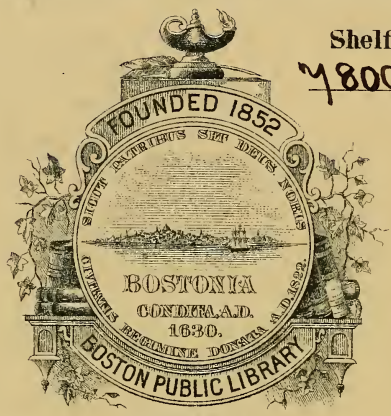


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THE
GERMAN NATURE-CURE,

AND

HOW TO PRACTISE IT.

By I. AIDALL.

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WITH FORTY ILLUSTRATIONS BY FRANCES M. E. CURRIE.

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H.

PREFACE.

THIS little work lays claim to no originality. It is merely a faithful representation, in a condensed form, of the theories, methods, and practice of the German natural healing art, compiled from the works of some of the leading authors on the subject.

In some cases, the very words of the writers have been retained. Where this has been impossible, owing to the large amount of matter before me, and the small space into which it has had to be curtailed, I have endeavoured to give a thoroughly accurate and comprehensive view of their meaning.

The writings I have drawn from, have been purposely those of some of the later exponents of the system, rather than of the earlier founders, in order not only to present the accumulated experience of the largest number, but a correct view of the entire Nature-Cure as it is *now* carried out both in Germany and Austria.

The works to which I am chiefly indebted are: Dr. Walser's "Naturheilmethode," Dr. Disqué's "Naturgemässe Behandlung der Krankheiten," and "Diätetische Küche," Dr. Lahmann's "Diätetische Blutentmischung," Father Kneipp's works, Herr Rikli's "Atmosphärische Cur, etc.," Herr Siegert's "Naturheilkunde," Herr Bilz's "Neue Naturheilverfahren," Herr Platen's "Neueheilmethode,"

Herr Kuhne's works, Herr Liskow's "Handbuch des Naturheilverfahrens," and Herr Simon's "Athmungskunde." I have not, however, confined myself to these, but have culled from many other sources, as they served to elucidate and practically open out the subject.

Unusual opportunities for not only testing the effects of the Nature-Cure on my own person, but of thoroughly studying its working as a whole, have led me to this effort.

The firm hold which a portion of the system, in the form of Hydropathy, has already established in our own country, the increasing number of Hygienic and Health reform movements of every description, the growing craving for other than the medical treatment of the old school, may perhaps make a further interpretation of German views and methods not unwelcome.

In the earnest hope that this little work may prove of encouragement and help to many, and be one more stepping-stone in the elucidation of the true nature of disease, and of its prevention and treatment by natural means, I give it forth to the public.

I. AIDALL.

September, 1897.

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INTRODUCTION.

IT is well known that the German-speaking countries have given birth to the present Natural Method of Cure.

Although, in 1784, Hahnemann, the founder of Homeopathy, and before him Dr. Hahn, wrote on the value of *water* as a remedial agent, the honour of laying the foundations of the *Nature-Cure* must be ascribed to two peasants, Priestnitz and Schroth, the forester Rausse, and the apothecary Hahn. To their sharp-sighted observations in the animal and vegetable world, and the clear, logical, and practical deductions they drew therefrom, mankind is indebted for that new and better way of healing which is beginning, at least in many parts of Europe, to revolutionise the whole system of medicine.

Priestnitz and Schroth were contemporaries, born within a year of each other (1799, 1798) in Austrian Silesia. In both cases, injuries received through accidents, which were not only badly treated, but pronounced by the doctors as incurable, were the means of turning their attention to natural remedies, and of proving their efficacy by the cures they achieved on their own persons, and subsequently on others. Priestnitz became a renowned water doctor, with a water-cure establishment on the Gräfenberg, in Austrian Silesia. Schroth laid the foundations of the Diet Cure, by the employment of the strict dry diet called after his name. Simultaneously also with Priestnitz, he was the happy discoverer of the marvellous effects of cold and tepid water compresses, which he enlarged into whole and partial wet sheet packings.

Rausse, or Francke, a disciple of Priestnitz, developed into a system what the former had only crudely begun. He corrected the mistakes in his master's methods, and is considered the reformer of the water-healing art.*

Theodor Hahn, a pupil of Rausse, was also much renowned as an author on hygiene, as well as in his sphere of nature-cure physician. He combined the methods of the other three, and employed a strictly-regulated diet, together with water treatment and the use of other natural factors.

Then followed Arnold Rikli, a Swiss, the originator of the priceless light-air and sun-bath system, called in Germany the "Rikli Method."

After him came the widely-known Bavarian priest, Sebastian Kneipp, the founder of an independent system of water treatment, especially the so-called Kneipp douches, combined with diet, and the use of simple, non-poisonous medicinal herbs. His works on the subject are translated into almost all European languages.

Almost as well-known as Rikli and Kneipp is another contemporary of these two—Louis Kuhne, who, like the latter, was compelled (through what were considered incurable bodily sufferings) to seek health and healing in natural means. Like Kneipp also, he has evolved, and long practised, an independent method of treatment, and his works are also largely translated.

After, and simultaneously with these, have arisen a host of nature-cure practitioners, all assisting, more or less, in spite of numerous mistakes and errors, to break down the gigantic wall of the "healing by drugs" superstition, and to show people the natural way of retaining their health, and, when they have lost it, of regaining it.

The Natural Method of Cure, as such, is by no means anything new, for it was not only understood in olden times, but widely employed.

"Its curative appliances have existed since the days of Creation, and will endure till the stars fall from heaven. The

* His works on the subject are still looked upon as the fountain-head of natural healing science.

well-known ancient Greek physician, Hippocrates, as also Galen and other 'immortals,' cured with water. So also did the old Romans; while daily baths and washings have, from the time of Moses, formed a direct part of the religious practices of the Jews." (*Philo vom Walde.*)

Water is not, however, the only remedial agent employed in the German Nature-Cure. All the vital elements of our existence are equally utilised, *viz.*: warmth, water, light, air, food, movement, and rest, besides magnetism and electricity, and, in later times, hypnotic suggestion. Simple, non-poisonous herbal remedies are also admitted in the practice, and occasionally used.

The Natural Method of Cure is based on the principle of the healing power, the self-help of Nature, or the vital force, the instinct of self-preservation inherent in each individual. It sees in the thousand and one so-called diseases of medical science, not the disease itself, but merely the appearances or symptoms of disease, the self-striving of Nature to rid the system of what is injuring it. Its aim, therefore, is not to combat or suppress such symptoms, but to give Nature, or the natural vitality, the help and support it needs in its endeavours to regain health.

"The school of medicine on the other hand—Allopathy—sees in the *symptoms* the disease itself, and concerns itself mainly with *their* removal. Such a suppression of the appearances of disease is, however, no real healing. Often, after such an apparent cure, a relapse of the complaint occurs, which is often more dangerous than the first sickness. It is self-evident that the chemical substances employed by the medical faculty, must *increase* the sickness, because the organism is compelled, not only to expel the matter of disease, but also the medicaments as well. If it were only understood that illness is merely a healing process of the body—an effort of the system to gain the mastery over what is injuring it—it would follow that no one would dare to stop its healing activities. Instead, the sick individual is frequently besieged with every possible and impossible remedy, and thereby it often occurs that, in place of the complaint, the patient is removed.

“The undoubtedly more favourable results of Homeopathy consist in the fact that on account of the attenuation of the drugs, they do not injure or suppress the natural healing powers of the body; but neither, on the other hand, do they influence, in the remotest degree, the course of the complaint. The circumstance that drugs are most helpless when they are most needed—that to-day they are extolled for all complaints, to-morrow rejected by others for the same sickness as injurious—leads the thinking physician to natural healing factors, and causes him to abandon the system of medicine of the medical school.

“Not less, however, than the physician is the public perplexed with regard to the drug superstition, and has more and more lost faith in the curative action of medicines, and in the method which employs them. It is beginning no more to believe that poisons which paralyse and kill, injure and destroy, can give health to any organism. A great part of the public demand unceasingly to be treated otherwise than medicinally, so the natural method of cure is ever acquiring new adherents.” (*Dr. Böhm.*)

“Thousands and thousands of people, the sick, the suffering, and miserable, treated and mistreated by Allopathy, and at last given up as hopeless, have in the Nature-Cure found what they so long in vain looked for—their health, their well-being, their contentment, their capacity for work, their happiness.” (*Bilz.*)

A German League for the “Care of Health and Drugless-Healing Method” has already been established for some years. In connection with this are more than four hundred associations with thousands of members, including many medical men, its mouthpiece being the monthly periodical, “Natur Arzt” (The Nature Physician.)

“Of course, the way is, or rather one may say *was*, beset with thorns and briars. Those who followed it, and induced others to follow, had to bear scorn, mockery, and even persecution.” (*Bilz.*)

That the movement began with non-professionals, and in large measure has been carried on by them, has been enough to set a large portion of the medical world in jealous antagon-

ism to it. Its influence has, however, already made itself so widely felt, that not only have many qualified practitioners cast off their old bonds, and become "Nature physicians," as they are called, but many others now prescribe the simplest remedies, or no medicine at all, and employ physical and dietetic means, although perhaps secretly, instead.

Everything also that serves to increase the knowledge of the public as to the natural laws of health and hygiene, by means of popular literature, lectures, and so forth, is assiduously promoted. At the same time, the numerous Nature-Cure establishments, both in Germany and Austria, offer every opportunity not only for the recovery of health through natural means, but of instruction and experience in the natural healing art.

THE GERMAN NATURE-CURE.

CHAPTER I.

DISEASE: ITS ORIGIN, CURE, AND PREVENTION.

THE fundamental theory of the German Natural Method of Cure is the unity, or oneness, of disease. This is expressed in different ways by various exponents of the natural healing art.

For instance, according to Priestnitz, disease consists in the clogging of the system with accumulations of morbid matter, principally introduced into the body as medicine.

Schroth understood disease to be the presence of injurious matter in the blood and juices, through inheritance, or faulty digestion owing to wrong nourishment, frequent use of drugs, bad air, or the suppressed or hindered activity of any organ of secretion or excretion.

Rikli's theory is, that disease is interrupted movement of matter, caused by disordered circulation of the blood and juices.

Kneipp's, that disease is a deterioration of the blood, through the incorporation of bad juices not belonging to it.

Kuhne's axiom is, that disease is the presence of foreign matter in the body, through inheritance, or induced by a disordered digestion.

Dr. Walser considers disease to be a disturbance of the vital process of the change of matter, through faulty compo-

sition of the blood, and a specific germ, or bacillus, developed in the depraved blood.

Glünicke considers disease to be the imperfect action of the vital processes, through the presence of foreign matter in the body.

Dr. Lahmann's theory is, that the principal root of disease is the faulty composition of the blood, through wrong quantity or quality of the dietetic vital stimulants—air, light, water, food, etc.

Liskow says, that disease is more or less disturbed change of matter, through the formation and deposit of matter in the system, which is injurious to it; while Just says, disease is foreign matter in the body, occasioned by disobedience to the laws of Nature; and so on, and so on.

These are all merely different expressions of the same idea, for the human body is a perfect, harmonious whole, each part of which is dependent on the other—each acts and reacts on the other.

If the blood and juices are impure, and the circulation impeded, not only will the digestion be impaired, but the lungs, brain, nerves, muscles, heart—every organ and function of the body, in fact—be injuriously affected and weakened. In the same way a disordered digestion, deficient action of any organ of secretion and excretion, will lead to depravity of the blood and juices, which again will react upon the whole. In any case, the change of matter process will be more or less disturbed: disease is present.

“Life is movement of matter.”

“Our entire state of health, our undisturbed well-being, depends solely on a free and unhindered change of matter.”
(Platen.)

This change of matter goes on in all organic life, whether animal or vegetable, and consists in a constant growth of new material, and casting off of the old. Every atom of the human body, sleeping or waking, by night or by day, is in a state of perpetual motion, acting under certain fixed laws, and through the agency of that wonderful, incomprehensible, God-given power which we call Life.

Movement, however, implies friction, and friction occasions

waste or wearing out. Just as in a machine the constant motion wears off particles of the iron, or of whatever the machine is composed, "so also our muscles, nerves, tendons, blood vessels, and bones (tissues) are constantly, through active movement, wearing out, being destroyed, used up. What is loosened from a living body has the tendency to decompose. Decomposing animal matter, however, is poisonous. Our bodies would be quickly poisoned if the cast-off tissue particles were to remain in the body. The latter, therefore, strives to expel it. Innumerable minute discs, the red blood corpuscles, swim in the blood. They draw the oxygen from the air which is breathed through the lungs, and carry it by means of the finest veins and fibres (capillaries) to every part of the body. The oxygen mixes with the waste tissue particles; they burn like wood or coal, only without flame. Thereby is formed, as by every burning, carbonic acid and water, also ammonia, salts, fat, and strong smelling, partly poisonous matter (self-poison). The blood takes up these matters of excretion, and expels them through lungs, skin, and kidneys, and partly by the bowels. How important the burning (or oxidation) in the body is, is shown by the fact that alone through skin and lungs in twenty-four hours several pounds of water and carbonic acid are excreted.

"A wound in the body closes after a certain time: it heals. Nails and hair grow again when cut. What in the body is destroyed, in the next instant is rebuilt. Where does the building material come from? The food we take becomes fluid in special organs, and streams into the blood. Through its intermingling with oxygen, building material for the body is formed. The blood carries it to the tissues. As blood fluid it oozes through immeasurably fine openings in the capillaries, and replaces what is destroyed.

"So there goes on in our bodies a ceaseless growth and decay, a continuous change of matter. We neither see it nor feel it, and yet it is of untold importance for the organism. Through it we receive the power to live and act; it alone gives the body the necessary warmth. So long as it goes on regularly, we are well; if it is disturbed, we are ill. If it ceases altogether, death ensues." (*Siebert.*)

Disease is therefore a disturbance of the vital process of the change of matter. We must look for the *origin* of disease in whatever causes that disturbance.

THE ORIGIN OF DISEASE.

“We may compare the body again to a machine. With marvellous certainty the mechanism which performs the change of matter goes on in spite of the often deplorable, unnatural treatment it receives. As in a machine, however, there gradually collects all kinds of substances which do not belong to it, such as dust, sand, rancid oil, and so forth, which if not removed will hinder its action, and at last cause it to stop altogether; so, gradually, there collects in the human body, useless, refuse, superfluous matters, injurious to the system. This is the immediate cause of most sicknesses. There are few people entirely free from matter of disease.” (*Liskow.*)

That it can be inherited as well as acquired is but too certain. “It occurs in every case where the parents are infected, and is a sure, though latent, propagation of morbid matter. Direct proof is found in the fact that experience shows the same forms of disease to be developed in the children as in the parents.” (*Kuhne.*)

“The precise cause of disease is the accumulation in the body of foreign matter, which is useless for its renewal and maintenance, and which has not been removed at the proper time through the organs of excretion—bowels, kidneys, skin, and lungs.” (*Platen.*)

This foreign matter has many causes to thank for its origin. The principal are the following:—

1. Disorders of the digestion.

The overloading of the stomach with more food at a time, or in a day, than can possibly be digested or assimilated, or than is needed for the waste going on in the tissues; the ingestion of food that is unsuitable to the individual, in relation to his constitution, habits, and condition of life, or that is deficient in one or other of the needful constituents;

the use of stimulants, such as alcohol and narcotics, as well also as tobacco—all these are potent causes of dyspepsia or indigestion with all its attendant evils, the clogging of the blood and tissues with undigested and decaying matters, and consequent disturbance of the vital processes. “Many people do not understand what a good digestion really means. A stomach that will seemingly bear all that is put upon it, is commonly supposed to be the sign of one. But that is an error. Such a stomach has really lost its sensitiveness, its power of warning, of rebelling against improper food. Besides, such a state of things never really lasts for long. The organs of secretion will become less and less able to bear the undue work and strain laid upon them; so that gradually the body becomes more and more encumbered, and the foundation laid for every variety of complaint.” (*Platen.*)

On the other hand, bad and insufficient nourishment, the latter often of an unsuitable kind, the substitution of alcoholic drinks for unnecessary food, will also cause digestive disorders, deterioration of the blood, and formation of disease matter in the system.

2. Impure air and defective breathing action.

“Our existence depends on breathing. Breathing is a continual exchange of gas, which takes place chiefly in the lungs, *viz.*: the inspiration of oxygen, the quintessence of atmospheric air, *into* them, and the expiration of used, corrupt air, carbonic acid, etc., *out* of them. This takes place by means of the blood, which is at the same time the nourisher and scavenger of the body. Through the oxygen the blood is cleansed, made again fit for action—*i.e.*, as a vital element—to go through the whole body, reviving, nourishing, and strengthening every part of it. If one then breathes bad air, or not enough of good, not only will the blood be insufficiently cleansed and renewed, but its circulation will be impeded, and the oxidation imperfect. Those parts of the body which are not supplied with good blood, rich in oxygen, will become weaker and weaker; for where no good blood comes, no bad will be excreted, and clogging and stagnation will ensue. In such stagnant, impure blood, decaying organisms are found, and these are the so much

feared modern bacilli, with all their frightful sounding names, and thus arise inflammation, tuberculosis, abscesses in the lungs, etc." (*Simon.*)

"It is the impure air, the miasmatic matters of evaporation, which we breathe, partly with, and partly against our will, in large towns, their streets and alleys, in badly ventilated, or totally unventilated dwelling and sleeping-rooms, in schools, offices, workshops, public places of meeting and amusement, which penetrates and poisons every nerve and fibre of the body, deteriorates the blood, and furthers the accumulation of morbid matters." (*Platen.*)

"Defective breathing action, too, has as much to do with the origin of disease, as want of pure fresh air." (*Simon.*)

"The air may be ever so good, but if it is not inhaled powerfully enough, the blood will not be properly cleansed; and in the same way, if the used up air is not expelled thoroughly and carefully, it will remain in the body to the injury and detriment of the latter. Few, very few, people breathe normally and thoroughly. Superficial breathing weakens the lungs; through deficient oxidation the blood is clogged and deteriorated, and so arise poverty of the blood, nerve complaints, headache, bad digestion—in short, the whole body suffers more or less." (*Dr. Weil.*)

3. Neglect of the skin.

The skin is our most important organ of excretion. "The entire number of its sweat glands is conjectured to be about two and a half millions, and within twenty-four hours about sixty-seven parts of the weight of the body should, through them, be excreted." (*Simon.*)

By this action of the skin all the other organs are assisted. If, however, the millions of pores on its surface are clogged by dirt and the accumulated excretion products of the sweat and fat glands they are designed to expel, not only will the impurities be detained in the body, but the work of the skin will have to be undertaken as much as possible by the other organs. This leads to all sorts of internal complaints, as well as of the skin itself.

The skin is also a breathing organ, as well as the lungs. The clogging of the skin prevents its absorption of air, as well

as excretion of waste matters. Not only will the cleansing of the blood again be defective, but the nerves of the skin will be insufficiently nourished, and the blood driven in upon the inner organs, thus producing disturbances of the nervous system, kidneys, bowels, and lungs, as well as excessive sensitiveness to changes of temperature.

4. The exhaustion and relaxation of the nervous system.

The nerves are the animating power by which the whole body, as well as single parts, moves and acts. Our thoughts, sensations, movements, digestion, and blood circulation are all controlled by their means, in subordination to the central organ, the brain. Whatever, therefore, weakens the brain and nervous system has a powerful reflex action on the whole body. Too excessive or prolonged mental work, overstrained bodily exercises, sexual excesses, solitary vice, alcohol drinking, smoking, etc., all have a weakening effect on nerves and brain, and through them on every part of the body, thus becoming powerful auxiliaries in the promotion of disease.

5. Narcotic and mineral medicines.

“The poisonous drugs which come out of the pharmacies as ‘curative remedies,’ and which in sickness are introduced into the body, are potent factors in the accumulation of disease matter in the system.” (*Platen.*)

“That the allopathic remedies of the present day are frightful poisons—injurious even in the smallest doses, if even in individual cases they act slowly and lingeringly—thousands of chronic sufferers can testify, who owe their sickness to such medicines. Drugs are not always completely excreted. They often remain the whole life long, deposited in different parts of the body, causing disturbances of health which often seem quite inexplicable. ‘Drug sickness’ the physicians themselves give in to.” (*Philo vom Walde.*)

There are also the numerous secret remedies, the so-called “patent medicines,” advertised to cure every complaint under the sun. These are only less harmful, because they are necessarily of a less injurious and also of a milder nature.

6. Vaccination and Inoculation.

“The preventive remedy against the much feared small-pox takes a chief place as a producer of disease.” (*Platen.*)

By it, or inoculation of any kind, foreign matter is introduced into the system, invariably poisonous matter too. "Man is an absolutely individual creature. It is impossible to introduce any substance from one organism to another without more or less destroying the vitality." (*Glünicke.*)

"Syphilis, and the germs of numerous other complaints, such as scrofula, gout, consumption, etc., are constantly transmitted from one child to another through vaccination." (*Liskow.*)

7. The change of matter products which are not excreted, owing to deficient activity of the organs of excretion, remain as morbid matter in the body and further disease.

8. Also the inhalation of injurious and miasmatic evaporations, the bites of poisonous animals and insects, bad water and food, will cause blood-poisoning (decomposition), by which the vital process will be more or less severely disturbed.

"All foreign matters, from whatever cause they may arise, deposit themselves first in the abdomen, that part where they can best force an exit, *viz.*: through the bowels and kidneys." (*Platen.*)

The abdomen, however, does not remain the only place of deposit. They slowly spread in gaseous, fluid, and solid forms, over the whole body. This process may be a gradual one, and go on for years without causing much uneasiness or exciting much remark, according to the constitution, strength, and powers of excretion of the individual. Or, as nature is ever seeking to restore the normal working order of the whole organism, the system may from time to time endeavour to expel the injurious matters by means of local inflammations, abscesses, boils, sores, ulcers, or eruptions of all kinds. Often, however, it is only when the accumulations have become so great, that the nervous system and other parts are suffering, and the body seeks in a violent, energetic way to get rid of them, that they are first perceived.

At any time it needs but an exciting cause, such as a heating, a chill, a change of temperature, emotional excitement, an error in diet, infectious, contagious, or malarial influences, to set the deposited matters in motion—in fermentation—and an acute illness, slight or severe, may ensue.

Should, however, the vital force not be sufficiently strong to rid the body of the fermenting matters of disease in such a vigorous way, the latter will extend themselves in particular organs or part, and then arise lung, kidney, and liver complaints, tumours, cysts, polypi, hard formations, etc.

The fermenting matters always, however, if possible, seek an exit, and wander towards the extremities. There they are stopped, because the skin does not let them through. Thus (if the constitution is capable of a violent effort, as in acute illnesses), "we first feel the pressure in the higher parts, and headache begins. The fermentation produces warmth, and we soon feel the increased temperature. This is what we call fever. Fever is fermentation going on in the system—a decomposition, a sort of decay. In all fermentation, little vegetable organisms, so-called bacilli, develop spontaneously. This is the case with fever; and thus the widely mooted bacillus question finds a simple answer. Whenever the deposited matters begin to ferment, bacilli are formed (develop) of themselves in the system; they are the products of the fermentation, and also disappear of their own accord when the latter ceases and the system becomes healthy." (*Kuhne.*)

"The principal weapons of the self strivings of nature, or the natural vitality, are fever and inflammation. Fever consists in a quickened circulation, a heightened change of matter. Through fever the matters of disease are dissolved, and then, in different ways and forms—as urine, motions, perspiration, and sickness, etc.—removed from the body. The more disease matter is present, and the more opposition it offers, the greater efforts will the fever make to overcome it. Hence the often long lasting and continually increasing fever heat." (*Liskow.*)

"Fever acts like a cleansing fire." "What makes the body ill shall be prevented from permanently injuring it; shall, through the glow of the fever, be burnt, dissolved, prepared for excretion. If this takes place, the latter follows, usually through foul-smelling urine or perspiration." (*Siegert.*)

"If, however, in consequence of deficient care or a perverted manner of life, the skin is either quite inactive and its

pores clogged, or it only partially acts, it will either not be able to expel at all, or not rapidly enough, the fermentation products pressing strongly against it. Through their pressure and friction arise the tension and expansion of the skin, the redness and the fever-heated extremities observable in feverish illnesses." (*Platen.*)

"If the skin acts readily and easily, the fever will be slight and the sickness as a rule terminate of itself, as is usually the case with measles. If it acts indifferently, the fever will be stronger and the danger greater, as in scarlet fever. If it does not act at all, then those illnesses occur in which the medical school is helpless, such as diphtheria. For if the fermenting matter can find no exit by the pores of the skin, it turns inward, presses, rubs, and finally burns the principal inner organs. Then is the neck, and with it the throat, especially threatened, because owing to the impervious skin and the partial or complete inaction of the bowels and kidneys, it remains the only exit which the disease matter can choose." (*Lothar Volkmar.*)

"Chronic complaints are chiefly suppressed fermentation processes—*i.e.*, acute illnesses through wrong treatment, medicinal poisonings, etc., by which means the fermenting masses have either been imperfectly eliminated from the body or not at all.

"So long as the body still possesses power of excretion—*i.e.*, fermentation—it will take the opportunity of a sufficiently exciting cause to renew the effort according to the law of nature to expel the injurious matter. Generally speaking, however, this effort of nature will again be rendered in vain by the treatment of the medical faculty, who, in consequence of complete ignorance as to the nature of disease, know how to suppress it, but not to cure it. The natural consequences follow. The old matter of disease becomes more firmly seated than ever, and, increased by the continual addition of fresh, makes the body ever more sickly and ailing, and takes from it the last remains of recuperative strength. A constant internal fever consumes slowly or quickly the inner organs as well as bodily strength, and leads to life-long suffering or a sure and early death." (*Platen.*)

Enough has been quoted to show that in the German Nature-Cure acute forms of disease of all kinds are looked upon merely as the self strivings of Nature or the natural vitality to rid the body of what is injuring it; cleansing, purifying processes; in other words, acute sanitary crises. Also, that sickness can only occur in a system predisposed to it—*i.e.*, in a body encumbered with foreign or disease matter.

