has been washed out, or cleansed of its impurities the gastric juice will pass more freely through the glands into the stomach and mix more freely with the food, bringing about perfect assimilation.

Those who cannot drink $1\frac{1}{2}$ pints of warm water should drink as much as they can, then insert the tube into the stomach and pour the remainder down a glass funnel, which may be attached to the end of the India-rubber tube, until the stomach becomes distended. The funnel may then be lowered to the knees, and the

contents of the stomach will be passed up the tube, greatly to the relief of the patient.

The best stomach tube is made of silk web and India-rubber, and is quite smooth. Its length is about eighteen inches—to which may be attached another India-rubber tube and a glass funnel through which to pass the water into the stomach. The process is quite harmless and painless, but it feels very peculiar the first time or two it is used, still, after the first few times it is not in the least objectionable.

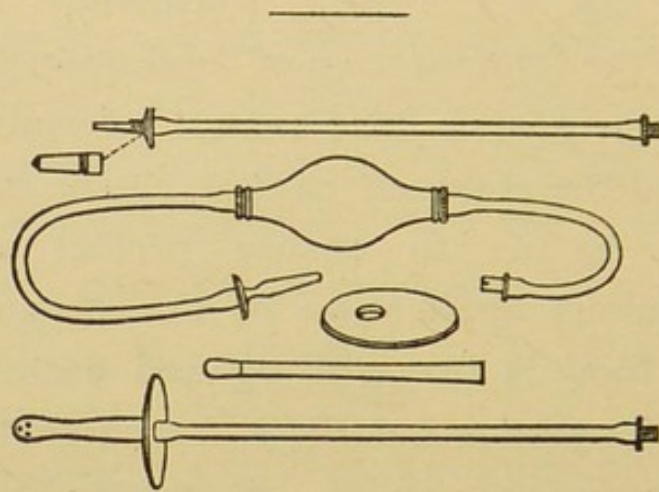


Fig. 10.

THE ENEMA.

THE enema is a very important instrument, and cannot be too highly appreciated, for in many cases it is an invaluable application. When the bowels are constipated, it may be used with tepid water once a day to advantage; and there are few cases of disease in which it may not be usefully employed. Chemists generally prepare medicated injection fluids which are, more or less, injurious, and at all times exceedingly questionable in their tendency. Either warm, tepid, or cold water will always be found sufficiently efficacious. When the

bowels are dry and constipated, the enema should be freely used. In this case a pint of warm water may be injected at each operation, which will usually relieve the bowels. When the intestines are over-heated, it is sometimes necessary to inject two or three pints of water. Sometimes the water is absorbed, but when this is the case, it is needed in the blood, and the injection should be repeated. By reference to our work on "Good Health" it will be seen when the enema should be applied. The syphon enemas are the most valuable, especially when they can be disconnected and the valves liberated when they become corroded. A good enema is always the cheapest in the end.

The valves of common enemas are very imperfect, for instead of their acting properly the air is drawn along with the water and injected into the rectum or seat, or into other parts of the body. This injection of air produces internal pain and distention, and thereby predisposes to serious diseases. We supply a superior instrument for this purpose (Fig. 10), the valves of which are so perfect that they seldom or never get out of order, except when used to inject gruel or other substance which has a tendency to stick around the valves, in which case the valve may be unscrewed from the enema and thoroughly washed and again screwed into the ball, when it will act as perfectly as when new.

Injections per Vagina are very beneficial for strengthening and invigorating the generative parts. They may be freely used in cases of leucorrhœa or whites, prolapsus uteri, ulceration, inflammation, painful menstruation, and kindred disorders.

Injections to the Ear are administered in much the

same way as to other parts except that there is a small pipe for this purpose. These injections are invaluable for deafness and singing sensations in the head, for which warm water should be used; but for toothache and kindred disorders cold water may be injected into the ears.

Injections per the Urethra, with warm water and milk, are very beneficial when the passage is obstructed, as in stricture, and in such disorders as cause matter to accumulate in this part.

We have said that water injections are invaluable, but when they are frequently applied they sometimes wash away the mucous from the intestines, which causes them to become so dry and inelastic as sometimes to cause cracks and conduce to the formation of fistulas, as also to bake the fœcal matter and render evacuation difficult even when water injections are applied. When this is the case, an injection of thin linseed tea, olive oil, soap suds, or glycerine may be taken about twice or thrice a week. This will lubricate the part and serve as a substitute for the natural mucous, and thereby facilitate evacuations.

THE CRISIS.

THE crisis may be said to be a visible effort on the part of nature, or the vital powers of the system, to rid it of some morbid matter, by expelling it through the natural outlets of the body, such as the skin, bowels, and kidneys. These appearances occur in the form of

boils, eruptions, sweating, mucous and bloody discharges, diarrhœa, highly-coloured urine, &c. When the crisis makes its appearance without the application of the wet compress, it should be encouraged to develop, so as to rid the system of its impurity ; but it is not advisable to produce a crisis or running sores by mustard plasters, mustard baths, or over-heating the system by unnatural means. Such treatment has a tendency to lower the tone of the body, and to do a serious injury. But the crisis which comes of its own accord after a few baths, or if it comes in the shape of eruptions or boils, or if passed off by way of diarrhœa, it is a sign that there is sufficient vital power in the system to expel the morbid matters that have accumulated. In such cases a mild course of treatment should be pursued. The soothing wet compress may be applied around the body, and very few, if any, sweating baths taken. Nature is now doing her work well ; do not thwart her by undue interference ; let her go on. If the crisis subsides before the morbid matter has been expelled from the system, it will then be soon enough to intensify the treatment, and again bring on a crisis, but Nature should not be unduly excited to a crisis.

Sometimes a crisis is produced by unnatural means, as by chilli paste and other agents that have a tendency to excite and irritate the skin, and thereby do a great amount of injury. Some cases of crisis that have been thus produced could not be healed for many months, producing general debility and complete exhaustion. A short crisis, however, is beneficial in many cases, but a long, tedious crisis, is very objectionable.

Our method of producing a crisis, when it is necessary to do so, is by

APPLYING THE LIFE-AWAKER,

and by this means the morbid matter in the system is speedily got rid. In this case the crisis is produced and the parts healed within a week, and it is surprising what a large quantity of matter is sometimes drawn from the body in so short a time. It is the most effectual means of ridding the system of those morbid humours which have a tendency to clog up every part of the system. In some cases where there is much internal disease it produces boils, or brings away the offensive matter in a complete mass of corruption. It will thus be seen that the Life-awaker is a purifying agent of extraordinary power, in fact, it is the best treatment with which we are acquainted for ridding the system of scrofulous diseases, skin affections, curing epileptic fits, torpidity of the liver, and many other disorders of a kindred nature. It is to be regretted that this healing instrument is so little known and appreciated. We trust the time is not far distant when there will be one or more Life-awaker practitioners in every town, so that its inhabitants may avail themselves of so beneficial and curative a process. This is one of the most effectual means of ridding the body of offensive matter and for clearing away morbid humours. For a description of this instrument, see "Good Health and How to Secure It."

WATER CURE FOR WEAKNESS OF THE SEXUAL ORGANS.

WHEN water is applied judiciously it has a tendency to strengthen, invigorate, and give tone to the generative organs. We have given full instructions for the treatment of these disorders in our work on "Vital Force, or the Evils and Remedies of Perverted Sexuality." It would occupy too much of our space to give even partial instructions here for the eradication of these affections, and therefore for full information on the subject the reader is referred to the above-named work.

SPECIAL WATER TREATMENT FOR PUBLIC SPEAKERS.

THE following water treatment is very beneficial for weak lungs, and especially for public speakers, singers, and those who exercise their vocal organs to a great extent:—

Procure a sponge or linen towel and dip it into cold water, and rub it briskly over the throat and chest; breathe through the nostrils, and hold some cold water in the mouth. The throat and chest should then be well rubbed with the bare hands until quite warm, dry, and red. No towel need be used for the drying process.

When a public lecturer or preacher has been speaking for some time and induced profuse perspiration, it would be well for him before going home to retire into the ante-room or vestry, take off his damp linen, and

sponge over the body with cold water, following with sufficient friction to produce warmth ; then put on dry linen and there will be no danger of taking cold, especially if the mouth be kept closed while in the fresh air. Public speakers should stand erect when addressing an audience, and exercise several times a day between meals with the chest-expander, dumb-bells, or clubs. This will promote deep breathing and help to ward off colds and other bronchial affections. If the throat should be somewhat relaxed after a lecture or sermon, it would be well to gargle the throat freely with cold water, and also dip the hands into cold water and rub the external part of the throat. Those who speak in public should avoid eating late suppers, and simply drink a glass of warm water before retiring to bed. Many a man has laid the foundation for an early grave by eating a hearty meal when exhausted by public speaking. It is no uncommon thing for us to hear of sudden deaths produced by eating a hearty meal after public excitement. Neither should a full meal be taken immediately before speaking or singing in public, otherwise the mind will be dull, the voice thick, and the thoughts will not flow so spontaneously as to electrify the audience. During speaking and singing digestion is retarded, and sometimes the contractions of the stomach force the food up the œsophagus or gullet, producing a choking sensation which is very unpleasant ; hence the necessity for abstemiousness by way of diet on the part of those who would speak well and avoid mental and physical convulsion.

When night sweats accompany weakness of the

lungs, two table-spoonfuls of salt should be added to a pint of water, and the throat and chest rubbed freely with it, morning and night. In cases of hoarseness and soreness of the throat, wring a piece of swansdown calico out of cold water and wrap snugly around the throat, cover with several thicknesses of dry flannel, and bandage down snugly during the night.

The wet compress may also be applied around the body during the night, and this, of course, should be covered with several thicknesses of dry flannel and bandaged down, but not too tightly, so as to allow free and copious breathing. On rising next morning the wet cloth and compresses should be removed, and the parts sponged with salt water and rubbed well with the bare hands till quite warm and red.

It is much better to rub the body with the bare hands than to use anything that is very rough. The human hand is more soft and suitable to the skin, and will make the patient feel much more refreshed than if he submitted to a brisk brushing or to a severe rough towelling.

SPINAL SLAPPING.

THIS is very beneficial in cases of weak spine, impaired circulation, and general debility. Let the patient remove all his garments above his hips, and be seated astride a chair. The attendant should then dip his hands into cold water, and rub them up and down the spine, alternating with light and sharp strokes until the skin is reddened. This may be continued for over

two minutes, but when it causes distress to the patient it should be discontinued. In nearly every case it may be repeated once or twice a day to advantage.

MAGNETIC RUBBINGS AND MANIPULATIONS

are very beneficial in all kinds of nervous affections, general debility, sleeplessness, heart disease, and impaired circulation. Let the patient remove all the garments above the hips, and the bath attendant dip his hands into cold water. First wet the head, then rub down the spine, from the back of the head, freely with both hands, for a few seconds. Dip the hands into cold water again, stand on the right side of the patient, placing one hand upon the chest and the other on the upper part of the spine, and rub the back and spine rather steadily until most of the moisture is absorbed. Then place the two forefingers together and allow them to pass over the spine, and the two next fingers to fit close down each side of the spine, passing the hands down steadily. When the lower part of the spine is reached, the hands should be taken to the upper part, and rubbed downwards again until the parts are quite red. The rubbing may then be extended over the chest, and the stomach kneaded. If the arms are weak, it would be well to dip the right hand into cold water, holding the patient's hand with the left, and move the hand briskly up and down the arm until all of the moisture is absorbed. Then move the hand to and fro steadily, with gentle pressure, so as to cause the blood to circulate more freely through

those parts. The other arm may then be served the same. The patient should be encouraged to breathe copiously and deeply through the nostrils while this process is going on. This treatment has a tendency to increase the circulation, re-vitalise the blood, and add warmth and strength to the system. These rubbings will be valuable in proportion to the amount of magnetism possessed by the manipulator; hence, those who have but little vitality, animal life, and magnetism, should not attempt to give these rubbings, otherwise the patient will not receive any benefit therefrom; indeed, a debilitated operator is more likely to detract from the strength of the patient than add thereto.

MASSAGE.

DURING the operation called "Massage," or manipulation with the hand, the patient is undressed, wrapped in a warm blanket, and lies passive on a hard and narrow bed or couch, with another blanket or two over him. The operator begins on one foot, putting each joint through its natural movements several times, and with increased force and rapidity. The skin is then oiled, and the soft parts of the foot and leg, as far as the knee, are gently, firmly, and rythmically kneaded between the thumb and forefinger, using not merely the tips but the whole length. The leg is then slapped with the open hand lightly and rapidly, producing a rather smart stinging sensation. The same part is next gone over in the same way with the outer edge of

the hand, with a quick chopping movement. The operator next makes a number of long sweeps with both hands from the foot upwards (standing about the middle of the patient, with his back to the head), steadily compressing the limb both in its hollows and projections. The thigh is next done in the same way, and then the other leg. The patient is then placed face downwards, and the operator, resting one knee on the couch, works with the fingers and balls of the thumbs the great muscles of the back, loins, and hips, a hand to each side, the weight of the body being brought to bear in kneading the parts. In slapping, the hands should run down as well as up the spine, one hand following the other in rapid succession. Turn the patient on his back again, and manipulate the muscles of the chest, but more gently, as they are more sensitive than the others. The bowels are next grasped with the hand, and gathered up towards the middle, working round the abdomen from left to right below, and right to left above, following the direction of peristaltic movements in the great bowel. This is done by a steady sliding motion of the ball of the thumb, and is of much service in chronic constipation. The time should not exceed half an hour at first, allowing one or two minutes' pause to rest the patient; and as strength increases the operation may be extended to an hour, and repeated twice a day. No food should be taken for four hours previously, and a light meal may be taken afterwards. Keep up the warmth of the body by covering the parts that are not undergoing manipulation. The operator should soak his hands in hot water, and rub them with oil before commencing.

Bowel Massage.—The attendant with the ball of the thumb kneads the abdomen slowly and with steady pressure, from right to left and above downwards, in a narrowing circle, for two or three minutes. He next pats over the same parts with the open hand, dipped often in cold water, for one or two minutes more. The patient lies down with his knees half drawn up, and the part is slightly oiled beforehand. The patient can also operate upon himself when strong enough for the exertion.

OIL DRESSING.

WHEN the wind is in the east and the skin is very dry, especially when accompanied with a chill down the back, a little olive oil, vasaline, or glycerine should be poured upon the hands of the bath attendant, and rubbed over the body of the patient, more especially between the shoulders and over the region of the spine. Do not put too much of either lubricant upon the skin, otherwise too thick a coating will have a tendency to clog the pores ; but a thin coating rubbed well in will ward off chills, counteract the drying effect of the east winds, and add warmth to the system.

HOT WATER BOTTLES.

WHERE there is little reactive power and inability to get warm in bed, hot water bottles may be applied to the extremities. Or a better plan would be to procure a foot tin which will hold about two quarts of hot water, and place it at the foot of the bed, cover it with a flannel or linen cloth, and place the feet against it.

THE STOMACH PAN.

THIS useful appliance is circular in form, and is well adapted for fitting over the region of the stomach. It should be filled with hot water, wrapped in a dry cloth, and placed upon the stomach for twenty minutes, while the patient reclines upon a sofa or in an easy chair. This may be applied almost immediately after meals to aid digestion.

The stomach pan, filled with hot water, is also very beneficial when applied over the wet compress, where there is too little re-active power in the system to produce warmth ; or it may be applied to the back, or any other part of the body that feels cold or chilly.

SAND BAGS.

THOSE who have a feeble circulation, and find it difficult to get warm in bed, will find that a sand bag is one of the most convenient articles to be used as a bed warmer. Get some clean fine sand ; dry it thoroughly in the oven. Make a bag, about eight inches square, of flannel, fill it with the dry sand, sew the opening carefully together, and cover the bag with cotton or linen cloth. This will prevent the sand from sifting out, and will also enable you to heat the bag quickly by placing it in the oven or on the top of the stove. The sand holds the heat a long time, and the bag can be tucked up to the back without hurting the invalid. It is a good plan to make two or three of the bags, and keep them ready for use.

A *Hot Sand Bath* is one of the latest hygienic appliances of a novel character. A London therapist proclaims that he has found the sand bath an infallible cure for rheumatism. He claims that its advantage is the non-suppression of perspiration, and non-interference with respiration, as is the case more or less with Turkish and steam baths; also that the body can endure the heat of the sand both longer and at a higher temperature. It can be used for infants, and permits of easy application to a part or the whole of the body. This form of bath will be beneficial in other kinds of disease than those mentioned, because it will be an effectual way of warming the whole body and equalising the circulation.

INHALATION OF STEAM.

WHERE there is a dry, hacking cough, and in cases of bronchitis, asthma, and kindred affections it would be well to inhale a quantity of steam from an inhaler. The inhaler should be three parts filled with boiling water, and the steam drawn as far down into the chest as possible, and expelled through the nostrils. From thirty to forty inhalations may be made, and great care should be taken not to go directly out of doors so as to breathe the cold air for some hours afterwards; hence it would be well to remain in the room all night after its application. A little flour of sulphur may sometimes be put into the water, and this will have a tendency to kill the fungi which accumulate around the throat in

these affections ; or vinegar may be substituted for water when there is much inflammation of the throat.



Fig. 10.

The above cut (Fig. 10) is an illustration of a very simple, cheap, and effectual inhaler. Sometimes the atmosphere in the room is too dry. When this is the case a kettle of water may be kept boiling in the room, and the steam will moisten the atmosphere.

Baths of Mineral Waters are recommended by some members of the faculty, but they are no better than baths of ordinary pure water. Many mineral and hot springs, such as those of Bath, Buxton, Cheltenham, and Harrogate, have become famous for the reputed cures effected by their thermal and mineral qualities when applied both internally and externally. We have long been of opinion that the greater part of the benefit supposed to result from the use of these mineral baths was due to the water itself rather than to its mineral properties. Some credit must also be given to the

exercise which is always recommended to accompany the drinking of the waters, as well as to the salubrious air for which the localities are celebrated. The human skin is impenetrable to the action of the minerals in water ; therefore the explanation of their effects must be sought in the domain of physics and not in that of chemistry. The external action of all kinds of water is much the same, and the cleaner, softer, and fresher the water the greater will be its restorative and invigorating influence.

THE HOLMAN LIVER AND STOMACH PAD.

SOME years ago quite a commotion was made by announcements in public lectures, long advertisements and short puffing paragraphs in the newspapers, concerning the marvellous qualities of this wonderful invention. It may be interesting to know of what this liver pad was composed. The pad was guaranteed to cure all cases of indigestion, and its advocates asserted that persons might eat as much as they liked, so long as they wore this pad, for no ill effects could follow. It was claimed that the pad had peculiar qualities which absorbed the poisons in the system, and that it had a marvellous way of assisting digestion. This pad certainly was of service to those who had long suffered from indigestion, not in consequence of any absorbing virtue which it was supposed to possess which would especially assist digestion, but by keeping the stomach and adjacent parts warm through bringing more blood to that region, and thereby assisting the process of

assimilation. The pad was about three-quarters of an inch thick, and filled with the following ingredients :— Ground flax seed and fenugreek seed 50 per cent.; pitch, resin of galbanum or olibanum, and resin of sandarac 45 per cent. The remainder was composed of aromatics. The fenugreek gave the peculiar odour, though this was influenced to a limited extent by the resin and aromatics. Such was the sum and substance of this wonderful invention !

Alas ! for honest, credulous John Bull,
Of every quackery the veriest gull !

RULES FOR BATHING.