The numerous complaints of childhood, and the fact that most children more or less have to pass through one or more of them, show either wrong conditions of life from the beginning, or that few people come into the world free from such encumbrance.

The natural method of cure teaches also that bacilli, microbes, bacteria, or micro-organisms of any specific complaint or form of disease, whether infectious, contagious, epidemic, or what not, cannot develop or be producers of disease in any organism where there is not a soil favourable to them, a breeding-ground, or fermenting, decaying matters of disease in which they can be propagated. For instance, "the much spoken of bacilli is not the cause of tuberculosis: it only, in the second place, gives the occasion for the tuberculosis to arise. The chief cause of tuberculosis is the diseased blood in which the germ or microbe of the disease can find congenial soil in which to develop." (*Dr. Walser.*)

Where do contagion and infection, plague, cholera, small-pox, etc., find their readiest victims, reap their largest harvests? Where crowded dwellings, dirt and drunkenness, bad or insufficient food, foul air, wrong habits and conditions of life most obtain. Other forms of disease, on the other hand, attack all alike, the poor and the well-to-do, the under and the over-fed. But the cause is the same in all cases. There must be a predisposition to disease—bad blood and juices, the tissues encumbered with morbid matter—or no disease germs of any kind can be propagated.

A healthy person, whose blood and juices are pure, will go unscathed through the greatest dangers of either infection or contagion, and will be equally impervious to any other form of sickness.

In the same way, when the blood is healthy and the body unencumbered with disease matter, external injuries, such as wounds, broken bones, etc., will speedily heal; while, if the contrary is the case, recovery will be slow and wearisome, and endless and inexplicable complications will result.

THE CURE OF DISEASE.

“In the natural healing art the greatest number of complaints are looked upon as the endeavours of the body to rid itself of injurious accumulations in the system, brought about by abnormal conditions of life, and its remedies are used accordingly. These abnormal relations affect the elementary particles of human beings, the molecules or cells, and it is the task of the natural healing method to come to the help of the diseased cells. This is arrived at by obtaining as rapid an excretion as possible of the injurious matters, and the restoration of normal conditions.

“The first part of this work—the elimination of disease matter—must be attained in the natural ways, through what are designed by nature as organs of excretion—the bowels, kidneys, skin, lungs, and mucous membranes, and this is what the natural method of cure seeks to assist.

“The second part of the work—the restoration of normal conditions of life—can likewise only be attained in the way Nature herself appoints, *viz.*: through light, air, water, warmth, natural food, movement, rest, etc. For only those conditions which keep a healthy organism in health, and serve for its continual formation and maintenance, are capable of restoring a sick system to its normal state. Medicaments, however, hinder this action of Nature, not only by not furthering the work of excretion, but by burdening the body anew, and giving it the task of not only expelling the already present normal and abnormal products, but the drugs also, as foreign matter.

“The natural healing method, on the contrary, lets the process of sickness quietly run its course to the end; so that

not only are the accumulated harmful products brought to easy excretion, but seldom is any relapse of the complaint experienced, or the injury in one organ communicated to another.

“Through the teaching of this modern hygiene, more and more is the knowledge gaining ground that the proper treatment of sickness does not lie in the action of specific drugs, but in the removal of the hurtful causes which call forth the disease. The aim, accordingly, of the natural healing art is to seek out those causes, and to put the body into the best possible condition to gain the upper hand in the fight against them, and the mastery over the sickness.” (*Dr. Böhm.*)

“Many complaints, for instance, can be cured alone by cleanliness, light, good air and food. In others, combined with these first, abstinence and simplicity in food and drink will work wonders without any extraneous help. In other sick conditions, such as acute illnesses, the violent healing efforts of Nature or the natural vitality have to be restrained, guided, regulated, and supported. In others, again, as in chronic forms of disease, especially in long standing cases, where through the habitual use of drugs, the suppression of acute illnesses, etc., the vital powers are enfeebled and paralysed, the same means have to be perseveringly, systematically, and dietetically employed to obtain the same results.” (*Philo vom Walde.*)

In all cases, however, it is the healing power inherent in each organism which, in the natural healing method, is regarded as the prevailing factor in all curative treatment. “Call it what we will—natural force, vital force, God force—it is there. It is really the body physician of man, by which the severest wound heals of itself. In severe cases, however, it needs our help, because too great hindrances lie in the way of its healing efforts.” (*Philo vom Walde.*)

“A strong constitution, a healthy organism, will itself expel the matter of disease. The sickly system, weakened by illness, has to be aided in its efforts to again begin that work.” (*Dr. Walser.*)

Warmth is the first necessary condition of our life, and the thermometer, so to speak, of our health. It is included in, or

indeed forms the chief groundwork of action of most of the other curative factors. In acute illnesses, which are mainly characterised by abnormal bodily warmth, not the *suppression* but the *regulation* of the fever heat, to prevent its obtaining a dangerous height, is what is needed. If a free action of the skin, a plentiful perspiration, and the efficient working of the other organs of excretion are obtained, the danger is passed, and the patient is relieved. A child only dies of measles when, through the inaction of the skin, the disease matter cannot find its way out.

In every complaint of an acute nature, whether slight or severe, proper action of the skin is the chief thing for which to strive. As assistant means, the various applications of water perhaps rank first; although abundant light, pure fresh air, suitable food, and, in severe cases, absolute rest, may be reckoned on as equally important adjuncts. In chronic complaints, through the weak, irregular action of the different functions of the body, owing to the enfeebled condition of the vital powers, a diminution of the animal heat takes place. At the same time an abnormal inner heat is always present more or less, especially in the abdomen, the chief place of deposit of the fermenting morbid matter.

“Many chronic complaints can only be cured when they are brought back from the latent to the active state—*i.e.*, changed again into acute. This occurs in the form of so-called ‘crises,’ a ‘healing crisis,’ a ‘cure fever.’ For this reason a well-known physician said, ‘Give me the means to excite a fever, and I will cure every (chronic) sickness.’”
(Platen.)

A feverish cold, for instance, if rightly treated, is always of the greatest benefit; for by it, not only the morbid matters in the body are brought out of their latent or slumbering stage, but a large part is expelled in the form of mucus.

The first object, then, in the treatment of chronic forms of disease is the strengthening of the vital force, or natural healing power, by which alone “healing crises,” or effective excretion of disease matter, can take place. For the accomplishment of this, the whole system is brought under treatment, for “when one organ or part of the

body is sick, the whole body suffers: it is mere folly then to deal only with single parts, and not with the whole.”
(*Dr. Walser.*)

To improve the digestion, “the primary cause of all disease,” and so to purify the blood of what is poisoning and contaminating it, and enable it to supply the vital processes with good material, is one of the first objects aimed at. Judicious dieting—*i.e.*, nourishing food in absolute relation to the powers of digestion of the individual—is therefore one of the first conditions of cure. Of equal importance is abundant fresh air, rich in oxygen; for “without air, no digestion; without abundant and good air, no good and thorough digestion.”

The restoration of the skin, bowels, kidneys, liver, etc., to their normal state of activity, is equally sought for, as well as the bracing of the nervous system, upon which the proper action of every function depends.

Water, light, air, exercise, rest, massage, health gymnastics and calisthenics are, in addition to diet and other factors, the remedial helps brought to the aid of the sick system in its fight with disease.

To render these helps as effective as possible, strict individualising is, or should be, the basis of action in all treatment. Unlike the medical school, which treats the disease and not the patient, the natural healing method treats the patient and not the disease. “The former thinks to have a specific for every complaint, or to have to find it. By the latter, different complaints are often treated in the same way, and the same illness differently. It addresses itself only to the individual and his present state: it individualises.” (*Philo vom Walde.*)

“Essential in cases of long standing complaints is a spirit of determination—a decided ‘I *will* be well!’ When this fails, the action of the means of cure alone are often unavailing. To every patient I recommend faithfulness to the system, patience and perseverance. Patience and perseverance, because it is unnatural and shows small reflection to expect the quick cure of a long and wearisome evil; for what has taken itself long to form must also take it long to retrace its steps. If it is ever attained to remove quickly the symptoms of such complaints, one may be sure that the disease—*i.e.*, the healing

efforts of Nature or the vital force, against deteriorated juices—is only suppressed or driven into a corner, to appear again in a longer or shorter time in a still worse form than before.” (*Rikli.*)

Often, indeed, the chief results are experienced after, and sometimes long after, any course of treatment is concluded. “So long as a ‘cure’ is in progress, a great stimulation of the nerve and blood-vessel systems is necessary, to prepare the abnormal, disease-making change of matter products for excretion. This may produce headache, sleeplessness, want of appetite, etc. Many, therefore, feel worse at the end of a ‘cure’ than they did at the beginning, and the results appear when the treatment has been ended for some time.” (*Dr. Walscr.*)

The possibilities of cure, too, have their limit. “As the expression of face and character are different, so the amount of vital strength which each human being possesses is also different. No treatment can alter that natural law. The best method of cure can only so long work beneficially as the fund of vitality present is capable of favourable reaction.” (*Rikli.*)

“Incurable complaints, also, there must always be. When a lung is destroyed, a new bladder bag cannot be put in its place; when the kidneys are completely shrivelled, a new filtering apparatus cannot be annexed. We can *treat* all complaints with our method, but not *cure* all. We can, so to speak, cure everything, but not everybody; for so much must always depend on the strength and degree of the complaint, the bodily constitution of the patient, and the like. Extensively destroyed organs can be as little replaced as wanting limbs.” (*Dr. Böhm.*)

THE PREVENTION OF DISEASE.

“The natural healing art lays great stress on the prevention of sickness, and strives in every way to instruct the masses in the care of health.” (*Philo vom Walde.*)

“It is easier to prevent disease than to cure it,” is the German equivalent of “Prevention is better than cure.”

“Unfortunately, people often only begin to take care of their health when they have lost it, and then not seldom it is too late.” (*Dr. Walser.*)

“Health is riches!” Health is the greatest earthly blessing God gives us, and the one which it is our bounden duty to keep and gain as far as possible. All else seems valueless in comparison, and yet it is just in the all-important points connected with the preservation of health that the greatest ignorance and indifference prevail. Just what is most essential for everyone to know and understand, what is so far more important than all the “ologies” that ever were invented, the simple physiological truths concerning health and hygiene, are insufficiently taught in our schools and colleges, or altogether omitted from their curriculum. And what is the result? “The half of mankind dies in infancy, thanks to the ignorance of the progenitors; while a considerable percentage fall victims to consumptive complaints in early youth, likewise through the same ignorance. It can only be otherwise when the children from their earliest years have a sensible comprehension of the fundamental principles of our being and conditions of our well-being; for only what the child learns, becomes the mental property of the people. The care of health must be so taught that every child can understand it.” (*Dr. Lahmann.*)

“Not less do the modern social conditions encourage sickness and demand their premature sacrifices. The crowding together in large towns, the living in damp, airless, often underground dwellings, in the smallest possible space, is certainly not conducive to health. The occupations in workshops and factories, where the air is permeated with smoke, gases, and often poisonous, disease-producing matters, must in the long run ruin the most powerful lungs and give countless victims to the greedy earth. The immoderate use of so-called luxuries and stimulants—tobacco, for instance, and alcoholic drinks—leads to an endless array of complaints and infirmities, which lay their mark on the health of the masses.” (*Dr. Böhm.*)

While vaccination also remains in force there must always exist another potent cause of disease. If small-pox were looked upon as what it really is, an acute cleansing or sanitary crisis, and treated rationally by natural means, its terrors would vanish, and there would be no need of vaccination, "the most fatal superstition of the nineteenth century," which "makes individuals unhealthy through and through, which decimates our world of children, and occasions the fearful spread of that terror of families—diphtheria." (*Lothar Volkmar.*)

So long as unwholesome social conditions prevail and social sins obtain, much of disease is unpreventable. Much, however, must always remain in the power of the individual at least to mitigate the causes of sickness, and to prevent the future generation from suffering for our ignorance, carelessness, indifference, or sinfulness.

Naturalness and simplicity of living are the best means of keeping illness from our doors. Wholesome and sufficient air to breathe, cleanliness of person, clothes, and dwelling, the right kind and quantity of food, sufficient exercise and equally sufficient rest, and the avoidance of everything we know will injure or harm us, are the principal conditions for the preservation of health.

Wholesome air is unfortunately sometimes the most difficult thing of all to obtain, where impurities fill the atmosphere, and ventilation is a thing unthought of, or only sparsely and meagrely carried out. Everywhere, and at all times, both by night and by day, in dwelling and sleeping-rooms, as well as in every place of work, meeting, and amusement, we should seek to have as good air—*i.e.*, rich in oxygen—as is attainable, and plenty of it to breathe. We must make a proper use of air, too, by good powerful breathing action, and that only through the nose, "for the mouth is like a chimney, and draws in all dirt and dust from the air. Also by upright sitting at desk, work, and table, by gymnastics and calisthenics and other chest-expanding, lung-filling, recreative exercises.

"In intercourse with our fellow-men, cleanliness is an indispensable requisite—the first duty we owe to our neighbours, and not less to ourselves." (*Platen.*)

“Only there where the most painstaking cleanliness obtains, in person, house, and all the relations of life, are people bodily and mentally healthy; where, on the contrary, uncleanness exists, there is disease, and the greater the uncleanness, the worse the sickness. Where dirt is, epidemics will ever arise; where cleanliness is, the bacilli will not come, or if they come, will quickly disappear.”
(*Simon.*)

The kind and manner of our clothing and bedding, also have a great influence on health. Under the auspices of the nature-cure system, a widespread reform movement as regards both has been going on in Germany for some time, the influence of which is extensively reflected not only in our own country, but in others.

Another mighty factor in the care of health is the food we take, and the way we digest it. Here again, the nearer we live to nature, the more simple, unstimulating, and easy of digestion our nutriment is; the more moderation and self-control we exercise both as to eating and drinking, the better health and the greater freedom from sickness shall we enjoy. “There is no form of disease which destroys mankind, which cannot be brought about by unnatural diet.” (*Platen.*)

Abundant work and exercise, both mental and bodily, alternated with sufficient rest, are indispensable auxiliaries to the maintenance of health, so long as the former are not overdone, when they pass the line of health preservers and become disease producers.

Much also remains to be avoided besides bad air, uncleanness, unsuitable food, etc., if we wish to keep our minds and bodies in a fit state to perform their duty both to God and man. Impure habits and indulgences; the immoderate use of stimulants, such as alcoholic drinks, tea, coffee, tobacco, etc.; and last, but not least, the avoidance of all injurious drugs and medicines, whether in the form of “doctor’s prescriptions” or the so-called “patent medicines” advertised so largely on every hand.

Already, as regards the use of drugs, the influence of the natural method of cure is making itself so strongly felt, that in

many German and Austrian hospitals, natural remedies are replacing more or less medicinal ones. In private practice also. "How many names of physicians and authorities could I not give, who, in public, call the nature-cure treatment a swindle, but secretly employ it in their practice!" (*Dr. Walser.*)

"Whoever has taken one deep look into the treasury of healing possessed by the natural method of cure, will never again regard it as impossible to treat without medicine. Only wickedness, envy, pride, and stupidity can declaim against this art of healing. Its greatest triumphs have been achieved in acute illnesses, when, through it, innumerable cases have been cured which were given up by the doctors, both allopathic and homœopathic. Epidemics, too, with natural treatment, lose their terror; for only those die whose constitutions are utterly enfeebled, and their systems poisoned with bad juices.

"It is well known also, that chronic complaints of long years' standing are, by the natural healing method, either cured or considerably benefited.

"In the domain of surgery too, the natural healing art rejects operations as much as possible, for it teaches what good is it, even should the operation itself be successful, when the patient either dies as a consequence, or limps about as a cripple all the days of his life. Not only by natural treatment can operations in a large measure be totally avoided, but when such are absolutely necessary, with the same treatment, they take place with little danger to the life of the patient." (*Philo vom Walde.*)

The intensely soothing, comforting, alleviating character, too, of the natural healing remedies, is one of their most prominent features, and such as no other system can produce. They enable us also to be in a great measure our own physician, and to have our pharmacy always to hand.

That "Nature cures, the physician only assists," is an old saying that has come down to us from the times of the ancient Greeks. In the present day, however, the natural healing art is the only method of cure which is built on the indwelling healing power in man.

Our own hydropathic system is an outcome of the earlier teachings on the subject. It will be seen, however, that we have still much to learn from our German brethren in their further developments and adaptations of the natural healing art.

In the following chapters, a brief, but as practical an outline as possible, will be given of the various ways and methods by which, in the German Nature-Cure, it is sought to assist Nature in her healing work.

CHAPTER II.

4 WATER: THE METHOD AND FORMS OF ITS APPLICATION.

“IN baths lie healing” was a Roman proverb, and a Roman author wrote, “During the six centuries that the Romans bathed, they needed no physician.”

It was only in the Middle Ages, under the rule of monasticism and asceticism, that dirt came to be regarded as a virtue, and non-ablutions a sign of spiritual grace. In Germany especially, the influence of this epoch was such, “that the Germans had the melancholy renown of being the uncleanliest people in Central Europe, until these later times, when the care of health in private as well as public has again become an important consideration.” (*Platen.*)

Now, in every moderately-sized town, both in Germany and Austria, bathing places and establishments are to be found where baths of all kinds and description may be obtained at comparatively little cost.

“The care of the skin and bathing, in days of health, are the best means for preventing a host of sicknesses. The healthiness of the skin influences the well-being of the whole organism. Daily washings are not only necessary for purposes of cleanliness, but to keep the pores of the sweat and fat glands always open.” (*Platen.*)

“The first thing in the morning everyone should do, to keep himself healthy, and pleasant both to himself and his neighbours, is to wash the whole surface of the body with cold, fresh water. Under all circumstances cold water is preferable to warm, not only for cleansing, but because it stimulates the nerves of the skin, and thereby strengthens the whole nervous system.” (*Munde.*) With weak people the reaction is attained more quickly by adding vinegar to the water.

The upper part of the body should never be washed alone. The lower portion should always be washed at the same time, to excite a normal circulation and right distribution of the blood. Afterwards there should be vigorous drying, either with a rough towel, flesh gloves, or, better still, with the hands alone. A weekly hot bath, or, what is far more beneficial, a sweating bath, by means of vapour or hot air, is a valuable addition to cleanliness and aid to health. Rikli says, "There is no doubt that all kinds of skin cleansings, which are not combined with perspiration, are more superficial in their action. Sweating baths, on the contrary, not only cleanse thoroughly outwardly, but the whole underskin, blood-vessel and lymph gland nets as well; especially so, when, in the highest state of perspiration, the body is rubbed vigorously, either with the hands or a soaped brush."

"Dry rubbings, also," he says, "by means of flesh brushes, Turkish or lufah wash-gloves, are very cleansing in their action. If used energetically, they not only completely remove the dead surface skin (epidermis), but promote a stronger circulation of the blood corpuscles, whereby the skin reddens more or less."

It is not only, however, in its domain of cleansing that water is rapidly regaining its proper place; but, after a long slumber of centuries, through Priestnitz, Schroth, and their successors, its virtues as a curative agent are becoming daily more widely known.

There is not a complaint or bodily ill to which man is subject which cannot be benefited, relieved, or cured by the common-sense, persevering application of water. And what artificial remedy can possibly equal its alleviating properties? In all cases of chills, and pains and aches arising from chill, who can adequately describe the warming, comforting, soothing effect of the steam or hot air bath? In all feverish conditions—the refreshing, heat-reducing, tepid water bath, the cooling drink, the soothing, comforting pack? Or in inflammatory pains, sores, wounds, and injuries, etc.—the intensely alleviating effect of local packs and compresses? How water revives the exhausted system, braces the nerves, and strengthens the vital powers! "Does not water stand

higher than all the pharmacies and laboratories in the world? Moreover, water is such a cheap medicine; it exists for us always and everywhere, at little or no cost, out of Nature's inexhaustible resources; and with it no harm can be done, except when it is used to excess, or at too low or high temperatures." (*Dr. Walsev.*)

"The natural method of cure uses water in every degree of temperature and form of application, according as it is desired to obtain a stimulating, soothing, or strengthening action. Simple pure water only is employed. Sometimes people think to increase its action by the addition of ingredients, such as salt, sulphur, pine and fir needles, bran, etc. It is an error to suppose that such additions have a great effect. For the human skin is a curious organ; it lets everything through from the interior to the outside, and also expels from the body through its pores, air and vaporous matter, but it lets nothing through from the exterior to the inner parts. Of all such mixtures nothing goes into the body, not even the water in which one bathes; they may, perhaps, somewhat stimulate the nerves of the skin; but the chief value of the bath and its action, consists solely and alone in the temperature of the water, and the duration of the bath." (*Dr. Böhm.*)

"It is to Priestnitz we owe the discovery of the different effects of water, according to its temperature, the duration of its employment, and the greater or less surface of the body that comes into contact with it. It was he also who first taught that the best curative effects are produced only when the body is warm, even perspiring; while doctors, in general, hold that such proceedings must be dangerous to life, and promote apoplexy and so on." (*Dr. Walsev.*)

Water has a stimulating (rousing, warming) action, a soothing (cooling, derivative, pain-stilling) action, and a strengthening (bracing, invigorating) action. When employed at a low temperature, and for a short time, it serves as a stimulating remedy; employed at a higher temperature, and for a longer time, its effects are soothing and derivative.

"The stimulating treatment (warming method) is used to quicken the vital processes, loosen, dissolve, burn, and excrete the firmly deposited disease matters and change of matter

refuse. It is particularly indicated in chronic complaints, caused by deteriorated and defective blood and juices, and to remove diseased conditions or action of single organs.

“The lower the temperature of the water, the more vigorous is the reaction—the flooding of the skin with blood, and the radiation of heat. At the same time, the shorter must be the application, in order not to cause by the increased flow of blood to the skin, and radiation of heat, a want of blood and lessening of heat in the inner organs.

“The soothing (heat-reducing method) serves to lessen the immoderately heightened vital processes, and to remove general or local states of inflammation; in other words, by the withdrawal of warmth, to bring the feverishly quickened oxidation process back again to its normal condition. The withdrawal of warmth must, however, only take place gradually, or else, through the too rapid loss of heat, the nervous system will be further excited instead of soothed, and the vital process be hastened instead of reduced. In the soothing treatment, therefore, the water must be cool or tepid, but not cold. Sometimes the two methods have to be applied at the same time. The hot body, *e.g.*, must be cooled, and the cold feet and hands warmed; or a warm application has to be given first, to prepare the skin for a later cooling.

“The strengthening treatment (animating method) serves chiefly to brace and harden. It is employed, therefore, only when persons are in a relatively healthy state, or recovering after an illness.

“By accustoming the skin to the cold of the water, it is hardened against changes of temperature. The skin becomes richer in blood, and the inner organs relieved of too much. Principally, however, the action of the skin is increased, and with it the functions of the nervous system, and with them, again, those of the whole organism.” (*Platen.*)

There are three special points to be considered in all treatment with water.

(1.) Its absolutely individual application. This means that the treatment must be suited to the individual, not the individual to the treatment. If cold water, for instance, is to benefit and not to injure, it must always be used in strict

accordance with the constitution, age, sex, above all, reactionary power of the individual.

(2.) Too much stress cannot be laid upon the fact that, mild applications are almost invariably the most beneficial. Nothing is gained, but, on the contrary, much harm may be done by the overdoing of any treatment, either as regards time, temperature, or repetition. The general principle may serve as a safe guide, that great differences of temperature excite and stimulate the nervous and blood-vessel systems; small differences strengthen and soothe them.

(3.) During treatment by water, as with all other natural remedial agents, crises will often occur—little violent outbreaks of illness, or an apparently worse condition of the patient. These are only favourable symptoms, showing that the “cure” is working, and that the vital force is gradually becoming strengthened to renew its self-healing work of expelling from the body what is injuring it and making it sick.

THE OUTWARD APPLICATION OF WATER.

Cold water averages from	42°	to	65°
Cool	„	„	65° „ 80°
Tepid	„	„	80° „ 90°
Warm	„	„	90° „ 100°
Hot	„	„	100° „ 110°

Duration of Bath.

Cold baths, from four seconds to three minutes. Warm bath, five to thirty minutes.

General Rules.

1. The water should never be tested with the hand, but always with the thermometer (bath).

2. Weakly, nervous, or sensitive people must as a rule have the higher temperatures and shorter application.

3. Before the tepid or cool bath, the body must be thoroughly warm. This may be attained, if necessary, by moderate exercise, or warming in bed or blankets.

4. Before the undressing, everything must be in complete readiness for the bath or application.

5. After the bath, hands, head, and ears, as well as the hairy parts of the body, should always be well wiped, dressing take place quickly, and bodily exercise follow, either walking, manual work, calisthenics, or else re-warming in bed.

6. After a warm bath, a cool or cold application must as a rule invariably follow.

7. *Hot* baths should only be taken under supervision of an expert.

8. The temperature of a room in which baths, etc., are taken should not as a rule be under 65 deg.

9. Where sponges are in use, their periodical cleansing with hot water and soda must be carefully attended to. From their intense porosity, sponges are fruitful accumulators of evaporation products, dirt and microbes.

10. After every separate person's use, baths should be scrubbed out with soap and water. It is impossible to pay too much attention to small details of cleanliness.

WHOLE AND PARTIAL WASHINGS.

The washing of the body by means of hands, sponge, wash-glove, or towel, is the mildest water application, and a splendidly strengthening remedy.

“The temperature of the water should in most cases be cool (65 to 80 deg.), but sensitive, weakly, poor-blooded people, can begin with warm water, gradually going to cold. The whole washing should not last longer than two minutes, and the temperature of the room should not be under 55 to 60 deg. Afterwards it is better to dress quickly without drying, and either walk, or return to bed for a time, till thoroughly warm. The not drying produces an evaporation on the skin, which calms and soothes the nerves, while rubbing excites them. Such mild whole-water washings, are especially indicated for weak, nervous, poor-blooded people.” (*Dr. Disqué.*)

They are also far better to begin with in many acute illnesses. They prepare the way for the after action of the bath, by gradually stimulating the action of the skin, and act in the same way, only milder. Where there is strong fever, whole washings can be given often in the day, sometimes every half-hour, the water 68 to 78 deg. or cooler. Here also it is recommended not to dry; but after each part is washed, it should be carefully covered. Where there is much weakness, the washings must be only partial ones, different portions of the body being washed or bathed at separate times.

“In the sweating stage, also, the patient can be washed; indeed the warmer and moister the skin, the more efficacious is the cold water washing.” (*Dr. Disqué.*)

Partial washings are also used locally. In inflammation of the lungs, the chest may be bathed every half-hour; in rheumatism of the joints, the painful parts three to four times daily; in erysipelas, the face is bathed. In such cases the temperature of the water may vary from 74 to 86 deg., according to the sensitiveness of the sick parts.

WET AND DRY RUBBINGS.

These can also be either whole or partial. They are similar in action to the whole and partial washings, and like them are a very mild application.

“A coarse linen towel, Turkish towel, or wash-glove is wrung more or less thoroughly out of cool water, and one part of the patient’s body after the other rubbed therewith—first, legs, feet, and arms, and then chest, stomach, and back—till the skin slightly reddens. The towel must be re-dipped in water directly it becomes warm. The same parts must afterwards be wiped and rubbed dry with a dry towel or bath glove, etc. The hands alone may be used for either the wet or the dry rubbing.

“Patients should not undertake such rubbings themselves, as the exertion would injure more than the application would benefit. When the condition permits, two such rubbings may take place daily—the first in the morning, the second in the evening.

“Where the skin is very sensitive, especially in skin complaints, the damp towel must merely be laid on the part to be rubbed, held firmly by the left hand, and the right rubbed gently over it. In the same way with the dry rubbings.

“In chronic cases, arms and legs can be rubbed, as also the other parts of the body, in order to increase the circulation in such parts, and to promote a right distribution of blood.”
(*Bilz.*)

PRIESTNITZ DRIPPING SHEET.

A linen sheet is wrung out of cold water and hung dripping over the shoulder of the patient, who must be then energetically rubbed by several people till the skin is red and the sheet begins to steam. This application draws the blood powerfully to the skin, and thus relieves the inner organs. Indicated especially in complaints of the lungs, liver, heart, kidneys, and brain, and also is employed in cholera. It must not be used in poverty of the blood or weakness of the nerves.

WHOLE BATH.

The whole bath, in which the patient lies with water up to the neck, is not much employed in the natural healing method, as the pressure of water, owing to the withdrawal of air, is often disagreeable. In cases of gout, rheumatism, and hard formations, as well as in highly nervous conditions, the whole bath taken two or three times weekly, from 90 to 100 deg. for five to ten to fifteen minutes, with short cooling afterwards, is very beneficial. Also for nervous excitement and sleeplessness, at 92 deg. for ten minutes, without after-cooling, immediately before retiring to rest. Also in ague or shiverings, the patient being wrapped up in blankets afterwards, without drying.

HALF BATH.

This is the most important of all the baths. It can be taken in any bath or tub where there is room to sit upright with legs extended, and the water about two hands high. (Fig. 1; see next page.)

It is the best and most efficacious remedy in all feverish illnesses, such as measles, scarlet and typhoid fever, diphtheria, inflammation of the lungs, etc. The water from 74 to 77 deg., or 82 to 88 deg., gradually cooled down to four degrees less, for five to seven to ten minutes. The higher the fever, the higher must be the temperature. The patient must



Fig. 1.

be undressed under the bed clothes, put quickly into the bath, and forehead and chest wetted; then, with the hands or a towel, the head and upper part of the body be well bathed, the legs and feet being more rubbed. The whole body then can be lightly kneaded or massaged. The bath

must be continued till the armpits show no more heat. The patient can then be lightly dried, or put back undried into bed, and well covered up to promote perspiration. Where the skin is affected, as in small-pox, scarlet fever, etc., there must be no rubbing, but the water be lightly applied and poured over.

The half bath is equally useful in most chronic complaints, the water varying in temperature from 70 to 90 deg. according to strength and power of reaction of the patient; the bath may last from two to five to ten minutes, the water being gradually cooled down to four degrees lower temperature, or water at the same temperature being poured up and over the back at the close. While in the bath the patient must be rubbed, or rub himself—especially the legs—with hands or coarse linen or jute (hessian) cloth. After the bath there must be brisk dressing, with or without drying, and exercise taken, or re-warming in bed.

The soothing half bath (warm temperature), as given in acute illness, expands the blood vessels, particularly the abdomen, thus promoting an active flow of blood to the liver and

other torpid parts. At the same time the pores of the skin are opened, and perspiration induced.

The stimulating half bath (cool temperature), as chiefly used in chronic complaints, arouses the dormant activity of the skin, and draws the blood to its surface. Its powers of excretion are thereby increased, and the circulation of the blood and vital processes quickened.

In cases of abdominal weakness, piles, hysteria, weakness of the kidneys, etc., Kneipp gave the half bath quite cold for half to three minutes.

SITZ BATH—HIP BATH.

If no proper sitz bath is at hand, any tub, wooden or otherwise (or even herring barrel, well cleaned and cut transversely), will answer the purpose, provided there is room to sit with the water up to the navel, the legs being outside. (Fig. 2.)

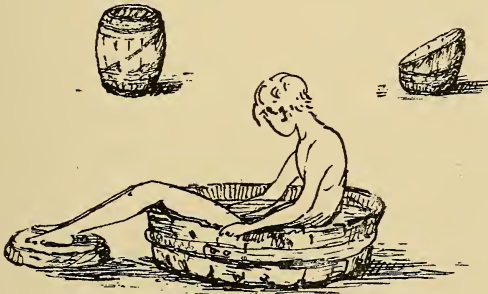


Fig. 2.

The hip bath differs from the sitz bath by sloping more at the back, thus allowing a reclining posture and room for friction. (Fig. 3; see next page.)

These baths serve to act directly on the abdomen and its organs, and so indirectly on the whole system.

The strengthening sitz or hip bath is taken with cold or cool water for half to three minutes, with vigorous kneading or rubbing of the abdomen with hands or coarse cloth, from the navel downwards, and on both sides; re-warming afterwards, either in bed or by brisk exercise. Indicated in

abdominal, bowel, and sexual complaints, and in digestive disorders, constipation, piles, etc. It should not be taken more than three times a week.

The stimulating sitz or hip bath is from 74 to 77 deg., or from 82 to 88 deg., for ten to fifteen minutes. Also with friction as above. Indicated in deep-seated digestive and sexual complaints, piles, etc.

The soothing or derivative sitz or hip bath is from about 80 to 96 deg. for ten to fifteen to thirty minutes. The higher temperature must be employed first; also for weak and excitable people. Friction as above, and also re-warming afterwards. Warm water can be added to maintain the heat when the bath is of long duration, colder water being gradually poured in at the close, or

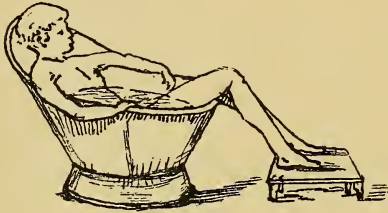


Fig. 3.

over the back. Indicated especially in pressure of blood to the head, neck, and chest; also in chronic inflammation of the abdominal and sexual organs, constipation, sleeplessness, etc. Two or three of these baths may be taken daily for a time.

The hot bath, up to 100 or 104 or 110 deg., for ten to fifteen to twenty minutes, may be taken to still pain and cramps in any part, such as in bowels, bladder, etc., or gout in the stomach. A cool washing or rubbing afterwards may always be used, instead of other cooling.

During all these baths the feet must be well wrapped up, and dipped into the bath at the end. Patient and bath can also be enclosed in a woollen blanket, and the feet placed on a hot water bottle or in a warm foot bath.

MALTEN SITZ BATH.

A low footstool is placed in the tub or bath, with a towel laid upon it, and only so much cold or tepid water employed as will allow of the patient sitting quite dry. With a coarse

piece of linen or jute in each hand, and taking up plenty of water, the abdomen and lower part of spine are vigorously frictioned. A powerful mechanical stimulation is thus added to that of the cold. Less withdrawal of warmth takes place than in the ordinary sitz bath, and the reaction is quick and uniform.

KUHNE'S FRICTION BATH.

A wooden seat is fitted into a hip, sitz, or small round bath or tub, in the shape of a three-quarter moon. The water comes only up to the board, so that the bather sits quite dry. With a coarse linen or jute cloth, and taking up plenty of water, the lower part of the abdomen—the genitals (in the case of females)—is gently laved upwards for five to ten to twenty minutes. The water must be cold or cool. Indicated in digestive, kidney, and sexual complaints, but must not be used by nervous and excitable people, or in consumption, etc.

GOSSMAN'S SPINAL FRICTION BATH.

The wooden seat, as above, is reversed (or a footstool in any bath or tub large enough for the purpose will do). The bather sits quite dry, with the back to the edge of the opening. With a coarse cloth the lower part of the spine is laved downwards for five to ten minutes. Water cold or cool. Acts as a derivative in pressure of blood to the head, etc., and as a strengthening remedy in kidney, digestive, and other disorders.

FOOT BATHS.

These, like hip and sitz baths, act by drawing the blood from other parts (derivative), and also to strengthen the feet themselves.

The Cold Foot Bath (55 to 65 deg., for three to five minutes, rubbing one foot against the other all the time), is both stimulating and derivative. It is indicated in congestion,

headache, giddiness, cold feet, pain in eyes, teeth, ears, knees, and in rheumatism of the joints, etc. Highly nervous people can begin with water at 88 deg. Once daily for strong people, two to three times weekly for weak people. To be taken only when the feet are warm (a hot foot bath may be taken first). Vigorous friction of the feet afterwards, exercise or re-warming in bed.

⁶ The Warm Foot Bath (98 to 100 to 104 deg.) for ten to fifteen minutes, with after-dipping of the feet in cold water for one or two seconds, is a soothing remedy. Indicated in over-excitability and weakness of the nerves, in chronic cold feet, abscesses, sore toes, colds, gout, retention of urine, bone complaints, sweaty feet, and menstrual difficulties. Also for weak and old people before going to bed, and for sleeplessness. If salt and ashes are added in the latter case, a better derivative action is combined.

Alternate Foot Baths.—The feet remain two minutes long in hot water (102 to 104 deg.), then in cold water for half a minute, then again in the warm, and so on for ten minutes. Indicated in the cold feet and hands of chronic complaints, also in gout, etc.

LEG AND KNEE, ARM AND HAND BATH.

These baths are like the foot baths, either local or derivative in their action.

The given limbs are held in any vessel containing enough water (65 to 77 to 83 degs., or colder or warmer water; see under foot baths), for five to ten to fifteen minutes. If the warmer temperatures are used, a short, cool application must follow at the close. Indicated to act generally on the system, in addition to other treatment, to soothe and still pain in the case of chronic tumours, abscesses, inflamed members, etc., according as the bath is of longer or shorter duration, or of higher or lower temperature. From 58 to 65 deg. for three minutes one to three times daily, to remove congestions, with headache, giddiness, nervous weakness, and inflammation of brain, lungs, and womb. Either knee, leg, arm, or hand bath can be employed at a time.

The Alternate Arm Bath.—The arms are held for two minutes in warm water (100 to 104 deg.), and one minute in cold (62 deg.). This, repeated three times, is useful in rheumatism, gout, paralysis, etc.

EYE BATH.

The eyes must be constantly opened and shut, or kept open, in tepid water for some minutes three times daily; afterwards washed with cold water. This application must be used facing the dark side of the room, and the eyes must be rested afterwards in the dark, or shaded. Indicated in all eye complaints.

With cold or tepid water on rising in the morning, this bath is an excellent strengthening remedy for the eyes.

HEAD BATH—BACK AND SIDES.

The patient lies on his back on a mattress or anything raised, the back of the head resting in a basin with water from 65 to 75 to 80 deg., for eight to ten minutes. (Fig. 4.)



Fig. 4.

For headache, megrim, congestion, pressure of blood to the eyes, etc.

The side head bath stimulates the region of the ears, and strengthens the eyes, especially if the part in the water is rubbed by another person.

MOUTH BATH.

Water as cold as the teeth can bear it, is kept in the mouth until it is quite warm. In mouth and throat complaints, toothache and earache; and every ten minutes in acute illnesses.

NOSE BATH.

Tepid water is drawn up the nose. To strengthen the relaxed mucous membrane, and to relieve pressure in the head, etc.

DOUCHES (*Kneipp*).

“The Kneipp douches are a powerful means of altering the circulation and distribution of blood, and of exciting to excretion, but not to *cause* it.” (*Dr Walserv.*)

“They are given as whole or partial douches, in order to strengthen and brace the system, to stimulate the action of the skin, and to promote the change of matter. They are therefore especially employed in digestive disturbances, poverty of the blood, obesity, and weakness of the nerves, to excite excretion; also in scrofula, gland and eye complaints; and to harden against chills.” (*Dr. Disqué.*)

“In the beginning of mental disturbances, arising from pressure of blood to the brain, on account of their derivative action, they are given with good success. Also in headache, cold hands and feet, as well as in all forms of hysteria and hypochondria, they act better than electricity.” (*Dr. Walserv.*)

Douches can be taken or given simply with a can or watering pot; or a regular douche apparatus to hang on the wall, such as Kneipp's or others, can be employed, or a gutta percha tubing fixed on to a tap. With the fingers the tubing can be so manipulated as to make different kinds of douches. There must be a bath or tub to stand in, or a brick or stone floor with drain outlets.

Douches must only be taken when the body is thoroughly warm, still better when perspiring.

“The colder the water, the warmer the body, and the shorter the douche, the greater is the stimulation, and the quicker the reaction, *i.e.*, the re-warming of the body.” (*Platen.*) Those who cannot warm themselves by exercise before, may take a hot foot bath.

Water is generally used from about 65 to 74 deg., and the douche should not last longer than one to two minutes. Weak and nervous people can begin with 88 deg.

UPPER DOUCHE.

The patient, undressed to the waist, leans over a bath or tub, his hands resting on the bottom, or on a cross stick.

The douche is first applied to the chest, then the water is poured softly and regularly from the right shoulder-blade in a circle over the back, letting it spread out over the neck, so that it falls over chest and arms. From the left shoulder-blade it is again brought round to the chest, and repeated. (Fig. 5.)



Fig 5.

Kneipp called the upper douche the best of all the douches. It acts excellently in clogging of the blood and catarrhs of the throat and chest; it draws the blood from the brain in pressure on the brain and headache, and is most useful in megrim and neuralgia in the face. Through it also, lungs and chest act more freely and quietly.

CHEST DOUCHE.

The water is poured slowly from under the right breast upwards on that side, and then on the left. Then several times backwards and forwards over the breasts; then in a circle below, up to the neck again, and repeat.

This douche strengthens the chest and bronchial tubes, relieving them of phlegm and mucus. Useful in lung affections, asthma, etc.

BACK DOUCHE.

The patient kneels or stands in a bath. The douche is then applied twice quickly from the right foot to the lower part of the spine and back, and so on the left side; then several times in a circle over back and spine, letting the water run down the back at the finish. (Or it can be self-given as in illustration.) (Fig. 6.) During the douche the patient must vigorously wash forehead, chest, and arms with cold water.

Especially indicated in spinal, abdominal, heart, lungs, and throat complaints, vertebral deformities and difficulty of breathing.



Fig. 6.

KNEE DOUCHE.

The water is poured slowly from the right foot front to the knee, then several times in a circle round the knee and back again, and so on the left side three or four times. The patient then turns and the same takes place behind. This douche may be given even when the feet are cold, but it is as well to warm them first. (Fig. 7.)

The knee douche is principally employed to gradually remove chronic coldness of feet, and pains

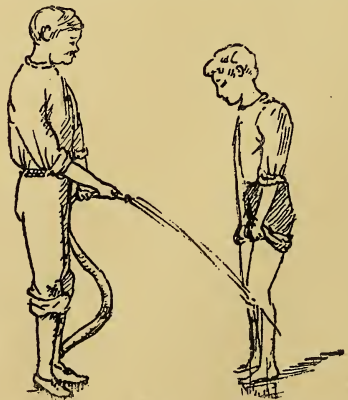


Fig. 7.

and numbness in the muscles of the same, in pressure of blood to the head, in female complaints, and to strengthen the womb.

THIGH DOUCHE.

This acts similarly to the knee douche, but is more powerful.

The water is directed slowly from the right foot in front to the knee and back, and the same on the left side; then from the right knee to the stomach and back again to the knee, and so on the left side to the stomach, several times in a circle round the navel to the thighs, and up and down the thighs to the knees. The patient then turns and the douche is similarly applied behind. Both these douches may be self-applied with apparatus or watering pot. (Fig. 8.)



Fig. 8.

For weakness and chill of legs and knee joints, sciatica, pain, and inflammation of the hip joints, constipation, piles, congestion, headaches, etc.

WHOLE DOUCHE.

The water is applied from the feet to the knees, back and front; then in the same way from the knees to the hips; then from the bottom of the spine to the neck; lastly, stomach and breast.

To strengthen and brace the system generally, and prevent chills, to stimulate the skin and change of matter, and to increase energy. Also in obesity, rheumatism, kidney disease, piles, scrofula, syphilis, poverty of the blood, and weakness of the nerves.

“Like the whole douche, the partial ones also act beneficially on the whole system, if they are so alternately employed that the whole body comes under treatment.” (*Dr. Disqué.*)

The nearer the patient and the more gently the water is applied, the less is the stimulation.

“On account of their short duration, these douches draw but little warmth from the body. Reaction comes quickly afterwards; only care must be taken: (1) That before any douche the body is comfortably warm; (2) that the douche is stopped as soon as the skin begins to redden; (3) that after dressing as quickly as possible without drying, exercise is taken till reaction thoroughly sets in.” (*Siegert.*)

LIGHTNING DOUCHE.

For this douche, which is given at a distance of two yards from the patient, a thin mouthpiece is inserted in the tubing, or the latter is partially closed with the fingers, in order that the water shall meet the body in the form of a powerful spray.

This douche is a very strong stimulant, and is especially used for rheumatism, neuralgias, sciatica, etc., but not for weak or nervous people, or in heart, lung complaints, etc.

SPRAY DOUCHE.

This is a mild application of the lightning douche, and can be used in all cases, and also where the other douches are not well borne. A gentle spray can be obtained, either by almost completely closing the tubing, or from the rose of a watering pot.

There are also the needle douche and rain douche, besides all manner of local douches, such as head, eye, ear, neck, stomach, and feet douches. Wherever stimulation is required, the douche, with its powerful and strengthening action, comes into play.

PACKS AND COMPRESSES.

“Life exists only through *moist* warmth, and *moist* warmth alone upholds life. Moist warmth is the chief requisite for the growth and well being of all organic life.” Not moisture alone, or warmth alone, but both combined. On this principle Schroth founded his system of packs and compresses. At first he employed them only for the cure of outward injuries and complaints. The wonderful results he obtained in these, owing to the penetrating, cooling, dissolving, and excreting action of the wet wrappings, led him on further to seek to remove internal complaints by their use.

He thus discovered that the efforts of Nature to remove the cause of disease could be marvellously assisted by the production of moist warmth. “Moist warmth is an excellent dissolvent of firmly deposited morbid matter.” (*Platen.*) For this reason, since Schroth’s time, packs and compresses have come to be reckoned among the chief of the natural healing agents, and their forms and method of application are almost endless.

“In fever complaints, they act by cooling the blood and allaying the excitement. The reaction of the cold stimulation drives the blood to the skin—the inner organs, and especially the brain, are relieved of blood—the heart beats more quietly and regularly. The skin finds itself in a bath of evaporation, it sucks in greedily the moisture produced by the evaporation of the water under the wrappings, and uses it to dissolve the bad matters deposited in the tissues and circulating in the blood. The perspiration of the skin then drives the disease matter into the wrappings. This is proved by the offensive smell of the latter, and that when they are washed, the water takes a muddy look.

In chronic complaints, the stimulating and blood-conducting action of the packs is the chief thing. The blood is clogged in the sick parts, and circulates feebly. The moist, warm fomentation acts like the air of a hot-house on plants. Under its influence the blood streams richly into the covered parts. The circulation of the blood and nourishing blood fluids, the formation and decay of cells (the smallest particles of

the tissues), the oxidation of the tissue refuse, the excretion of the change of matter products—all go on more actively. Deposited morbid matter is dislodged, dissolved, mixes with the blood stream and is brought to excretion.” (*Siegert.*)

Packs and compresses then, according as they are employed, have either a stimulating, warming action, or a soothing, cooling action; both kinds may be derivative. “Also in both kinds numerous modifications are admissible, conditional on the force and degree of the complaint, the natural strength, age, and sex of the patient.” (*Platen.*)

“Packs must never be given for the purpose of perspiration, but rather to saturate the skin and to render it more flexible by the absorption of the warm moisture, so preparing it for later voluntary perspiration.” (*Rikli.*)

It is important that, before a pack, the body should be comfortably warm. A hot foot bath may be taken to excite warmth, or a short, mild steam bath. In all cases, the room in which a patient is packed and unpacked should be reasonably warm, but during the pack the windows may be opened.

When no blankets are to be had, sacking, baize, or anything that is thick and porous will answer the purpose.

WHOLE PACK.

Stimulating Whole Pack.

Two or more blankets are spread on the mattress of the bed, or on a couch. A coarse linen, cotton, or raw silk sheet, well wrung out of fresh water (55 to 74 to 82 deg.) is laid smoothly over these, a hand's breadth shorter than the blankets at the head end. For weak people, with little natural warmth, a thinner sheet, much more thoroughly wrung out, and the higher temperature of water must be used. The patient then, fully undressed, lies in the centre, while first one side of the sheet is wrapped round him and carefully folded in at the neck, so that no air can get in, and then the other. Each leg should be wrapped round separately,

and the sheet turned up over the feet. On the chest, the sheet must lie somewhat loosely, not to hinder the breathing. (Fig. 9.)

The first blanket must then be carefully folded round, and well secured at the neck, sides, and feet. The same also with the second. Over these more coverings may be placed,

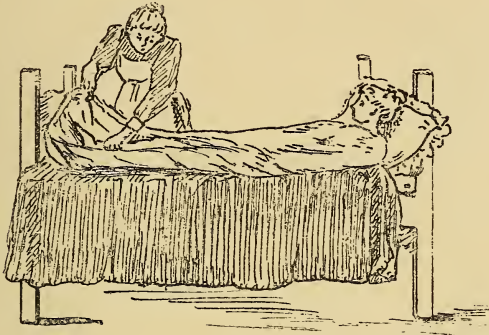


Fig. 9.

and if the patient does not soon get sufficiently warm, two or three hot water bottles can be laid inside, one against the feet, the others each side of the hips.

Duration of the pack, one to three hours, according as it is desired to induce perspiration or not. Gentle evaporation generally suffices. A cooling water application must follow afterwards, a whole washing or rubbing, a half bath at 88 deg. or hip bath, 74 to 82 deg. Indicated in both acute and chronic complaints.

Soothing Whole Pack.

This pack is employed in illnesses with fever and inflammation, such as scarlet fever, typhoid, etc., to lower the heightened vital processes.

According to the degree of fever, one or more sheets are very slightly wrung out of water at about 74 deg., and the coverings must be only moderately thick. The stronger the patient and the higher the fever, the thicker must be the wet wrappings. The packs should be renewed (a second bed being

used) as soon as the fever symptoms, dry hot skin, flushings, restlessness, etc., reappear. The more the fever or inflammation gives way, the longer must the pack remain, one to two to two and a half hours. In light fever cases two or three packs daily will suffice. As soon as the patient perspires, a half bath at 86 deg., with cooler over-pourings or lavings must be given. Should there be only evaporation, the skin must be gently stroked down with the palm of the hand.

THREE QUARTERS PACK.

This is prepared like the whole pack, but reaches only to the armpits, the arms and upper part of chest being free. For this reason the three quarters pack is much better borne by many, especially nervous people and children. (Fig. 10.)

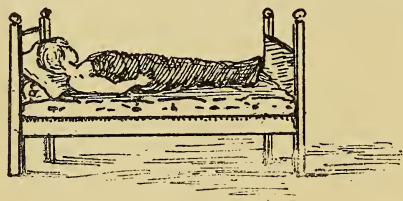


Fig. 10.

It acts in the same way as the whole pack, stimulating and warmth-inducing, or soothing and heat-reducing. It is also useful in the same cases, but in inflammatory complaints the inflamed parts should be further cooled by cold compresses. Rules as before. This pack can be self-applied.

HALF PACK.

This pack reaches only from the navel to the feet. Each leg and foot must here also be wrapped up separately.

The half pack is employed only in the stimulating form, and in connection with other outer procedures, either to remove pressure of blood to the head, or in headache, ravings, giddiness, sleeplessness, and in heart and lung complaints, tremors of legs and feet, rheumatic pains and gouty swellings of legs, kidney and bladder complaints, piles, wind, female complaints, etc.

Duration, one and a half to two and a half hours. Afterwards a half bath, washing or rubbing, etc.

BODY PACK.

This pack reaches from the armpits to the thighs. Either a sheet folded in four can be employed, or two towels sewn together, or raw silk, etc. The woollen coverings, blankets, rugs, or baize, etc., must be two to three fingers broader than the cloth, and the latter must be so laid, that the chest and abdomen have a double covering. Safety pins or tape tied round is advisable to secure the whole. (Fig. 11.)

The temperature of the water must be in accordance with the constitutional strength, age, sex, form and degree of illness of the patient (65 to 74 to 82 to 86 deg.); sometimes quite hot packs are employed for fifteen to twenty minutes, but only under advice.

In chronic complaints the stimulating form—colder temperature, thin, well wrung out cloth, and thick coverings—is chiefly used. Duration, one half to two and a half hours, or all night. In acute illness, the soothing form—higher temperature (tepid), thick, lightly wrung out cloths and thin coverings. This is one of the most useful form of packs, as it can be employed in all cases to replace the larger ones, all the principal organs being brought under its influence. It is much easier to manage, and can be self-applied.