ALTHOUGH the conditions which should regulate bathing in the sea have been already indicated, it may be well to add a summary of the rules which are applicable to all cases.

1. Do not bathe immediately after a meal. A sickly patient should never take what is called a "full meal," but always leave off with an appetite. The bath is best when taken two or three hours after a meal.

2. A cold bath should not be taken when the patient is chilly or fatigued. Keep the feet in warm water when taking a cold sitz or pouring bath, but dip them into cold water for four seconds as soon as the bath is over.

3. If inclined to headache wet the head with cold water or wear a wet cloth before entering and during the bath.

4. Do not eat too soon after bathing. Rest and gentle exercise are best for the first hour. Apportion the exercise to the strength.

5. Protect the head from shower and douche baths by a covering.

6. Do not sit in a draught after bathing, nor let the feet get cold. If unable to exercise, better lie down and be covered up.

7. As a rule women should avoid taking cold baths during the menstrual period, but when a warm sitz bath and back sponge is necessary, cool but not cold water may then be dashed upon the body, followed with an abundance of friction to get up a good reaction.

8. In cases of great debility use the mildest form of baths.

9. The strongest and coldest bath should be taken in the morning, when two are taken daily.

10. It is not well to have baths every day without any intermission. Sundays may be omitted wholly or partially, and occasionally other days.

11. The feelings are not always the best guide as to the most desirable bath; be guided by reason and by your attendant.

12. The temperature of the bath room should be comfortable, and the ventilation good.

13. Pale, cold, weak, and bloodless invalids should not have very cold water applied to their bodies until they possess more reactive power.

14. The practice of eating a mutton chop, beef steak, or drinking hot and strong tea or coffee while in the bath, or as soon as taken, is a very bad practice. It has a debilitating effect upon the system, and neutralises the good effect of the bath.

15. Follow each bath by out-door exercise when there is sufficient strength to take it.

16. All consumptive persons should take considerable out-door exercise, and walk as sharply and as briskly as their strength will allow. If their mouth becomes dry, or their throat inflamed, they may suck a few grapes, but not swallow the skins.

17. Horseback riding is very beneficial for consumptive persons, more especially if they sit erect and breathe copiously and deeply through the nostrils during the exercise. On their return home, if they feel fatigued a warm bath may be taken at 90 or 95 degrees, and followed with a pouring bath and plenty of friction.

18. Those who feel cold over the region of the stomach, after a bath, may either put a wet pad over the part and cover with several thicknesses of dry flannel, or they may wear a pad composed of similar ingredients to the Holman Liver and Stomach Pad, not because of its supposed power of absorption, but for the sake of the warmth it produces, thereby conducing to digestion.

19. After a hot air, vapour, Turkish, or shallow bath, as much out-door exercise may be taken as the strength will permit without producing exhaustion.

20. It would not be wise to sit either upon the ground or upon a cold seat in the open air after taking a bath. Some persons after bathing, thoughtlessly sit upon a cold seat until they are thoroughly chilled, which predisposes to rheumatism, sciatica, neuralgia, colds, and other disorders.

21. It would add very materially to the efficacy of the baths if a little muscular exercise could be taken both before and after bathing; this would get up a natural reaction and cause the excretory functions to

pass off more freely that which is wasted in the system.

22. Bath attendants should avoid giving *shocks* to nervous people, or to those inclined to apoplexy or affected with heart disease.

23. The bath attendant should be lively, cheerful, healthy, humorous, intelligent, and full of dexterity. Such a one will inspire the patients with confidence in his skill.

24. A doleful, mopish, weakly, fault-finding and clumsy person should not attempt to become a hydro-pathic practitioner.

25. When symptoms of faintness appear, during a hot bath, apply cold water to the head and face, give cool water to drink, and allow the patient to sit erect, and bathe the exposed parts that have been in the bath with warm water.

26. A cold bath should never exceed five minutes, and in most cases two minutes will be sufficient.

27. The patient should be thoroughly dried after each bath. Wipe specially well between the toes and underneath the armpits.

28. A patient should never be left chilly after a bath; let him be rubbed till he is quite warm.

29. Remove the patient from a bath when any unusual or unexpected symptoms appear during the time he is in the water or pack.

30. Whenever a bath is followed by headache and fever, it is evident that it has not agreed with him—such a bath should not be repeated till he is stronger.

31. Patients would derive greater benefit from their baths if they would assist in rubbing and bathing themselves.

32. When the patient is very weak he should rest awhile after each bath, or go to bed and cover up warm for an hour.

33. Sharp, excitable, and restless people need cool and bracing baths—as the wet sheet pack, pouring bath, tepid sitz, half bath, dripping sheet baths, &c.

34. Slow, phlegmatic, and mopish need baths of a stimulating and relaxing nature—as the vapour, full warm bath, warm sitz, hot blanket pack, hot air bath, &c., to liquefy the blood, open the pores of the skin, and facilitate the passing off of morbid humours, which are sure to accumulate in such persons.

35. Nervous and debilitated people require wet rubbings, magnetic rubbings, tepid or cool dripping sheets, wet compresses, tepid sitz, hot and cold foot baths, &c., to tone up the system.

PRACTICAL HINTS.

THE main object of bathing is to stimulate and balance the circulation, and to rid the system of morbid accumulations. A tendency of blood to one part is a sure sign of indisposition. This is discovered by the temperature, which is the first point to be ascertained by the physician in his diagnosis. When there is undue heat, as in fever, cool or cold water should be used ; when the surface of the body is cold, warm bathing is required, to be followed with cold in order to produce a reaction ; and if some parts are cold and others hot, the applications should correspond. Sickly people should never take a bath without first

ascertaining whether it is specially adapted to their condition. It is customary in some hydropathic institutions to apply water in a routine way, and for the sake of variety. This sometimes aggravates the symptoms which they were taken to relieve, and many who could have been quickly cured by a system of baths that were adapted to their condition, have actually been injured by those which have been prescribed; hence, it is not surprising that so many of these institutions become unpopular and non-remunerative. It is of the highest importance that the physician who prescribes should understand the action of the various kinds of baths upon each patient, and carefully adapt his remedies to the condition of each particular case. Our opinion is that every true physician who has the welfare of his patients at heart, should not only see them every day, but that he should visit them occasionally while taking their baths, and carefully note their effect upon each. This may neither be convenient nor pleasant to the physician, but it is essential to the speedy recovery of the patient; for we seldom or never find that any bath will act upon all patients alike, inasmuch as the ever varying conditions of body, even of the same person, will determine whether the effect of a given bath will be beneficial or otherwise.



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WOMAN:

HER DISEASES, AND HOW TO CURE THEM.

BY

R. B. D. WELLS,

PHRENOLOGIST,

WEST BANK, SCARBOROUGH.

"As vigorous health, and its accompanying high spirits, are larger elements of happiness than any other things whatever, the teaching how to maintain them is a teaching that yields to no other whatever."—

HERBERT SPENCER.

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WOMAN

THE HISTORY OF THE WOMAN OF THE FUTURE

R. D. WELLS

NEW YORK: BAKER & BLOOM

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PREFACE.

FEW words are needed as a Preface to this work on the Diseases of Women. Its object is explained in the Introduction. I shall have two classes of readers—the healthy few, who will be critical; and the sickly many, who will put my advice to the test of experiment; and I can promise the latter that their reward will be in proportion to the thoroughness with which they follow the advice contained in the following pages.

This work contains, in brief compass, the results of my wide experience, in the course of which I have cured almost every disease not absolutely incurable. I have no doubt that the sale of this work will equal, if it does not surpass, the great demand for my other works on Health and Disease. That such a book as the present one is wanted is proved by the frequent applications made to me for the information it supplies. This must be my reason for its publication.

The chief design of the work is to enable those who need its advice to treat their ailments at home, without the aid of myself, or of any professional medical man. This is the age of "Women's Rights." I place foremost in the list of Women's Rights the Right to be Healthy. Every page of my book shows how this Right is to be won and kept.

R. B. D. WELLS.

WOMAN, AND HER DISEASES.

INTRODUCTION.

In order to become successful, joyous, and happy, it is essential that people should be strong and healthy; as with weak and delicate bodies, they cannot manufacture sufficient vitality to impart power and momentum to the brain, so as to bring about great results.

Hence I have made Body and Brain a joint study. In fact, I do not see how they can well be divided, because one is dependent on the other, and no great undertaking can be carried into successful execution, unless harmony exists between body and brain.

This book is written especially for Ladies, and its object is to teach them how to become strong, healthy, and happy. A great many of the feminine gender labour under the delusion, that it is necessary they should take a quantity of nauseous physic, in order to be well. This is a great mistake, for the Divine Architect who made Woman never intended that her stomach should be turned into a drug store. My conviction is that the habitual taking of opening medicine kills more people than gluttony and war combined. I, therefore, feel it my duty to raise my voice against such an injurious practice.

During the years we have been before the public, thousands of ladies have consulted us in respect to their health, and we rejoice to know that the advice and treatment given, have been the means of restoring a great number of them to their normal and healthy condition.

Many very bad cases have been treated as indoor patients, and testimony has invariably been accorded to the efficacy of our treatment, as the following extracts from letters received will testify :

A lady living at Grimsby writes :

“ My dear Mrs. Wells,—I am glad to tell you that my health is very much improved. I feel quite a new person. I have not tasted flesh meat of any kind, nor pastry, since I came home, I live on two meals a day, and feel much better for it. My friends all tell me I look fifty pounds better since I returned. I have taken Mr. Wells’ advice, and never trouble about things now, as I used to do. I take everything more evenly and find it much better.”

A lady living at Barnsbury, London, writes :

“ My dear Mrs. Wells,—I am thankful to say, that since my arrival home, I have had very good health ; in fact, I cannot remember having been so well for a long time. I only wish I could have stopped another fortnight, and have had the “ life awaker ” applied again. If God spares me another summer, I shall come and spend a month at Scarborough, in order to be treated by you again ; at the same time, I am very thankful for the amount of good that has been done.”

The writer of the following letter is Mr. Adam Elders, Town Missionary, Driffeld. I should state that when he came to us for treatment, he was suffering from sciatica and dyspepsia, and his lower limbs were contorted into painful positions, by the agony he endured :

"Dear Sir,—I am happy to inform you that I am doing well. I feel my legs getting better every day. The stiffness has worked off. I hope to have no more returns. I would not like to for a good sum of money. My friends did not expect to see me cured. When I told them I was, they would not believe, though I am here to look at. Then they said you had not done it; it was the rest I had got. But I told them I knew a man who had been resting eight years, and was not cured yet. One thing I know—whereas once I was bad now I am cured. I shall ever feel glad that I got to know about you, and that I came under your treatment. Let others say and think what they choose, the sound of your name will ever fall like music on my ears. If all your patients return home as I have done, they will go with a light heart."

Such letters as these—and we have received thousands—transcend in value any money payment, and are most encouraging and consoling to us in our arduous undertaking, to emancipate humanity from the thralldom of disease. I feel that our mission in life, in healing diseases, and in throwing the light of mental science, in silvery streams, over the grand empire of the mind, is second in importance to none, and that the enlightenment of the people, concerning the laws of health is a vocation, of which we may justly feel proud. I have no quarrel with the doctors, especially those who have written honestly and faithfully respecting the diseases of women; though I must confess, there is a great deal of conservatism in the medical ranks, and that the more mystery some of its professors can throw around the healing art, the more gratifying it is to their vanity, and the better it takes with a great number of people. There are a few allopathic practitioners, however, who are doing good work, by enlightening the human race in regard to nature's laws. Such men deserve the thanks and gratitude of all honest and intelligent people. I cannot close

this introduction, without expressing my admiration of the able and manly spirit in which many health reformers, including Drs. Trall, Nichols, Chavasse, and others have written upon this subject. I feel convinced that their writings have done much for the advancement of the human race, inasmuch as they have taught mothers how to live in accordance with nature's requirements, by obeying the laws of health, in order that their bodies may become strong, and thereby bring into the world, children who are possessed of that priceless boon—a sound and healthy organisation. I may add that the remedies prescribed in this book are of the simplest, cheapest, and safest character, and they have all been tried over and over again, and have not failed to produce a beneficial effect. The remedies prescribed are not shrouded in mystery, nor confined to the wealthy, neither is it necessary to employ a skilful practitioner (except in very serious cases), but they are within the reach of all, and may be applied at home, with decided benefit, by any person of medium intelligence. There are some diseases, however, which it is impossible to cure, because they have reached the last, or incurable stage. Still the information contained in this book will be very beneficial, even in the last stages of disease; and if its teachings are wisely carried out, aches and pains will be alleviated, and the autumn of life will lose most of its terrors.

CHAPTER I.

THE AILMENTS OF WOMEN.

Delicate ladies, unhealthy wives, and sickly mothers are the order of the day. Very few ladies can be said to be healthy, strong, and vigorous. There is a pernicious error abroad that

woman is, physically speaking, the weaker vessel. This is a mistake, for woman is man's equal in this respect. I do not say that she has such a strong, bony framework as man, nor that she is capable of enduring such laborious work, or qualified to encounter some of the hardships, for which man is better organised. But women can endure more watching, and waiting, and care-taking, and all that comes under the good old English word, "nursing," than men. Woman is peculiarly fitted for service in the sick-room, where patience, sympathy, and endurance are required. Of her the poet has truly and beautifully said—

When pain and anguish wring the brow,
A ministering angel thou.

The erroneous idea that woman is the "weaker vessel" leads to, and excuses many feminine infirmities, which ought not to have any existence. The idea is based upon Fashion, not Nature, and comes from regarding woman as she is, instead of as she should be. It does not follow, because woman in civilised life is feebler than man, that she is constitutionally the weaker vessel. Physically, woman is man's equal. In power of endurance, tenacity of life, and vitality, woman is superior to man. There is a physiological reason why a woman should be strong, namely: because she has to nourish her offspring as well as herself; hence, the provision of a superior nutritive apparatus, which makes her system rounder and more beautiful than that of man, and at the same time, imparts to her nervous and glandular system greater prominence. Physicians have often testified to the great endurance and adaptiveness of women as nurses, a profession for which she is peculiarly qualified. Woman is better fitted than man to tend the sick couch, to undergo unceasing care and watchfulness, to lose rest and sleep, and if necessary, can last for long periods.

The world is beginning to realise the sublime truth of the

Mosaic record, that God placed Eve *beside* Adam, and neither below nor above him. A sickly Eve was no part of the divine plan ; on the contrary, the record is clear that she was intended to be a help meet for man, and that " God saw everything that he had made, and behold it was very good." But there has been a sad falling away from the original type, in the sickly, nervous, hysterical, wasp-wasted creatures, who spend one half their time in making themselves ill, and the other half, in lamenting, and doctoring their ailments.

But it may be said by these pitiable specimens of humanity—" Supposing we have inherited sickly bodies from sickly parents." Well, I admit it is impossible to put a healthy constitution into a rickety skeleton ; but my object is to show, how all the ailments are to be avoided, which result in these sad deformities. Women who have inherited frail bodies, which no amount of hygienic skill can make sound, should not transmit their frailties to innocent children ; they had better live heroic old maids. Unhealthy wives and mothers are, I lament to say, the rule and not the exception. It has almost come to be considered part of a woman's nature that she should be a life-long sufferer. This deplorable state of things is not inevitable ; it is most unnatural, and those women who expect to become wives and mothers, are bound to assist in bringing about a thorough reform in their habits of life. It is profoundly sad, that what should be the happy mission of a wife, should so often end in miserable, blighted, childless homes, or in the birth of diseased children. These, however, are the natural and inevitable consequences of indulgence in the frivolities of fashion, the pernicious system of stimulants, and unhygienic living.

I feel confident that my advice, if faithfully followed, will remove, or prevent many, if not all, of these melancholy results of an artificial mode of existence.

CHAPTER II.

SLAVERY TO CUSTOM AND FASHION.

This is a great obstacle in the way of good health. Ladies seem to pride themselves in compressing their vitals by tight lacing, in order to have, as they imagine, a beautiful and fashionable figure. They do not generally do this to please men, but simply to vie with each other, in obedience to the dictates of vanity. In order to show a tapering waist, they deliberately crush that part of the body, which should be especially left free, thereby contracting and displacing the lungs, heart, and other vital organs, and consequently entailing disease, not only on themselves, but on their children. No sensible man would think of marrying a lady, who has compressed her vitals to such an extent, as to weaken the digestive apparatus, contract the lungs, impede the circulation, and weaken the constitution. To the fashion of corset wearing, may be attributed many of the weaknesses and ailments of the feminine gender. Those who compress their vitals by this vile practice, cannot reasonably expect to live to such a ripe old age, as though they had allowed heart, lungs, and stomach, and all the internal visceral functions to have full play. Small-chested people can never oxygenate the blood so thoroughly, as to give complete warmth to the system; consequently, the blood becomes poor and impoverished, and cannot build up a strong and heathy body. Orators, and the class of persons who breathe copiously and deeply, have large chests; but if they were to put on stays and then attempt to speak in public, consumption or some other dire disease would soon be the result.

“Fashionable people” usually say, that they cannot give up fashionable amusements; “they must do as others do;” “they might as well be out of the world as out of the fashion.” To such people I have very little to say, for if they value the fashion more

than their own health and happiness, this book will be of little use to them, because they are not amenable to reason and common sense. Fashion, it has been said, is often only another name for suicide and baby slaughter. I pity the children of the mother who is the slave of fashion, because the pre-natal influences have been unfavourable to the full development of their vital powers, consequently, they languish all their life long.

Every ounce of pressure should be removed from the vital parts. Even skirts or dresses, that are drawn close about the body, and suspended from the hips, should be remodelled, inasmuch as they have a debilitating effect upon the pelvis, and frequently cause a bearing down, with pain in the abdominal region and kidneys, bringing on congestion, leucorrhœa, and other affections. Skirts and dresses should be suspended from the shoulders. It is obvious that our life power is proportionate to our capacity for breathing. If we breathe strongly and deeply we live strongly; if our breathing is weak our life is weak. In other words, the quantity of breath we inhale is the measure of our life.

Dio Lewis, in his "Chats with Young Women," says—"Go with me to a ball room. Notice that couple; they are dancing. Watch them. When they stop, observe their breathing. *He* has taken one deep breath, filling all the lower parts of his lungs, and now his breathing is quiet. But notice her breathing. See how the upper part of her chest works up and down. Watch her ten minutes; that panting and pumping will go on."

What is the reason of this difference? The Creator has not made a woman's lungs so deficient in size, that she has to labour to get her breath. Among children there is no difference in the breathing of boys and girls. The difference is the result of two different modes of physical education, one natural and the other unnatural. The lower part of the lungs is the larger part, and

that is where most of the breathing should be done, and that is where men do most of their breathing. But the fashionable woman has so squeezed and contracted the lower part of her lungs, that very little breathing can be done there, and consequently, the small upper part of the lungs has to do most of the breathing, and being over-worked, it causes first distress in breathing, and then consumption. The habit of wearing a belt or band about the waist is to be deprecated, because it compresses the stomach and retards digestion, and it is well that the practise is going out of fashion. One other injurious fashion ought to be mentioned, namely: wearing a veil, because it is injurious to the sight, owing to the air being kept from contact with the eyes, which contact strengthens the nerves of vision. The objection does not apply so much to a veil worn at night. It is surely unnecessary to say many words in condemnation of chignons, long dresses, and high-heeled boots. Chignons have a tendency to over-heat the brain, and cause the hair to fall off. You can no more walk properly in thin, narrow-soled, high-heeled boots than you can on stilts. High-heeled boots throw the body out of balance, cramp the toes, and impede the circulation; they also produce corns, weaken the ankles, spoil the shape of the leg, and debilitate the spine. The soles of ladies' boots should be half-an-inch thick, and in winter, they should have an outer sole of india-rubber, to keep out the damp and prevent slipping.