Fig. 11.

WAIST OR ABDOMINAL PACK.

This is the most important of all the packs. The cloth or towel must be wide enough to cover stomach and abdomen, and long enough to go twice round the body if single, and once if double. The woollen coverings smoothly laid on, must be sufficiently wide to keep out the air. If worn at night the pack must be well secured. (Fig. 12; see next page.)

In stomach and liver complaints, smaller ones can be worn all day.

Temperature of water 55 to 74 to 86 deg. Duration half an hour to two hours and a half, or all night.

This pack can be used either in the stimulating, or soothing form.



Fig. 12

“It is an excellent remedy in all head and neck complaints, in diphtheria, heart, lung, stomach, bowel and kidney complaints, piles, cramps, children’s diarrhœa, and feverish illnesses such as measles, scarlet fever, inflammation of the lungs, etc. In the slightest ailment I advise a stomach pack; in most cases the ailment will disappear through its use. In digestive difficulties, gas in the stomach, and pain in the abdomen, there is no better remedy. It is successfully employed in all female complaints.” (*Dr. Disqué.*)

As a preventive remedy against every sort of illness, relatively healthy people can, with great advantage, use a stimulating waist pack two or three times weekly. If used at night it should be taken off in the bed, and the parts rubbed dry with the hand.

CROSS PACK.

This can be combined with the body or waist pack, and is useful in all sexual complaints. A wet piece of linen or a towel is folded two or more times, passed between the legs and secured by the upper pack.

If it is wished to change a chronic state into an acute, the cross pack must be stimulating; if to remove a state of inflammation and cause contraction, it must be soothing. In the latter case, it must be often renewed. The former can be kept on all night. “A mild, effectual, and perfectly harmless substitute for surgical operations.”

LEG, ARM, FEET, AND HAND PACKS.

Leg packs are either long or short, the former extending from the ankles to the middle of the thigh, the latter only to

the knees. They are applied like other packs, but the wet cloths must only be single. In the short leg packs, cotton stockings without feet, covered by woollen ones, do very well. For feet packs, strips of linen or cotton socks, also covered by woollen ones, and secured at the ankles to keep out the air, can be used. For arm packs, the wet cloths must also be single. Hand packs, when employed in acute illnesses, can have a thick wet covering and slight upper one. All these packs have a strong derivative action.

In congestion, with headache, giddiness, noises in the ears, sleeplessness; in inflammation and complaints of all the principal organs, brain, heart, lungs, abdomen, etc., they relieve by drawing the blood to the extremities. For the same reasons they are equally valuable in all acute illnesses. They must be applied cooler than packs of other parts, as the object is to attract the blood to the legs, arms, etc. The after washings may also be cooler.

When used locally, for sores, wounds, injuries, and so on, one leg or arm must never be packed alone, as the unaffected one, by its derivative action, relieves the heat and pain of the other.

Feet packs are also useful in face and ear-ache. Sometimes nervous people cannot bear them; leg packs can then always be used instead. The derivative hand packs are especially useful in acute heart and lung complaints.

NECK PACK.

A handkerchief well wrung out in not too cold water, folded in four, and secured round the neck with a good woollen covering, does for this. The long lasting, stimulating neck pack, is good for inner complaints of the throat, the second stage of diphtheria, and for croup, etc. "By its action, the blood vessels of the skin are expanded, the blood flows into them from the inner parts, which are thereby relieved, their temperature is lowered, and the inflammation is reduced."

This pack is always combined with derivative leg or feet packs, or waist packs.

In simple catharrhal diphtheric inflammations of the throat, the dry throat pack is very valuable. Warm salad oil is first rubbed on, then covered with dry cotton wool, and fastened with a handkerchief. Changed only mornings and evenings.

After each change there must be a cool washing of the neck with soap and water.

SHOULDER, SCOTCH, AND SHAWL PACKS.

For the shoulder pack two towels are needed, wrung out of water at 86 deg. One is laid over the right, and the other over the left shoulder, and covered with a wider flannel binding or woollen shawl. As this is always combined with the body pack, it needs no other fastening.

The Scotch divided pack is laid on like the shoulder pack, but is longer and broader than the latter, and must be fastened together at the back with safety pins. This is used with, and secured by, the waist pack. (Fig. 13.)



Fig. 13.

The shawl pack consists of a square piece of coarse linen, folded crosswise, one end hanging over the back, and the other two fastened together in front; a woollen shawl, etc., to cover, and secured by the body or waist pack.

These packs can be renewed without the under pack being changed at the same time. They are employed in all chest complaints and inflammations, consumptive and bronchial affections. Combined with leg and arm packs, the divided Scotch pack is useful as a derivative in inflammation of the

brain and abdomen, and in apoplexy. They draw the blood richly to the skin, thus relieving the inner organs; the cough irritation gives way, and the difficulty of breathing is lessened; the phlegm becomes fluid, and is easily coughed up. They must be changed as soon as they are hot, or can lie all night.

The shawl pack also cools the head. It is therefore most useful in pressure of blood to the head, in the beginning of inflammation of the brain, and in mental diseases.

In chronic lung complaints, in which the blood circulates feebly in the lungs, these moist, warm packs of about two and a half or more hours, act as blood conductors, drawing the blood to the lungs.

HEAD PACK.

This is applied in the stimulating form. A well wrung out folded cloth or towel is laid on forehead and head, and secured by thick woollen coverings in the shape of turban caps, or wrappers laid on and secured by knots each side above the ears, etc.

It can be kept on all night, and must always be combined with a stimulating derivative waist pack, or leg, arm, foot, or hand packs. The head must be kept warm for a little time after the pack is removed.

Useful in nervous headache, hot head, megrim (one-sided headache), and sleeplessness, which often proceed, not from pressure of blood to the brain, but from want of blood and contraction of the blood vessels. The damp warmth relaxes the latter and cools the nerves.

COMPRESSES.

These consist of two to six folds of clean old linen of any kind, raw silk, etc., wrung out of water (60 to 70 deg.), well covered with flannel, etc., and laid on single parts of the body.

Stimulating, warming compresses, well wrung out, well covered and laid on for two and a half to three hours, soften the skin, open the pores, expand the blood vessels, and cause excretion. In connection with general treatment, they are employed to remove tumours, hard formations, glandular swellings, gout, abscesses, and foul discharges of all kinds.

Soothing, cooling compresses wrung out of tepid or cool water, serve to reduce heat or inflammation in any particular part of the body. They are only slightly wrung out, lightly covered, and removed as often as they become hot.

These compresses are invaluable in all sicknesses where there is increased flow of blood to any part of the body, as, *e.g.*, in inflammation of the lungs, brain, or abdomen, of arms, legs, hands, gums, joints, eyes, etc., in erysipelas, rheumatism of the joints, inflamed abscesses, wounds, contusions, etc., and in all acute illnesses, particularly of the head and abdomen.

Compresses on the affected parts are not generally used alone, however, but others are at the same time laid on parts at a distance, in order to lessen the flow of blood to the former, or local packs are combined, such as leg or foot packs; or neck and chest compresses may be used with forehead or head compresses in congestions of the head, etc.

In cases of severe illness, or in others where packs are not well borne, compresses can replace the latter, or they can be combined with local packs, as, *e.g.*, a back compress laid along the spine, with leg packs, etc. *Note.*—Oilskin or waterproof must never be used for the covering of compresses. The diseased, and therefore poisonous matters of evaporation, are thereby detained, and absorbed by the skin.

WASHING OF PACKS AND COMPRESSES.

After every time of use, the sheet, towel, cloth, and so on, must be well washed out in warm water without soap, and once in ten days or so, according to use, must be well washed out *with* soap, and boiled. The woollen coverings must be well dried, aired, and occasionally washed.

DRY PACKS.

For these only blankets are used with thick upper coverings. They are employed in various cases to promote perspiration, especially after warm and vapour baths.

STEAM OR VAPOUR BATHS.

Russian steam or vapour baths are much more commonly employed in the German Nature-Cure, than hot air or Turkish baths.

The former are employed in every variety of form, as sitting, recumbent, and bed steam baths, whole, partial, or local.

“The natural healing art not only cools when too much heat is present, but it warms also, when, in the whole body, or in single parts, warmth is lacking. It has already been mentioned that no pack must be applied to cold parts of the body, that no cool bath or washing must be given when the body is cold or shivering. In these cases heat is necessary to reanimate the nerves paralysed by the want of blood, and to draw the blood which is driven in upon the inner organs back to the skin.

“Many illnesses would be prevented, if, at the first symptoms of chilliness, a steam or hot air bath were taken to induce moist heat and evaporation, or if these are not to be had, beer or other bottles filled with hot water, enclosed in a towel lightly wrung out of warm water, and the whole wrapped round with flannel, or a woollen stocking drawn over, and placed at the feet and legs, the hands being warmed at the same time with warm towels or hot compresses.” (*Siegert.*)

“Mild steam baths, either whole or partial, are most valuable in the chilly stage of all acute illnesses, and in blood poisonings of all kinds, only not to *force* perspiration, but merely to *prepare* for it. This is exceedingly important. The dislodging and dissolving of firmly deposited disease matters only gradually take place; the latter are only slowly conveyed

into the blood stream, and when they are ready for excretion, the perspiration comes of itself, either during a vapour bath, or afterwards." (*Platen.*)

"Steam baths are equally useful in all complaints of chill, colds, coughs, sore throat, inflammation of the eyes and ears, etc." (*Dr. Disqué.*)

In chronic complaints, in which the blood always circulates more or less feebly and unevenly, vapour baths have a most beneficial action. "The circulation of the blood is quickened, warmth induced in the whole or single parts of the body, and excretion promoted. They prepare the way for the after cold stimulating application, which induces the reaction, the flooding of the skin with blood, and consequent soothing, powerfully healing effect." (*Platen.*)

"Steam baths are especially indicated in rheumatism of the muscles, neuralgia, sciatica; further, in all complaints where excretion through the skin should be promoted, as in syphilis, scrofula, gout, dropsy; also in complaints like poverty of the blood, chlorosis, and weakness of the nerves, when they stimulate the skin and vital processes. In the latter cases only the mildest forms must be employed, in order not to diminish strength. Also in heart complaints vapour baths must be given very carefully, and always with cold compresses on the region of the heart; and only local ones should be given, such as feet, leg, hand, arm, and bed steam baths and steam compresses." (*Dr. Disqué.*)

In all cases steam baths must be used moderately, both as to the number taken, as well as their duration and temperature. Too frequent or too prolonged applications lead to too great expansion of the blood vessels of the skin, and the subsequent weakening and relaxation of the latter.

In chronic complaints, more than two steam baths weekly should not as a rule be taken, often one will suffice.

The bath should only be extended till perspiration breaks out on the forehead. During the bath the window should be more or less open, to be shut before the bather leaves it.

Cold water compresses can be laid on the head, and changed when hot.

After each steam bath, a quick cool or cold washing of the whole body must take place, or a tepid half or hip bath for ten minutes with friction downwards of back and abdomen, rubbing of legs, etc., the temperature gradually lowered, and a douche to conclude with or not. A rest afterwards, wrapped up in a blanket, or sheet and blanket, till thoroughly cooled, increases the value of the bath, but is not absolutely necessary. Often a hip or three-quarter pack follows the vapour bath, with subsequent cool washing, etc. The hotter the body, and the greater the perspiration, the lower must be the temperature of the water.

Vapour baths are not indicated for very weak or old people, in advanced consumption, or pregnancy.

WHOLE STEAM BATH.

This brings the whole body under the action of the steam. It can be taken in many ways. In the German Nature-Cure establishments the cabinet kind is usually employed. The bather sits in this, with only head exposed and a towel round the neck to prevent the escape of vapour. This is also practicable for private use, the steam being conducted by means of gutta-percha tubing, from a methylated spirit, gas, or petroleum steam producer outside. There are also the cheaper and more portable Sternkopf's and Moosdorf's apparatus, Dittmann's combined wave, steam, and sitz bath, and many others.

When no special appliance is at hand, a cane chair will do, under which a pot or saucepan of boiling water is placed. (Fig. 14.) The heat can be

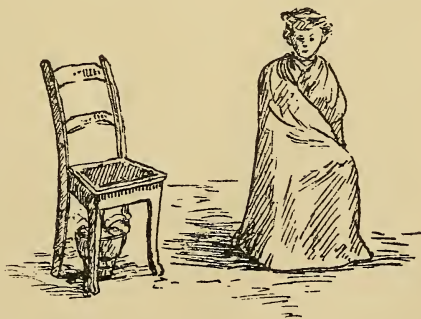


Fig. 14.

maintained by a hot stone or tile slipped into the water, or a gas or methylated spirit stand with tubing can be used. The bather sits fully

undressed on the chair, and one or two blankets are carefully secured round both him and the chair, only the head remaining free. The feet rest either on cross bars of wood on a second pot of hot water, or in a warm foot bath. Duration of bath, ten to twenty to thirty minutes.

The recumbent steam bath is taken either on a cane bench (Kuhne's apparatus is the best for this), or on three or four cane chairs, in both cases the head being raised. Two or three pots of boiling water are placed underneath (not under the head), and the patient covered with a blanket, or sheet and blanket.

To many people this form of vapour bath is the most comfortable, on account of the rest to back and head.

HALF STEAM BATH.

In this, only the lower part of the body to the navel comes under the influence of the steam, the upper part being free. If, however, during the bath, the latter also perspires, the following water application must be extended to the whole.

LEG AND FEET STEAM BATHS.

“These, especially the last, are much employed in the Nature-Cure. In head congestions, head, tooth, eye, and ear-ache, giddiness, asthmatic complaints, difficulty in breathing, pain in the heart—in all cases where it is necessary to draw the blood quickly and powerfully from the upper parts—the leg, and particularly the foot steam bath, is indicated. The bath lasts from twenty to thirty minutes. Then follows a cooling washing (62 to 68 deg.) or douche, etc.” (*Platen.*)

“The simplest form of foot steam bath consists in the use of three hot water bottles covered with wet cloths and woollen wrappings (hot vapour bottles). Two of the bottles are placed in an open box, the bare feet resting upon them, and legs and box well wrapped round, so that the vapour is enclosed and acts on the feet for twenty-five to thirty minutes. The third bottle can be placed on a stool turned upside down on the

lap, and also enclosed with the same wrapping. By this means a hand vapour bath can be taken at the same time." (*Siebert.*)

Leg and feet vapour baths can also usually be taken in any steam bath apparatus; or pail, saucepan, or pot can be made to answer the same purpose, if care is taken that the feet should not be scalded, by two bars of wood, joined at each end by a cross piece, and projecting well beyond the pot at each side, being laid across for the feet to rest on. (Fig. 15.) "The patient sits with bare feet and legs on as high a stool as possible, on which a blanket has been spread. When the pot has been half filled with boiling water, it must be pushed under the feet, the blanket wrapped round, and every five minutes a hot stone or brick that has been heated in the oven gently slipped into the water, unless there are other means of maintaining the heat. After fifteen to twenty to twenty-five minutes a vigorous cold washing of feet and legs must follow, or if the whole body has perspired, the whole must be washed, and the clothes changed. Afterwards there must be exercise out of doors, or re-warming in bed." (*Siebert.*)



Fig. 15.

ARM AND HAND STEAM BATH.

"The same principles apply for this as for the leg and foot steam bath. It is either used to produce local action for the removal of rheumatic and gouty affections, hard formations, chronic abscesses, chronic cold hands, and, above all, for the dislodging, dissolving, and excreting of diseased deposits in the arms or hands themselves, or as a derivative to draw the blood from principal inner parts, such as lungs, heart, brain, etc." (*Platen.*)

In its simplest form it can be taken as above described, or a special apparatus can be used; or a wooden tub, with merely a bar of wood across for the arms to rest upon, does very well. In this latter case, the blanket must be well fastened round the upper part of the body. When patients are confined to bed, hot vapour bottles (as before described) are the best form of its application.

The arm and hand vapour bath is most invaluable for the cold feet and hands of severely sick people, and also for those who are sickening for any illness. Directly the hands and feet are thoroughly warm, the bottles should be removed and a packing (three quarters, body or waist,) given. The whole should be repeated as soon as hands and feet become cold again.

HEAD STEAM BATH.

This is most useful for soothing pain in eyes, ears, nose, teeth, and throat, and for dissolving and excreting, in the case of external or internal gatherings and formations, as well as to lessen the pain.

If no regular head steam bath apparatus is to hand, a pot filled with boiling water, can be placed on a table, over which

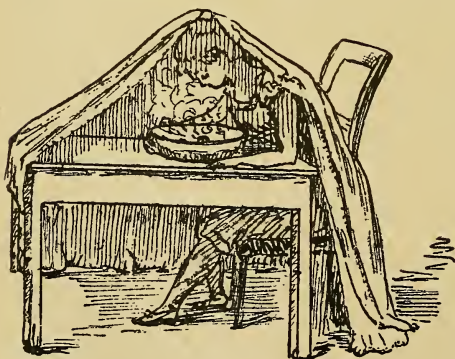


Fig. 16.

the patient, undressed to the waist, leans his head, the latter as well as the whole body being covered with a woollen blanket; or a kitchen bench, or two chairs placed back to back can be utilised. (Fig. 16.) The pots can be renewed at pleasure or till head and neck perspire.

The after cooling application must extend to the whole body, if the whole has perspired.

“Head steam baths are best employed with some deriva-

tive treatment, such as a hip bath, or a stimulating hip or waist pack at night, with leg or feet packs; also water-treading, knee douches, derivative foot baths, and last, but not least, with barefoot walking." (*Platen.*)

BED STEAM BATHS.

These are a very mild form of steam bath, and can be given to infants as well as to old people. They originated with Rikli, and for them he has invented a regular apparatus. The mattress is covered by a large piece of waterproof, over which a sheet or woollen blanket is laid, on which the patient lies. A bamboo or wooden framework, about three quarters of a yard high, is then placed over, and on this one or two woollen blankets are laid. These hang well over all sides of the bed, and are securely fastened at the neck. By means of a steam producer

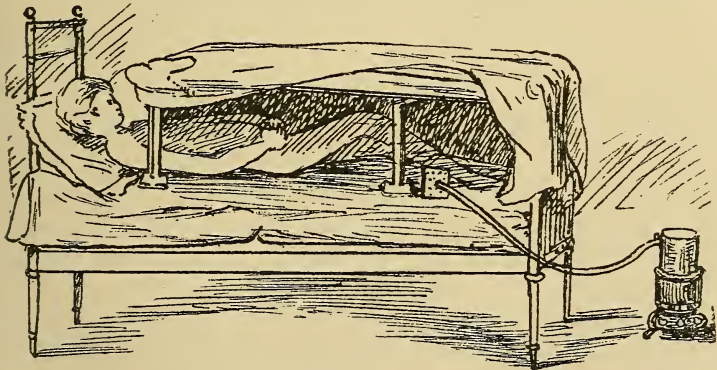


Fig. 17.

and gutta-percha tubing, the vapour is conveyed into this air-tight hollow place, the end of the tubing being fixed in a small wooden box, pierced with holes for the more regular distribution of steam. The framework is divisible, so that either whole, three quarters, half, hip, leg or foot vapour baths can be given at pleasure. (Fig. 17.) If after or during the bath a

more vigorous action is required, the framework can be removed and the patient wrapped in the blankets. Afterwards a cooling application follows.

CANITZ BED STEAM BATH.

“As in a whole pack, a woollen blanket is laid on the bed on which the patient lies. (Fig. 18.) A body or waist and leg packs are then applied without woollen covering, and against these are placed five hot water bottles of any kind, one against the feet, two each side of the legs, and the others

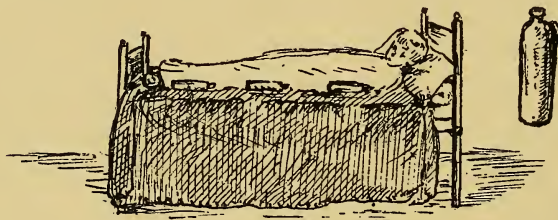


Fig. 18.

each side of the hips. Something woollen can be placed between the bottles and the body to prevent burning. The blanket is then wrapped round, but not too tight, a thick covering laid over, and a pillow between the feet and the bottom of the bed. At the neck the blanket must be carefully secured with a safety pin. Children and very weak people should have only three hot bottles.

Another way is to give a whole or three quarters pack, and the five or three hot bottles laid outside the first blanket, or the patient can be warmly wrapped in the blanket, hot vapour bottles being first laid inside. (Fig. 19; see next page.) Care must be taken to keep the steam in the bed. A circle of vapour is thus formed which draws the disease matter to the skin. A cooling application, etc., follows as before. When the bed vapour bath is properly applied it can be used in every case on account of its mild, derivative, evaporative action, and gentle stimulation of the skin.

“When there is doubt as to the nature of the illness it will cause it to break out, such as measles, scarlet fever, poxes,

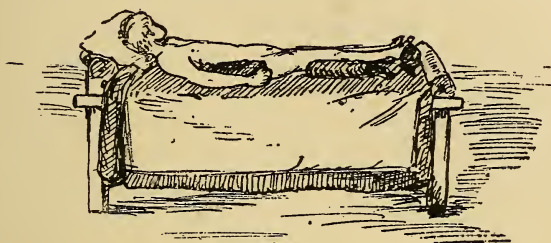


Fig 19

croup, diphtheria, etc., so that the bed steam bath is an unerring diagnoser where science will be at fault.” (*Dr. Walser.*)

The bed steam bath is excellent for restoring the activity of the skin after years of neglect; also, in convalescence after severe illness, in chlorosis, poverty of the blood, colds of every kind; in fact, as before said, it may be advantageously employed in almost all complaints.

STEAM COMPRESSES (HOT FOMENTATIONS).

“These are used to apply moist heat to single parts of the body. A loosely woven linen or raw silk cloth, or towel folded six to eight times, is wrung very lightly out of hot water about 142 deg. and laid between woollen or other material, and placed on the affected part. After fifteen to twenty minutes the hot wet cloth (only) must be renewed, and this twice or three times according for what the fomentations are required. They may be given twice in the day, or when used as assistant treatment in chronic complaints, once or twice a week, etc.

“They act in softening, dissolving, separating, and excreting disease matter, and thereby lessen existing pain. They are useful in abscesses, swollen glands, fresh eye or ear inflammations, toothache, cramp of the stomach, colic, tumours of liver and stomach; and further, to soften old secretions, as in paralysis, joint complaints, etc. In bronchial catarrh and whooping-

cough the whole chest should be covered by them, and cold derivative leg packs given at the same time. In croup, hot fomentations should be laid on the neck, and as soon as the inflammation has subsided, cool stimulating compresses for two to two and a half hours. The wishes of the patient should always be the guide for the employment or continuation of hot, warm, or cool compresses. Pressure of blood to the head and excitement during the application of such hot fomentations, can be removed by cool neck, throat, or heart compresses, and through derivative stimulating leg packs." (*Siebert.*)

To recapitulate the action of the water applications.

Strengthening forms of treatment are employed to brace the nerves and the skin, and therewith the whole body, such as nerve-strengthening packs, feet and sitz baths, and daily whole washings or rubbings (morning and evening), besides other corresponding procedures.

Stimulating Treatment.—Here, through the stimulation especially of the nerves of the skin, an increased flow of blood is drawn to the surface of certain parts of the body, by which means the change of matter is quickened. Especially through stimulating packs, disease matter is loosened and eliminated through perspiration. This is also effected through stimulating local packs and compresses, whole and other packs, sitz and foot baths. Also through cool rubbings, massage, exercise, etc.

Soothing Treatment.—This is used either to soothe, to still pain, to moderately cool, or to act as a stimulation. For this soothing local packs and baths, warm and hot packs and baths, and hot fomentations (steam compresses) are employed.

Derivative Treatment.—This is used in inflammatory conditions of the head, neck, and chest, etc., in order to draw the increased flow of blood away from the inflamed parts, such as stimulating packs on opposite portions of the body, feet, legs, thighs, or arms, hands, etc., as well as waist packs and compresses. Also stimulating body or three-quarter packs, sitz baths, foot baths, feet steam baths, half steam baths, rubbing of single parts of the body, feet rubbings, whole rubbings, whole packs, etc. For inflamed eyes, stimulating neck packs or compresses.

Cooling Treatment.—This has the object of moderating the high bodily temperature and rapid pulse, as in fever; to reduce the pressure of blood to inflamed parts, and to lessen the heightened activity of the change of matter. Cool and tepid packs, compresses, and baths, and all other treatment as for fever.

Pain-stilling treatment consists in cooling and soothing packs and compresses and local baths, warm and hot packs, hot fomentations, hot half, sitz, or hip baths, vapour baths, and massage.

The object must always be to draw the blood away from the painful parts, either to below or outside.

INNER APPLICATION OF WATER.

WATER DRINKING.

“Water drinking is often useful in the natural treatment of sickness. A glass of fresh water mornings (fasting), and also a dessert-spoonful of water every half hour, are excellent remedies for constipation.” (This is supposing the water is good, and contains no lime; lime increases the evil.) “In diphtheria, croup, and mumps, two to three sips of fresh water every hour are most useful. Who does not know the pleasure of the fever-heated patient when he is allowed to drink cold fresh water; how it cools and reduces the temperature, how it refreshes the mucous membrane of the tongue, mouth, and throat! Every fever patient knows that these two spoonfuls of cold water are of more worth to him than all the remedies of the pharmacopeia.

“In cases where nothing can be retained on the stomach, cold water will not be thrown up. Cold water, fresh from the spring, is the best remedy for sickness. It soothes the over-heated blood-laden mucous membrane of the stomach, so that the sickness soon stops. In such cases, adults should take a spoonful of water every half hour, and children a teaspoonful.

“ It is also the best remedy for the sickness of catarrh and cancer of the stomach, abdominal inflammation, inflammation of the brain, and in the diarrhœa sickness of children; also the diarrhœa sickness of infants in teething gives way through nothing quicker than by a little cold water. The white of an egg can also be mixed with the water, and a teaspoonful given every half hour; nothing else, however.

“ Also for the diarrhœa of adults, a dessert-spoonful of cold water, mixed with white of egg, rice, barley water, or oatmeal gruel, every half hour, no other nourishment being taken till the diarrhœa gives way.” (*Dr. Disqué.*)

INJECTIONS.

Enemas.

“ Purgatives act very injuriously on the bowels. They irritate, and so excite a movement of the intestines, and an excretion of fluid through the mucous membrane. This is no natural process. Such often repeated stimulations must, by relaxation, lead to chronic disease of weakness of the stomach and bowels. Water enemas, without the addition of medicine, are never injurious. They should, therefore, always be employed when such kind of assistance is needed. Also at the commencement of every illness, if the bowels are not already opened, and during the illness when necessary.

“ Enemas are of great service in constipation, diarrhœa, relaxation of the bowels, pressure of blood to the head, piles, dysentery, and even cholera.”

“ Two kinds are employed—the acting enema, and the stationary one.

“ The acting enema (for constipation) is used in quantities from one to two pints for adults, and half a pint for children, with water about 88 deg. After the motion, a cooling stationary enema (quarter to half a pint) from 74 to 77 deg. should follow. The latter application acts as a derivative, strengthens the bowels, and removes the heat in the intestines. It can be used two to four times daily, after the motion, and at the time of going to bed. The water is absorbed by the bowels, and must not be emptied.

“In very obstinate cases, and when it is necessary to give speedy help, a dessert-spoonful of salad oil, or oil and salt, may be added to the acting enema.” (*Disqué, Liskow, and Platen.*)

The irrigator is the enema most used in the German Nature-Cure establishments, but the Clyso pump and Alpha enema syringe are also recommended.

Vaginal Injections.

These are used in various female complaints, such as whites, catarrhal conditions, and inflammations of the womb, in abscess, and falling of the womb, etc.

The water should be from 84 to 88 deg.

A decoction of oak bark, or extract of the same, is a very strengthening addition.

Ear Syringing.

In discharge from the ears, catarrhs, etc., it is a most efficient remedy to syringe the ears two to three times daily with water at 88 deg.

In sudden inflammation, with violent pains in the ears, the water should be about 95 deg., and head vapour baths should be used as well.

Nose Syringing.

Either a nose syringe, irrigator, or nose douche apparatus is used with water from 88 to 92 deg. Or simply a nose bath can be taken; or with children, the water can be drawn up the nose from a clean sponge.

Indicated in scrofulous catarrh of the nose, and discharges of pus, in headache, giddiness and sleeplessness consequent on cold; especially in all acute and chronic cases, and when it is advisable to draw the blood away from the brain. In stoppage of the nose, it should only be held in water, and head vapour baths should also be taken.

Gargling.

“In complaints of the mouth, tongue, and gums and teeth, in diphtheria, croup, mumps, catarrh of the throat and

stomach, hourly gargling with water about 74 deg. is excellent. In toothache the water can be somewhat warmer, 82 deg.

“Children who cannot gargle, can in the above complaints and whooping cough, take a sip of water every hour.

“Infants before they are laid down, or given the bottle, should have their mouth, gums, etc., washed out with a soft cloth, this prevents sour risings in the mouth and consequent diarrhœa.” (*Dr. Disqué.*)

MINERAL BATHS AND WATERS.

These are not reckoned amongst the remedial agents of the Nature-Cure.

“Mineral baths are supposed to act on the body by means of absorption through the skin. Learned authorities, however, teach us, that the skin absorbs very little water, and still less of matters contained in it. The beneficial effects, therefore, of mineral baths are reduced to a minimum, and the good resulting from a ‘cure’ at some mineral bathing resort, must be ascribed to other causes, such as the fresh air, a regulated diet and manner of life, change of scene, freedom from care, etc.

“The immoderate drinking of mineral spring waters only acts injuriously on the digestive organs, as does also the habitual use of artificial mineral drinks. The carbonic acid contained in the latter, when these are constantly taken, goes into the blood and poisons the body. Persons who accustom themselves habitually to their use, either as dietetic drinks or as means of refreshment, gradually become bloodless and wanting in energy.” (*Platen.*)

CHAPTER III.

LIGHT AND AIR.

LIGHT-AIR BATHS.—SUN BATHS.—AIR HUTS.— BAREFOOT-WALKING.

THE use of sunlight and air as curative agents, in the form of light-air baths, sun baths, and sleeping in air huts, is a prominent feature of the German natural healing method. In most Nature-Cure establishments both in Germany and Austria—and their name is becoming legion—these are reckoned among the most potent of the remedial influences, as well as the Kneipp remedies of barefoot-walking on wet grass, wet stones, and in sandals.

Neither bathing in the air and sunlight, nor sleeping out of doors, which is what the air-hut system, as an adaptation to cooler climates, represents, is anything new. Neither is walking barefoot. Natives of hot countries, as well as savage races do all instinctively. Going bareheaded and barefooted is the common custom, at least in summer, of a large section of the inhabitants of Europe. The higher the grade of so-called "culture," the more completely is every portion of the body at all times carefully excluded from the animating electric influences of sunlight and air, the more are two of God's most bounteous gifts for health and healing shunned and feared.

One of the most important tasks of the natural healing art has been, and is, to combat all such existing prejudices, and to demonstrate the untold wealth of these two vital elements as aids not only to health, but to cure.

Although Rausse, writing in the "forties," advocated air baths, Arnold Rikli, as mentioned before, born in 1823 in Canton Berne, is the real founder of the light-air and sun-bath treatment, together with the air-hut colony system, called in Germany the "Rikli Method," and by himself the "Atmospheric Cure."

It was, however, some years after he had introduced them into his own practice, in his Nature-Cure establishment at Veldes, in the Tyrol, before his brethren in the natural healing art completely adopted his views on the matter. Now, not only is his method fully incorporated into the general system, but every writing on the subject teems with scientific reasons for the use of air and sunlight as curative agents, and practical instruction for their employment.

Although *Rikli* "invented," so to speak, barefoot-walking, it is always regarded as *Kneipp's* particular speciality, because, eschewing the "Rikli method," he enlarged upon it in all sorts of ways, and used it alone as an important accessory to his means of cure.

LIGHT-AIR BATHS.

The model light-air baths are, of course, to be found at Veldes, where *Rikli* has five "stations," or "parks," as they are called, partly naturally and partly artificially enclosed, three for one sex and two for the other.

Those nearest the centre, and on flat, grassy ground, are for the weak and uninitiated patients; the others are further off, and situated on heights, the walk and climb giving full play to the lungs, and inducing comfortable warmth before the stations are reached.

To these grassy enclosures the patients repair in the very early morning (in summer), and, in Adamitical costume, or one very light garment, take their atmospheric baths. The time of the bath varies from ten to fifteen to twenty minutes to hours, according to the state of the weather and condition and strength of the patient.

In many other Nature-Cure establishments, these "Rikli" light-air baths are to be found, situated in the same way on heights, or in meadows on level ground. (Fig. 20; see next page.) In others, where space is more limited, they are taken in the sun-bath enclosure, or a roofless tent has to answer the purpose, or perhaps an enclosed portion of the roof.

The best thing, of course, is a grassy space, large enough to allow for rapid change of movement, such as walking, running, etc., as well as all kinds of health calisthenics. Where there is but little room for action, the latter alone will keep the body warm, and give full play to muscles and lungs. "Where there's a will there's a way!" A small piece of garden or meadow enclosed, or in the bedroom, with all the windows open after the morning wash, or feet and leg, hip and arm light-air baths taken morning and evening. In the former the lower part of the body is bared to the thighs, and in the

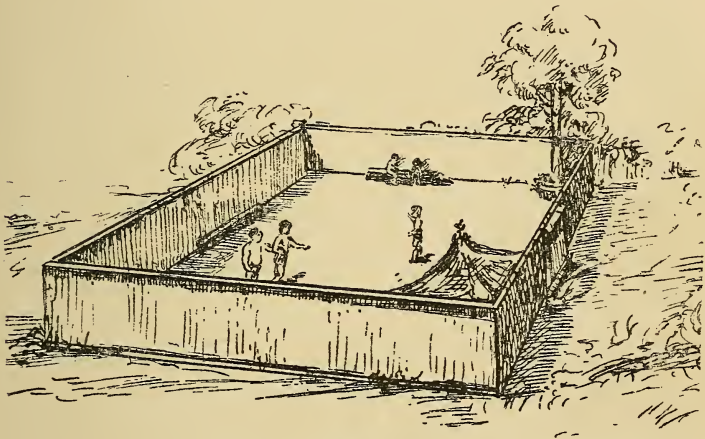


Fig. 20.

latter the upper part to the hips. Anything is better than nothing! In all light-air baths breathing exercises should be done, as they powerfully heighten the action of the bath.

"Water is good, air is better, but best of all is light," says Rikli. "Light—sunlight, the mother of all life, has a much more real action than is commonly supposed. Every organic being has so much more perfect life, the more it enjoys the influence of light. Withdraw it from a plant, or an animal, and in spite of all nourishment, all care, it will lose strength as well as power of growth, and finally die. Man himself, by a lightless existence, becomes pale and dull, and loses at last the whole energy of being."

“The entire physical well-being of man is dependent on the sunlight, and yet how seldom he understands how to make proper use of its beneficent influence for the preservation of health! By its action, the chemical transformation of the food matters circulating in the blood (change of matter) is quickened, the nervous system is stimulated, soothed, and strengthened, the blood corpuscles are reddened, and the excretion of carbonic acid promoted.” (*Böhm and Platen.*)

Light, also, has been proved by certain eminent bacteriologists to have a distinct effect upon disease germs. “In the clear sunlight, bacteria die as surely as in carbolic acid and sublimate. The lazzaroni lying about all day, bathing his half-naked limbs in the sun, never gets consumption.” (*Siegert.*)

The action and importance of *air* as one of the chief elements of life, is, perhaps, better understood. “Air is the bread of the lungs,” by means of which it cleanses our blood, which feeds our tissues, and on which all our vital processes depend. It is also the food of the skin, the function of the latter being to absorb pure, strengthening air, as much as to excrete morbid matter and change of matter products. “A better medicine, a more strengthening and nourishing remedy than the atmospheric air, in its purest unmixed form, does not exist.” (*Simon.*)

It is a much milder stimulant than water (cold), and also a much worse conductor of heat, protecting the body from loss of warmth by the contraction of the blood vessels of the skin. Cold air is the best medicine for the nerves, on account of its containing more burning material or oxygen; under its influence, therefore, the change of matter process in the nerves goes on more rapidly and powerfully.

“Man is a light and air creature; he was not born with clothes on, but with the instinct of living in the sea of light and air, like a walking plant. Neither is he an amphibium, to need to be constantly dabbling in water.” (*Rikli.*) Therefore, he says, “Bathe in the atmosphere, instead of in water! No other kind of bath, be it what it may, produces such an alteration in, and strengthening of, the nerve and blood-vessel systems. The delightful feeling of bodily comfort which is aroused by a light-air bath in beautiful weather in the early

morning, is hardly to be imagined. Unfortunately, this relatively new teaching is only understood with difficulty, because the many hundred years' deeply-rooted dogma of the 'mischievous cold air' and 'dangerous sun heat' stands in the way."

"The light-air bath, because, by means of our nerve apparatus, it acts beneficially on the whole system, is the most simple, natural, delightful remedy that can be imagined. It is—I hesitate not to say it—the single universal healing remedy, *i.e.*, for every form of disease, which in Nature's divine treasury of healing we possess. The evaporation of the skin, its absorption of the air, its impregnation with blood, its radiation and production of heat, are all active and unhindered in a light-air bath. Light and air can enter fully and freely into the human organism. Even when the skin is cooled to the degree of the formation of a goose skin, it does not matter. The capillaries of the skin contract through the stimulation of the cold air—in the same way as with cold water, the blood is driven inwards, and by the following reaction, streams back more vigorously to the surface of the skin, impregnated with all kinds of foreign matter." (*Platen.*)

"The light-air bath, especially in a cool temperature, is a powerful means of exciting oxidation in the inner organs, which means increasing the digestive power. The quality of the blood also changes during an air bath. It becomes lighter from being relieved of the half burnt, imperfectly oxidised products. This is why, after an air bath, a person feels so fresh and brisk, so cheerful and comfortable.

"The light-air bath, too, braces and strengthens the skin, thus assisting the excretions in that way. A weakened, relaxed skin is the second cause of almost all disease. Our manner of clothing and life condemns the nerves of the skin to almost complete inactivity; they are, therefore, insufficiently nourished, while the blood is driven in upon the inner organs, which get more than is good for them, thus producing disturbances of the nervous system, kidneys, bowels, and lungs. The air bath helps the skin to regain its lost quantity of blood, and the inner organs are relieved." (*Natur. Arzt.*)

“The light-air bath is not only a powerful means of preserving health, but an important factor in the cure of all disease, whether acute or chronic. And yet, although it is the simplest, cheapest, most easily to be employed remedy, how little is it understood or employed!

“The child, sick with diphtheria, and in danger of suffocation, strives with all its might to throw off its bed coverings, which its mother, with anxious, but fatally mistaken care, prevents it from doing. The patient tossing with fever and delirium is watched night and day that he may not follow his instinct—the voice of Nature—and spring out into the cool, or icy cold air. The cool air acts on the heated body exactly like cold water, refreshing and reviving it; while the removal of all covering allows the bad, foul air to be constantly streaming outwards from the skin, instead of being continually reabsorbed.” Those who have employed light-air baths in cases of acute illness testify to the rapid amelioration of the symptoms, and quick recovery of the patient.

In every case of severe illness, the patient's clothes and bed coverings should be removed, and if not in the open air, he should be placed by as many open windows as possible, even in a draught, and on the coldest winter's day. (*Note*.—A person in a high fever *cannot* take cold.) He should lie from fifteen to twenty minutes in cold weather, and from one to three hours in warmer; then replaced in bed and thoroughly rewarmed. The colder it is, the more beneficial. Nature sends the cold of winter to destroy the bacilli, bacteria, microbes, and all such organisms. The same thing is of chief importance with a sick body. Many, for example, would lose the itch if they would take light-air baths on cold winter days, while consumptives would find them the surest way of destroying the bacilli in the lungs, the produce of fermenting foreign matter. It is just weak and sick people who require, more than any other, the cooling of the inner heat, and strengthening of the vital force. By light-air baths, the latter is so effectually increased that the body throws off quantities of foreign matter, while at the same time, the heat which is induced thereby is lessened, so that the patient finds immediate relief.

“Children should be accustomed to take light-air baths from their birth, if only in the room with all the windows open, immediately after rising, or after the early bath.” (*Just.*)

“The proper time for a cooling light-air bath, is always early in the morning in summer time, as soon as possible after leaving the bed. After the continued relaxing warmth of the bed, the compensating cooling application is most essential for the strengthening of the nerves, and, as a rule, the coolest air is in the morning. It should be taken daily, except in heavy rain; on fine days, before sunrise. In spite of the double loss of warmth through radiation and evaporation, cold is not experienced, because the vigorous inhalation of oxygen keeps pace with the evaporation, and excites a powerful circulation of the blood.

“When light-air baths in the open air are impossible, they should be taken in the room, after or before the cold water washing. If therewith is combined an energetic dry rubbing of the skin, with only hands, or rough wash-glove, the important streaming of the blood corpuscles to the skin will be assisted, and the deficient light effect compensated.

“For towns-people the so-called clothing air bath is earnestly recommended, as a most valuable bracing and strengthening remedy. It consists in going out once or twice daily, very lightly clad, in order designedly to cool the skin. If the cooling has been intense, warmth must be obtained on the return way, by over clothes that have been taken for the purpose, or through going out again in heavier clothing. If the cooling has only been a mild one, it is sufficient after the return to remain from one to three hours in a warm room, or lying in the sun. If a chill is experienced, it will be necessary to take a vapour bath to promote perspiration, or evaporation must be induced for a couple of hours. This will often be the case the older a person is, because after the zenith of life is passed, the elasticity of the organic fibres is diminished.” (*Rikli.*)

Weak people and the unaccustomed must begin light-air bathing very cautiously. It is best first to take them in the warmth of the day, and with some portion of the clothes on, gradually coming to cooler and cooler temperature, and the body quite bare. (The lightest clothing hinders the action of the

air, and gives a feeling of chill.) At first, five minutes is enough, but gradually the time can be extended, according to the feeling of the bather and condition of the weather. It is a good plan to leave off at the first shivers.

Motion and exercise are always necessary in an air bath, particularly in cold weather. Care must be taken that proper reaction, even to perspiration, takes place afterwards, either by walking, manual work, or re-warming in bed.

For restlessness and feverishness at nights, as well as for sleeplessness, it is excellent to leave the bed and stand at the open window, or walk about the room for a few minutes. Sleeping without night-clothing on, is a form of night air bath much recommended by many Nature-Cure practitioners. Also the airing of the bed at night at any waking opportunity, by lifting the bed clothes sufficiently to allow of the escape of the bad air, and the entrance of fresh.

After great bodily fatigue, a light-air foot bath, *i.e.*, exposing the feet or feet and legs to the air for some time, is as restful and refreshing as a water bath.

The efficacy of the dietetic employment of light and air as indispensable assistant agents in Nature's work of healing, has only to be tested to be believed in.

“As no such nerve strengthening kind of bath as the light-air bath can possibly be invented, it is highly probable that within a not very distant time, every considerable town will have its light-air park and sun-bath gallery. For the winter they must be glass covered arenas, something between greenhouses and riding schools.” (*Rikli.*)

SUN BATHS.

The light-air bath is a cooling application, the sun bath a heating one. As after the former, re-warming is necessary, after the latter, cooling must always follow.

“Whoever for the first time hears of an air or sun bath, will perhaps have no great desire to bathe in the air or sun.

Whoever, however, has experienced the enjoyment of such a bath, will certainly deplore not being able oftener to have it. Many people will think it curious, even foolish, in the hot summer time, instead of seeking cooling, to heat his body in the sun. But it is quite different whether the sun shines upon us clothed without sufficient evaporation of the skin, or unclothed with free evaporation of the same." (*Dr. Böhm.*)

Warmth in our bodies is, as we know, generated by the movement of the smallest particles or molecules, the most important source of which is the heat that radiates from the sun. When, therefore, not only the hands and face, but the whole body is exposed to the action of the sun's rays, it is evident that every function and organ must be brought into a heightened state of activity.

"Under the influence of the sun's warmth, the circulation of the blood is quickened, the skin is filled with blood, and through its countless pores exudes a beneficent and healing perspiration." (*Platen.*)

Much more powerfully than in the light-air bath, as Rikli shows, the blood corpuscles, which are the chief conveyers of oxygen, as well as the watery particles (serum), are drawn to the surface of the body. "Through the quickening of the circulation, all the blood masses are thus gradually brought to the surface, and renovated and improved."

As the excretion also of refuse blood and tissue particles, in the form of gas vapour, goes on only under corresponding warmth of the skin, it is plain how those excretions must be promoted by the concentrated heat of the sun brought to bear upon it.

"Under the influence of the sunlight and sun's heat, the deposited matter of disease is dissolved, and excreted through perspiration. Not being hindered by any poisonous evaporation matters, the oxygen of the air, animated by the sun's rays, is able abundantly to enter the blood through lungs and skin. The swelling of the visible veins of the body, the powerful repletion of the skin with blood, the extraordinarily comfortable feeling in the body occasioned by the penetrating warmth, show what an immense effect is being exercised on the circulation." (*Siegert.*)

“The sun bath is an excellent remedy in deterioration of the blood and juices, and catarrhs of every kind. Also in poverty of the blood, chlorosis, tuberculous affections, rickets, syphilis, mercurial poisonings, rheumatism, gout, obesity, and above all, in the manifold digestive and change of matter disturbances. In the widespread complaint of chlorosis, the sun bath is a true specific. The blood, which, in consequence of a want of red corpuscles, is changed in its natural elements, through the stimulating effect of the sun’s rays, is brought to the skin. There, through the chemical action of the sun’s heat, the formation of the red corpuscles by means of oxidation is furthered, independently of the agreeable, warming effect of the sun’s rays on the pale, bloodless, cold skin. The intensely increased action of the peripheric or surface blood circulation assists the respiration of the skin and the whole change of matter process.” (*Platen.*)

“We distinguish between two kinds of sun baths,” says Rikli, “*viz.*: the *natural* sun bath, which simply consists in exposing the body in the light-air park (enclosure) to the action of the sun; the other the *cure* sun bath, in which the rays of the sun are concentrated in a boarded place, with compact plank walls, to hinder as much as possible the streaming in of the cool air, and to allow for lying in the full heat of the sun.”

The “natural” sun bath is a mild application of the sun’s heat, because the air has full play on all sides. It may, therefore, be taken by the most nervous and weakly, either lying on the grass, a rug, or mattress—head and face being protected—or in the sun-bath enclosure, or in a room where sufficient sun streams in. A partial one can be taken sitting by the open window, and bathing feet and legs in the sun. “The principal thing is, that one should let the sun act as often and as much as possible on the bare body. The less one is covered, the better.” (*Siegert.*)

The duration of the natural sun bath must depend on the feeling of the bather, time of year, and heat of the sun. Generally, a gentle perspiration will break out, and shortly after that a cooling application must be taken—either a simple wash down, or a bath, or water poured over the body from a can or watering-pot, at temperatures varying from 82 to 64 deg.

The "cure," or direct sun bath, is of much more powerful action, and stimulating in its nature, and must be used more cautiously and individually.

In the Nature-Cure establishments, distinct wooden sun-bath enclosures, or galleries, are generally erected, where the sun can have free entrance. They are usually raised above the ground on piles, and are on an average from ten to eighteen yards long, and six to twelve yards broad. The plank walls are from three to five yards high, and the flooring is also of boards. A small portion is partitioned off and roofed in, where mattresses, baths, etc., are kept, or the bathing place is on the ground floor, and the sun bath above. (Fig. 21.)

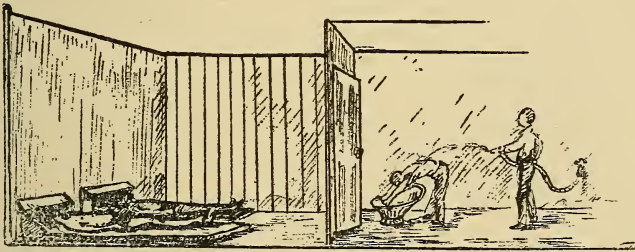


Fig. 21.

The bather lies on a woollen blanket, spread on a straw mattress, raised at the head by a wooden wedge. A protruding plank shelf about a yard from the ground shelters the head, but to protect the face and neck a towel or something similar is suspended in front.

At first he lies quite bare, or with a very light covering, turning over on all sides, until the whole body is thoroughly "sunned." He is then wrapped up or "packed" in the blanket, which must be well secured at the sides and neck, to hinder the entrance of air. He then lies quietly on his back till the perspiration breaks out on the forehead, which is a sure sign that the whole body is perspiring. It is best then to be "unpacked," for to perspire too long relaxes the skin, and weakens the reactionary power.

A cooling application now follows, either a half bath from 82 to 74 deg., gradually cooled down to 64 deg., or a sitz bath,

or a douche of any kind at varying temperatures. An absolutely cold application after an intensely heating one, is exciting and stimulating to the nervous system, and must only be taken by those strong enough to bear it. Except for very weak people, it is best to dress without drying, and take a little gentle exercise.

As a rule, two to three sun baths in the week are enough.

Any place, of course, can be utilised for the direct sun bath, where the rays of the sun can be sufficiently concentrated, and too great play of air prevented. For those to whom either the natural or cure sun bath is quite impossible, Dr. Walser says, "A very pleasant sun bath can be taken in light linen or wool clothing, walking or sitting alternately in sun and shade as long as possible."

"If, during the employment of light-air and sun baths, uncomfortable reactionary symptoms should appear, it will be a sign that the tissue or blood refuse is put into motion. The sooner this takes place the better, as it is only through the accumulation of such that severe illnesses arise. Unless the 'crises' should be of a very violent nature, the bathing can be quietly continued, as they will further assist Nature in her purifying work." (*Rikli.*)

AIR HUTS.

Rikli says that he found "for the completion of the light-air cult, a dwelling system was necessary, which should afford perfect enjoyment of the two vital elements. In the air-hut colony to be found at Veldes, such conditions are fulfilled. There the purest air is breathed by night and day, and every ray of light can be used as a relative sun bath."

In most Nature-Cure establishments, these "Rikli" air huts are now to be found, situated singly or in groups, single and double ones, fitted up in the usual German fashion, as bed-sitting rooms. They are built of wood, in a fanciful style, raised from the ground either by a stone plinth or on piles, with movable steps for entrance, and a solid roof to keep out

the wet. They are either fitted up with door and windows on three sides, that can be closed or opened according to the weather, and ventilators above for further circulation of air, or are completely open in front, with waterproof curtains to let down at night or in bad weather. In fact, in every place, the style differs more or less. (Fig. 22.)