CHAPTER III.

EQUABLE CIRCULATION ESSENTIAL TO HEALTH.

The follies of fashion are manifold; my duty confines me to pointing out those that are injurious. It may surprise ladies to be told, that such an apparently innocent article of female comfort

as a "muff" is injurious; but that it is hurtful will be apparent on reflecting, that holding both hands in a muff, precludes freedom of motion to the hands and arms, and hinders expansion of the chest, thus depriving the wearer of one half the benefit of a walk in the open air, when the shoulders should be thrown back and the arms be free to swing gently and gracefully. By all means keep the hands and arms warm, but this can be done in other and better ways than by keeping them in a muff.

Another folly of fashion is the way in which ladies treat their poor feet. How often do ladies complain of cold feet? Now what is the cause of cold feet? It arises from imperfect circulation. "Keep the feet warm and the head cool" is a sensible old adage, but in the present day the practise is usually the reverse. If you place a small thermometer under the tongue, it will in a few moments indicate ninety-six or ninety-eight degrees, which tells the warmth of your blood. Now hold the thermometer against your foot for the same length of time, and it will fall to sixty or seventy degrees; this indicates the temperature of the feet, showing a great difference in the warmth of the mouth, and the blood where it circulates freely. Now so long as there is a difference of thirty degrees, in different parts of the body, there cannot be good health, for that depends on equable circulation, the absence of which means bad health.

When the feet and legs are cold, the blood is repelled from them to other parts of the body, where there is more heat. If the mind is very active, the blood is sent to the head, which produces a headache; or if the chest is covered with too many thicknesses of clothing, the blood is driven to the lungs and causes local congestion, which brings on bronchitis, shortness of breath, and kindred affections. Hence headaches indicate that there is too much blood in that region; and shortness of breath, congestion, &c., indicate that too much blood is taken to the lungs.

Insufficient exercise in the open air is a common cause of cold feet, and the best way of warming them is to take a brisk walk, wearing warm hose, broad-soled, and low-heeled felt shoes, and in winter over-shoes in addition. In summer, leather boots may be worn, but leather is too cold a material for winter, and when travelling. The feet should be on intimate terms with soap and water, and should be washed every night or morning, accompanied with an abundance of friction, with a rough towel and the bare hands.

Another cause of cold feet is insufficient nourishment. Many ladies half starve themselves. They think it is vulgar to eat heartily, so as to satisfy their appetite; of course, the stomach must not be overloaded, but a due amount of exercise will not only create an appetite, but impart vitality for its speedy assimilation. Walking is far preferable to any other exercise. Taking the air in a carriage, is of little use to a healthy person, in comparison with walking briskly, which brings every organ into beneficial action.

Bathing the feet requires to be done with discrimination. If the feet are put into warm water for ten or fifteen minutes, it will give almost instant relief to the head and chest. This indicates that the blood is partly drawn from the head and chest to the lower extremities, thereby helping to equalise the circulation. As soon as the feet are taken out of the warm water, and come into contact with the colder air, the blood is sent with force to the chest and head, thereby increasing the violence of the headache and chest affection; but if after removal from the warm water, the feet are dashed into cold water for a few seconds, reaction sets in, and the blood is brought to the skin, warming the extremities and relieving for a time the headache or chest affection. But if, after this, the patient sit still, taking no exercise and wearing no extra clothing over the legs and feet, the headache and chest

affection will soon reappear. Some ladies wear thin shoes, thin stockings, and short drawers, thus leaving the calves of the legs and the knees nearly bare. Thin leather shoes are certain to produce cold feet in winter. Felt boots are preferable for warmth, and when travelling over-shoes should also be worn. In damp and cold weather the legs and feet should be encased in the warmest woollen stockings. The arms should also be warmly clad. In our damp and uncertain climate, much depends on warm clothing as regards equable temperature, and consequent warmth and health. Exercise and friction are good and necessary, but these aids to circulation can only be occasional, whilst warm clothing may be a permanent protection. Dio Lewis vividly portrays the foolish and injurious mode of dressing practised by most women, he says :

“ Just think how women dress about the chest, the warmest part of the body, they put one, two, three, four thicknesses then comes a shawl, and then thick padded furs ; while their legs with, one thickness of cotton, go paddling along under a balloon. They go to the family physician and say, “ O doctor, my head goes bumpity-bump. It seems as if all the blood in my body is in my head and chest.”

“ Well, madam, how about your legs and feet ? ”

“ O, doctor, they are like chunks of ice.”

“ Ah, madam, if you dress your legs and feet so that the blood cannot get down into them, where can it go ? Of course it goes into your head and chest.”

HEADACHE.

Every headache is a protest from the brain against either impurity, or excess of blood. A disordered stomach, arising from eating too often, eating late at night, or eating unsuitable food,

especially pastry, will sooner or later cause headache. The brain requires the best of blood, and cannot be nourished on half digested food of the wrong kind. When the blood is impure, the brain is the first organ to feel it, because more blood is sent to the brain than to any other part of the body. New and hot bread and cakes should never be eaten. Eat brown bread made of entire wheat meal, and plenty of fruit, especially ripe apples, pears, grapes, oranges, &c. When fresh fruit is not in season you can still get bottled fruits, which are far more wholesome than preserves. Every shilling spent in fruit is so much saved from doctors' bills. The fruit should not be eaten between meals, but as a part of each meal. All kinds of hogs flesh should be avoided. It makes bad blood, and only plough boys can digest it. Headache means blood in the wrong place. The blood is wanted elsewhere, but some ligature may prevent its circulation. Neither shoes nor garters should be tight. There are contrivances for keeping the hose in place without compressing the blood vessels. Sitting too long in one position, either reading or sewing, is likely to conduce to headache, especially in close rooms. Tea drinking is a prolific cause of headache. A cup of tea may give temporary relief, but it only predisposes to a worse attack. Ladies who wish to preserve their good looks should not be hard tea drinkers. Tea is not so injurious as gin, but it drives the bloom from the cheek and the light from the eye when young women become tea-topers. Coffee, like tea, causes headache, and upsets the kidneys, especially when taken strong. For further particulars as to the effects of tea and coffee, see my work on "Good Health and How to Secure It."

GOOD AND BAD TEMPER.

Disposition is greatly affected by the state of the health, and by our surroundings. A bad temper, a scolding or excitable disposition, a harsh or screaming voice in mother, wife, or teacher, will be sure to be reflected by those with whom they come in contact. Ladies who give way to these fitful feelings, can never hope to enjoy good health, neither can they expect to be happy in this world, and it is doubtful whether they can be comfortable in the world to come. Thackeray says, "The world is a looking-glass, and gives to each individual the reflection of the face he brings to it. Smile on it, and it will smile in return. Frown on it, and it will frown in return." Wives sometimes yield themselves to a taunting, unkind, and domineering spirit. This is sure to bring its reward, and bitterness will be engendered in the breasts of those who have promised to love and cherish them. Fits of temper and excitable conditions of mind usually bring on hysteria, mental depression, nervous debility, and are a frequent cause of insanity. Hence temperance and discretion, in the expression of one's thoughts, is one of the surest ways to health. There is also a moral as well as a physical aspect to this question of temper. It is a moral duty, incumbent on those who have to go through life together, to set a watch over their lips, and keep guard over the door of their mouths ; for bitter words once spoken cannot be recalled, and may never be forgotten or forgiven. Suspicion and jealousy are the offspring of a disordered brain, and cause a great deal of unhappiness. Nothing can be more terrible, than for a wife to give way to fits of unfounded jealousy and suspicion, because it makes herself and her husband wretched. Thousands of husbands, have been estranged from their wives, because they foster this passion of jealousy. There may be grounds for jealousy in some cases, but many hysterical ladies, who have pure and chaste

husbands, are in the habit of chiding them when there is no occasion. The passion has such a debilitating effect upon the nervous system that wives sometimes become insane under its influence. Man and wife will, if they are wise, behave their best towards each other. As the wife demands the best in her husband, so he is entitled to look for the best treatment from his wife, who should be kind and temperate in her speech, health-seeking in her habits, and courageous enough, to resist the temptations of fashion and extravagance. This necessitates self-reliance and self-control, which are qualities of slow growth, and consequently should be exercised daily and hourly. Prudence of speech, apparel and demeanour, will characterise the good wife whom Solomon has so beautifully delineated, "She openeth her mouth with wisdom, and in her tongue is the law of kindness. She looketh well to the ways of her household, and eateth not the bread of idleness. Her children rise up and call her blessed; her husband also, and he praiseth her." The laws which regulate happiness may be put into one word—unselfishness. There can be no doubt that nine-tenths of the unhappiness in the world, springs from selfishness in one form or another. In general, the happiest people will be those who are the least selfish, those who think more of the welfare of others than of themselves. If you would be happy, you must first make others happy. In other words, "To be good is to be happy." And in yielding to bad temper or selfishness, is the sure way to misery, wretchedness, and disease.

COLD IN THE HEAD OR CATARRH.

This subject I have treated fully in my book on "Good Health and How to Secure It." I may here add, however, that the blood should be kept in its right place, and all its channels should

be unfettered by any bands. The lungs should have the fullest liberty. The skin of the whole body should be familiar with cold water. The neck should not be muffled up too much, but the feet and legs should be so clad, that they will always be warm. When the feet are kept warm and dry, catarrh will seldom be known, for a cold in the head or catarrh, and cold feet always go together. Patent nostrums, snuffs, and medicines cannot cure this affection; the cause must be removed, otherwise the effects will not cease. Take two hours out-door exercise every day, and breathe the pure fresh air through the nostrils, and not through the mouth. Romp and play with the juveniles, or take some frolicking exercise with people of your own age; then your circulation will be healthy and vigorous. Avoid sitting long in hot rooms, and especially do not keep too close to the fire. There should be a thermometer in every house, and the temperature should not exceed 68 or 70 degrees. Change the air of your room every hour or two, and do not sit more than an hour in one position. Rooms on the south side of the house will be warmer than those on the north side, also more healthy and cheerful, because they catch more sunshine. When the front door faces the north or east, the inmates will be more liable to suffer from cold draughts. For treatment, see pages 64 to 66 in the book above referred to.

IMPORTANCE OF BODILY AND MENTAL EXERCISE.

Very few persons know the full value of having both body and mind fully occupied. When people have nothing to do, and no special object in life, time hangs heavily upon their hands, and they fall into a dreamy, mopish, and listless condition, or become hypochondriacal, and wile away the tedious hours in a state of

wretched inactivity, until life becomes a burden. Such people usually sit in hot, close rooms, indulge in the luxury of easy couches, soft cushions, and downy beds, all of which enfeeble and debilitate both body and mind. It is said that if a healthy whelp, of the bull dog species, were to be fed upon rice, chicken, and other luxuries, made to lie upon soft cushions, and shut up for some weeks in a close room, that he would become unhealthy, weak, and spiritless. So it is with human beings; the more they indulge in these enervating luxuries, the more unhealthy, weak, spiritless, and miserable they become. Thousands of ladies are literally dying for want of physical exercise—that is, for lack of something to do. Idleness is not only the rust of the mind, but it is more wearisome to the body than toilsome work. This mental rust consumes faster than labour wears. Ladies are often “tired to death” with doing nothing. Such people cannot be said to “live” in the full sense of the word—they only “exist.” It is lamentable that while the world is perishing for want of the work that women could accomplish, so many thousands of them waste their time in idleness. Pride is one cause of a good deal of this idleness. Young ladies want to do something grand, and they overlook the little nameless duties that lie around them in every day life. Labor, like charity, should begin at home. It is well as far as possible, to combine exercise with useful occupation. Skating at the rink is a healthy exercise, but it does not benefit one’s poor neighbour. It is possible to combine recreation with utility. Young ladies at school need drilling as much as boys, though in a different way, in order to develop the chest and strengthen the lungs.

Exercise and fresh air are indispensable to health, and if the exercise can be taken in the open air, so much the better. Dr. Grosvenor, in his excellent *Essay on Health*, says, “one seldom

sees in cities and rich houses, where people indulge in the pleasures of appetite, that perfect health and vigor which is commonly seen in the country cottages, where nature is their cook and necessity their caterer, where they have no other doctor, but the sun and fresh air, and no other physic but exercise and temperance." Cold air, which is often considered injurious, is beneficial to a healthy person. How a brisk walk in frosty weather sharpens the appetite! Dr. Cullen says, "cold air, applied with exercise, is a most powerful tonic with respect to the stomach; and this explains why, for that purpose, no exercise within doors, or in closed carriages, is so useful as that in the open air."

Idleness and luxurious living, are as inimical to fecundity as to health. Pampered ladies are less likely to be blessed with children, than hard-working women. Hence, a good deal of misplaced pity is often bestowed upon the poor.

If I were asked what was the best cure for eruptions on the skin, I should say "Water and Work." Pimples indicate, that the internal organs of exertion are not active enough to do their work, and consequently it has to be done by the skin. Work and water are the great strengtheners, purifiers and beautifiers. By work I mean real manual labor, exercise that will make you perspire; this will keep the internal organs in order, and bring much dirt to the surface, which water will wash off. Work is as necessary for moral as for physical well being. Viciousness is generally associated with idleness. The indulgences and vices of wealth and prosperity are more fatal to the highest development of national life, than the privations of poverty.

Some ladies object to the "trouble" of taking a daily bath; and others, and those not the most industrious of their sex, complain of the "time" it takes. Of course, anything that is precious and desirable, takes time to acquire; and is not health

the most precious of acquisitions? Better spend half-an-hour daily in the bath, than waste the best part of life as an invalid. Moreover, the daily bath soon becomes one of the greatest pleasures of life. If any of my lady readers have not experienced this pleasure, I recommend them to give it a trial. It will banish many of their ailments as well as bring pleasure. Nothing is so conducive to good spirits, health, and beauty, as the daily bath.

Exercise promotes cheerfulness, and cheerfulness promotes health. "A merry heart doeth good like a medicine." Cultivate contentment and a happy temper—there is no medicine equal to it. Blessed is the man who has a contented wife. A peevish, discontented wife is enough to spoil the temper and render miserable the best of men. I hope there is no wife of the character I have described amongst my readers; if there should be, I trust the perusal of this book will lead to her becoming cheerful, contented, and confiding, and the centre and source of a happy home, as well as the diffuser of sunshine to all around.

Some ladies labour under the impression that they cannot get housework done unless they display harshness of temper; so they hurry and worry their minds when there is something extra to be done, and this makes them seriously unwell. It is not work that kills, but worry.

Men are as liable to become dyspeptic, discontented, and miserable as women, perhaps more so when they lack regular and interesting occupation. Many a man who has been as happy as the day was long, during his active business life, has become of all men the most miserable on "retiring" with a competence. It is better to take things a little easier, than retire from business entirely. After a long life of activity, habit becomes second nature, and enforced idleness is most irksome and unhealthy. In this, as in most other things, wisdom and happiness are found in

moderation, and only those who are generally busily employed, can thoroughly enjoy a holiday, and amusing recreation.

Some ladies have a certain degree of inertia to overcome, before they can screw up their courage to take out-door exercise. They generally have a small base to their brain, which is usually accompanied by a feeble circulation, and a consequent disinclination for exertion. The primary cause of this distressing state is that their blood is poor, which induces debility and nervousness; and the chief reason their blood is poor, is because it is not oxygenised and vitalised by active exercise in the open air. Whoever wishes to become healthy, must shake off this indolent lethargy, and take sufficient exercise, to make the blood dance merrily through the veins and arteries. Exercise out of doors is most essential after bathing, so as to cause a reaction. There is no possibility of getting health without exercise, and a little gentle force may sometimes be necessary. We must seem to be cruel in order to be kind. Regular out-door exercise is quite compatible with the systematic discharge of household duties.

The great point is to have *order, system, and method*. Begin the day, if possible, with a short walk. Ten minutes' brisk walk before breakfast, is worth an hour's strolling afterwards. Our climate is often most unjustly railed against. Travellers, who ought to be the best judges, say that there is no country in the world, which is blest with a climate so suitable for out-door exercise, all the year round, as England. Walking is the best of exercises for ladies; it gives grace to the figure and deportment when needed, strengthens the body, keeps the bowels regular, purifies the complexion, promotes cheerfulness, and costs nothing. When a lady is pregnant, walking—of course in moderation—is even more necessary, for it keeps up the spirits and assists in an easy delivery.

THE DAILY BATH.

Every lady in the land should take a bath of some kind, each morning of her life, excepting perhaps, in the case of delicate persons, on the day after the menses have commenced, when a short intermission may be excusable, though a cold sponge bath even at this time, followed by friction, would be very beneficial. For a weak and debilitated person, the water should be tepid, but the sooner cold water is used the better, because it will more effectually contribute to give strength to the body and the nerves. Bathing should be quickly performed in order to produce a reaction, and cause a warm glow to pervade the system.

Some ladies are afraid of washing their feet and legs, but these members need washing quite as much as any other part of the body. If ladies will make it a daily practice to wash their feet and legs, cold extremities will be the exception rather than the rule. Furthermore, if a bath be taken every morning, it will banish nearly all nervous and other ailments.

Cold water sponging calls the blood to the skin, keeps out the cold, and causes the system to feel all of a glow. This kind of ablution tends to regulate the bowels, strengthen the back and loins, and makes most women strong and healthy.

Another fancy that some ladies have, is that baths are all very well for summer, but that they are most injurious in winter. This is a mistake, for baths are even more essential in winter than in summer, in order to render the skin elastic, and facilitate the exit of waste matter that accumulates in the body, because a cold atmosphere has a tendency to close the pores of the skin more tightly, and thereby prevent the casting forth of the effete and injurious matter of the system. For instructions how to take the

necessary baths, see my work on "Water and How to Apply it in Health and Disease."

An illustration of the danger of stopping up the pores of the skin is afforded by the case of the child whose skin was gilded, to represent the golden age, at a festival to celebrate the election of Pope Leo the Tenth. The child died in consequence of this unnatural application. Foucault, a French experimenter, covered animals with a coat of varnish, and they died more quickly than when the skin itself was removed. Horses had catarrh, dogs had congestion of liver and inflammation of bowels, and all died in convulsions. Think of this, young ladies, when you are tempted to increase your beauty by the aid of paints, powders, and enamels!

The fear or dislike of baths is strongest amongst those who most need water applications. Dr. Mary Studley, (U.S.) relates the following instance in her book, "What our Girls ought to Know:"

"During a practice of several months in one of the New York dispensaries, where the poor got plenty of medicine from newly fledged doctors, I was again and again shocked by the fear of water which prevails amongst this class of misguided beings. I remember a very filthy woman who used to come every Saturday for pills. The accumulated filth upon her body would defy description. As it was in the heat of midsummer, I ventured to propose that she take fewer pills for the inner self, and more water for the outer self. I wish there were any words by which I might picture the expression with which she asked me, "What, all over?" She then informed me that she had never done such a thing in her life, and should be ashamed to tell of it if she had. Medicine she must have. God's pure air and water and sunshine she was afraid of. I think I succeeded in getting the whole of that filthy body washed by instalments. I gave her a dozen powders of carbonate of soda, told her to dissolve one in a basin of

water and apply externally until the whole body was thus medicated. The medicine (!) induced her to try this plan of ablution." I need scarcely add that this was followed by the best results.

GOOD BLOOD IS ESSENTIAL TO GOOD HEALTH.