Tents, of course, can be made to answer the purpose. We know, for instance, how healthy camp life is in India, how well the soldiers are on a march; how, in times of epidemics, they

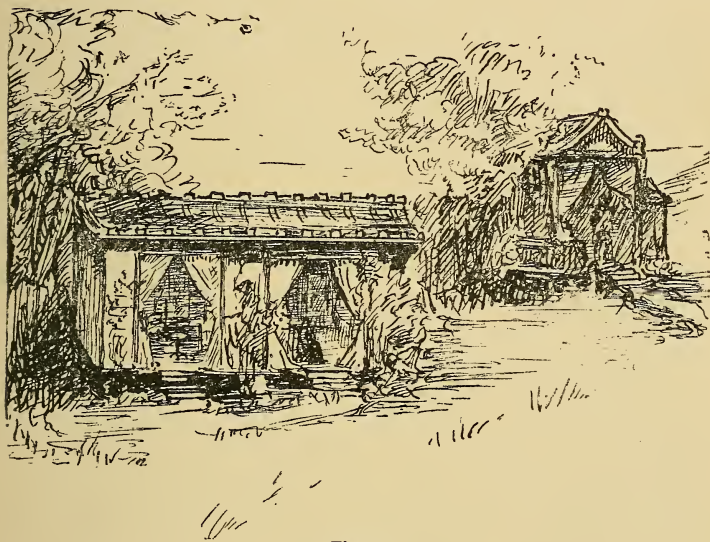


Fig. 22.

are sent out to live in tents, to recover from, or escape contagion. It is the unlimited supply of fresh air and vivifying light which purifies the blood and juices, promotes digestion and excretion, and keeps all the vital functions in healthful activity. Living, and especially sleeping in air huts, as an adaptation of tent life to European climates, must, it is evident, have a very beneficial effect during a "cure," or indeed at any time. "A full supply of fresh pure air is of the greatest importance for the cure of all complaints, be it a cold, or typhoid, typhus or cholera, rheumatism or gout, nervousness

or consumption, cancer or syphilis, a wound or an open sore. Health is for man the foundation of all earthly happiness, and he can only enjoy earthly good according to the health he possesses. Only as he understands this better, will light-air huts be used and valued.

“There is no need to fear that in an open-air hut in a cool temperature it will be cold, for the body develops much more natural warmth when it inhales fresh pure air, than in the bad air of a room.” (*Just.*)

“The open sleeping rooms, the air huts invented by Rikli, are a benefit for sufferers from lung disease, sleeplessness, and poverty of the blood, which cannot be sufficiently extolled.” (*Dr. Lahmann.*)

BAREFOOT-WALKING, ETC.

“The simplest and most natural means for bracing and strengthening consists in going barefoot. It can be practised in all sorts of ways, according to different states and ages.” (*Kneipp.*)

“Our feet have not been endowed for no purpose with a net of multitudinous nerve fibres. The atmospheric airing of the nerves of the feet has a manifold reaction on the whole of the upper part of the body. Not only is it the best remedy against chronic cold feet, but it is also actively stimulating to the abdominal functions, strengthening to the spine, and derivative from chest, neck, and head.

“Not only would a great number of complaints be prevented by daily (dietetic) barefoot-walking, but their cure also be promoted, particularly with regard to head complaints. Mother Nature has in this simple way given us a mighty help to our hand to check the numerous diseases of the brain. It is so simple, and yet—or, perhaps, because of that—neither the physicians order barefoot-walking, nor are medical students instructed in it. For mental workers it is most useful often to bare the feet, for merely the effect of the air draws more blood into them, as can be seen by their

stronger reddening after a short time of freedom from covering. Even if the feet should be chilled thereby, it is much better than that they should be pale, cold, and bloodless under the feet coverings." (*Rikli.*)

"Go often barefoot in the room, or in any suitable place, and do not think it is always necessary to have dewy grass or wet stones. It is not the damp that does the good (at the most, it withdraws unnecessary warmth), but the stimulation of the light-air electricity, which acts electrically on the countless blood-vessel nets of the weakened feet." (*Dr. Walsev.*)

"Barefoot-walking draws the blood to the feet. Especially in congestions with noises in the ears, giddiness, and headache, there is no better remedy. Also after apoplexy (sunstroke, etc.); but it is by no means always indicated in all complaints, such as lung disease, etc. It is generally carried out on wet grass from ten minutes to half an hour at a time, and also on stones sprinkled with water, or in snow for about three minutes." (*Dr. Disqué.*)

"Barefoot-walking on wet grass is a bracing application that not only acts as a derivative from head, chest, and abdominal organs, but also strengthens and hardens the feet. It is the most natural cold foot bath." (*Platen.*) (Fig. 23; see next page.)

"The wetter the grass, the longer it should be continued, from one to three quarters of an hour. The feet must then not be dried, but perfectly dry coverings put on, and exercise taken for re-warming. This, like merely walking barefoot, can be done even when the feet are cold.

"Walking on wet stones has the same effect as walking on wet grass, and to many is easier and more comfortable. Any stones or stone-plastered place will do, however small. The chief thing is that the stones should be wet, and active movement be made while standing on them. It should not be done longer than from three to fifteen minutes, according to the state of the patient. Even the weakest and most sensitive should not shrink from this bracing remedy. Those who suffer from cold feet, throatache, catarrhs, pressure of blood to the head and following headache, should often use

this application. For re-clothing and re-warming, the same rules apply as for walking on wet grass. This may also be done with cold feet.

“Water-treading is also an exercise that acts on the whole body, and strengthens the entire system. It acts favourably on the kidneys and urethra, preventing on that account many complaints which arise in the kidneys, bladder, and abdomen. It also relieves the chest, and draws gas from the stomach, and is particularly useful in head complaints, headache, etc.



Fig. 23.

“The feet must be moved up and down in cold water, coming to the ankles, in any bath or tub. It acts better, of course, when the water reaches the legs, or even the knees. The duration can be from one to six minutes. The colder the water is, the better. Exercise must take place afterwards to thorough re-warming.” (*Kneipp*.)

There is no fear of catching cold with these procedures, but weak and nervous people must begin cautiously and

tentatively by accustoming the feet first to rubbings with a wet towel, and for water-treading, using at first tepid water.

Kneipp has also made *sandal* wearing a popular institution in every Nature-Cure establishment. When worn without socks or stockings, they form a comfortable kind of perpetual barefoot-walking. But even with the former, they are an admirable hygienic sort of foot covering, allowing perfect elasticity to the foot, and free circulation of air. They are made after various patterns and shapes, and are now to be obtained in all the principal German and Austrian towns.

As an addition to other treatment, or as part of the general "strengthening cure," or used by itself, barefoot-walking in its various forms is a valuable auxiliary in the cure and prevention of disease.

CHAPTER IV.

DIET.

“RAUSSE said, ‘It is water that does it, of course!’ Rikli says, ‘Air stands higher, and light the highest!’ I say, Important are all the curative factors, but the most important of all is *diet*. The chief function of the organism is to receive food and manipulate it in the digestive canal. The digestion and the nutrition resulting therefrom, are the foundation and first condition of health. Right nutriment, therefore, is of the highest importance, if we would remain well and remove sickness.” (*Dr. Disqué.*)

“Right nutriment is the basis on which the natural healing art is built. It is the groundwork, without which any attempt at cure is useless; it is in fact the most important part of the care of the sick. It is often thought that the natural method of cure and vegetarianism go hand in hand, and that only the latter is allowed and prescribed. This view is an error, for vegetarianism is only a curative factor of the natural healing method in the same way as water. It would be just as foolish to order every patient a vegetarian diet, as it would be, *e.g.*, to treat every sufferer with vapour baths. Vegetarianism is made use of in numberless cases, but in many, a normal diet is desirable.” (*Dr. Böhm.*)

The question, then, of diet is not a light one, but rather of the gravest importance both in health and sickness. Not only man’s physical, but also his moral and mental well-being is largely dependent on the quality and quantity of food and drink, their suitability to the individual constitution, and the relationship they bear to the individual conditions, habits of life, and surroundings.

“As children, we formed the conception, from what we were taught, that the stomach was, so to speak, a self-thinking, self-acting organism, a faithful servant, which could separate

the good from the bad of what we took in through the digestive canal. We have also often learnt that unhealthy dwelling arrangements, bad and insufficient air, and wrong clothing promote sickness. But sickness depends mainly on injudicious nutriment. Deviation from the normal composition of the blood is the chief root of all sick dispositions. Blood is formed from food and drink. Can it be of indifference, therefore, what one eats and drinks?" (*Dr. Lahmann.*)

"Thousands and thousands become wretched and sickly because the 'belly is their god.' Countless numbers would recover, without any special medical help, would they in this direction lay bit and bridle on themselves." (*Siegert.*)

"As a general rule people eat too much, about two to five times as much as they need, and, particularly in the towns, too much meat. Thereby is occasioned that over-excitement of the nerves, palpitation of the heart, headache, pressure of blood to the brain and consequent apoplexy, pressure of blood to the lungs with resulting hæmorrhage, the overheating of the system with consequent deposits of uric acid salts, as in gout, gall stones, bladder and kidney complaints, that hurry and worry with following nervousness and sleeplessness—states which often lead to mental disease." (*Dr. Disqué.*)

"Whoever, at least once daily, does not sit down to table with a feeling of hunger (not only with appetite) is over nourished, and will surely sicken sooner or later." (*Rikli.*)

"*Appetite* is a palate stimulation, and arises from the desire for food and drink for the sake of the taste. A healthy person always has appetite, even when he has no hunger; he should, however, as long as he does not experience the latter, naturally not satisfy the former.

"*Hunger* is, on the contrary, an irritable state of the stomach, arising from the contraction of its walls. With many people this contraction is weak, and with them also the feeling of hunger is also weak; with others the contraction is powerful, and with them the feeling of hunger is also strong. It is always the feeling of hunger that should be satisfied, and not the appetite." (*Platen.*)

"Again, few people ask themselves whether such and such food suits them, or whether the bodily activity is in relation to

what they take, or whether what was taken last has been digested. The generality only seek the gratification of their momentary tastes and cravings. Instead of giving the digestive apparatus the nutriment most in accordance with its capabilities and the activity of the bodily functions, and leaving it a proper time for digestion, the stomach is constantly refilled with all kinds of food that will tickle the palate, which for the most part are composed of indigestible materials. Whether the stomach is in a condition to work over and digest so much in so short a time, or whether the body can use so much fluid contained in it and taken with it, is not asked. By far the largest proportion of complaints develop in consequence of defective digestion, caused partly by too fat, partly in relation to the digestive capacity, too abundant, and indigestible food, and its consequent deficient conversion into the juices of the body. It must not be thought that defective digestion results only in a passing disturbance with consequent discomfort, such as acidity, flatulence, wind, and the like, which can be driven away with all kinds of remedies. On the contrary, the consequences are severe and far-reaching, the more so the longer time the digestive disturbance has lasted. The principal results are the formation of bad blood and juices, and the gradual accumulation of imperfectly digested and therefore decaying matter in the blood and digestive canal, while the digestion itself becomes ever weaker, and unable to perform its duties. Gradually the whole body partakes in the unhealthy condition." (*Liskow.*)

Not only the quality and quantity of our food, however, are important, but its composition also.

The greatest mistakes are made in the present day of estimating alimentary substances, and labelling them as nourishing or otherwise, according to their chemical constituents, and the amount of nutriment they are supposed to contain.

"Man lives, not from what he eats, but from what he digests." (*Dr. Lahmann.*)

"It depends on the power of assimilation (making similar) of our nourishment whether the blood formed from it is able to change itself into bones and muscles, and so build up the

organism. Many articles of food possess the requisites for the chemical constitution of the body, but whether they are assimilative or digestible is another matter." (*Dr. Walsev.*)

Diet is not a chemical question, but a physiological one. The nutritive value of alimentary substances does not lie in the amount of carbon, nitrogen, oxygen, and salts they may contain, but in the relation which the several substances bear to the organism they are to nourish. The vital processes which go on in our bodies are different to what go on in laboratories, and demand other tests than those furnished by chemistry. In nothing has individuality to be more studied than in diet. What nourishes one person will harm another, so that it is useless to say a substance *ought* to nourish in virtue of its composition, when experience tells us it does not do so, on account of some defective relation between it and the organism. "There are thousands of riddles with regard to the fancy for foods, as well as of their suitability, of a quite personal nature, not to be solved by any model theory." (*Rikli.*)

That certain elements are necessary in what we take to build up the fabric and maintain the heat of the body is true enough.

We need for our maintenance food that contains albumen (nitrogen). "Albumen acts like the cement in the building of a house, and gives strength, solidity, and firmness." Further, we need sugar, or such food as will be changed into it (starches or carbon hydrates). These are the heat-formers of the system. Then fat, so important for the formation of nerve tissue, and mineral matters, so-called "nutritive salts." "But how much of each of these should be taken differs according to the individual, and is a matter of indifference." (*Dr. Lahmann.*)

"It is quite false to imagine that albumen or nitrogenous matter is the most important part of our food. They are all of equal value. When one fails, or is taken in insufficient quantity, deterioration of the blood results." (*Siebert.*)

These alimentary substances—albumen, carbon hydrates, fat, and mineral salts—are found in differing quantities in all our foods. Albumen is contained most abundantly in milk,

eggs, cheese, and pulses, then in meat, fish, and cereals, such as wheat, rye, barley, oatmeal, buckwheat, rice, maize, millet, etc., and lastly in vegetables, fruit, and nuts of various kinds.

The carbon hydrates, or starches (sugar and heat-formers), are contained abundantly in all kinds of cereals, as well as in potatoes, vegetables, and fruit, and are also found in milk.

Fat is present in milk, animal and vegetable butters, meat, the different oils, and in all kinds of nuts. Further, vegetables yield a great variety of oils, which are more digestible than animal fats, owing to their minute state of subdivision. Mineral or nourishing salts exist most abundantly in vegetables, leaf salads, and fruit.

“Most people take too much nitrogenous nutriment, and suffer from the deficiency of sugar-formers and nourishing salts. Meat and fine bread, the chief foods of a large class of people, contain too little of the latter. The sugar-formers, for which the body feels an unconquerable need, are then often taken in the form of beer. No one, however, can assert that this is the proper way of taking nourishment.

“Especially severe are the consequences when the food of children contains too little of the sugar-formers and nourishing salts. Their growth, particularly as regards bones and teeth, suffers then sorely; while rickets, scrofula, or poverty of blood, are too frequent results.

“Without doubt, meat contains an immense amount of nourishment, but the partly poisonous change of matter products present in its juices, are irritants, the incorporation of which in large quantities is undoubtedly injurious. They are principally excreted through the kidneys, but can easily deposit themselves firmly in the tissues, and occasion gout and rheumatism. Meat is more easily digested than vegetable food, and is almost all dissolved and absorbed. The latter, on the other hand, contains much indissoluble material. This, however, gives the bowels the work for which they were made, while the dissolved change of matter products of meat load the tender kidneys with the work the bowels should do. Therefore, by abundant flesh food, we find, besides gout and rheumatism, also lung, bladder, and kidney complaints, pressure of blood to the head, and, on account of the deficient

action of the bowels, chronic bowel complaints. These occur so much the more quickly, the more the use of meat is combined with want of exercise, fresh air, and care of the skin." (*Siebert.*)

"If a person also takes food which is poor in mineral matter, he has salt hunger, which he has to satisfy with mineral chloride of sodium (common salt). Salt not only irritates the nerves of the stomach, but, owing to its extreme solubility, gradually penetrates the tissues, replacing the nutritive salts so necessary to their repair. It is then excreted through the kidneys, which gives those organs too much to do. Often the use of alcoholic drinks, which is so often the cause of inflammation of the kidneys, is the consequence of the immoderate use of salt—one unnatural and injurious habit bringing another in its train." (*Prof. Bunge.*)

If not alcoholic drinks, too much salt as well as nitrogenous food leads to the taking of too much fluid. "The change of matter requires only so much water as will give the necessary amount of resistance to the oxygen in its dissolving and burning processes, and prevent its too rapid action. Dr. Lahmann calculates that 87 per cent. of water is sufficient both in our solid and liquid foods. If a person takes more than that," he says, "not only is his food thinned, but that which is formed out of the food—the blood. This thinning of the blood means that the tissues become full of water, and, in spite of quickened heart and kidney action, quantities of water gather in the lymph-vessel systems. Not only will the quality of the red corpuscles be bad, as they will be insufficiently nourished, but the watery blood will be poor in mineral salts."

The preparation of the food which contains the largest amount of nutritive salts, has also much to do with their deficiency in what we take. As we know, it is vegetables and fruit which are peculiarly rich in mineral matters. Generally when the former are cooked, "the water, which absorbs the chief part of the nutritious substances, is thrown away, and the soaked-out vegetables then brought to table. This is utterly wrong. All vegetables ought to be cooked in as little water as possible, or in a steamer, and the water left on them." (*Hering.*)

“The first principle in the preparation of alimentary substances is, that they should be brought to table with all their goodness left in them, and injurious matter avoided.” (Siegert.)

General Rules for Diet.

1. “Never eat without hunger, and never drink without thirst.”

2. Live moderately, and do not overload the stomach. Leave off at the first feeling of satisfaction.

3. Take no food which is too much salted, sugared, spiced, or peppered, or which is too acid. By far the largest number of stomach complaints arise through overspiced food. Spices irritate the kidneys, excite the nervous system, and lead to too much eating and drinking. Sugar creates acidity.

4. Masticate all food well. A German proverb says: “Well chewed is half digested.” Not only does digestion begin in the mouth, but imperfectly chewed food overburdens the stomach with too much work, and leads to defective and difficult digestion.

5. Take as little fluid as possible at meal time. Fluids thin the gastric juice, prevent the proper mastication of food and its due admixture with saliva. It is better to drink before or after meals, but the best thing is to take only such food as creates no thirst.

6. Take food neither too hot nor too cold, and neither, immediately after the other. Too hot foods inflame the stomach, and too cold, exercise an injurious stimulation on the mucous membrane.

7. Do not always take the same kind of food, but change it judiciously from day to day.

8. Do not do mental work, or take too much bodily exercise immediately before or after a meal. Never eat when overfatigued either bodily or mentally; the stomach is then less able to digest.

As a general rule three meals in the day are sufficient. There should be a pause of five to six hours between each. The stomach should be empty for at least an hour before

the taking of fresh nutriment, as it needs rest from time to time as much as any organ of the body.

There must, however, be necessary modifications, according to the climatic conditions, constitution, age, sex, and occupation.

Those who work in the open air from early hours require strong robust food in large portions, and four to five meals in the day, because the evaporations are increased by the strain on the vital processes.

Workers in closed rooms must choose their food more carefully. It must be lighter in digestion and less in quantity.

Brain workers must take a limited supply of food, and never to full satisfaction. Especial care must be taken that the foods are easy of digestion, and that nothing is eaten late in the evening.

Old people must take very strengthening, but easily digested food, and it is best to avoid all stimulants. They can often easily do with two meals a-day, because with them the change of matter goes on more slowly.

Children and convalescents will often need to eat between meals, because with them the vital processes are more active. (*Disqué, Platen, and Tischberger.*)

DIET IN ACUTE ILLNESSES.

The first rule in acute illnesses is, "Give the patient but little food, and never urge him to eat and drink, as long as he does not demand food and drink. The inner organs being hard at work as it is, and possessing little capability of digesting and assimilating, as little new labour should be imposed upon them as possible.

"Should, however, the patient during the fever periods require nourishment, what is given must be as easy of digestion as possible, unstimulating, and what will not cause acidity.

"Meat, meat broths, milk foods, and sweet things must be strictly avoided.

“Fluid nutriment is the most easily borne, and also it can be given more frequently and in smaller quantities.

“In the first place comes water, the best of fluid nourishment for soothing and refreshing the sick, especially when they long for it to still their thirst. In any case, however, small sips of fresh water should be given to moisten the dry lips and tongue, and to ease the throat. Fruit juice can always be added, particularly lemon juice. Also thin oatmeal and barley gruels, almond milk, cows’ milk thinned with water, thin rice or semolina soups, stewed fruit, and acid raw fruit or grapes, etc., make up a suitable fever diet. Tastes and habits of the patient play as much a part in the choice of suitable food as the condition of the digestive apparatus.

“Fever patients must never be forced to take food or drink they do not like; it will not suit them, and will only increase the fever. The instinctive cravings of the sick are generally the best guide as to the choice of nourishment.

“Sometimes it is best for a time to withhold all food; especially so with children. The greater number of feverish complaints with children arise from previous overfeeding. Here hunger is the best physician and the greatest assistance to cure.

“In other cases patients may be given small quantities of suitable food, according to the degree of fever and general state, every quarter, half, or whole hour.” (*Kuhne and Platen.*)

In lesser complaints of an acute nature, such as cold, local inflammations of any kind, mumps, chicken-pox, diarrhœa, etc., as well as in the case of wounds, injuries, and so forth, fever is always more or less present. The same rules, therefore, as to diet, hold good as in the severer forms, with necessary modifications according to the complaint, state, and condition of the patient.

DIET IN CHRONIC FORMS OF DISEASE.

“Diet is the nourishment which agrees with the bodily state of the patient. Nourishing, only means what can be

digested. In all sick conditions it is not the chemical composition of foods that must regulate the choice of diet, but the capability of digestion." (*Dr. Walser.*)

"To give correct general prescriptions as to the choice of food, is an impossible thing, because the constitution, tastes, nature of digestion, the nutriment necessary in relation to the quality of the blood, are so different, that every person must be separately studied, in order to prescribe an absolutely right diet. Everyone, therefore, in the choice of food, must be principally his own physician." (*Rikli.*) As in acute illnesses, however, so also in chronic complaints, there are general principles with regard to diet, which serve to act as guides to more particular individualisation.

It must never be forgotten that there exists no complaint of any description, in which the digestion is not more or less involved. The stomach is the fountain-head of all disease. Diet is therefore, so to speak, the key of the situation.

1. As in acute illnesses, so also in chronic cases, no person should be forced, or force themselves to take food or drink when appetite or inclination is wanting. The very absence of one or both, shows either that the nerves of the stomach are overstrained and exhausted, and need absolute rest, or that the latter requires all its forces to play its part in the work of loosening, dissolving, and expelling the disease matters. Fruit, cooked or raw, barley water and oatmeal gruel, if taken at intervals in small quantities, will be sufficient nourishment in such cases till appetite returns.

2. As a rule in chronic complaints, three meals in the day are sufficient. A sick stomach needs long intervals of rest. In some cases, however, especially when there is great weakness, little and often is the best thing.

3. The diet must be simple, non-stimulating, digestible, and free from all injurious ingredients, in order to avoid any overtaxing of the digestive and blood-forming organs, and that they may be able chiefly to occupy themselves with the secretion and excretion of morbid matters; also to prevent the formation and accumulation of new matter of disease in the blood and juices.

4. Moderation in eating and drinking must be strictly

observed. The quantity of food taken should be always *under* the capacity of the digestion.

5. All stimulants in the form of alcoholic drinks, tea, coffee, etc, must be eschewed. They stimulate the nervous system, but, like all stimulants, afterwards weaken and depress it.

6. All spices, such as pepper, mustard, etc., must be avoided, as they are highly injurious to the mucous membrane of stomach and bowels. Sugar and salt should be used sparingly, and vinegar replaced by lemon juice.

A "cure" diet in general demands a lessening of nitrogenous foods, and an increase of that which contains sugar and nourishing salts. Therefore, by most patients, meat should only be taken exceptionally, and then only in small quantities, and the kinds most light of digestion. Fruit should be taken plentifully, and rightly prepared young vegetables and leaf salads. Only care must be taken for proper variation. "Simple food is not synonymous with monotonous; the latter soon causes aversion." (*Siegert.*)

MEAT.

The most digestible kinds are what is called white meat, which contains the least fat, such as fowl, wild fowl and game, calf's head, sweetbread, etc., also beef when of young animals, veal, and lamb. The most indigestible and unwholesome are salted and potted meats of all descriptions, and pork of all kinds. These must never be included in a "cure" diet.

The pounding of meat before it is cooked is much to be recommended, because the coverings of the muscle fibres are thereby burst, and the latter become more porous.

Meat is often indicated in obesity and heart complaint, in many cases of weakness, and poverty of blood, also in stomach and bowel complaints when a fleshless diet is not well borne.

It is not indicated in fulness of blood, headache, pressure of blood to the head, giddiness, nervousness, and many nervous conditions, in epilepsy, gout, rheumatism, kidney and bladder complaints, gall stones, skin diseases, weak stomach, sickness, and diarrhœa, etc.

FISH.

Fish are almost as nourishing as meat, and when plain boiled, and only those kinds eaten which contain the least amount of oil or fat, are easy of digestion; also oysters and similar shell-fish.

SOUPS.

Soups and broths find but little place in a "cure" diet. If soup is taken at the beginning of a meal, the stomach becomes distended, its muscles cannot properly move the food, the gastric juice is only sparsely secreted, and that little is thinned.

In some cases, however, soups made from semolina, rice, barley, oatmeal, sago, milk, potatoes, etc., are of use and easy of digestion when properly prepared. The grains should be softened in water over night, the next morning cooked for three hours and pressed through a fine sieve. A little salt and thin meat broth may be added, and a yolk of an egg beaten up in some of the cooked broth. Very little fat must be used, only a little fresh butter, and neither herbs nor spices, which create gas and irritate the stomach and bowels. Carrots, etc., may be added, boiled, and put through a sieve. Warmed-up soups should never be given to sick people; they easily form fermentation products, and the fat curdles.

MILK.

Milk is an excellent nutriment, especially for children. Many with stomach complaints take milk well, while it does not suit others. In liver complaints it is not well borne. Milk should only be warmed, not boiled, as the boiling hinders the fermentation process in the stomach, and thereby its digestibility. Should, however, it be necessary for safety to boil it, it must boil for some time, to render the caseine in it more digestible.

Cereal foods prepared with milk, or half milk and half water, well boiled or baked, are usually wholesome and easy

of digestion. Milk soups made with skimmed milk, with the addition of a little salt or sugar and toasted whole-meal bread, quickly boiled, are very good for weak stomachs.

Dr. Lahmann's "vegetable milk," prepared from nuts and almonds, when mixed with water and a little cow's milk, is considered the best of nourishment for infants, when it is necessary to replace the mother's milk.

Sour milk is much used in sick dietaries in Germany. On account of its having gone through the first stage of digestion or fermentation, it is considered more digestible and nourishing than sweet milk. It is a most refreshing drink in summer, and most nourishing in stomach, bowel, kidney, bladder, and lung complaints. The milk should be kept in a room under 65 deg. for three days before being drunk.

Butter-milk, although not so nourishing, is still easier of digestion.

EGGS.

Eggs are most digestible when taken raw, scrambled, or lightly boiled. Most difficult when poached or fried.

Eggs must be used very sparingly in liver, stomach, and bowel complaints.

In conjunction with cereal foods, potatoes, and vegetables, they are of great value in a sick diet, when they can be borne. Omelettes and pancakes, etc., must be avoided where there is any dyspepsia.

The white of an egg stirred into boiling water with a little sugar, is good in liver complaints; in bowel complaints, without sugar.

CHEESE.

The only kinds of cheese admissible in a sick diet are milk and curd cheeses; the latter in Germany are always sour. They should be eaten with grated bread crumbs, or stale bread.

BUTTER.

Butter, if good and fresh, is one of the most digestible fats, and for weak and poor-blooded people, and those with lung

complaints, for the nervous, and all such with whom the bowels act well, is to be recommended. Sufferers from liver, stomach, bowel, and heart complaints, obesity, gout, and rheumatism, should eat very little, or none at all.

Vegetable fats, such as cocoa-nut butter, laureol, etc., are much used in hygienic cooking in Germany in conjunction with cow's butter, for owing to their freedom from fat acids, they are lighter of digestion than the latter.

CEREALS.

The digestibility of cereal or grain foods, such as wheat, rice, barley, millet, buckwheat, maize, semolina, etc., depends very much upon their preparation. "The finer they are ground," Dr. Disqué says, "and the longer they are cooked, the more is the starch they contain converted into dextrine and sugar, and the more digestible in consequence are they. The great fault in the preparation of such foods for the sick is that they are not cooked long enough. Also, they must be prepared so as to be porous, *i.e.*, with sufficient air-room, that the gastric juice may penetrate properly."

In "cure" diets, cereals are generally given in the form of thick stews, or mashes; being, when properly prepared, most digestible and very nourishing. Stale bread, or toast, or rusks, should always be eaten at the same time. This ensures good mastication, which elicits a flow of the saliva, the most important digestive juice for the starch foods, as it converts the starch into sugar.

Grain foods may be cooked in water with fruit, or half milk and half water, or, in cases of very weak digestion, one-third milk and two-thirds water. The nourishing value of cereal foods is increased by the addition of butter, milk, and eggs, but these must be used sparingly, in order that the digestibility should not suffer: the gastric juice can penetrate through them as little when they are too fat, as when they are too watery. (*Note.*—Millet must be scalded before use, to remove the bitter taste.)

The pastes made from wheat, such as macaroni and vermicelli, are very nourishing and most digestible when properly

cooked. The water in which the former is boiled should not be thrown away, or else the most nourishing part of the macaroni is lost.

Sago, tapioca, arrowroot, and corn flour are also all very useful in sick cookery.

BREAD.

In the same way with bread. The finer the meal of which it is made is ground, the more thoroughly it is baked, the easier of digestion is it. Through baking, the husks of the starch globules are burst, and the starch is changed into dextrine and easily dissolved sugar. Therefore, bread is more digestible than flour, and the crust than the crumb, and toast more so than bread. Bread that is under-baked only clogs the stomach. New, spongy bread, from which the moisture has not yet dried out, is also indigestible, on account of its not being sufficiently porous for the gastric juice to penetrate. It also creates acidity, and forms gas in the stomach.

Whole-meal bread is much more nourishing than white, because it is richer in albumen, the most albumen being contained in the husks of the wheat. It assists the digestion and motions, and, therefore, is a splendid preventive of constipation.

People with weak digestions, or those who suffer from diarrhoea, should take bread made of one-third whole meal and two-thirds fine meal, or partially whole meal and partially white bread.

In Germany "Graham" bread is much used, made of whole meal without any yeast. From its want of porosity, however, many Nature-Cure practitioners recommend the addition of a little yeast.

No alkalies, or any such injurious adjuncts, should be used in the making of bread. For diabetes, poverty of blood, stomach complaints, and especially for people who can eat but little, Dr. Disqué recommends what he calls "albuminoid" bread. The dough is kneaded in a cloth under water, until a great part of the starch is separated. The remaining dough is then mixed with yeast, left to rise, and afterwards baked.

A change of bread is desirable.

PULSES.

Peas, beans, and lentils, with the addition or not of a little fat, are the most nourishing as well as the cheapest kind of food, and when properly prepared they are not difficult of digestion.

In a sick dietary, they are given only in the form of thick soups and purées. If the digestion is good, they may be eaten as cutlets, rissoles, etc.

Their digestibility is increased when dried or fresh fruits are cooked with them, or cereal foods.

VEGETABLES.

Vegetables contain, in great abundance, the necessary salts for the formation of blood, juices, and bones. The retention of the latter, however, after the vegetables are cooked, depends largely upon their preparation. The best way of keeping in all their nourishment is, after they have been well picked over and washed, to pour a little boiling salted water over them, and cook them in that quickly for ten minutes. They should then be put on one side and allowed to simmer till they are soft. As little water as possible should be employed, but what is left over can be used for soups and sauces.

When the digestion will bear it, they may be thickened with flour, or meal slightly browned in butter, mixed with some of the vegetable water, and the whole then boiled together.

For sufferers from stomach complaints, vegetables must be particularly carefully handled, prepared with very little or no butter, no thickening or sauces, and cooked slowly for a long time, often with either rice or potatoes, or puréed (put through a sieve).

Potatoes agree with almost everyone—only as fried, or in salads are they to be avoided. They can be either steamed, boiled, baked, or mashed; also cooked with fruit and a little butter and milk, they make a light and wholesome dish. They must, however, be partaken of very sparingly by those suffering:

from acidity, as in gout and rheumatism, also in stomach complaints and fevers, and totally avoided in obesity, constipation, and diabetes.

The easiest digested vegetables are spinach, asparagus, cauliflower, parsnips, young peas, French beans, vegetable marrows, tomatoes, and cucumbers (boiled). The most difficult are all sorts of cabbages, radishes and celery (unless boiled), leeks, onions, and herbs. French beans are lighter of digestion when cooked with peas or potatoes, and red and white cabbage with apples.

Warmed-up vegetables are injurious in all cases, because they ferment easily, and create wind.

Salads, when they can be borne, are very wholesome. They should be eaten with lemon juice instead of vinegar; a little cream and sugar may be added.

People suffering from sexual excitement or kidney complaint should avoid celery, asparagus, and parsley. In gout and rheumatism also, asparagus should not be eaten.

Fresh raw tomatoes are good for rheumatism and gout.

FRUIT.

Fruit makes pure and good blood, as it assists the digestion and stimulates the change of matter. It also prevents clogging in the region of the abdomen, and increases the action of the kidneys. In chest and abdominal complaints, *e.g.*, the grape cure is of great service. In chronic constipation, inflammatory conditions of the digestive apparatus, rheumatism, gout, bladder and kidney complaints, the use of fruit cannot be too highly recommended. Also, being rich in water and acids, it is cooling and refreshing in all feverish conditions. To people with weak stomachs, cooked fruit is more digestible than raw; it should be pressed through a sieve (puréed) and very little sugar added, as the latter promotes acidity.

Where it can be borne, fresh raw fruit is best, and the skins of pears and apples should be eaten, as they assist the digestion. The skins, stones, and pips of plums and grapes, and cherry-stones are sometimes dangerous, and can cause an inflammatory condition of the bowels.

Dried fruits should be soaked in cold water over night, and cooked in the same the next day. They must be avoided in diarrhœa and diabetes, and sometimes in liver complaints.

Slightly acid fruits, carefully prepared and cooked, as apples (roasted or baked), prunes, some sorts of English plums, grapes, strawberries, oranges, and pine apples, are good for rheumatism and gout, but dates must be avoided on account of their saccharine nature.

Oranges are rich in free acids and sugar, and may be partaken of freely by invalids. Baked apples and grapes are the best of brain foods.

Figs eaten before going to bed are good for constipation.

NUTS, ETC.

Nuts and almonds are the most nourishing of all fruits; owing, however, to the abundant fat they contain, they are difficult of digestion. They are extremely useful in constipation and inaction of the bowels, when they can be borne.

Chesnuts are very nourishing, and are good for diarrhœa when no catarrh of the stomach exists.

CAKES, PASTRY, SUET, PRESERVES, ETC.

These foods must be strictly avoided in all sick conditions. All things containing cooked fat, such as pastry, cakes, and puddings made with suet, are difficult of digestion, not only because the gastric juice cannot properly penetrate them, but because of the fatty acids which they produce, which are acrid and irritating.

Jams, preserves, candied fruits, etc., are equally injurious, because they cause acidity in the stomach, and also injure the teeth.

DRINKS.

“Wine, beer, and spirits must also find no place in a sick diet, because they contain alcohol, one of the strongest nerve poisons. Alcohol also hardens the mucous membrane of stomach and bowels, and hinders the digestion. Coffee is also a stimulant, and when taken too strong or in too great a quantity leads to the worst consequences, such as poverty of blood, nervousness, heart disease, headache, giddiness, and stomach and bowel complaints. It is also a luxury of life without nourishment. Tea also has no nourishment; it excites the nervous system still more than coffee, and must therefore be still more forbidden to the nervous, and to people who suffer from palpitation of the heart and disorders of the circulation. Cocoa is much less stimulating and is very nourishing. The purest fluid, however, and the best for quenching the thirst, is that contained in the juice of raw fruits.” (*Disqué and Sievert.*)

The drinks chiefly used in the German Nature-Cure are hygienic coffees of various kinds, made from barley, wheat, acorns, and maize, strawberry leaf and bramble leaf tea, cocoa shell tea, Dr. Lahmann's nourishing salts cocoa, oatmeal cocoa (made of one part oatmeal flour to two parts cocoa), lemon juice and fruit juice drinks, wheatmeal drink, and, above all, fresh water.

SPECIAL DIET CURES.

SCHROTH DIET CURE, OR REGENERATION CURE FOR CHRONIC COMPLAINTS.

It was Schroth who first developed the theory that in every sick condition, fever is a curative factor, a necessary consequence of the health strivings of nature. He therefore contended that no complaint can be radically removed unless a sufficiently strong condition of fever can be excited. The fever

purifies the blood and juices from the contaminating matters of disease, and removes them through the usual channels.

His diet, therefore, was arranged with the view of—

(1) By the gradual limitation of fluids to create an artificial fever, and maintain it till the body was thoroughly cleansed.

(2) By other curative factors to withdraw fluids from the tissues of the body, and with the fluids so withdrawn to bring away much abnormal deposited change of matter products, and excrete them through the skin, lungs, kidneys, and bowels.

(3) By simple pure nutriment to promote the formation of good food juices, which should gradually replace the bad, and at the same time prevent an entrance of any injurious substances that would hinder the cleansing process.

(4) To give the body not more than the absolutely necessary amount of nourishment, in order that all its powers might be employed in the dislodging, dissolving, and expelling of the disease matter.

(5) To so support the healing power of Nature, as to enable it to gain and keep the mastery over the sickness.

The general features of the diet are—

(1) Three thirst days in the week. On these days no drink is allowed. The food consists of stale white bread or rolls—the German “*semmel*.” “These ‘*semmeles*’ so taken absorb like a sponge the bad humours of the sick juices, the mucus of the stomach.” (*Platen*.)

(2) Two partial thirst days. Stale bread to the middle of the day, and then a meal of thick stews of rice, semolina, pearl barley, millet, macaroni, or peas, etc., cooked in water without fat, and the addition of lemon juice. Also oatmeal gruel and lemon juice. The evening meal, bread, and a small quantity of country red or white wine.

(3) Two drink days. Bread and oatmeal gruel, and a little warmed wine in the morning. A larger portion of wine in the evening, and in the middle of the day stews as before.

Modification in this diet necessarily takes place, according to the conditions and idiosyncrasies of the patient. Also, there is a preparation diet, and an after diet; the former a gradual leading up to the strict course, and the latter a gradual return to ordinary living.

The thirst during the "cure" is mitigated by frequent wet sheet packings, whole or partial. "Through the dry diet, the organism absorbs greedily, through the pores of the skin, the moisture contained in the packs. The thirst gives way, while the damp warmth acts marvellously in dissolving and excreting the matters of disease." (*Platen.*) Crises during the "cure" are of frequent occurrence. These consist in violently increased excretions, periods of fever, or the return of old maladies in a subdued form. After each such crisis, the patient feels he has made a distinct step towards recovery.

The diet cure is still carried on by Schroth's grandson at Lindewiese, in Austrian Silesia, and where Schroth lived. In many other Nature-Cure establishments, also in Germany and Austria, it finds employment. That thousands have been cured or benefited by it, there is no manner of doubt, especially in cases of long-standing, deeply-rooted complaints, while hundreds have through it been saved the necessity of surgical operations.

Many Nature-Cure practitioners, however, consider the Schroth Cure diet a too forcible strain on Nature's powers, and employ less severe regulated dry diets instead. For instance, Dr. Disqué says that in his Nature-Cure establishment at Chemnitz he employs a modified Schroth Cure diet. "For three days I give only stews (of cereals), stale semmels, and a bottle of wine. No other fluids. The fourth day the usual amount of drink is taken and a diet without meat. The Schroth Cure is most successfully employed in gout, syphilis, scrofula, swelling of the glands, and skin diseases." Dr. Walser gives two modified Regeneration Cure dietaries, to be used in conjunction with packs, baths, douches, air baths, etc.

I.—STRICT DRY DIET.

In the middle of the day a stew (cereal) with cooked fruit, or green vegetable soup, or thick soup of oatmeal, etc. The rest of the time stale semmels or whole-meal bread. On Sundays and Thursdays a bottle of light country wine as well, to be drunk morning and evening, and sometimes a little white

meat. Thursday and Saturday evenings a glass of warm apple wine, in which an egg is beaten up with a little sugar.

II.—RELATIVE DRY DIET.

Breakfast—whole-meal bread with fruit and curd cheese, or cocoa, oatmeal gruel, etc.

Dinner—cereal stews, cooked in water with stewed fruit (made into a juice), thick bread soups, and green vegetables thickened with a little flour and butter. Evenings—thick meal soups, cereal stews, fruit, and whole-meal bread, and one-glass of sour milk. Occasionally a little fowl. During any of these diets no water must be drunk, and fat, acids, salt, spices, and sugar are strictly forbidden.

SPECIAL DIETS.

MILK CURE.

The milk cure is useful in the beginning of consumption, in abscesses of the stomach, chronic stomach complaints, in heart, kidney, and bladder complaints, poverty of the blood, and nervous states. The milk must be first taken in small quantities daily, increasing until the amount of three quarts and more is reached. Should the milk not agree taken pure, a little aromatic tea can be added. The milk can be taken boiled or unboiled, sweet or sour, or as butter-milk, also with rice and semolina, or as milk soup with wheatmeal.

GRAPE CURE.

“The grape cure is good for chest complaints, for chronic constipation, in piles, worms, dyspepsia, heart, kidney, and bladder complaints, gall and kidney stones.

“The diet during the cure must be mild and moderate, consisting of bread, lean meat, and vegetables. Two pounds of grapes must be taken first in the day, and gradually increased

to six pounds, in two to six portions. At one time more than three pounds should never be taken. The grapes thin the blood, alter the composition of the juices, and promote excretion. They are, therefore, good purifiers of the blood."

HERB CURE.

The spring is the best time for a blood-cleansing herb cure, the young plants being at that time juicier, more balsamic, and containing more sugar and the nourishing mineral salts so needful for the building up and maintenance of the human body.

The fresh plants are pressed in a mortar or wooden press, and strained through a cloth, and the juice drunk, nothing being added thereto. The herbs must be gathered fresh, at least every other day, such as dandelion, leaves and root, milfoil or yarrow, large thistles, feverfew, camomile, celery, parsley, water-cress, radishes, rue, coltsfoot, garlic, meadow cress, chervil, hedge mustard, cucumber, etc. On an average two to four ounces must be taken daily of the freshly pressed juice. The first glass must be taken early, and no breakfast must follow for two or three hours afterwards. A strict diet is necessary with the herb cure.

APPLE CURE.

An "apple cure" is a good cleansing process, as by it much diseased matter can be excreted. For a few weeks nothing should be taken mornings and evenings but whole-meal bread and apples. In the middle of the day a stew of oatmeal, maize meal, etc., and twice weekly half a bottle of cider. Excellent treatment for gout, obesity, fulness of blood, congestions, constipation, etc.

CHAPTER V.

CLOTHING.—BEDDING.—DWELLING.—VENTILATION.

CLOTHING.

“THE reform of clothing is one of the most important chapters of the care of health. That, from our modern system of clothing, an army of complaints arise—particularly, the so-called complaints of chill, and many rheumatic conditions—there is no question.” (*Dr. Lahmann.*)

“Clothing may be described as the private dwelling-house of the individual. Like a house, it protects the body from giving off too much warmth to its surroundings. In the former this is attained by the walls; they keep the surrounding air relatively still. Such a motionless layer of air withdraws far less warmth from the body than air in motion. Like a dwelling, so our clothes form several still layers of air round the body, which hinder a too quick exchange between our bodily heat and the surrounding atmosphere, and prevent the body from giving off its warmth too quickly. So it is not our clothes which keep us warm, but the layers of air in which we are enclosed. ‘Our true clothing is the air.’ For this reason, tight gloves, stockings, or shoes are not warm, because the layers of air between them and the hands or feet are wanting.

“A complete enclosure of air must, however, be as little attained by our clothes as in a dwelling. Rather must the body perspire through the clothes, actively evaporate, in order that fresh air may come in. Otherwise, the air-layers in the body become too warm, and the latter gets overheated from being in a condition to give off little or no warmth. It is then not surrounded by a “still,” *i.e.*, slowly, alternating layer of

air, but by an immovable stagnant one, that is soon filled with matters of evaporation. In this moist, warm, foul air, it can expire but little more water and change of matter products; they must remain in the body. That is why we find impervious india-rubber clothing uncomfortable, why our feet burn in india-rubber shoes. So, for the sake of the evaporation and air, our clothing must be porous. The skin can then evaporate freely and take in oxygen: can, in fact, breathe." (*Siebert.*)

"But we must not only look upon clothes in their relation to warmth, air, and evaporation, but also to that of light and electricity. Light-coloured clothing lets in the light easier than dark. Many girls get chlorosis, because they clothe themselves in dark materials, and shut out the light from their bodies. We have only to see how blanched and poisonous potatoes, for instance, become that are shut up in dark cellars, or compare the brilliant feather covering of birds, the shimmering iridescence of the glittering insects in warm countries, with the monotonous appearance of our birds and insects, to see what an influence light has upon their coverings. The lighter the clothes are, the better can the rays of light enter and attract the blood to the surface. On the other hand, the darker the clothes are, the warmer are they; the lighter they are, the cooler. In what relation do our clothes stand to electricity? This question has been but little ventilated, and yet it is of great importance, for the weal or woe of man depends greatly on the charging and discharging of his body with electricity. To an hysterical woman, whose brain is so filled with electricity as to be almost ready to burst, it is not a matter of indifference whether we clothe her in wool or furs, which are all bad conductors of electricity, or in linen or cotton, which are good. Further, it is of importance whether the underclothing through friction produces electricity. What is now the most judicious clothing?" (*Dr. Walser.*)

"Wool, linen, and cotton come principally in question. All these can be so woven that they are thoroughly porous. The ordinary woven calicoes and linens are, as a rule, too thick and impervious, unless very coarse. When damp they

are still more unhealthy, because the pores are stopped up with water, and also, of course, the water through evaporation produces an unpleasant chill. The damper they become, the more the effete evaporation matters increase under them. For under as well as for over-clothes, therefore, we should wear porous woven material, and the over-clothes should have porous linings." (*Siebert.*)

The question whether wool, linen, cotton or silk, or a mixture of any, forms the best material for clothing, depends for answer very much on the idiosyncrasies of the individual, *i.e.*, his peculiarities and sensitiveness, always taking into account, however, that custom and habit play a large part in the matter.

"Wool is naturally porous. Even when damp it lets the air through. It does not rub the skin, but rather irritates it, and thereby attracts more blood to the surface. But at the same time, being a bad conductor of warmth, it overheats the body, which becomes thereby weakened. Linen, when porous by being woven very coarse, is good. It is rough and rubs the skin, does not overheat the body, because it conducts warmth well (cools), absorbs little water, and quickly gives it off. The chill which the skin thereby experiences can only be very disagreeable to such who enervate themselves, seldom let water touch their skin, or light and air rest upon them.

"Good—*i.e.*, porous woven cotton material—tricot or stockingette, etc., holds the middle point between wool and linen, and is also cheap and durable." (*Siebert.*)

There are now endless firms in Germany supplying every kind and sort of hygienic underclothing; of them Jaeger's woollen, and Dr. Lahmann's cotton clothing are the best known in England. Our own English "Cellular" manufacture can be surpassed by none. It answers every health requisite, and is cheap and durable. The "Net of Health," too, is also extremely good. "The looser the clothing is, the more air can come between, the more air the clothes can take up, the warmer they are." (*Dr. Walser.*)

"It is most hurtful to wear anything that will compress any part of the body, and thereby hinder the circulation of the blood. Tight stockings and shoes, tight waistbands and

girdles, etc., too tight fastenings to the underclothing of women and children, and, above all, corsets. If one presses the under ribs and the abdomen together on both sides with the hands, one cannot draw deep breaths; the lungs cannot fully extend themselves, one can only move with pain and difficulty. It would be imagined no reasonable person could possibly lace themselves in tightly at these parts, and so affect the action of so vitally important organs as the lungs, heart, stomach, and liver. And yet this is what thousands and thousands do from sheer vanity. The chest of the tightly-laced girl cannot heave powerfully; the lungs are imperfectly developed, and breathe only partially. In the liver arise furrows from the pressure of the ribs. The stomach is so pressed together that it takes the form of a sand-glass. All sorts of digestive and lung disturbances are the result. For adult women or girls, a stomach belt, or hygienic corset, to which the clothes can be buttoned at the bottom, is the best thing, and through such no part of the body will suffer." (*Siebert.*)

"A very important part of the clothing are the *feet* coverings. Half of mankind suffer from cold, and a great part from sweaty feet. The reactionary effects on the whole system are considerable. Such sufferers are readily disposed to catarrh of the air passages, frequently to consumption; further, to eye and ear complaints, complaints of the nerves of the head, and later, to apoplexy, etc. The feet are so compressed in stockings and tight, impervious shoes, that unhindered circulation of the blood is impossible. Besides, the impervious leather shoes allow no evaporation, and consequently the stockings become damp. To dry up the moisture, much warmth is needed, which the blood, impoverished through frightful compression, is not able to afford. The results are lasting cold feet." (*Pettenhofer.*)

"Wear sandals, laced shoes, boots with short uppers—best of all, shoes and boots of material that will not hinder the even evaporation of the feet, and, above all, they must not be tight." (*Siebert.*)

"The *throat* is the seat of many complaints. If it is too warmly covered it develops too much heat, and, in consequence,

more blood flows into it. Then when cold air is breathed into an overheated throat, into the air passages and bronchial tubes, the occasion is given for catarrh, or some other throat complaint. Whoever wishes to protect himself from these must learn to harden his throat. In the same way, if head and chest are too warmly covered, it gives the occasion for all sorts of different catarrhs to arise." (*Kneipp*.)

In fact, our clothing in general can either be the best means of hardening, and thus protecting and bracing us from all evil results of changes in temperature, etc., or it can be largely the means of weakness, relaxation, and enervation, and the promotion of all kinds of illness.

"Clothes should always be changed at night, and the day linen aired at an open window. Our underclothes absorb a great part of the dirt of the skin as well as of perspiration and evaporation. If they are worn long the perspiration and dirt decompose, and the skin absorbs again a portion of the foul matters. The oftener under linen is changed, the better it is for the skin and the whole body; free use of linen is the healthiest luxury anyone can enjoy." (*Siebert*.)

Upper clothing, when not in use, should be often put in the sun, aired, and beaten. The beating removes dust, and, therefore, makes free passage for the air.

BEDDING.

The same principles apply to bedding. "We spend about a third of our lifetime in bed, to gather fresh strength for our daily work, so that the question as to what constitutes healthy bed and bedding is one of the most important, although it is one of the least often discussed." (*Falkenhorst*.)

Our bedding should be as porous as our clothing. The still layers of air between our bodies and our clothes which keep us warm in the day, rest between the under and over coverings at night, and spread over a wider surface. If, then, we are sleeping between thick, impervious coverings, not only is any renewal of air rendered impossible, but the same air becomes

saturated with foul evaporation matters which the skin has to absorb over and over again.

“*Feather beds* are a nest-bed of all possible complaints. Before all, they contain the germ of rheumatism and gout.” (Dr. *Walser*.)

Not only do feather beds hinder the evaporations, and become themselves receptacles of dirt, damp, and micro-organisms, but they overheat the body, hinder the air from reaching it, and keep it the whole night in a vaporous atmosphere of its own miasmatic excretions. The whole body becomes thereby so enervated and relaxed, that it falls an easy prey to disease.

Close-woven linen and calico sheets, besides their damp chilliness from their almost total want of porosity, have the same injurious effects in a lesser degree.

“We should sleep on solid mattresses (horse-hair, wool, sea-weed, straw, according to means), between loose-woven cotton bed sheets, and under woollen or baize upper coverings. The feet should be somewhat more warmly covered, and here feathers are not out of place as a foot pillow.” (Dr. *Lahmann*.)

“The bedding must not be too cool. By night the body develops less warmth than in the day. The coverings must protect us not only from chill, but from every unpleasant feeling of chill. It must at all times accumulate so much warmth in our bodies, that we shall feel thoroughly well and comfortable, but—and this is the chief point of all bed reform—it must also protect us from overheating and deterioration of air; therefore, all overplus of warmth must be removed, for this disturbs like fever heat, and causes sensitiveness and relaxation.” (Steiner.)

“As extra coverings, eiderdown quilts, etc., which are often aired, sunned, and beaten, so that no decomposing evaporation excrements can be detained in them, are not to be rejected in cold winter weather. Bedding of all kinds should be constantly aired, beaten, and put in the sun. Air and sun are the best mean of disinfection, and destroy all the accumulated injurious matters. The beating frees them from dust, so that the air can better pass through.” (Siegert.)