Good blood is made from good food, thoroughly masticated and assimilated by the aid of exercise, the oxygen of the air, and a cheerful disposition. No medicine will enable the digestive apparatus to make good blood out of bad food. If a lady lives on pickles and preserves, cakes and candies, strong tea and coffee, hog's flesh, highly-seasoned food, studies too much, and does not take adequate exercise, she cannot have good, healthy blood. Parents and teachers overlook or ignore this fact, when they require or permit girls to study too closely, and thus over-tax the mind and exhaust the vital energies. Over study sends too much blood to the head, and robs the extremities of that which would give strength to the bones, elasticity to the muscles, and warmth to the system. Growing girls are generally weak and sensitive, and need quite as much exercise for the body as for the mind. Being large, they look stronger than they are, and have too much mental labour forced upon them, which often results in chronic indisposition.

Bright girls who are quick to learn, become the victims of nervous exhaustion under the "cramming" system. It is a sad mistake to stimulate precocious children; they should rather be held in check, or the after-reaction will almost certainly leave them dull, listless, nervous, and undeveloped. How often the brightest scholars at school come home with their prizes to sicken and die! And when fatal results do not follow, the over-strained mind and body never recover their lost power.

PUBERTY AND CHANGE OF LIFE.

The period of life when menstruation begins is called Puberty. This change usually takes place about the age of fourteen, in some cases of precocity it may commence at ten, or as late as fifteen or twenty, while with some ladies the change never occurs. Much depends upon the stock of inherited vitality. The change is known by different names, probably the shortest, *menses*, is also the best, because, being the Latin word for months, it indicates the periodical recurrence of this constitutional peculiarity. From three to five days is the customary duration of the menses for those who are in health, but the time may range from one day to ten days. Stimulating food, reading love stories, &c., may bring on the change prematurely, to the weakening of the constitution.

Many well-meaning but ignorant parents, keep their daughters un-informed in regard to the wonderful changes, which their nature undergoes at a certain period of life—changes which are divinely ordained, and are essential to maternal life, as well to the development of the girlish nature—sometimes rough and turbulent—into gentle, tender, and sympathetic womanhood.

Ignorance of the reason for this functional change frequently leads to alarm at the first appearance of its symptoms, hence the duty of mothers to instruct their daughters respecting the expected change in due time. Knowledge often prevents danger. Girls have been known to conceal the symptoms of the change, from fear, washing themselves, and their linen, and putting the latter on damp, lest a call for clean clothing should lead to the discovery. They thus run a serious risk of taking cold. Mrs. R. B. Gleason, M.D., in her "Talks to my Patients," relates the following pungent case :—

“One said she had heard mysterious hints about ‘bad girls,’ but did not know what it meant, and feared she was one when this strange flow began. She waded into a brook and wore wet linen until the flow ceased. At thirty years of age she came under my care, when she was a seriously nervous invalid in consequence of a chronic uterine disease.”

Every sensible mother will make her daughters acquainted with the time and symptoms of the change. If girls wear damp clothing to conceal the change, it may cause clots to be formed in the uterus and bring on suppression. The blood is then carried to the lungs or to some other part, and causes a derangement of the vital functions. When it is carried to the lungs, it frequently brings on a cough, and causes consumption and kindred affections. When girls are acquainted with the change they should know how to act. If there is pain in the head and back, the patient should have a warm sitz bath, accompanied with abundance of friction, and plenty of physical recreation. Girls from 12 to 16 should have as much out-door exercise as possible, so as to get a good circulation of the blood, as the best preparation for this wonderful change, which is meant for the development and graceful adornment of the sex. At this period the mellowing influences of love are at work, the voice becomes softer, and the pelvis and neck are enlarged. If the menses are stopped or retained, then the girl's nature becomes cold and tame, instead of being warm and sympathetic. Judicious management at this time lays the foundation of good health for life, but injudicious management lays the foundation for disease. A girl's future well-being, in short, depends on being rightly treated at this critical period of her existence.

It is better to impart the necessary knowledge to girls in good time. Better be a year too soon than a day too late.

There is sometimes needless alarm at the simple absence of the menses. When a girl of puberty is undeveloped she has only to

wait and take proper exercise, and use proper means to develop the generative system, such as morning baths, washing the bosom with cold water, wearing a wet bandage about the loins, taking a warm and cold sitz bath daily, and using the vagina syringe at the morning bath.

THE UTERUS, OR WOMB,

Is properly the organ of generation, and is situated in the cavity of the pelvis, between the bladder and the rectum. This organ, like all other parts of the system, is liable to derangement when the laws of health are violated. Doctors inform us, and our experience confirms the statement, that very few "*fashionable*" ladies are free from some affection of this organ. The derangements incidental to the uterus may be divided as follows:—
 (1) Amenorrhœa, which means retention or suppression of the menses; (2) Dysmenorrhœa, or painful menstruation; (3) Menorrhagia, or excessive discharge at the monthly period.

AMENORRHŒA.

Retention of the menses may be caused by malformation of the uterus, by obstruction, such as the closure of the mouth of the womb, or by an imperforate hymen. Retention is most generally caused by lack of development, by constipation, and want of power to digest and assimilate food.

When the family physician is consulted, he sometimes prescribes doses of iron, or some other medicine, which will debilitate the parts, and call too much blood to this organ, thereby causing a bearing down. As before stated, lack of development may occur from hereditary weakness and from want of outdoor exercise.

Treatment.—The dietary should be plain and simple, consisting of brown bread, vegetables, and plenty of fruit. When there is much pain in the head and in the region of the ovaries, a warm shallow bath should be taken, for 10 or 15 minutes, after which a basin of cold water may be forcibly dashed upon the chest, followed with much friction with a dry towel and the bare hands, until the parts are quite warm, dry, and red; or a warm sitz bath, and back sponging may be resorted to, followed by a dashing on of cold water and plenty of friction. This will aid nature to do her own work by drawing the blood to the parts, and thus causing a vigorous and healthy reaction throughout the whole body. A wet compress may also be worn around the loins at night; when taken off next morning, sponge with cold water accompanied with friction. The bowels should be kept regular by eating laxative food, and by water injections, if they do not act freely without. If there is much pain in the womb, an injection to the vagina of tepid hop tea may be applied each morning; but if there is much weakness in the part, cool water injections may be resorted to. The patient should exercise much out of doors, and if convenient, take a rising douche bath on going to bed at night. In this case the water should be cool or cold.

CAUTION.—In all cases where a warm sitz bath is recommended, the water should be cooled down before the patient leaves the bath. If this is not convenient, a basin or bucket of cold water, may be dashed forcibly upon the patient, to cause a reaction and avert taking cold. If the warm sitz bath causes the menses to flow, the cold water may be dispensed with, but the patient should be wrapped well in warm clothing; but even in some cases of this kind, cold water following warm would be more beneficial than otherwise.

When retention is caused by an imperforate hymen, it is indi-

cated by pain and swelling of the abdomen, a dropsical condition of the feet and ankles at night, fulness of the eyes and face in the morning, and symptoms similar to those of pregnancy. This condition requires a surgical operation by a perforation of the membrane. The best and easiest mode of performing this operation, is by a crucial incision with a scalpel or lancet, and should be performed through a speculum. This operation is neither painful, dangerous, nor difficult; any experienced and handy nurse can perform it as well as a regular surgeon.

SUPPRESSED MENSTRUATION

Is usually brought on by colds contracted during the menstrual period. These colds are frequently caused by ladies wearing thin boots which expose the feet to the damp, and long dresses which drag upon the ground, thus becoming damp or wet, then they come into contact with the extremities, chilling the parts and thus causing clots in the uterus, and consequent suspension of the menses.

Over-exertion and mental anxiety, are also conducive to suppressed menstruation, as is also the vile practise of masturbation, or other amative excesses. It sometimes occurs that the menses begin to flow when the patient is undergoing the water cure; in such case there need be no ground for alarm, inasmuch as the system is becoming purified, strengthened, and invigorated; and the return of the menses is a sign that these processes are completed. There are many other causes of suppressed menstruation, but the above will suffice for our purpose. The chief symptoms are difficult breathing, palpitation of the heart, headache, cold extremities, a rush of blood to the head, and a sense of fulness and heat in the pelvis.

Treatment.—Warm sitz and foot baths should be taken once a day, followed with a dashing on of cold water. When the body is

feverish, the wet sheet pack may be taken every alternate day until the symptoms subside. The warm shallow bath is also beneficial, but the patient should not remain in the water more than fifteen or twenty minutes. If the skin be very moist, the hot-air bath may be resorted to every fifth day; but if the skin be dry and hot the vapour bath may be taken every fourth day. The wet compress may also be worn during the night, and a cold sponge bath taken in the morning, followed by an abundance of friction. If the bowels are constipated, tepid water injections may be taken daily, and if there is great pain in the vagina, injections of warm hop tea will be beneficial.

When the menses do not appear at the right time, some ignorant mothers and nurses give decoctions of tansy, rue, savin, and preparations of iron, aloes, iodine, &c., all of which occasion congestion in the organ, and often induce hemorrhage, which is mistaken for menstruation; in fact they force nature to throw off a quantity of the life giving fluid, which has a tendency to exhaust and debilitate the system. Hence all such drugs and decoctions should be avoided. If there is not sufficient vitality to cause the menses to flow naturally, these empirical practices will do more harm than good, because they produce permanent congestion of the uterus; hence the organ becomes too heavy, and the constant pressure on the vagina will bring on prolapsus uteri, or falling of the womb, and kindred affections.

DYSMENORRHŒA, OR PAINFUL MENSTRUATION.

This affection is usually attended with considerable, and sometimes excessive bleeding, while in other cases the hemorrhage is slight. Some ladies suffer excruciating agonies for several days.

calling forth the greatest sympathy and pity from those around them. Dysmenorrhœa is usually caused by an inflamed condition of the mucous membrane of the uterus, and by internal clots of blood, which in some cases have been mistaken for abortion. Sometimes these pangs are of a neuralgic or rheumatic character. In such cases the pains should be alleviated by sitz baths, and an abundance of friction; but all we can hope to do at this period is to relieve the pain; and during the intervening weeks the general health should be attended to.

Treatment.—The successful treatment of painful menstruation, requires great experience of the bathing processes, in order to bring about a healthy condition of body.

The sitz and foot baths may be taken from ninety-five to one hundred degrees Fahrenheit, and the bowels should be well rubbed with the bare hands, while the parts are immersed in the water, which should be of fifteen minutes duration. The wet compress, wrung out of cold water, should then be applied and changed every four hours. If the intense pain continues, the parts should be fomented with water as hot as it can be borne for ten or twelve minutes; after which, they should be covered with four thicknesses of flannel wrung out of hot water and covered with dry flannel, bandaged down tightly, and changed every two hours. It should be borne in mind, however, that these hot fomentations have a tendency to relax the parts, and to increase the severity of future attacks; hence the necessity for attending well to the system during the intervening weeks. If the body feels chilly, the sufferer will find the hot shallow bath, of 105 degrees, and 15 to 25 minutes duration, very soothing. A cold wet cloth should be wrapped around the head while the patient lies in the bath; after which, the patient should be put to bed and wrapped up warm. The above treatment applies to the spasmodic stages. In the later

stages the baths should be cooler and regulated in proportion to the intensity of the pain. Vaginal injections of warm hop tea are also serviceable, as also is the drinking freely of warm water. The bowels should be freed from all obstructions by the injection of warm water. If there is considerable pain in the rectum after the injection of water, three or four spoonful of water, to which has been added twelve or fifteen drops of laudanum, may be injected. This will give relief from the pain, though as a rule, I am not in favour of using opium in any of its forms; the above quantity of opium, however, will give relief better than by any other means, because it goes directly to the seat of the pain. The danger of using laudanum injections arises from the liability to increase the quantity, thereby disturbing digestion and inducing constipation. One other caution is necessary: never allow an inexperienced person to administer these powerful remedies. Ladies will do well to recollect that during their monthly illness, their nervous system is more sensitive than at any other time; consequently, they are more liable to pains in the head, back, and loins, and are more subject to depression. Anything that disturbs the feelings is more felt at such times; a shock of severe sorrow or even anger at this period, sometimes causes mental derangement, suppression, hemorrhage, or painful menstruation.

The treatment during the intervening weeks between the menses should be as follows: If the patient is too feeble to take much active exercise, she should wrap two or three blankets around her and sit in the most open part of the house, throwing wide open the windows and doors, so as to let in a current of pure air, and breathe copiously and deeply, filling the lungs full at every inspiration and emptying them at every expiration. If it is convenient for her to take a ride into the country in an open conveyance, so much the better; but if she is strong enough to take out of door walking

exercise she should not fail to do so. She should take a warm and cold sitz bath three times per week, and wear a wet compress around her body every alternate night. By this means the circulation will be improved and the whole system toned up. The bowels should be kept quite regular by water injections and by eating laxative food. It is much better to regulate the bowels by eating laxative food and by out of door exercise, bathing, &c., than by merely relying upon injections, though the latter are very beneficial when the other remedies fail to act. I have frequently been called to prescribe for young ladies who have been in dreadful agonies at the time of the menses, and in nine cases out of ten, I have found that a simple hot sitz and foot bath, and an injection of water has given instantaneous and permanent relief, especially when the bowels were well attended to afterwards. Every lady who is subject to painful menstruation, should have a sitz bath for this purpose ; and on the approach of the menses, she should avail herself of its beneficial effect.

MENORRHAGIA

May be described as an excessive secretion of the menstrual fluid, a profuse menstruation, or a real hemorrhage. Some ladies bleed profusely, which is usually described as a "flooding," or too great loss of blood. Not long ago, I was sent for by a lady, who had been troubled with a flooding for twelve months, almost without intermission. She was so weak and bloodless, the doctor would not allow her to sit up, saying that if not kept in a reclining position, every drop of blood would come from her. He had given her medicines, but they seemed to have no good effect, and the doctor and all her friends declared that her case was hopeless, and that she must not expect to live many weeks. After Mrs. Wells had applied the water

treatment for a few days the hemorrhage ceased, and ever since that time the patient has gradually improved, and is now quite well. This is only one case out of a number that have come under our treatment.

In a perfectly healthy state the secretion is light in colour, and comes on at regular intervals, and lasts from three to five days, and should not exceed three or four ounces; but many weakly and delicate ladies have seldom a free interval of more than twelve or fourteen days, whereas, four weeks should elapse between finishing one period and commencing the next.

There are two kinds of menorrhagia; one in which the discharge is natural, but in excess; and the other in which pure blood is discharged. The symptoms of the disease are, that the flow of blood is profuse and lasts much longer than is natural. The menstrual periods occur too often, with profuse leucorrhœa in the intervals. In some cases, the discharge comes in gushes, especially with women who have had many children. There is experienced a feeling of languor, with weakness in the loins and back, acute headache, ringing in the ears, dimness of sight, giddiness, debility, derangement of the stomach and bowels, palpitation of the heart, melancholy, nervousness, amounting at times almost to insanity, dropsy of the eyes and feet, and sometimes prolapsus of the uterus and vagina from relaxation. In married women, who live freely, the disease often assumes a more violent and active character; while with more delicate persons it is rather of a passive kind. In the former case it is often caused by cold, which may have the effect of either checking the discharge or making it flow profusely, and with more or less pain. The passive form of the disease is of more frequent occurrence. There is little or no local pain during the flow, but great debility and exhaustion afterwards. Although seldom fatal, life is often reduced to the lowest ebb by the loss of blood. The disease not unfrequently occurs about the

time of menstrual decline, ranging from about the age of forty to fifty.

The causes of menorrhagia are various. The chief cause is the over-excited state of the ovaries, which discharge the ova too rapidly, and, in the congested and irritable state of these organs, this gives rise to profuse menstrual discharges. When once morbid and excessive action has been created, it is kept up by habit, and the discharge of ova and blood assumes a passive character. Other causes are hard and exhausting labour, great anxiety of mind, jealousy, undue sexual intercourse, masturbation, &c. Sitting in close and hot rooms and drinking strong tea and coffee, enfeeble or excite the body and predispose to this disease. Too frequent child-bearing is also a common cause, also excessive lactation. Abortion may cause menorrhagia, or be caused by it, for it is really an ovarian abortion, the ova being cast off prematurely, just as the child is cast off by the womb before the right time. An inflammatory state of the ovaries and ulcers of the womb are frequent causes. The form of the disease, which occurs at menstrual decline, may be owing to complete abstinence from sexual intercourse, to avoid increase of family, and the consequent derangement and congestion of the ovaries and womb; but this only occurs in ladies who have a full habit of body. The sexual intercourse at this period is very exhausting to those who have a delicate constitution. The disease is in some respects analogous to profuse spermatorrhœa in the male; the sperm cells and the germ cells, being too rapidly discharged in a crude and immature form in the worst cases.

Treatment.—First and foremost, all predisposing causes must be avoided. When the disease has been produced by excessive venereal indulgence, abortion, or over lactation, separation from the husband for a time is advisable, and the child should be

weaned. If caused by masturbation, the habit must be abandoned. If from too frequent child-bearing, the recurrence of pregnancy should be avoided, remembering that too frequent child-bearing can be endured with impunity only, by very strong women, and is full of danger to the delicate, and to those whose life is not a very healthy one. During the flooding a reclining position is the best; and a cool air and quiet are essential to recovery. In cases of severe flooding, pieces of ice may be introduced into the vagina; and when there is a sense of heat in the abdomen or pelvis, cold wet cloths should be applied and frequently renewed. A strict dietary must be observed. Cool sitz baths and cool vaginal injections may be taken two or three times daily. The water should be as cool as the patient can bear without chilliness. If there is exhaustion and a lax condition of the vessels, very cold injections may be taken several times a day to the vagina, and once a day to the rectum or seat. A cold wet compress may be worn around the body, and re-applied three or four times a day. The abdominal region and spine may be sponged over with cold water each morning, accompanied by friction. In many cases the cold douche bath acts like a charm, when it is applied to the lower part of the spine. This treatment may alarm some persons who are afraid to touch cold water, and who think it is dangerous even to wash their faces with cold water during menstruation. But we invariably find that the application of cold water even during menstruation is more beneficial than otherwise; and we seldom or never suspend water treatment during menstruation; yet every year we cure many very severe cases of this kind.

INFLAMMATION OF THE OVARIES.

The ovaries are oval shaped bodies attached to the upper and forming part of the womb, and extending to each groin. Sometimes they become inflamed, which is characterised by pain, swelling, heat, and sometimes redness in one or both groins. When this is the case, the patient should sit in warm water for ten or fifteen minutes, then gradually cool the water down. The parts should be gently rubbed with the bare hands during this time, after which the cold wet compress, or apron, should be applied and worn during the night. A strict dietary must be observed. Tea, coffee, stimulants, and condiments must be avoided.

INFLAMMATION OF THE WOMB

Is usually caused by undue sexual excitement, or irritation of the organ, which attracts the blood to the part, and is a source of great discomfort.

Treatment.—The treatment for inflammation of the ovaries is also available for inflammation of the womb, with the addition of cool water injections to the vagina and rectum.

DISPLACEMENT OF THE UTERUS.

Prolapsus uteri, or falling of the womb, is a very common disorder, and the great majority of ladies, have more or less of it. Even young girls, soon after puberty, are troubled with this affection. Amongst the causes, is the pressure of heavy skirts, sustained by the abdomen, which bear upon this region, and add to its weight upon the uterus. Sometimes it is caused by the

pressure of fœcus, in the constipated rectum, and by straining to expel them. Sedentary habits, by weakening the whole of the muscular system, and especially the abdominal muscles, are causes of displacement, as also is the taking of forcing medicines, as rue, tansey, preparations of iron, &c., inasmuch as these drugs occasion congestion of the uterus, and the organ becomes too heavy, because of its accumulated blood, and its constant pressure on the vagina, causes its fibres to stretch to such an extent that it eventually protrudes externally. The symptoms of displacement are a weakness or aching of the small of the back, a sense of weight and dragging down in the pelvis, a feeling of sinking in the region of the stomach, general exhaustion, tenderness, heat and smarting in the womb, light-coloured discharges, and a dull, heavy, dragging sensation in the part. Prolapsus uteri is sometimes accompanied by retroversion, or a turning backward of the uterus; or anteversion, a turning forward.

Dr. Edward Clark, in his book entitled "Sex, in Education," says: "Let the statement be emphasised and reiterated until it is heeded, that woman's neglect of her own organisation, though not the sole cause of her many weaknesses, more than any single cause adds to their number and intensifies their power. It limits and lowers her action very much, as man is limited and degraded by dissipation. The saddest part of it all is, that this neglect of herself in girlhood, when her organisation is ductile and impressible, breeds the germs of disease, that, in later life, yield torturing or fatal maladies."

Diseases of the uterus are amongst the most common of these painful and preventible maladies. Dr. Mary Studley says: "Only just so much space being assigned to the uterus, in the pelvis, if it is turned backward or forward, or to one side or the other, there is at once a protest, from the nerves of the adjacent organs, in the

way of pain. The prominent causes of these positions, are, first, the unnatural weight of the organ, which is the inevitable result of a mode of dress which forces too much blood to it ; and second, a flabby condition of its texture, which is the natural result of this habitual congestion. Not less common than false positions of the organ, are unnatural conditions of the mucous membrane, which lines it. It is the function of all mucous membranes, when in health, to secrete enough mucous, to keep the surface moist. As soon as this mucous membrane becomes unhealthy, this natural moisture increases to the extent known as a catarrhal discharge ; and whether this discharge be a nasal or uterine one, its character is the same, and its cause the same, namely—congestion. This discharge, occurring from the uterus, or the vagina, is called leucorrhœa ; if it occurs from the nose it is called a catarrh."

Sensitive ladies, who have a slight falling of the womb, are apt to become greatly alarmed, and imagine that if they sit up, or stand, the organ is sure to fall. Mrs. R. B. Gleason, M.D., in her " Talks to my Patients," says :—

" I could fill this little book with cases, having a strange mixture of the sad and the ludicrous, to illustrate this one point. For instance, a young lady was once brought to us on a bed, and carried to her room with great care as to position, it being supposed that she could not be raised up, because she had falling of the womb so badly. On going to her room in the morning (which was a cold one), I found her lying flat on her back, eating breakfast with white woollen mittens on her hands. When asked why she could not be raised in bed, or lie on her side, she said that the uterus fell from side to side, if she moved either way ! From her description one would have supposed that it rolled round, like peas in a basin. Now this young lady was really a serious invalid. She had a delicate constitution, worn by close

study and teaching, until she had become dyspeptic, constipated, and weakened in the back by leucorrhœa and profuse menstruation ; but there was no mal-position of the parts. I asked her what made her first think she had falling of the womb. ‘ Why,’ said she, ‘ I felt weak, and unable to walk or stand, and some persons, whom I supposed understood all these matters, told me I had falling of the womb ; and so I took to bed to have things got in place, and to keep them there ; but the longer I lay, the worse I felt, and the less able I was to get up. I could not submit to be examined by a male physician, so I was doctored by guess until I came to you.’ I need not add that before twenty-four hours had passed she sat up to eat, to evacuate the bowels, to take a sitz bath, &c., though for several months she had not been otherwise than in a horizontal position, for any purpose whatever, never even lying on her side. Though much emaciated, and unable to stand on her feet, in a few months she was about the house and grounds. This is a sample of many cases of a similar class.”

The same accomplished lady doctor writes : “ The large number of utero-abdominal supporters, and of pessaries which I have removed because they were unsuited to the case, would supply anything short of a wholesale establishment with these kinds of instruments. The contrivances which I have seen used to support the uterus, which in a normal state weighs less than two ounces, are truly surprising, and suggestive of a very flimsy state of the maternal organs, which in the beginning were able to accomplish a great deal of useful labor, without artificial aid. The whole range of shoulder braces and abdominal supporters are invented to do the work for which muscles were designed, and, of course, at best can but imperfectly supply their places ; because the former is the work of the Infinite, perfect Artist, the latter of

the finite and fallible. When, from disease or disuse, the muscles become too weak to do their work, and we are obliged to resort to artificial support, we get a very imperfect substitute. Besides this, the longer we rely upon their aid, the less able we are to do without them ; because, animal tissue, unused, rapidly loses its vigor. Then, too, the pads and splints lessen the healthful circulation through the parts where they rest, and become a source of debility. More than this, spinal irritation is often induced by undue pressure."

Treatment.—In order to cure prolapsus uteri, every predisposing cause should be avoided. Tea and coffee, condiments, and everything that has a tendency to debilitate the system, should be abstained from. This disease is an offshoot of general debility, and the patient must have the body toned up. It generally accompanies nervous sensations, and weakness of the digestive apparatus. Cool or cold water injections to the vagina will be very beneficial, as also to the rectum, to remove the fœces, if the bowels do not act regularly. Injections may be taken to the rectum twice a day. Sitz baths, of short duration, may be taken twice a day ; to commence with, the water should be about 80 degrees, and gradually cooled down, each day reducing the heat at the commencement. A piece of swansdown calico should be wrung out of cold water and applied to the abdomen, and this should be covered with two or three thicknesses of dry flannel, and kept in its place by an apron, which fits around the abdomen, and is fastened by an elastic about the thighs. This is one of the most soothing and comforting appliances with which we are acquainted. In consequence of so many patients consulting us when troubled with prolapsus uteri, with anteversion and retroversion, which causes a pain just below the naval and in the groins, Mrs. Wells contrived an apron of a peculiar form, by which the wet cloths

and flannels could be retained in position so as to supply moisture and support the parts. It would be difficult to give a description of this apron. To be understood and appreciated, it should be seen and tried. It is inexpensive and very beneficial.

In some cases of retroversion and anteversion or inversion special manipulations are necessary, such as only competent practitioners can administer; though in many cases the above treatment is all that will be needed.

ULCERATIONS OF THE WOMB

Are generally produced by over indulgence in sexuality, by masturbation, or by corroding discharges, and a sluggishness of the liver.

Treatment.—Take frequent vaginal injections of cool water. Keep the bowels regular; abstain from all undue sexual excitement; exercise freely out of doors, and take tepid or cool sitz baths. The apron, as above described, is also very serviceable in this affection. Caustic and cauterisation of every description do serious injury to the parts, and should be avoided.

LEUCORRHŒA, OR WHITES.

This is one of the most prevalent infirmities which sap the freshness of girlhood and the strength of woman-hood. It is sometimes called FLOUR-ALBUS, a name given to all light coloured discharges, caused by vaginal excitement, and other affections which produce an increase of purulent, acrid, and offensive matter. Ancient medical authors wrote of this disease as incident to women worn with frequent child bearing, and prolonged nursing and overwork, but now-a-days it often begins with maturing girlhood. Ladies sometimes suppose leucorrhœa to be a natural

accompaniment of menstruation, but on seeking advice, they learn that it is the result of disease. The term *leucorrhœa* covers all discharges from the vagina, except the regular monthly flow. It may be yellow or greenish in tint, thick and milky white, or ropy and tenacious, like the white of an egg. As to quantity, it may only slightly soil the linen, or be so profuse as to need a napkin. As to its characteristics, it may be bland, and not irritating, or so acrid as to induce much local soreness and irritation. It is always attended with debility, and there is often much pain. It is often difficult to tell the difference between *leucorrhœa* and *gonorrhœa*; yet the difference must be great, because the latter is very infectious, while the former is rarely so. *Leucorrhœa* is severe in proportion to the extent of the mucous surface affected. The causes are very various. It is most common in child-bearing women, because after a birth the womb does not quite return to its virgin size, and the vagina is more relaxed, and more prone to congestion and inflammation. The more excited or irritated any part becomes, the more prone is it to inflammation. Amongst the causes are cold, insufficient clothing, thin shoes, and cotton stockings. The disease is the more difficult to cure because of the monthly illness and the sedentary life that most women lead.

Treatment.—Similar treatment should be followed as advised for prolapsus uteri; but in acute *leucorrhœa*, where there is much heat, tenderness, and active inflammation, the treatment should be mild and soothing, including washing with tepid water, cool water injections, the avoidance of hot rooms, late hours, sexual intercourse, and other excitement. This will give speedy relief in many cases; but if the discharge has become chronic, two or three injections of cold water to the vagina should be given daily. A cold sitz bath of three minutes' duration should be taken at 11 a.m. as also at 8 p.m. accompanied by friction. When the parts have

been strengthened, cold water should be injected once or twice a day for some time, in order to restore tone to the parts. No tonic is equal to this. The injections are quite harmless, and must be of great service, so long as they are used with discrimination. A cold injection daily to the rectum is also beneficial, especially in cases of inveterate leucorrhœa. The more active a life the patient leads the better. In some cases of chronic leucorrhœa, the application of the "*life-awaker*" over the loins and abdomen is very beneficial; though we should not recommend this for a very delicate person, inasmuch as she needs strengthening and toning up more than anything else.

HYSTERIA, OR HYSTERICIS.

This disease is commonly supposed to be peculiar to women; but some men are also hysterical. This, however, is the exception, rather than the rule, the exceptions being amongst very nervous, fidgetty, and debilitated men. Hysteria is a nervous disease, arising from debility, ovarian affection, and irritability consequent upon exhaustion. Dr. Trall says, "The symptoms are generally a sense of nausea, or sickness, flatulency, palpitation, depression of spirits, weeping, &c., without any assignable cause. The fit soon follows, indicated by a coldness or shivering over the whole body; quick, fluttering pulse; a feeling of acute pain in the head, as though a nail were driven into it; there is often an acute sense of pain in the left side, about the flexure of the colon with a sense of distension, which feeling advances to the stomach and throat, causing a sense of suffocation. This feeling has been called "*globus hystericus*." A convulsive struggle usually follows, which is sometimes very violent, causing terror to those around, the trunk of the body being twisted to and fro, the

limbs agitated, the hands clenched, the breast spasmodically beaten, the muscles of the chest agitated, and finally, the sufferer bursts out into paroxysms of laughter or crying, or utters incoherent sounds under a state of temporary delirium. On the cessation of the spasms, there are flatulent eructations, and a discharge of limpid urine. The patient lies stupid and apparently lifeless for a time, but presently recovers sense and motion, without any distinct recollection of what has taken place, but feeling a pain in the head, and a general soreness of the body. Hysteria differs from epilepsy in the insensibility being only partial, and by the absence of distortion of the features. Hysteria is caused by intense mental emotions, especially grief and anxiety, constipation, excessive evacuation, obstructed menses, plethora, and hot enervating drinks, such as tea and coffee." Pain and tenderness in the spine, and in the left side of the abdomen, is often felt by hysterical persons, and it often continues for years. This pain is probably in most cases symptomatic of an irritable or inflamed state of the womb. In some cases of hysteria it approaches very near to insanity. The mind becomes so perverted, wild and excitable, that friends become alarmed, and sometimes threaten confinement. But this should not be permitted, because to put such a patient amongst lunatics would be the surest way to make her a lunatic.

On reviewing the various symptoms of this distressing disease, it will be found that they all arise from a weakened and excitable state of the nervous system, connected with or depending upon a similar state of the nerves of the sexual organs. As chlorosis is mainly a disease of the blood, so hysteria is a disease of the nerves, though the symptoms of both diseases are often found together. Fear and rage make the heart beat violently, produce a gasping for breath, a choking in the throat, and even take away the power of speech, so strong is the influence of the emotions over the will.

A singular feature of hysteria is its imitative character, which is seen not only in its simulating so many diseases, but also in its infectiousness. It has often been observed by hospital physicians that when a hysterical girl is admitted into a hospital, the disease frequently spreads throughout the whole ward, and all the patients begin to exhibit hysterical symptoms. This arises partly from the great impressibility and sympathy of the female character. The controlling power of the will is not so strong in women as in men, while the emotions and feelings are at times overpoweringly strong.

When hysteria occurs about the second change of life—from the age of forty to fifty—it is usually produced by the wonderful changes that are taking place throughout the system; at this period, sexual contact has a tendency to aggravate, rather than to alleviate, the sufferings. In fact, I feel convinced that the sexual embrace, at either of the periods of change, is a source of great injury, especially to delicate persons.

Hysteria is one of the most terrible diseases with which physicians have to grapple, and they would generally rather be without hysterical patients, because the symptoms are so variable, that before all the possible remedies have been tried, both patient and doctor are tired out. Not only is the patient weak, excitable, nervous, and irresolute, but so changeable in her likes and dislikes, that patience is taxed beyond endurance. The victim of hysteria is often the subject of unfounded jealousy and suspicion, and exaggerates things in an extravagant and irritating manner.

As Shakspeare says—

“Trifles light as air are to the jealous Confirmations strong as proofs of Holy Writ.” There is no reasoning with hysterical women. Many cases are recorded where the basest and most unfounded charges have been made against the best of men and women, by hysterical persons.

Amongst the causes which give rise to this disease, are those which excite the sexual feeling without gratifying it. Hysteria is most common amongst the upper classes, amongst whom the sexual feelings are more prominently developed than amongst the poor. Idleness is another common cause, and that complaint is also chiefly confined to the rich and luxuriant classes. Dr. Ashwell says that marriage often cures hysteria; but hysterical women make bad nurses, having often scanty and innutritious milk. There is no doubt that a happy sexual intimacy is one remedy for hysteria, especially when backed up by proper hygienic conditions. The periods at which ladies are most liable to hysteria are from the age of 14 to 20, and from 40 to 50, which are the times of important changes in their life.

Other causes of hysteria are masturbation, undue sexual excitement, genital irritability, intense emotions, especially grief and anxiety; constipated bowels, obstructed menses, enervating drinks, such as tea and coffee; plethora, and novel reading. Close indoor confinement is also very conducive to this disease; yielding to violent passion is apt to bring on the disorder. I knew a case in which the malady was cured by a whipping, but this would be a dangerous procedure in the case of delicate girls or women. Dr. Carpenter records a case in which the spread of hysteria in a girls' school in France was checked by corporal punishment. Disappointment in love, ungratified sexual desires, and ovarian irritability frequently cause this disease, and in such cases chastisement would do more harm than good; on the other hand, undue pity manifested by friends, often aggravates the disease.

Treatment.—When the hysterical paroxysms come on, the patient should be laid all her length, upon the floor, or upon a couch, the dress should be loosened, and cold water dashed over the head and neck, till the patient becomes chilly, and revives.

There is no danger attending this treatment, nor any need for alarm; but if the patient turns very cold, flannels should be wrung out of hot water, and wrapped around the feet, or a hot foot bath may be applied. We have sometimes poured cold water over the head and chest of patients, for an hour, after which, they have appeared to be quite well. If this affection is associated with diseases of menstruation, as chlorosis, dysmenorrhœa, &c., these affections should be rectified at once, and must be overcome before the patient can be cured. I have known many young ladies to be cured of hysteria, by matrimony; in fact, marriage is the natural state for a woman, and those who are happily mated, are less liable to hysteria than those who are single. An abundance of out-door exercise, merry company, and rational amusement, are essential to complete recovery. Between the intervals, the patient should take frequent hot and cold sitz baths, and occasionally, a wet sheet pack, or a dripping sheet. In most cases, the bowels are more or less constipated, and the diet must be regulated accordingly. Highly-seasoned food should be avoided, as also late suppers, stimulants, and condiments. Injections of cool water should be administered to the vagina, once or twice a day; and all kinds of mental excitement must be avoided. I have stated that hysteria is sometimes caused by masturbation or self-abuse; when this is the case, the injurious habit must be at once abandoned, and a plain and simple dietary should be strictly adhered to.

MASTURBATION OR SELF-ABUSE.

It is with the greatest reluctance that I have to pen anything in regard to this vile practice; but a sense of duty compels me to do so, because those who indulge in this heinous sin, or in other undue excitement of the genital parts, in one way or another, are sure

to suffer from nervousness and functional derangements. Nothing will cause the beauty to fade, the tinge of health to leave the cheek, the nerves to be shattered, and detract more from social, mental, and physical enjoyment, than this habit, which is undermining the constitutions of thousands of the fairest and otherwise most lovely women. Ignorance of physiological laws is at the root of the evil. It is not surprising that nervous debility, depression of spirits, and shattered constitutions, are very prevalent, while so many of Eve's fair daughters yield to this vice. It is unnecessary for me to write more on this subject in a book of this kind, and the reader is referred to my work on "Vital Force, and Marriage Physiologically considered," for a full exposure of this dreadful evil and a description of the remedies.

NERVOUSNESS AND DEPRESSION OF SPIRITS.

Derangement of the female functions frequently gives rise to great depression of spirits, and to a condition of general nervousness. Amongst young women of a studious habit, this is especially the case. It requires quite an effort for some ladies to take exercise out of doors, though they are fond enough of activity of a certain kind, such as dancing in a hot ball room; but they imagine they cannot walk a mile without getting the back-ache. Nervousness, hypochondria, and hysteria, are seldom known to attack persons who take an abundance of outdoor exercise, and who are free from the worry, care, and anxiety of exhausting labour and fashionable life. Frequently depression of spirits springs from irregularity of the menses, or from ovarian derangement. Before this malady can be cured, the bowels and menses must be regulated. A cold sponge bath should be taken each morning.

strong tea and coffee avoided, cheerfulness encouraged, and pleasant occupation indulged in. To indolence, having nothing to do, reading novels, stimulation, and tea drinking, may be attributed most of the nervousness of the present day.

NEURALGIA.

Many ladies suffer intensely from this painful affection, and some gentlemen also are subject to it. Neuralgia is caused mainly by eating too much, which brings on dyspepsia and general debility, also by impure blood, and by an impaired circulation. It should be understood that the nerves are the sentinels which report the want of equilibrium in the circulation, by means of an ache of some kind. There cannot be an excess of blood in any part, without some kind of protest. Hence the inference is clear that neuralgia may be defined as a prayer of the nerves for healthy blood, and for an equable circulation. If bad food be eaten, the stomach is thereby impaired, and it is evident that good blood cannot be made. When the nerves are supplied with discordant materials, jarring of the nerves is an inevitable consequence.

For the appropriate treatment of neuralgia, see page 150 of "Good Health and How to Secure it."

HEADACHE.

Headache is caused by an impaired circulation, unclean blood, dyspepsia, tea and coffee drinking, tobacco smoking, worry, mental anxiety, constipation, monthly irregularities, hysteria, colds, want of out-door exercise, genital irritability, &c. It should be understood that too much blood in the head will cause these aches and pains, so will bad blood, which is manufactured from unsuitable

and half digested food. Hence the dietary should be very strict, and all kinds of indigestible food should be studiously avoided. Tea, coffee, condiments, and stimulants, should never be resorted to.

Treatment.—Ordinary cases of headache may be removed or cured at once, by putting the feet into water as hot as can be borne, and applying cold wet cloths to the head. When headache arises from suppressed menstruation, a warm sitz bath and back sponging will give immediate relief. When caused by dyspepsia, the head should be washed with warm water and rinsed with cold. Relieve the bowels of the fœces by water injections. Wear the wet compress during the night. When it arises from cold, the hot air bath or wet sheet pack should be employed. But nothing will cure headache for long, unless an abundance of out-door exercise is taken, and strict attention paid to the diet.

SICK HEADACHE DURING PREGNANCY.

May be relieved by drinking sips of warm water, and by wearing the wet compress around the body, three or four days weekly, changing it night and morning, and by the tepid sitz bath.

PALPITATION OF THE HEART

Is chiefly caused by indigestion, constipation, tight-lacing, the use of tea, coffee, tobacco, and ardent spirits, also by impaired circulation, and by pregnancy. There is much needless alarm about this symptom, for when the stomach is distended by too much food, the diaphragm is pressed against the heart, and causes it to beat more rapidly. In this case the cause should be removed, and the

effect will cease. If it arises from impaired circulation, more out-of-door exercise should be taken, and frequent warm and cold sitz and foot baths ; but if from a weak action of the heart, a wet pad should be applied to the part during the night, as also between the shoulders, and the parts sponged well with cold water next morning. My work on " Water, and How to Apply it in Health and Disease " will indicate how these pads should be applied. All kinds of indigestible food must be avoided. Sometimes palpitation is accompanied by derangement, or enlargement of the heart. In such cases a respectable medical adviser should be consulted. I have known many cases of palpitation removed, and completely cured, simply by regulating the diet, wearing the wet compress around the body two or three nights weekly, taking an hour's daily exercise out of doors, and a cold sponge bath every morning. Those who are troubled with this affection should not get into a desponding, gloomy, and dispirited condition, because it increases the difficulty. Laughter, cheerfulness, and merriment will do much towards effecting a radical cure.

MARRIAGE.

Marriage is a Divine Institution, and therefore every person who would answer the end of their being should marry when they arrive at full maturity. I am not in favour of girls marrying, nor of boys taking to themselves wives ; but when a lady is twenty-two years of age or upwards, and a young man is twenty-three or more, it is then time for them to marry. But they should be very particular in the selection of a companion, inasmuch as their health, happiness, and future prospects depend upon their being equally yoked together. There should be harmony both from a

phrenological and physiological stand-point. There cannot by any possible accumulation of misery come into your life so terrible a woe, as that which results from a hasty and unwise marriage. But some ladies who are unhappy at home, rush into marriage, accepting the first offer, in order to escape their misery. They marry in haste and repent at leisure. They vainly imagine that their husband should humour their every whim ; but in marriage there must be mutual concession, or there cannot be mutual regard and happiness. The husband has a right to expect that his wife will be trained to be self-reliant, industrious, and capable of bearing her fair share of the household burden ; as also to possess a cheerful spirit, a sweet temper, and the ability to manage family affairs with economy and efficiency. He should, of course, reciprocate her love, and do his utmost to make home happy.

THE EVIL OF HAVING TOO NUMEROUS A PROGENY.

Many ladies, who get married, are never free from ailments, in consequence of too frequent child bearing. It is unwise that weakly, delicate ladies should frequently be bearing and suckling children, inasmuch as the practice will have a debilitating effect upon their constitutions ; but robust, healthy ladies may have a large family, without seeming to do them any harm, and they always seem happy, when surrounded by their offspring. Every lady has a right to an abundance of fresh air, physical recreation, and enjoyment ; but if a wife is frequently bearing and suckling children, she is kept in the house, with a child in her arms ; and with so many children, and other household cares, she has no time to bask in the sunshine, and enjoy the beauties of nature.

Too frequent child bearing brings, upon frail and weak women, displacement, ulceration, and other ovarian affections. Hence, there should be three or four years interval between the birth of each child. This important subject is fully treated in my work on "Marriage Physiologically Considered," to which my fair readers are referred.

BAD SMELLING BREATH

Is usually caused by constipation, indigestion, decayed and filthy teeth, indolence, and genital derangements. From whatever cause the breath may be tainted, the teeth and gums should be well washed with cold water, each night and morning, and the mouth should be rinsed at the same time. The wet compress should be worn around the body during the night, to aid digestion, and all kinds of indigestible food, such as cakes, candies, new bread, condiments, &c., should be studiously avoided. The bowels should be kept regular by water injections, if they do not act freely without.

PREGNANCY.

When a lady gets married, she expects to become a parent at no distant date, and it is natural she should desire to have offspring, for children bring some of the greatest joys and blessings of life. The first sign that indicates pregnancy is the cessation of the menses, but this is not a certain sign, there must be other signs to corroborate it. The next symptom is morning sickness. This is one of the earliest indications of conception, and it sometimes occurs a few days after, and generally not later than two or

three weeks. Morning sickness is a distressing feeling, accompanied by a loathing of food, and sometimes vomiting. The sickness usually passes away after the first three or four months. A third symptom is throbbing, lancinating pains, and enlargement of the breast, with soreness of the nipples. This comes on about the second month. Sometimes after the first few months, a small quantity of watery fluid, or a little milk, may be squeezed out of the breasts. This can generally be relied on as a symptom of a first pregnancy, but not afterwards, because a little milk might remain in the breasts for some months after a child has been weaned. The veins of the breasts begin to look more blue, and are more conspicuous; the breasts themselves become firmer, and the nipples are enlarged and moist.

There is an erroneous notion that ladies cannot have offspring without great suffering, and that it is natural for wives to be sickly, especially during the period of gestation and parturition. I see no reason why ladies should suffer from an attack of neuralgia, or any other affection, at such times, because it is as natural for a woman to bear children as for a tree to bring forth its fruit. Nature has made provision for the support of the little one, and for ushering it into the world at the right time. Childbirth, amongst so-called savage people, is easy and painless in comparison with parturition in civilised society. It is related by travellers that when Indian women in North America, during their long marches, find that the time of labour is approaching, they retire to some quiet place, by the side of a brook, alone, even amid the snows of winter, are there delivered, wash their child and themselves in the stream, rejoin their company, and resume the march after a few hours' delay. This is natural childbirth. In our artificial life, labour usually lasts many hours, and the mother is kept in bed several days.

Many expectant mothers eat and drink too much, under the impression that they have two to support instead of one. This is sure to bring on nausea, vomiting, heartburn, and kindred affections. Overloading the stomach causes the food to ferment, producing colic, flatulency, and eructations. Again, pregnant women generally have the idea that they should keep themselves quiet, sit at ease, and avoid exercise of every kind, lest it should produce miscarriage. It is a notable fact, however, that the less exercise a lady takes at these times, the more will she suffer, and the greater will be her burden. The child will also suffer from the mother's inactivity, for when a person is indolent, the blood does not circulate freely through the body, it becomes stagnant and putrid, and is unfit to support the life in the uterus, which is thus made up of waste matter, instead of pure arterial blood. It is not surprising then that children should come into the world impregnated with disease, "scarce half made up," inasmuch as the blood which should have nourished and strengthened them, is compounded of unsuitable materials, and results in diseased conditions.

A young wife should take moderate walking exercise as frequently as possible, but not to exhaust herself; in fact, she should live half her time in the open air. Fresh air and exercise avert many of the usual unpleasant symptoms of pregnancy, and prepare the system for an easy delivery. One of the reasons why poor women have easy labours, and get about sooner, is owing to their having constant occupation and muscular exercise. Many a "poor body" thinks little of a confinement, while to rich ladies the period is always one of anxiety. Let the rich lady learn a lesson from her poorer sister.

During pregnancy, violent exercise must be avoided, such as running up stairs, over-reaching, and lifting heavy weights. Even

riding on horse-back, and dancing, are dangerous. Indolence is equally to be deprecated. A lady who lolls on the sofa all day, is preparing herself for a painful delivery. The lively, active women, have easier and quicker labours, and finer children than the sluggish and indolent. Burton says, "Idleness is the bane of body and mind, the chief author of all mischief, and a great cause not only of melancholy, but of many other diseases."

It is a mistake to look upon pregnancy as a disease; it is a natural process, and should be treated naturally. In the first place, the diet should be simple, both in meat and drink. No intoxicants should be taken, for they inflame the blood, injure the child, and depress the spirits. Meat should be eaten only once a day, and the less the better. Rich dishes should not on any account be partaken of. The less stimulating the food the better. It is a mistake to suppose that more nourishment is required during pregnancy, because there are two to be fed; on the contrary, it is safer to eat less than usual. It must be remembered that the drain upon the system from the menses has ceased, and that the little embryo for the first two or three months is not larger than a hen's egg. Heartburn and indigestion, which often accompany pregnancy, may be lessened or removed by abstinence. After "quickenings," the appetite generally improves, and as the foetus is then growing rapidly, more nourishment may be safely taken. The food should be both light and nourishing. When there is a dislike to flesh meat, it is best to avoid it, and take more ripe fruit and farinaceous food. Roasted apples, ripe pears, strawberries, grapes, stewed pears, and prunes, oranges, raisins, &c., are both food and drink, and keep the bowels open. The cooked food can hardly be too plain, but it should be varied from day to day, for the stomach as well as the taste likes variety. Sweets and rich pastry should be absolutely prohibited. When the body is inclined to plethora, abstin-

ence is still more necessary. A little honey eaten with bread at breakfast, or dissolved in warm water, will act on the bowels far better than any aperient medicine. Keep the bowels open, for costiveness is a common cause of hard labours. If necessary, the enema should be used, with water of the temperature of new milk ; it should be taken early in the morning two or three times a week. If the constipation be very obstinate, a little castile soap may be added to the water, which should vary from three-quarters of a pint to a pint-and-a-half. These injections never disorder the stomach nor interfere with the digestion ; they do not irritate the bowels, but soften the accumulation of foecal matter and wash it away, thus giving elasticity to the intestines, and tone and vigor to the system.

HEARTBURN

Is generally produced by acidity, arising from an over-loaded stomach, or acrid bile. When this is the case, an abstemious diet ought to be strictly observed. Great attention should be paid to the quality of the food. Bacon, pork, ham, fat and greasy food, should be avoided. Frequent sips of warm water will afford considerable relief.

PILES

Are a common attendant upon pregnancy, and are the result of habitual constipation, or the pressing of the womb upon the blood vessels of the fundament. Some ladies take strong purgative medicines, especially pills containing aloes, or other pernicious drugs, which conduce to these troublesome affections. Cool or cold water injections should be taken once a day. Two or three

sitz baths may also be taken daily ; for this purpose, the water should be about sixty-five degrees Fahrenheit, and should be gradually cooled down. An application of wet cloths, covered with a piece of dry flannel, and bandaged down, will aid in giving relief. The rising douche bath also acts like a charm upon the seat of the pain.

VARICOSE VEINS AND SWOLLEN LEGS

Are caused by pressure of the womb upon the blood vessels. Women who have had large families are more liable to these affections than others. These maladies require no special treatment, excepting the varicose veins be very painful ; when this is the case, the legs should be bathed in water, as hot as can be borne, for a few minutes, and afterwards dashed into cold water, and rubbed well with the bare hands. When the legs are very swollen and painful, a piece of swansdown calico should then be wrung out of cold water, and applied to the part, over which two or three thicknesses of dry flannel should be bound tightly with a calico bandage, beginning at the ankle, and fastening the bandage at the thigh or hip.

ABDOMINAL PAINS

May be greatly relieved during pregnancy, by wearing an abdominal belt, under which there are two or three thicknesses of swansdown calico, wrung out of cold water, and covered with flannel. Care should be taken to keep the bowels regular.

TOOTHACHE.

Some ladies are predisposed to this affection at all times, and more especially during pregnancy. It is not advisable to have any teeth extracted during this period, as it may tend to miscarriage or some kindred affection. Freeing the bowels with tepid injections, and living abstemiously for a day or two will relieve the pain. The most speedy relief, however, comes from holding tepid or cold water in the mouth for a few minutes, repeating the process until relief comes. It is difficult to determine whether the water should be tepid, warm, or cold; but experience will decide what temperature is most serviceable. If the patient suffers from a decayed tooth, it will be advisable to dip a bit of cotton wool into unmethylated chloroform, and apply it to the part affected, taking care to keep the bottle from the nose. Many have also gained relief by inserting the cotton wool, when dipped in the chloroform, into the ear.

MORNING SICKNESS.

This is one of the earliest incidents of pregnancy, though some married ladies never experience it. It usually begins with a sensation of nausea, early in the morning, and as soon as she rises from bed she feels sick and retches. It is immediately occasioned by the disturbance of the genital parts, consequent upon the enlargement of the uterus in the pelvic cavity. All the treatment required is to drink a glass of warm water, eat wheat meal bread, stewed fruit, and the higher class of vegetables. The bowels should be evacuated each morning, and late suppers should be avoided. If the retching is very severe, the wet compress should be worn around the body three or four nights weekly.

CRAMPS

Are very common with pregnant women in the legs, thighs, and sometimes in the stomach. They are occasioned by pressure of the enlarged uterus. Those who lead a sedentary life, and are confined in-doors, suffer greatly from this affection, but those who take active out-door exercise are very seldom troubled with it.

Treatment.—Bathe the legs and thighs in water as hot as can be borne, for ten minutes ; after which, wrap around the parts affected two or three thicknesses of swansdown calico, wrung out of cold water, covered with dry flannel, and bandage down tightly during the night. When taken off, the parts should be washed with cold water, and rubbed freely with the bare hands, until quite warm, dry, and red. When there is cramp at the stomach, warm water should be freely drunk, and the wet compress worn around the body. The bowels must be kept regular by daily water injections, if they do not act freely without.

ITCHING AND IRRITATION OF THE EXTERNAL PARTS.

This is a very troublesome affection, and most ladies are too sensitive to speak about it. It causes much uneasiness, and is difficult to endure. The warm sitz bath and water injections act like a charm, especially if followed by wet cloths, wrung out of tepid or warm water, and frequently changed. The diet should be simple and nourishing, and all stimulants should be avoided. In some cases, it adds to the effect, if a handful of salt is put into the sitz bath.

PAINS IN THE BREAST.

During pregnancy, we frequently have complaint made to us, by our lady married patients, of pains in the breast. The best way to relieve these pains, is by bathing the parts with warm water, after which a piece of swansdown calico wrung out of cold water may be applied, covered with flannel, and bandaged down tightly; re-apply it night and morning, and sponge the parts well with cold water every time the cloths are changed.

DIFFICULTY IN PASSING THE URINE.

Pregnant women are liable to various affections of the bladder. Inability to expel the urine is sometimes very annoying, at other times the water can scarcely be held at all. The slightest exertion, such as stooping, coughing, sneezing, walking, or lifting, causes it to come away involuntarily.

Treatment.—When there is difficulty in passing off the urine, a warm sitz bath, accompanied by friction over the abdomen, often repeated, is very beneficial; or warm and cold wet cloths, to the lower part of the abdomen, may be alternately applied. The wet compress around the body is very beneficial. When the urine comes away involuntarily, the sitz bath should be cold instead of warm.

COLIC AND FLATULENCY

Are caused by eating too much, and may be relieved by draughts of warm water, warm fomentations to the abdomen, or a warm sitz bath, accompanied by friction. Eat less food and take more out-door exercise.

HEMORRHAGE DURING PREGNANCY.

Weakly ladies sometimes experience bleeding from the uterus during pregnancy. It is thought by some that this is a continuance of the menstrual flow, but this appears to be impossible, inasmuch as the neck of the womb is completely closed up as soon as impregnation takes place. Hemorrhage generally occurs in consequence of mere congestion. Cool sitz baths and wet compresses around the body are the best applications. Of course the bowels should be kept in proper order.

DIFFICULT BREATHING

During pregnancy is sometimes caused by a swelling of the liver, constipated bowels, impeded respiration, or general plethora.

Treatment.—Take moderate out-door exercise, drink frequent sips of warm water, eat little food, and pay due attention to the bowels

MORBID CRAVINGS.

During pregnancy women sometimes have longings or cravings for unwholesome and improper articles, or for fruits, or something which may be strictly hygienic, but which is not within reach. Whenever this is the case, ladies should avoid touching their faces, or any other visible part of their body; they should drink a good draught of cold water, and turn their thoughts into another channel.

MOTHERS' MARKS.

We often meet with people who are marked in consequence of their mothers longing for something that was not within their reach. Sometimes strong mental impressions, and shocks during

pregnancy, will cause blemishes and deformities. Hence it is unwise to allow crippled, diseased, and deformed persons, or anything that is horrible, to be seen by women who are pregnant. Every precaution should therefore be taken, to keep out of sight of these and other unpleasant objects. If a woman yields to fits of temper while pregnant, they have a prejudicial effect upon the child, which will inherit the mother's irritable or passionate traits of character.

THE "LIFE AWAKER."

Plethora, and fulness of body are great drawbacks to health and enjoyment, as also are a scrofulous taint, sluggish circulation, and a melancholy disposition. These affections may be greatly relieved by the Life Awaker. This instrument, when rightly applied, has a marvellous power of ridding the system of waste matter and morbid humours. It aids the processes of respiration and digestion, stimulates the liver by purifying the blood, and removing the waste matter that clogs the machinery of life. For a description of the Life Awaker, its uses and mode of application, see my work on "Good Health and How to Secure It."

A BAD APPETITE.

Some wives complain that they have no appetite, and that they cannot eat anything except at supper time. This is not surprising, for if they eat heavy suppers their food cannot digest so well as if taken in the early part of the day, and it ferments upon the stomach, causing derangement of the organ, bringing on dyspepsia and kindred affections. Then, too, they take very little exercise, do very little work, and sometimes lounge upon the sofa most of the day. The best cure is an avoidance of suppers, an abundance

of out-door exercise and physical exertion. Every lady should bestir herself, and look well after her household duties, and take two hours out-of-door exercise daily, and then she will have no reason to complain of a bad appetite. Occupation improves the health, drives away melancholy, ensures sound and balmy sleep, and enhances the enjoyments of life.

SLEEPLESSNESS.

Sleeplessness is sometimes caused by leading a luxurious, idle life. Some persons tumble and toss on their beds of down, night after night, and cannot get any refreshing sleep, which is "tired nature's sweet restorer." Sometimes, sleeplessness is caused by great mental anxiety, too great a strain upon the mental energies, nervous exhaustion, and by want of out-door exercise. Drinking hot and strong tea, and eating late suppers, is conducive to sleeplessness, and those who would obtain refreshing sleep must avoid them. An active, industrious, useful wife sleeps like a little child, for exercise and useful occupation cause balmy and refreshing sleep. The last hour of the day, before retiring to bed, should be spent in cheerful conversation, and physical recreation, or out-of-door exercise.

THE DELICATE AND NERVOUS LADY.

If a young married lady be delicate and nervous, without having any indication of actual disease about her, she should, if convenient, go to the sea-side for a change of air, move about freely in the sea breezes; and indulge in the luxury of sea-bathing, if she can get up a good reaction afterwards. If she cannot get up a good reaction, she should take two or three sitz baths per week, sponge

the body over each morning on rising, and follow with an abundance of friction. By this means she will aid digestion, the process of respiration, and help nature to build up a strong and healthy body.

Suppers should generally be avoided: but if the patient suffers much from flatulency during the night she may eat a crust of bread, a digestive biscuit, or a roasted apple and drink a glass of warm water. In most cases, however, a glass of warm water is satisfying to the appetite, and will ward off flatulency and kindred affections: but late and hearty suppers have a tendency to debilitate the system, render the sleep unrefreshing, and cause a lassitude and qualmishness to pervade the system.

HOW OFTEN TO EAT.

Three meals per day are quite sufficient for any person, even when they have to perform hard manual labour: but in the great majority of cases two meals are much better than three. Many people think, however, that unless they take three meals per day, they are likely to pine and die for want of nourishment, saying that if they do not eat a little and often, they are troubled with flatulency and a sinking feeling. These symptoms only indicate that the stomach is in a weak and enfeebled condition, and that the appetite has not been restrained, otherwise there would be no indications of the kind. Those who have restrained their appetite, and subdued the inflammatory condition of the stomach by eating two meals per day, seldom or never feel these hungry craving feelings.

WHAT TO DRINK.

Tepid water, toast and water, or lime juice, are the best drinks, but at meal-times cocoa, milk and water, or boiled milk may be

taken. Some ladies cannot digest boiled milk, as it has a tendency to make them bilious ; by such it should therefore be avoided. Those, however, who have good digestion, may derive much benefit from taking it. Brandy, spirits, and other alcoholic drinks, should never be taken. Some ladies resort to these stimulants when they feel low, sinking, and depressed, in order to raise their spirits ; but this is fraught with innumerable dangers, inasmuch as they weaken the nerves, inflame the blood, derange the stomach, and create an unnatural craving for further supplies, and it eventually results in dipsomania, excitable temperaments and shattered nerves. When a lady feels low and dispirited, she should try the effects of a pleasant walk or drive in the country.

MISCARRIAGES

Are commonly caused by violent exertions, mental shocks, excessive sexual indulgence, local debility, over-reaching, jumping, dancing, riding on horseback, obstinate constipation, tight-lacing, late hours, and purgative medicines. A slight cause will sometimes produce the death and expulsion of the foetus, and a miscarriage is no trifling matter. Amongst the symptoms of a miscarriage are pains, at first slight, irregular, and of a grinding nature, but which soon become more severe, ending in bearing down. The most usual time for miscarriage is from the eighth to the twelfth week. It is not confined to this period, as during the whole time of pregnancy, there is a possibility of premature expulsion of the foetus. A miscarriage before the fourth month, is at the time attended with little danger, although, if neglected, it may injure the constitution. Unless judiciously treated, a miscarriage may prove more weakening than a labour ; and when a lady has once miscarried, she is

likely to miscarry time after time, until her constitution is completely broken down. The principal symptoms of miscarriage are pain and hemorrhage, which are usually preceded by a sense of languor, uneasiness, weariness, bearing down, depression of spirits, weakness and uneasiness about the loins, thighs, and lower part of the belly, also aching and cramping pains in the back. Tea and coffee have an enfeebling effect upon the system, and are somewhat conducive to miscarriage.

Sometimes, young women who have fallen from virtue and become pregnant, are urged by their betrayers to produce a miscarriage. I would implore them to do nothing of the kind, because such a course adds sin to sin, is debasing to the mind, and is nothing less than murder to the child, and may be death to the mother.

The late Mrs. Lydia Fowler, M.D., wrote, "though I believe that mothers should not bear more children than they have the strength or means to provide for and educate, yet I would say for the encouragement of those who have a dozen, that perhaps the last child will be the Joseph or the Benjamin, who will give them joy and comfort, and take care of them in their old age, and that by no means should they do ought to destroy the child before birth. There is life in a foetus of a few days, or even of one day old. Sometimes, though a woman does her utmost, she cannot get rid of the foetus, but does it a permanent injury, and may bear an idiotic child to be a curse instead of a blessing."

Treatment.—The first condition is perfect quiet. The patient should recline in an easy recumbent posture. The cool, wet compress should be applied around the abdomen, and changed several times a day, and three or four injections of cold water should be given to the vagina daily. When there is much flooding, the same treatment should be applied as for *menorrhagia*. If faintness is experienced, it may indicate the formation of a clot,

which obstructs the breathing vessels, in which case, the forehead should be bathed with cold water, and a free current of fresh air allowed to pass through the room. The patient should always be kept as cool as possible, without discomfort, though it is better to avoid chilliness and to avoid cold extremities. If the feet and hands become cold, the feet should be wrapped in warm flannels, while cold water is applied to the head. The hands may be immersed in warm water for a few minutes, then dashed into cold water, and rubbed freely and covered with woollen gloves. If it is not convenient to apply flannels to the feet, a hot water bottle may be used for the same purpose. Stimulants of every description should be avoided. The diet should consist of arrowroot, gruel, sago, tapioca, toast and water, pigeon or chicken broth, grapes, strawberries, or roasted apples. If the bowels do not act freely without, a cold injection should be taken.

PREPARATIONS FOR MATERNITY.

Every thoughtful woman will prepare for labour. There are different ways of preparing for an early delivery. The first condition is that care and anxiety must be cast from the mind; out-of-door exercise freely taken, and the sitz bath used frequently. Of course, all parts of the dress should be worn very loosely. The more fruit is partaken of by a pregnant woman the better, so long as it forms part of her regular meals, for if the bowels are kept quite regular, the labour will be so much the easier. I cannot too strongly impress upon the mind of every pregnant woman, the necessity of taking frequent sitz baths. They soothe the nervous system, and strengthen its tone wonderfully, drawing the blood and humours from the head, chest, and abdomen, and relieving pain and flatulency. It would also be advisable to take

a foot bath at the same time. To commence with, the water should be about 85 degrees Fahrenheit, and gradually cooled down before the patient leaves the bath, to about 60 degrees. After the first few baths, the temperature of the water may be gradually reduced, until the bath can be taken comfortably at 65 degrees, and cooled down till quite cold before leaving. There is one other habit that should be avoided, namely, a stooping posture when sewing, reading, or working, as apart from the injury it causes by increasing the pains of labour, it is apt to cause the child to turn from its natural position, and cause a wrong presentation.

LABOUR PAINS.

A day or two before labour commences, the expectant mother usually feels better than she has done for some time, and the child "falls" as it is termed, or rather, it drops lower down. This is probably one reason why she feels lighter, more comfortable, and better inclined to take exercise. The only inconvenience caused by the falling is the pressure upon the bladder, which sometimes causes an irritability, and induces frequent desire to urinate. Shortly after this, the grinding pains come on at uncertain periods, sometimes once an hour, at other times at intervals of two hours. When this is the case, tepid water injections may be taken to advantage, and the sitz bath at 75 degrees has a very soothing effect. Brandy should never be taken at such times. A drink of warm water or gruel will be beneficial. If there should be much shivering, the feet may be put in warm water for ten minutes, and afterwards dashed into cold water for five seconds, and rubbed well with a dry towel and the bare hands until quite warm and dry. The patient should endeavour to walk about the room, or sit in a

horizontal position ; but the more active she is the better. Lying upon the bed has an enfeebling effect, and retards the operation. Everything should be in readiness. The bed should be hard, and protected from injury by india rubber sheeting or blankets. Several clean, dry towels should be at hand, as also a long bandage, warm and cold water, a good vagina syringe, a pair of scissors, and two strong ligatures made of four thicknesses of whity-brown thread. The linen should be well aired, and ready for immediate use. After a time the character of the pains alter, changing from a grinding sensation to a bearing down. The latter are the true pains, and are more regular and frequent than before. They proceed from the back and loins, and rise gradually to a certain pitch of intensity.

When the pains assume a bearing down character, the doctor should be at hand ; but he should not attempt to force the birth. It is unwise to hurry matters, and if attempted, irreparable mischief is frequently done. Nature must take her own time, and the medical man should not tamper with her, for it will only make it worse for the unfortunate patient. When there is much pain, some ladies prefer to kneel, while others stand or sit ; but as before stated, walking is preferable if it can be endured. The bowels should be evacuated as soon as the bearing down pains commence. A good enema is very essential for this purpose. When the pains grow more feeble and irregular, a cold sitz bath of eight or ten minutes, will be very beneficial. It generally suspends the pains for a short period, after which they come on strong and regular.

During a long labour, the cool sitz bath may be taken to advantage every 4 or 5 hours. Eventually the bag of water appears, and as the child is pressed downwards, there is a breakage of the membrane and a gush of waters. The nurse should then be ready to receive the head of the child, which suddenly emerges and

comes out like a shot, and during the next pain the body is delivered. Sometimes, however, there is a breakage of waters some hours before the child is born. Whenever this is the case, warm water injections should be administered. After the child is born, and the nurse feels satisfied that there is no other child to be delivered, a piece of swansdown calico should be wrung out of cold water, doubled into 4 or 6 thicknesses, and laid upon the abdomen. This will assist in the contraction of the uterus, and help to expel the placentia, and prevent hemorrhage. The after-birth generally comes away in half-an-hour after delivery, but it should not be forced or drawn away forcibly, otherwise it may do much mischief. If the after-birth does not come away within an hour or two after delivery, the nurse may use a little gentle pressure, but force should be avoided. Placing the child to the breast is one of the best means of bringing on the necessary contraction, thereby aiding its expulsion. When the after-birth has been delivered, it would be advisable to force a pint or a pint and a half of cold water into the vagina, so as to contract the uterus and prevent hemorrhage. The patient should even be allowed to rest and sleep for 2 or 3 hours, but should not take anything to eat. In 4 or 5 hours she may take a sitz bath at 65 degrees, for 4 or 6 minutes' duration. Injections of cold water to the womb may be given twice a day, and the sitz bath at 65 degrees may be taken once or twice daily. There is no danger in taking these baths; they prevent an undue loss of blood, thus retaining the living fluid in the body to give strength and vigour to the patient. I expect that some of my fair readers will be alarmed at this practice, because some ladies are afraid to touch a drop of cold water for a month after delivery, lest it should give them cold and cause their death. They usually wash in warm water, which liquifies the blood and causes a profuse hemorrhage; this is

unwise, for the blood is the life, and the more blood there is lost at this time, the less life and vitality will be possessed by the patient. Labours treated after this manner are not of long duration, and the patient usually leaves her bed on the first or second day and is following her household avocations within a week. Many poor women are hard at work when their babies are a week old; but where there is no necessity, it is better to keep quiet a little longer. Dr. Nichols, speaking of the efficacy of the water-cure practice in childbirth, says, "We have many cases of women of good constitutions who have been faithful in their preparatory treatment, whose labours are over in less than an hour, without the least trouble, and who might be round the next day, if they choose, carrying their babies. Water-cure, in fact, brings to women the strength and power of their natural condition. There are women who are shocked at the indelicacy and want of refinement shown in these easy labours; such ought to have the privilege of suffering as much as their sense of delicacy and ideas of refinement require."

On the appearance of the "little stranger," the slime should be wiped from its mouth, and if there is any delay in its breathing, the cool air should be allowed to come in contact with its skin, or it may be sprinkled with cold water. If the medical attendant is not present soon after the birth of the child, a ligature of thread as before described, about a foot long, with a knot at each end, ought to be tied tightly around the navel-string about two inches from the body. A second band should then be tied in a similar manner, about three inches from the first, and the navel-string should be carefully cut midway between the two ligatures, with a pair of sharp scissors. These operations should be carefully performed, otherwise they may be a serious danger to the child.

MANAGEMENT OF THE NIPPLES AND BREASTS.

For three or four months previous to a birth, the nipples should be bathed with the following solution, several times a day:

Borax, twenty-two grains;

Tannin, six grains;

Brandy, one ounce;

Water, one ounce.

This will prevent soreness, which is frequently a great trouble, with the first child. The solution should be applied with a soft piece of fine old linen rag. All pressure should be taken from the nipples, and the stays should not be allowed to press upon the breast. Sometimes the nipples become flat or sunken, as the breasts enlarge. When this is the case, they should be gently manipulated with the finger and thumb, and gradually drawn out two or three times a day. If there are any hard, knotty substances in the breast, they should be well washed with cold water every morning, and a piece of swansdown calico, wrung out of cold water, and covered with several thicknesses of dry flannel, should be applied, and changed morning and night, the parts being gently rubbed with the bare hands, until the knotty parts are gone. If the breasts are more than usually painful and large, after the birth, young cabbage leaves should be applied, and renewed every hour, at which time the parts should be softly rubbed. Before applying them, the hard fibres of the leaves should be pared level with the leaf, by a sharp knife. If the leaves are young and small, several may be applied at the same time. They are very cooling and comfortable. If the breasts feel very heavy, they may be supported with a soft handkerchief, placed underneath in the form of a sling, and tied at the back of the neck. These precautions

will prevent gatherings, soreness, and other affections. Tumours and cancers are morbid growths. I have treated on them in my work on "Good Health, and How to Secure it," to which the reader is referred.

GARTERS.

Much mischief is caused by wearing tight fitting garters which impede the circulation, causing swelling and badness of the legs, and other affections. Sometimes the garters are bound round the legs so tightly, as to cause pain and leave a red mark, and indentation. This cannot be done with impunity, and it may even cause rheumatism in the knees. Formerly we discountenanced the wearing of garters, in consequence of these injuries, but recently there has been invented a Patent Duplex garter which is very elastic, and yields to the movement of the muscles, of the leg, thus allowing free circulation, and avoiding all discomfort from pressure. Being made of wire no heat is imparted, nor is ventilation impeded. A short time ago, a lady came into our establishment to purchase another pair for a friend, who was troubled with rheumatism, remarking, that before using these new garters, she was herself plagued with rheumatism in the knees, and that it had since entirely disappeared.

CHANGE OF LIFE.

There are two important epochs in the life of a woman, namely (1) the commencement, and (2) the close of the period of menstruation; and each epoch requires great care to prevent the occurrence of serious diseases. The importance of attending to

the healthy and proper performance of this function will be evident, in reflecting that upon its due recurrence and operation, conception itself depends. Menstruation generally occurs once every month, that is every twenty-eight days, and it usually returns to the very day, and often to the very hour. But some ladies have the menses every three weeks. Whatever the interval, the discharge generally lasts from three to five days, and sometimes for a week, or even a longer period. It is estimated that the amount of the discharge is from three to six ounces. The menstrual state continues for thirty or thirty-five years, and while it lasts, is a sign that pregnancy is possible, unless in exceptional cases of protracted menstruation. As a rule, when the flow ceases, the power of child-bearing ceases. The menstrual fluid ought not to clot, for that brings pain; moreover, pregnancy seldom occurs until the clotting has ceased. The treatment for this affection has already been described.

The ceasing of the menses is termed "a change of life," and as it follows from a change of the regular habit of years, it is a critical period of a woman's existence. Before the change comes, the menses usually become more or less irregular, as to time, quantity, colour, &c. The stoppage of the flow generally has the effect of causing greater plumpness of the person, about the bosom and abdomen, giving a matronly, and at times, a pregnant appearance. There may be peculiar pains, nervousness, flushing, flatulence, &c., at times. Sometimes the nose may bleed, as though nature were relieving the system, and it is well not to stop the bleeding, unless it be very profuse. When the change of life ends favourably, as it generally does, when well managed, it improves the constitution, and often the temper and comeliness.

Some ladies, at the change of life, have very peculiar pains, sometimes in one place, and sometimes in another. The head is

often affected, one time at the back, and then in front; and again, there is a pain, as if a nail were being driven into the head. Ladies of full habit may have pains and swellings in the breast, which cause her to fear there is a tumour or cancer forming. Amongst the symptoms of the change may also be noticed, flatulence, and pains on different sides of the abdomen. This flatulence is at times so severely painful and annoying, that it drives the sufferer from society, and makes life burdensome. The wind sometimes rises to the throat, causing incipient hysteria. Other pains may occur between the short ribs, back, and lower part of the abdomen. There may be some eruptions on the skin, especially on the face, so as to make the sufferer very uncomely, but these eruptions have their use, and they do not leave any permanent disfigurement. Fat may accumulate about the throat and chin, giving the latter a double appearance. There is now and then, also, slight indication of a beard. Bleeding piles are apt to occur, and may return periodically; these may be considered a good sign, being an effort of nature to relieve herself, and should not, therefore, be repressed, for though painful, or at least unpleasant, they obviate greater pain and discomfort. Some ladies are subject to flushings of the face, neck, &c., followed by profuse perspiration, and succeeded by chilliness. These flushings may be only occasional, or they may recur at what would have been the regular menstrual periods, and are no cause for alarm, but rather for thankfulness, unless they are attended by hysterical symptoms, when a gentle water treatment will allay them.

SPINAL WEAKNESS.

Many ladies suffer from spinal weakness, chiefly because they do not strengthen the muscles of their body by means of physical

exercise, which they are often unable to take, from wearing stays, belts, and straps, under the false impression that these artificialities sustain and strengthen them. The best cure for spinal weaknesses, curvatures, &c., is the sitz bath and back sponging, accompanied by friction with the bare hands, and an abundance of physical exercise and recreation, with the occasional application of the "life-awaker," which will cause the blood to circulate freely down the back, and thereby strengthen and invigorate the system. The spine is like the mast of a ship, which is held in its place by stays or ropes, having no power to support itself; so the spine has to be held in position by the stays and ropes which we will call muscles. The development and strengthening of these muscles, will cure a large portion of the cases of spinal weakness. Any mechanical appliances which ignore these muscles and relieve them of their work, are injurious, for they make the spine weaker and weaker. During the "change" there is more tendency to debility and mental depression, than at any other period of life, as also a disinclination to take out-door exercise. After menstruation has ceased, several months and even years elapse before the nervous and circulatory system become quiet and settled.

Treatment.—When the patient is of full habit of body, fat and greasy food should be avoided, and an abundance of out-door exercise taken. The bowels should be kept regular, and frequent ablutions resorted to, such as the warm shallow bath. This bath may be taken at 95 to 100 degrees, and for twenty minutes in duration, to be followed with a dashing of cold water, and an abundance of friction. If the patient should be spare and lean, the warm sitz bath and back sponging may be substituted for the shallow bath. The patient will also need an abundance of out-door exercise. If there is feverish excitement and nervous irritability, a full shallow bath at 98 degrees, will give considerable relief.

During the time the patient is in the bath, her head should be sponged with cold water, and during the night the wet compress should be worn around the body ; then a wet sheet pack, for three-quarters of an hour in duration, followed with a dripping sheet rubbing, or a warm and cold pouring bath may be taken twice a week. While the patient is in the pack, a cold wet cloth should be applied to the head. Stimulants, highly seasoned food, and condiments, should be avoided, as should also late suppers, and all causes of excitement and irritation. If there is pain in the head, frequent head and foot baths may be taken. The head should be bathed in water at 80 degrees, and the feet held in water 105 degrees ; after which, cold water may be dashed on the head and feet, in order to cause a reaction. These baths should not exceed seven minutes in duration. When there is a tendency to mental depression, out-door exercise, change of scenery, &c., should be resorted to. The bowels should be kept free, the head cool, and the feet warm, and the patient should be actively employed at some pleasant vocation. Cold sitz baths of four or five minutes' duration, may be taken daily with advantage, especially if followed by some active out-door exercise. The skin and kidneys should be rendered active by drinking freely of warm water, and by taking such recreation as will produce animal heat. Tea, coffee, and stimulants of every description should be studiously avoided. Patience and perseverance are two essential qualities at this period of life. If the above treatment be faithfully carried out, the autumn of life may be more enjoyable and healthy, than any previous season of existence.

FAINTING.

Fainting is usually caused by too tight an adjustment of corset strings, inactivity, mental excitement, confinement in close hot

rooms, and amatory indulgence. We seldom see ladies faint who do not lace their waists tightly. On this delicate subject, hear what Dr. Mary Studley says, "of course, when a girl faints, I go for the corset strings—for she who faints out of corsets is the exception—and I have more than once stabbed my fingers most woefully with those abominable pins, on my way to the corset strings. Please bear in mind that this is your first service to be rendered on such occasions, namely to cut the corset strings. That is far more essential than to run for the camphor bottle. The next service is to open the windows; the next is to sprinkle a few drops of cold water in the face; while all the time you must send the curious away, and allow no one to remain in the room, or near the patient, to vitiate the air for her. Give her plenty of air and plenty of chest room, and nature will do the rest in most cases." If after this, the patient does not revive, a warm foot bath may be administered.

ULCERATED AND INFLAMED LEGS.

Ulcers are caused by purulent secretions, a morbid condition of the blood, a sluggish liver, and an impaired circulation. There are several kinds of ulcers—as the *Indolent*, or "running sore," the edges of which are inverted, rounded, glossy, thick, and regular; the pus is thick, of a dark yellow colour, and adheres to the bottom of the ulcer. This kind of ulcer is very common to women, especially at the change of life, and is usually located in the legs.

Irritable Ulcers are very tender to the touch, very liable to bleed; the discharges are very slight, and of a thin, ichorous nature; the colour is dark or purple; the edges are uneven and jaggy; the parts around are red and swollen.

The *Benign or Healthy Ulcer* is that kind which is unaccompanied with the destruction of the surrounding parts. Its surface is florid, and is without offensive smell. It heals regularly, without leaving much scar or mark, and very much resembles the common boil. In fact, the common boil itself is a kind of ulcer.

Varicose Ulcers are sometimes indolent, and at other times irritable; they usually accompany enlarged or varicose veins, and are located below the knee.

Specific Ulcers are the results of scrofula, syphilis, salivation, etc.; they are accompanied with an unpleasant smell, and sometimes terminate in cancer, especially when proper means are not taken to rid the system of these virulent poisons.

There are many other varieties of ulcer, but the above are sufficient for our present purpose.

Treatment.—When the legs are affected with either the *indolent*, *irritable*, or *varicose* ulcers, a hot-air, vapour, or shallow bath should be taken, after which the “*Life-Awaker*” should be applied over the chest, stomach, and addomen, also down the spine and over the legs. This will cause a great deal of waste matter to be passed off, and will do much towards clearing the blood. On the sixth day after the application of the “*Life-Awaker*,” a vapour bath should be taken. On the seventh day the wet sheet pack will be very beneficial, and on retiring to bed, a white turnip poultice should be applied to the ulcerated parts, covered with linen, over which several thicknesses of dry flannel should be wrapped, and bandaged down tightly with a roller bandage, beginning to wrap it on at the ankle and finish at the knee. When the poultice is removed next morning, the leg should be well washed, and covered with two folds of swansdown calico wrung out of tepid water; this should be covered with flannel, and bandaged down tightly with the roller bandage, and changed as

often as it gets dry or feels very uncomfortable. The poultice and bandage should be applied nightly, and the wet dressing applied daily, till the twelfth day after the application of the "Life-Awaker." On the ninth day a hot-air bath may be taken; and on the tenth and eleventh days the hot and cold sitz and leg baths will be very beneficial. On the twelfth day the "Life-Awaker" should be re-applied, and the same baths, etc., may follow as after the first application. Rich and greasy food should be avoided, and an abundance of physical exercise be taken; the bowels should be evacuated daily, and late suppers abandoned.

The above treatment will cure some of the worst cases of "ulcerated bad legs" in a remarkably short time.

If it is inconvenient to have the "Life-Awaker" applied, one thorough bath should be taken daily—as the wet sheet pack, vapour, hot-air, sitz, and leg baths, or the shallow bath, at 98 degrees, and gradually cooled down. The local dressings will, of course, vary according to the character of the ulcer.

The *Healthy* ulcer, or boil, needs nothing more than a cool wet cloth, or a linseed meal poultice to bring it to a head; when it bursts, the part should be bathed with warm water; the poultices should be changed morning and night, and continued for two or three days, after which the cool wet cloths will be quite sufficient to facilitate the healing.

The *Irritable* ulcer is sometimes very painful; when this is the case, the surrounding parts should be well bathed with warm water, or fomented with cloths wrung out of hot water until it becomes easy, after which wet cloths wrung out of tepid water may be applied, covered with dry flannel and bandaged tightly with a roller bandage. Exposure to the air aggravates the pain, the surface may be covered with flour or charcoal, previous to putting on the wet cloths. The turnip poultice, during the night, is very beneficial.

The *Indolent* ulcer often requires the application of mild caustic — when the “Life-Awaker” cannot be applied — to remove fungous growths and callous edges. The legs should be well bathed with warm water, or fomented when the surrounding parts are hard, after which the roller bandage should be wrapt on tightly, commencing at the ankle; or, adhesive straps may be tightly wound around the parts affected.

Varicose and *Specific* ulcers can be successfully treated by the “Life-Awaker” and water treatment combined, if carried out as above described, but they are very difficult to cure without the assistance of the former, though in some cases cauterization of each distended vein with potassa fusa, one or two inches distance from the ulcer, may be beneficial, and resorted to in bad cases with some degree of success.

TO PREVENT BAD LEGS.

Do not sit too long in one posture; take an abundance of outdoor exercise; keep the bowels regular; avoid rich and greasy food; take frequent ablutions; guard against eating bacon, pork, or ham, and everything that has a tendency to vitiate the blood; avoid late suppers; wash the feet and legs once daily; and do not strangle the legs, nor impede the circulation, by wearing tight-fitting garters. Keep the legs and feet warm by brisk exercise; and in winter thick woollen stockings, felt boots, and overshoes should be worn, in order to prevent the parts from becoming chilled.

We are frequently consulted by persons who are anxious to have their ulcerated, inflamed, and swollen legs cured by some kind of ointment, salve, or plaster, but we invariably inform such persons that when the legs are thus affected it is an indication that the blood is in a very morbid condition, and that before the legs can

be permanently cured the blood must be purified and relieved of the diseased particles which permeate it. It is true that certain kinds of ointment may help to heal over the sores and relieve the pain, but they do not remove the cause, consequently, the disease is likely to break out in some other part of the system, or it may be driven to some vital organ, and there assume another form of disease, and endanger the life of the patient. I recently became acquainted with a lady who had been troubled with bad legs for some years, and at length she was advised to consult a person who was said to have *cured many bad cases*; she underwent the treatment—had some ointment and medicated liquid applied, over which a roller bandage was tightly wrapped, and after a few weeks' treatment, the ulceration, soreness, and swelling disappeared. This was pronounced to be a "marvellous cure," but in the course of three or four months her body began to swell, the eyes to run, the breathing became very difficult, and the body gradually filled with water. Several doctors were consulted, each of whom declared her condition to be hopeless, and each ascribed the healing over of her ulcerated and inflamed legs as the cause of this condition; at the same time, they remarked that when the blood becomes saturated with disease there must be an outlet for it, otherwise, it will accumulate and derange the whole body. Mrs. Wells and myself were consulted by her friends, and, after due consideration, we undertook the treatment of the case. A vapour bath was first administered which opened the pores of the skin and gave some relief, but the size of the body did not materially diminish. Mrs. Wells afterwards applied the "life awaker," which caused the body to break-out into sores, boils, and abscesses. By this means a large quantity of waste matter was passed from the system, and the blood was thereby relieved of the disease, and as a result the patient recovered. This is

conclusive evidence of the unwisdom of stopping any running sore until the blood has been purified and the cause removed.

Dropsical Swellings of the Legs cannot be cured by local applications, for the seat of the affection is in the kidneys, and until such treatment is applied as will strengthen the kidneys it is useless to do anything to the legs. The "life awaker" and water treatment, when judiciously applied, will relieve the whole body of the waste matter and thereby aid nature to build-up a strong and healthy constitution.

Dropsical Swellings of the legs may also be greatly relieved by applying the "life awaker" without putting on any oil, in order to relieve the parts of water that may have accumulated. After which, a white bread or linseed meal poultice will be very soothing and facilitate a speedy cure.

THE EVILS OF TAKING PURGATIVE MEDICINES.

The nearer people are to the darkness and errors, and the gross superstition of the middle ages, the less do they appreciate the good that surrounds them. They totally ignore the benefits that may be derived from out-of-door exercise, the glorious sunshine, and cleanliness. As a rule, these people do not want advice about living so that they may exist without medicine; and they estimate the medical skill of their adviser, by the amount of physic he supplies. They cannot understand how a person may get well without taking nasty, nauseous medicines, which excite, irritate, and inflame the stomach, and hurry off the food before it has been digested.

They either ignore or are unacquainted with the fact, that much waste matter that accumulates in the system, should be passed off

through the pores of the skin. Consequently, they do not pay that attention to cleanliness, which is very essential to good health, for unless the skin be kept clean by frequent ablutions, it is impossible for the waste matter to escape through the pores; and the sooner people recognised the fact, that the stoppage of the pores with waste matter will cause humours to accumulate in the blood, and render it unclean, throwing too much work upon the heart, lungs, liver, stomach, and all the internal parts, the better it will be for the community at large.

It is impossible to purify the blood by purgative medicines, nor indeed, with any other system of treatment that does not go to the root of the evil. We sometimes see advertisements in the newspapers about some patent nostrum that is held up as a cure for all the ills to which flesh is heir; but the whole virtue of the medicine is in the advertisement. We regret to acknowledge that ladies are frequently victims to the baneful habit of taking purgative medicines. They thus weaken their stomachs by drugs which do more harm in a short time than can be eradicated by many months judicious system of hygienic treatment. Mercury is extensively used in medical preparations, and it is difficult to estimate the great injury it does to the body. Some skilful doctors assert that mercury eats right into the bones, affects the nervous system, and renders the body so susceptible to change of atmosphere as to indicate, by aches and pains, approaching changes in the weather. Some doctors greatly denounce the practice of taking purgative medicines, declaring that they have more faith in the curative qualities of daily ablutions, a strict dietary, out-door exercise, and a good ventilation; but in the majority of cases it does not pay medical practitioners to give advice of this kind to their patients, as the latter very reluctantly act up to such instructions. Moreover they begrudgingly pay doctors for that which is more valuable

than physic; and they lose faith in any medical practitioner, who does not give lots of medicine, as they estimate his value by the quantity of diastie drugs prescribed. Hence, a medical adviser is literally compelled to administer to the morbid desires of his patients. It would be well, however, for my readers to seriously ponder over what Pye Henry Chevasse, F.R.C.S., says in his admirable work, "Advice to a Wife."

"The reason why my fair countrywomen take so much opening medicine, is the want of exercise. How truly it has been said that "physic," for the most part, is nothing else than the substitute of exercise, or intemperance. I consider it to be a greivous misfortune for anyone—man, woman, or child,—who cannot, without the frequent taking of physic, keep their bowels regular. When such is the case, there is something wrong, very wrong, about her system, and about her proceedings, and the sooner the matter is enquired into, and rectified the better. The necessity of a constant swallowing of opening medicine is a proof of chronic ill health, and will in time, injure her constitution beyond remedy. I cannot speak too strongly on this subject; I have, in my professional experience, seen so much mischief and misery caused by the frequent swallowing of opening pills, that I should not do my duty if I did not raise my voice against the abominable custom. Why, many ladies make a practice during the whole of their lives, of taking two or three times a week, opening pills! The bowels, they say, will not act without them, but I maintain, that if they would resolutely refrain from swallowing them, and adopt the rules of health laid down in these pages, they would be able altogether to dispense with them, to their great benefit and delectation. But then the rules of health require trouble and perseverance—(and what that is worth having, does not!)—while the swallowing of a couple of pills might be done

quickly, and with very little trouble; but although the frequent taking of pills gives at the time but little trouble, they cause much trouble afterwards."

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"If a lady be costive, and is in consequence inclined to take a dose of physic, let me advise her to take instead a long walk, which will in the majority of cases, do her vastly more good; and if requiring repetition, the one is vastly more agreeable, and the effects are much more likely to be lasting than the other. Exercise, I am quite sure, is, as a rule, in the long run, much more effectual, and beneficial, and agreeable, than opening physic."

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OPINIONS OF THE PRESS

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NOTE.—The above extracts have reference to R. B. D. WELLS, of Scarbro', and not to the late S. R. Wells, of New York, as some designing people would have the public believe.

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Testimonial from the REV. E. J. SILVERTON, Albert House, Park Street, Nottingham.

My Dear Sir,—It was strange to me how you should know so much of my character. You told me more truth than any other in your profession, though I have consulted the most eminent Phrenologists who have visited this and other towns. If I were a wicked man I should not like to come before you.

Truly yours,

E. J. SILVERTON.

My Dear Sir,—I was perfectly astonished with your accurate delineation of my character and abilities, and also my deficiencies and failings. You might have known me all my life: in short, you knew me as well as I know myself. Your excellent advice was worthy of being written in letters of gold. When I next come to Scarbro', if I am spared, I will do myself the pleasure of calling upon you. With kindest regards to Mrs. Wells and yourself,

Yours truly,

ABRAHAM SMITH,

Principal of the Collegiate, Huddersfield; and Officiating Minister of St. Thomas's, Bradley.

TESTIMONIALS.

The following Testimonials are selected from some thousands of similar ones, which we have received from persons whom we have cured of the diseases set forth. Being well aware of the fact that many so called Testimonials are fictitious, and that several envious persons take a pleasure in circulating false and damaging reports about us, we hereby offer a reward of £10 to any person who can prove the following to be false or fictitious. Each of the said individuals being willing to testify to the accuracy of the said Testimonials, on condition that they are put to no expense in doing so.

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CURE OF EPILEPTIC FITS.

My Dear Sir,—I have waited for some months to see the effects of your treatment upon my son, in order that I might be able to speak with the greater certainty. For many years he was subject to Epileptic Fits, *unfortunately of great violence and frequent recurrence*. I consulted the most eminent men in London and elsewhere, still he continued subject to these attacks. His coming to you was entirely his own act, as I ridiculed the idea; and even when he returned so much improved in general health, I had, nevertheless, no confidence that you had been able to effect what the most eminent men of the faculty had despaired of. Ten months have now passed away, and he has never had an attack. Your rule of diet has wonderfully improved his general health, and his confidence in you, as well as mine, is unbounded. He speaks of the kindness he received at your hands, as well as the attention of your excellent wife, with the greatest gratitude, and for myself I shall ever have cause to thank God that he put himself under your treatment. With respectful compliments to Mrs. Wells and yourself, believe me, my dear sir,

Ever yours gratefully, ABRAHAM SMITH, M.A.,

Principal of the Collegiate, Huddersfield.

CURE OF SCROFULA, TRANSMITTED BY VACCINATION.

Sir,—I beg to make the following statement—My little Annie was a healthy child up to being six months old, and about that time she was vaccinated. She soon after broke out in abscesses under her chin and the side of her face. The glands of her neck were swollen and knotted. I took her to the doctor who vaccinated her, and asked him what was the matter. He said that it was Scrofula, but such a disease has never before been known in neither my family nor my wife's; consequently this disease must have been transmitted by vaccination. I have other three children, but there is no such

Testimonials.

indication of disease in them; two of which are unvaccinated and for ever shall be. I had tried various means, and had her under various doctors with no good results. The sores would heal up by their treatment, and then break out again; and when you came to Leeds in 1872, I put her under your treatment, and she has never had the least signs of Scrofula since, which is about four years ago, and for which we are sincerely thankful.

Yours respectfully,

A. APPLEBY,

Wholesale Provision Dealer, 82, Meadow Lane, Leeds.

CURE OF DROPSY AND ABSCESS ON THE KIDNEY.

For nearly two years I was suffering from Dropsy and Abscess upon the right Kidney. During that time I was treated by three medical men, one of whom declared that it was an impossibility for me to be cured; the other two gave no hopes of my recovery, and I received no benefit from their treatment. I was at length advised to consult Prof. R. B. D. Wells, of Pavilion Place, near the Railway Station, Scarbro', and he completely cured me after a few months' treatment.

ROBERT WARD,

11, Albion Place, Spring Gardens, Scarbro

CURE OF CONSUMPTION.

Miss STEWART, greengrocer, Castle Road, Scarbro', came under our care after her case had been given up as incurable by several eminent gentlemen connected with the medical profession. Her case was, indeed, a severe one, and it was not surprising that her medical men had despaired of her cure. She was induced by the representations of her friends to put herself under our treatment in August, 1877, and after having had only *nine weeks' treatment*, she was discharged from our establishment *entirely cured*; and she is now a hale and hearty representative of the efficiency of our treatment. She indeed declares that she never felt so well, nor had such elastic spirits and buoyancy during the whole course of her life as she has had since her restoration to health.

CURE OF DROPSY AND DYSPEPSIA.

For eight years I was suffering from Dropsy and Dyspepsia, accompanied with Heartburn, Flatulency, and sleepless nights. I had been given up as incurable by several eminent doctors, and neither I nor any of my friends had any hopes of my recovery. My daughter having been ill, and under the hands of the doctor for a long time, I sent her, along with my wife, to Scarbro', for the good of her health. But as she got no better, a friend of ours, who was under Mr. Wells' treatment, advised my wife to consult the Professor about her. She was very loath, however, to do as advised; but after having heard such flattering reports from persons who had been cured by him, she summed up courage to write and get my consent to give him a trial. After a few weeks of his valuable treatment, my daughter became quite healthy, and we have never had to consult a doctor since; though for a long time previous to seeing Mr. Wells, we either had to go to, or fetch a doctor every few days. When I saw what a cure he had made of my daughter, I thought there might be a chance of his doing me a little good, though I had not the remotest hope of his being able to cure me. A drowning man will grasp at a straw, and I, in the depths of despair, resolved to consult Mr. Wells as a last resource. To

Testimonials.

my surprise, however, and to the astonishment of my friends, he completely cured me in three weeks at his Establishment in Scarbro'. I give him permission to make what use of this he likes; at the same time I shall be glad to answer any questions anyone may put to me.

JOHN LAWTON, Wood View, Barnsley.

CURE OF RHEUMATISM.

In 1871 I was suffering from Rheumatism to such an extent that I could not lift my hand to my face, neither could I stir my legs; but Prof. R. B. D. Wells cured me in less than a month. I had previously been under treatment in the Sheffield Infirmary, and under several doctors, still no treatment was effectual but his; and whenever I have the least symptoms of it re-appearing, I apply the same remedies, which have the desired effect. I scarcely need say that I have the greatest confidence both in Mr. Wells and in his treatment. I may also add that after having tried the doctors without having received any benefit, Mr. Councillor William Mudd brought him to my house, and in six days I walked to his residence to thank him for bringing Mr. Wells to see me.

WM. THORNLEY, 15, Mangle St., New Clee, Grimsby.

CURE OF PILES.

Dear Mr. Wells,—I write to thank you for the wonderful cure of Piles you have brought about in me. I have been troubled with these pests for fifteen years, during which time I have consulted several doctors, and have been under three botanists. But when I consulted you I was in a worse condition than ever I had been, but in three weeks your treatment completely cured me.

I am yours, ever gratefully, E. W. J——, Rochdale.

CURE OF RHEUMATISM.

Dear Sir,—I arrived home on Tuesday night safe and sound, and quite surprised all the people at Grimsby, who all looked upon me as not being able to do any more business, as I had been for twelve months before I came to you a perfect cripple from Rheumatism, and through your grand treatment I am here a living witness to its wonderful efficacy. You can make what use you like of this letter. I hope you may live long to do good in this country, and my sincere wish is that you will not go to New Zealand, but stay amongst your friends in Old England. Hoping Mrs. Wells and yourself are well and happy,

I remain, Yours very truly,

J. PLASTOW.

P.S.—Give my kind regards to all your servants.

SPECIAL NOTICE.—Prof. R. B. D. and Mrs. Wells may be consulted daily at their Phrenological and Hygienic Establishment, Scarbro', from June 1st to October 12th in each year, from 10 a.m. till 7 p.m.; also during the winter at the towns in which they are lecturing.

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