Steiner's reform bedding, in conjunction with the healthy

English wire mattress bedsteads, are, by the adherents of the German Nature-Cure, considered the model of what hygienic beds and bedding should be. Dr. Walser says, "Steiner's reform bedding consists of tricot (cotton stockingette), sheep's wool, and horsehair, a combination which allows of continual alterations of air on the skin. It is soft, comfortable, warm, and airy—excites quiet sleep, hinders night perspirations and head congestions, etc. Others, again, recommend Jaeger's or other systems; while reform bed linen of every description, but all porous and admitting free ventilation of air, is sold now by numberless firms.

DWELLING.

"What are the requisites for a healthy dwelling? Warmth, dryness, air, and light." (*Dr. Walser.*)

"When possible the situation should be south, south-east, or south-west. The less it is exposed to the sharp east wind, the more healthy it is. The house should be well raised from the ground, and it is better when cellars are beneath, as they detain the dampness from the earth." (*Tischberger.*)

The soil on which a house is built should be of a dry nature; a sandy or gravelly soil is pre-eminently the best, as it permits of thorough filtration of moisture, while a clay soil, for instance, retains it. If the ground under a house is damp, the walls will also be damp. Damp walls are as injurious as damp clothes, because they do not let the fresh air in or the bad air out. This is why underground dwellings are so peculiarly unwholesome, and why the ground floors are not so healthy as the upper ones. "Damp walls not only hinder ventilation, and so make the air of rooms bad and unwholesome, but, also, like damp clothes, promote an unequal distribution of warmth.

"Why is it, just in spring, when the warm time of the year begins, that most complaints of chill supervene? Because during the winter the walls are completely cooled, and in the warm time of the year radiate cold. If in spring, therefore,

anyone goes perspiring into a room, he can, through the cold radiating from the walls, easily experience a chill, and this chill may cause the blood with all its refuse to be driven in upon one of the inner organs, or to the joints, where the corresponding microbe finds its 'nidus,' and so arise what we call inflammation of the lungs and rheumatism of the joints." (*Dr. Walser.*)

"The walls of our house should be as porous as our clothing, so as to allow for free circulation of air, the proper exchange between the inner and outer atmospheres. But even should they be damp, by thorough good systematic airing, much can be done to remedy the evil. It must always be carefully seen to that the bad air is continually streaming out, and fresh air as incessantly pouring in. If a damp room in a house is not kept well aired, all the other rooms will become injurious to health.

"The nearer a dwelling is to trees the better it is, for there the air is moist and healthy." (*Tischberger.*) Trees give out oxygen, so necessary to our well-being, and absorb carbonic acid, which is so hurtful to us.

In the same way, the lighter and sunnier a dwelling is, the healthier it will be.

"The light which comes to us from the sun is for all organic beings one of the most indispensable conditions, and its influence on our bodily vitality greater than is commonly supposed. We know that plants are dependent on the sun for their colour, growth, and fruitfulness. If, then, light exercises such power on other created things, why should it not have an especial effect on the human body and mind? How a dark day depresses a sick person—even a healthy person does not feel so comfortable—and how beneficially it acts when, after a few rainy days, the kindly sunlight shines into the sick-room, the workshop, upon the whole creation!" (*Simon.*)

"An Italian proverb says—'Where the sun comes in, the physician seldom enters.'"

"Look at the children in the cellars and dark dwellings of large towns. A great part die at an early age. Others are sickly with scrofula or rickets. How different it is with children in the country. What makes the difference? The

air, the sun. The air of a room in which the sun never enters smells 'musty.' Mould gathers on the walls. The sun's rays purify the air, kill germs and fungi, which cause fermentation, decay, and foulness. Nothing also more surely destroys the bacteria of disease than sun and air. They are the best means of disinfection." (*Siebert.*)

Utterly opposed, therefore, to all laws of health and hygiene are the thick curtains, the carefully closed blinds, to exclude every ray of sun, for fear of "fading the carpets" and "spoiling the furniture"! Carpets themselves are nest-beds of dirt, dust, and micro-organisms. Far healthier are the German painted floors, or linoleum coverings, which not only allow of daily washing out, but upon which the sunlight may stream in unchecked.

"Only those rooms should be inhabited which are accessible to the sunlight, the entrance of which is not hindered by thick curtains, hangings, or plants, etc." (*Bilz.*)

"Wall papers are also prejudicial to health. Besides the poisonous colours they so often contain, they attract bad smells, dust and dirt adhere firmly to them, and behind them vermin collect readily. Also, papers further the growth of mould on damp walls. It is far better, therefore, that walls should be coloured, either with lime or chalk colours.

"The rooms of a house should be as large and airy as possible. In sickness, the sick-room should be the largest and brightest in the house. Only when the daylight troubles the patient should it be withheld. Through bacteriological researches it has been shown that the different kinds of bacilli—such as cholera, typhoid, typhus, and other forms of disease—cannot live in light." (*Platen.*)

"The most painstaking cleanliness in a house is necessary for the preservation of health. Where dirt and uncleanness reign, there are necessarily also vermin, putrefaction, and foul smells; and there, also, will the germs of disease gain the upper hand, and epidemics arise." (*Simon.*)

"Drainage also should be carefully attended to, and there should be plentiful bathing conveniences." (*Tischberger.*)

"It is better to save in other ways, and have a roomy and healthy house, not only for the preservation of health and

prevention of sickness, but for the removal of any states or condition of disease. Mind and spirit are as largely affected by outer influences as is the body, and react upon the latter as much as the body reacts upon the mind." (*Platen.*) The more healthy and cheerful our surroundings are in house and home, the better able shall we be to keep our bodies in that state of health for which they were designed, and to fulfil our duty both to God and our fellow-men.

VENTILATION.

"Ventilation is the renewal, the improvement, of air in rooms of dwellings and other places where people congregate. Food and drink we can go without for a long time, but air not five minutes. An adult man breathes in one minute about thirty-two quarts of air, in twenty-four hours about ten thousand. The daily air nutriment is therefore the first consideration, and of far more importance even than food or drink.

"The indifference, however, to this fundamental principle for the preservation of health is astounding, although who will doubt that bad air is the true cause of the degeneration of the human race?" (*Bilz and Walser.*)

"We breathe contentedly in rooms where people live, the matter the body has cast out through lungs and skin as injurious. No one washes himself in the water another has used. The air, however, which has been hundreds of times through the lungs and bodies of others, we breathe over and over again, without thought." (*Siegert.*)

"Only go into a school and notice the mist within it, even long after the scholars have left—one does not wonder any more when whole classes fall ill at once of diphtheria, scarlet fever, measles, influenza, etc." (*Simon.*)

"Carbonic acid is for our breathing organs the rankest poison, which paralyses the action of the heart, and hinders the circulation of the blood. We not only inhale it from the burning of wood, coal, gas, etc., but from our fellow-men and house animals, who are perpetually giving off carbonic acid.

“Therefore, we mutually poison ourselves in our dwellings, offices, schools, public places of meeting, etc., and one cannot too impressively urge the constant introduction of good air, through rational airing in these ‘human stables.’

“Under ‘good air’ only such is to be understood which is not permeated with evaporations of every kind, those of people, lights, dust, etc., or from drains, dung-heaps, stagnant water, chemical and animal excrements, marshes, etc. Pure air should never smell. In dwellings and sleeping rooms, the cooped-up air is always bad and tainted. Consequently the window, or windows if there are more than one, should be open as often, and as long as possible, to let in good air.” (*Platen.*)

“Often people think when they have opened a portion of a window for an hour in the morning, that the room is aired. It is about as much so as if one put a teaspoonful of good fresh water into a glassful of muddy water; the latter is not made good and wholesome by that. One knows it of course as regards the water, because one sees it, but the air one does not see, so most people do not remark the tainted air of a room, or take it as an unavoidable evil. Whoever wishes to keep his vital processes in good order, and himself healthy and capable of work, will so care for thorough ventilation in his dwelling, that when he comes into it again from the outer air he shall not be able to ‘smell’ the air in his living and sleeping rooms.” (*Prof. Dr. Reclam.*)

“In winter also, when the rooms are heated, ventilation must be carefully attended to. Many do not air their rooms in winter for fear of ‘catching cold’—‘only not to take a chill!’ Ah! but the ‘light catarrh’ of the windpipe, the ‘severe catarrh’ of the lungs, will come from chill in spite of assiduous ‘keeping warm,’ even if, the whole winter, windows should not be opened, or one should not go out into the fresh air. That the chill comes *because* of that, who thinks? The most merciless and obstinate enemies of mankind—consumption, scrofula, rickets, and croup—are the very complaints which cannot possibly be cured without the free use of air, but very often, without any other means, are cured by that alone.” (*Siegert.*)

“If then, for strong healthy people, the remaining in bad air is injurious in the highest degree, how much more must it be in the case of sick people and children?” (*Bilz.*)

“Still more injurious than a dwelling room, which is deprived of wholesome air, is a sleeping room where this fails. People often go out of a living room in the day and breathe again fresh air; but in a sleeping room they remain continually the whole night through. In the night more oxygen is inhaled, and less carbonic acid given off than in the day. When, however, there is only tainted air in a room, instead of that which will give health, people only inhale that which will destroy it.

“Still more hurtful is it when many people sleep together in a room that is not properly ventilated. The air becomes still more impure from the exhalations of many persons, and the evaporations from many beds. Through the breathing of such foul air, filled with carbonic acid, and other poisonous matters, a person awakes of a morning tired and exhausted with headache and chilliness, instead of being fresh and energetic for the day’s work.” (*Kneipp.*)

“Therefore it is most important in sleeping rooms, quite apart from the daily thorough airing, to have a portion of the window open at night, or at least one in the next room, in order that the harmful evaporation of the sleepers may escape.” (*Dr. Disqué.*)

“Many people think that the night air is injurious. This is quite a childish superstition; for the night air is the purest, and the most free from dust and smoke. What otherwise would become of the many people who are obliged to breathe the night air; and what of all the sick people, who, in order to regain their health, sleep in air huts?” (*Simon.*)

“If only people would simply harden themselves with air and cold water, it would hurt no one to sleep with an open window. By bracing and simple nourishing food, the poorness of the blood will be removed, the system become strong and enduring, and capable of resisting any change of temperature.” (*Kneipp.*) Those who have once accustomed themselves to the intense refreshment of an open window at night, will not lightly give it up again.

“For children to be strong and healthy, it is as necessary for the mother, before their birth, to breathe good, pure air, rich in oxygen, as to provide them with it afterwards, from the moment they are born. The half of new-born babies become candidates for consumption, and the mothers become sickly and ill, owing to the close, bad air in rooms during confinements. If the child is to develop in body and mind, it must continually enjoy good, pure air, or else not alone will the best of nourishment be worthless, but even prejudicial, and also the mind will be hindered in its normal development, or at least influenced thereby.” (*Simon.*)

“Air and light are the chief means for the preservation of health. As a plant without air and light cannot thrive, but fades, so it is with men. Children who have no good air in the house, or school, cannot grow strong; they suffer early from poverty of blood and chlorosis, scrofula, and crippled limbs, in consequence of rickets. As with plants, so also with men, most complaints arise through want of air and light. Therefore, every dwelling, sleeping, work, and sick-room should be kept light and well aired.” (*Dr. Disqué.*)

“In sick-rooms, the constant renewal of air is of the utmost importance. Fresh air is the best and cheapest disinfectant, the first and surest curative remedy in all illnesses. If a patient has to breathe over and over again his own excretions, he is continually infecting himself afresh; the cure will be hindered, or much delayed. In all illnesses of a miasmatic character, the room cannot be too energetically aired, or else the accumulation of the miasms streaming out from the patient will perpetually increase the infection.

“The sick-room should never smell. In favourable weather, the windows should be kept quite open; in unfavourable, the upper portion only, and the bed must be so placed that the patient shall not be in a draught. With fever patients there is no fear of chill. Also, the skin of a person treated with water is less sensitive than that of any one debarred from air and water. Only during baths, washings, changing, of packs, etc., the window must be shut.” (*Siegert and Bilz.*)

CHAPTER VI.

EXERCISE.—REST.—MASSAGE.—HEALTH GYMNASTICS AND CALISTHENICS.—BREATHING EXERCISES.

EXERCISE.

“Movement is a necessary condition of our existence, like light, air, food, and water; a man who lets all the vital stimulants act rightly on his body, but omits motion, will be ill. Likewise, a sick person can only become well when all the lacking vital conditions, whereby the sickness has been produced, again exert their influence on the body.” (*Dr. Walsler.*)

Movement or exercise may be of many kinds, both active and passive, natural and artificial, and there is mental exercise as well as bodily. Active movement powerfully assists in loosening the disease matter in the system, and bringing it to excretion. It strengthens the muscles of the body and single organs, making them all more capable of action; it regulates the circulation of the blood, and stimulates the vital processes.

“The tissues of which the body consists, are continually being used up and exhausted (change of matter).

“In a condition of rest, the waste is naturally less than in active motion. ‘The muscles are the principal seat of the transformation of matter;’ what is consumed in the muscles and other tissues, is replaced by the blood. A working organ needs four-fifths more blood than a resting one. The blood renews itself from the food. A considerable consumption of blood results in a greater need of food. Work and exercise, therefore, increase appetite astonishingly, and a simple meal will bring more enjoyment than the costliest dishes to the sedentary liver. By increased consumption of blood, the

food is thoroughly worked over, completely digested, and the food juices more rapidly absorbed. Vigorous movement tends to an active formation of blood, and increase in its quantity.

“Also, as we know, all the waste, effete matter, the tissue refuse, must be removed from the system. The quicker and more thoroughly this takes place, the better is it for the body. A burning through oxygen precedes the excretion; therefore the hunger caused by motion. Through rapid walking, mountain-climbing, calisthenics, gymnastics, etc., the lungs are extended to their utmost extent, take in oxygen abundantly, and give out carbonic acid, water, and other waste matters.

“Through vigorous motion, also, there takes place through the *skin* an active excretion of refuse matter, a cleansing of the blood. Thereby the overplus fat and water in the muscles are decreased. Fat people can do very little; fat muscles are unfit for work; and fat in the lungs hinders the entrance of air. Fat people are generally poor blooded, their blood contains so much water. Therefore, the least movement makes them perspire. Watery blood hinders fat and poor-blooded people from doing either vigorous bodily or mental work. They are quickly tired, sleepy, and easily suffer from headache. Vigorous muscular work oxidises the immoderate fat, and brings the water to excretion; and active exercise of any kind causes the loss of much through perspiration, by which a comfortable feeling of relief is experienced, and a delightful sense of bodily and mental elasticity.

“With the active burning of the tissue refuse there comes also increased bodily warmth, as we know by experience after every walk or vigorous bodily activity.

“If in winter through long sitting hands and feet have become cold—*i.e.*, the blood in them has become scanty and stagnant—it takes only a few minutes of active motion to restore the circulation, the uniform distribution of blood.

“The circulation of both blood and lymph vessels is acted on extensively by both breathing and muscular action. Further, the powerful filling of the muscles with blood

draws the latter from the inner organs, and lessens the pressure on the brain.

“Active formation of blood, right blood composition, and thorough circulation, the unburdening of the inner organs, the regular working of the vital processes, and therewith complete nourishment of the body and its organs, are the results of muscular work and exercise, together with deepened breath, a healthy colour, a cheerful disposition, and inclination for mental as well as bodily activity.” (*Siegert.*)

“Want of movement brings many evils in its train. People who take insufficient exercise suffer from all kinds of disturbances of the circulation, such as cold feet, headache, liver and spleen affections, hard belly, and piles, and women from various female complaints. Also the lack of muscular development leads to different disturbances of the vital processes; for the muscle system, being the most extensive system of the body, and possessing in the highest degree the capability of transformation, it, of all the systems of organs in the body, assists the general change of matter in the quickest and most abundant manner.” (*Gossmann.*)

Exercise is, therefore, of peculiar importance to those who are confined to sedentary occupations for the greater part of the day.

“By the constant sitting and stooping, the chest is narrowed, and certain limbs and muscles are overstrained, while others are not used.

“A whole host of complaints might be avoided, if, after business hours, free exercise in the open air were taken, so that all the muscles should come again into play, and the overstrained ones be relieved.” (*Bilz.*)

The exercise which encourages the most muscular action, is of course the most beneficial. A short run, for instance, is better than a long walk, because more muscles and organs are brought into action, and the breathing is more powerful.

“Walking, especially on level ground, does not as a rule suffice. It does not give the muscles the needful work—indeed the great muscle groups of the arms, chest, and abdomen, remain comparatively inactive. Running, mountain-climbing, swimming, rowing, moderate bicycling, and other

sports, wood-hewing, chopping, and sawing, vigorous work in house, garden, and field, give the muscles, on the contrary, a plentiful amount of movement." (*Siegert.*)

All kinds of active work and exercise are good, if not carried to excess, when they cease to be beneficial, and become positively harmful.

Glünicke says, "I have treated many patients who have ruined themselves by sport, because they thought that thereby they were assisting their weak health."

"The immoderate way in which bicycling and so many other sports are carried on, completely out of proportion to the bodily condition of the individual, causes many serious changes in the organs of the chest. The overburdening of the lungs with work leads to disturbance of the circulation, as well as encumbrance of the heart, for which the latter strives to compensate by the thickening of the flesh of its muscles." (*Hillmann.*)

When rightly carried out, exercise not only increases our corporeal well-being, but our mental also. Body reacts on the mind as mind equally reacts on the body. Sufficient mental exercise is as necessary for our well-being as bodily. "All good ideas, all great inventions, have proceeded from people who have been obliged from necessity to keep both mind and body in full power of action. The neglect of both bodily and mental work in the tropics exerts a most prejudicial effect upon health; both body and mind become weakened and inert. Whoever wishes to retain their health in hot countries should keep both in constant exercise." (*Dr. Walserv.*)

"Those who let, or can let, mental and bodily occupation alternate one with another in a sensible manner, will be much more generally capable of action than the one-sided bodily, or one-sided mental worker. In preponderating corporeal work, therefore, some part of the day should always be devoted, if possible, to the improvement and cultivation of the mind, as also the mental worker must not neglect bodily exercise.

"Mental overstrain, much deep thinking and reflection, causes sickness of the cells of the brain. An important

organ like the brain is richly nourished with blood, and the more it has to work, the greater must be the supply of blood. The purer the whole blood vessels are, the better will the brain be nourished. Brain workers should therefore inhale oxygen abundantly at the open window, and when they are mentally tired, change to some active occupation, in the open air, if possible." (*Platen.*)

As a curative agent, active bodily movement holds a very important place. Without it, treatment by water would be injurious, air baths, etc., harmful, and the most judicious and nourishing diet of no avail.

"All exercise, however, will only exert a beneficial and strengthening action on the body when, in amount and duration, it accurately corresponds and is suited to the existing degree of strength the patient possesses. The same biological principle which governs other forms of treatment must equally govern that of exercise. Small stimulations fan the vital activities, moderately strong stimulations further them, strong hinder them, and very strong paralyse them. Also, exercise which seems easy to a healthy person, will appear violent to the disturbed and weakened organs of a sick one. Too vigorous forms of motion will not strengthen a patient, but weaken him, and act most injuriously on the nervous system. After all movement, whether natural or artificial, a sick person should feel revived, and the blood streaming more evenly and vigorously through the body. He should never exhaust his existing powers, for he needs the overplus of the same, as much for the secretion of the foreign matters encumbering the body as for the rebuilding of the disturbed organs that are gradually becoming disencumbered. The weaker a sick person is, so much the more must he husband what strength he has. Exercise, in frequent but small portions, should be the rule in all sick conditions.

"For very weak people there is no exercise more to be recommended than a slow, short walk, with arms in swinging motion. It is as harmless as reviving. Much sitting still and constant brooding can only have a weakening effect." (*Glünicke.*)

REST.

“As *movement* is indispensably necessary to man, in order that his juices may course naturally through his body, and not become disordered, clogged, or paralysed in these or those blood vessels, so is the opposite condition—rest—just as needful.” (*Bilz.*)

“When the body has been mentally or bodily employed for any length of time, it craves for rest, in order to repair the loss of matter and strength. This longing for rest, which makes itself as much felt as the desire for food, must be duly satisfied, or serious detriment to health will ensue.” (*Platen.*)

Rest does not always imply a condition of quietude. Rest means refreshment. A change of occupation, as from mental to manual work, and *vice versa*; a change of scene, recreative exercise, amusement, or employment, may be the the greatest rest; or the Sabbath rest after a week of toil, or the yearly holiday after months of mental or bodily labour.

“The best refreshment, however, and the most natural condition of rest, is that of sleep. It is the rest of nerves and brain. A short sleep in the day, for example, will often act like magic in removing previous weariness, lassitude, or overstrain, and reviving strength and energy. But at night, mind and body both need a long interval of rest and sleep for the reinvigoration of the vital forces, and to refit them for the work of the following day.

“A sufficient, long, deep, uninterrupted sleep makes a man feel as though new born. Healthy people are able to shake off all their fatigue and exhaustion by so many hours' good sleep. With weak and sickly persons, however, this is less the case, for with them it is not weariness from work and healthy activity, but from loss of strength.

“But, if even sleep fails, body and nerves are resting. It must never be sought to produce sleep by narcotics, because these as poison act injuriously on the whole system. The avoidance of physical and mental excitement, and also of eating some time before retiring to rest; of ‘going early to bed, and

early to rise,' and taking care that sleep, when it comes, shall not be disturbed; above all, of sleeping with the window more or less open, are the best helps towards ensuring it.

"A sleep or rest after the mid-day meal is also of great importance in weakly states, because, when all the limbs are at rest, the entire circulation of the blood can be at the disposal of the digestion—that important act on which so much depends. Such a sleep, however, must never be taken at the expense of the night's rest. In all chronic sick conditions there must be besides plentiful intervals of repose. Whenever mind, body, or nerves crave for it in the slightest degree, it must always be the signal for its indulgence.

"In acute illnesses, rest is absolutely necessary, in order that the constitution may gather strength for the fight against the 'exciter of disease;' and, in the case of wounds, injuries, and broken limbs, complete rest of the whole body or single parts is the chief condition of cure.

"In nervous exhaustion, and cases of great weakness, bodily rest and freedom from all care, worry, and excitement are the needful adjuncts of all treatment.

"In overstrain of the brain, prolonged mental rest will be necessary; in overstrain of the nerves, both mental and bodily rest; in overstrain of the whole body, or parts of the body, complete rest of the whole body or single parts." (*Bilz, Platen, Glünicke, etc.*)

MASSAGE.

Massage, like the water cure, is a revival from olden times. The kneading and friction of the body, during and after the bath, and also as a healing remedy, was a common custom amongst the Romans and Grecians. In India and China, and amongst many savage races, kneading and stroking have, from time immemorial, played a prominent part in the treatment of the sick. In Europe, however, for many centuries, massage sank into almost entire disusage. It is only within comparatively few years that it has again come to the front, as

a most important and effective curative agent, and now scarcely any other has become so popular, or is so widely known and spread.

“Massage, or the art of removing numberless forms of disease, through systematic stroking, kneading, knocking, tapping, slapping, vibrating, squeezing, etc., has not only become a branch of medical science, but, together with other natural remedial agents, is an important factor of the natural method of cure.” (*Platen.*)

Massage, being passive movement, and undertaken by another person, requires very little muscular or nervous power on the part of the patient, and, therefore, can be used in cases where active movement is impossible or undesirable. It acts also as a most beneficial compensation in many acute and chronic forms of disease.

“Massage has a mechanical, thermal, and electric action. Whereas in the employment of water, the thermal action is the principal thing; in massage, the mechanical action plays the principal part. By it, the circulation of the blood and lymph are quickened in the parts that are massaged, and deposited matters are taken up and absorbed by the blood and lymph-vessel streams.” (*Dr. Disqué.*)

“The general action of massage consists in powerfully stimulating the change of matter, increasing the natural warmth of the body, strengthening the muscles, reviving and soothing the nerves, and furthering the excretion of disease matter.” (*Dr. Walser.*)

“Its healing *electric* action depends on the magnetic *rapport*, or sympathetic union, between the patient and the masseur. Not only the more healthy the operator is, but the more magnetic power or vital electricity he or she possesses, the more successful will be the results.” (*Platen.*)

“Massage, however, used alone cannot cure; the other vital conditions through lack of which a person has become ill, must also be supplied. In combination with massage, therefore, the other factors of the natural healing treatment must be employed, such as health calisthenics, baths, packs, constant fresh air, and judicious diet, etc.

“Its combination with baths and packs is most beneficial.

It should, as a rule, take place after, or in a bath, as the skin is, as it were, prepared. *Before* a vapour bath, however, it is often most useful; the massage sets the blood and lymph streams in active movement, and the vapour bath draws them to the skin and causes excretion." (*Walser and Bilz.*)

MASSAGE MOVEMENTS.

Stroking.

This is done either with the tips of the fingers, with the flat hand, with the palm of the hand, or with the whole wrist as well. (Fig. 24.)

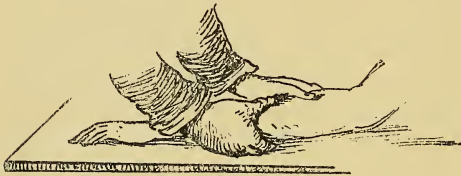


Fig. 24.

At first the pressure is soft, and then gradually increases, according to the character of the complaint and nature of the individual.

All prominent parts, like the knee joints and ankles, etc., must be pressed round in a circle. The direction of the stroking is almost always towards the heart, as, for instance, from the feet upwards, from the head to the breast, from the hands up the arm; very seldom, and only in certain cases, otherwise. It is different, however, with the back. The lymph stream takes its way above and below, from the middle of the back. The movements must, therefore, usually be from the centre of the spine, upwards and downwards.

Inflammatory parts must be stroked first, near and above, to promote the flow of lymph, and prepare the exudation products for excretion. The pressure must then gradually be extended to the centre.

Simple stroking, as a stimulation to the nerves, considerably quickens the circulation of the blood. It is the mildest form of massage, and is, therefore, the best for general massage of the body, in cases of poverty of blood and weakness of the nerves, to further the change of matter, and strengthen the organism.

Deep Stroking.

This is only a stronger stroking, in that the surface of the hand or finger-tips press vigorously on the parts to be massaged.

It is employed for the disintegration and absorption of exudations, as in swellings, tumours, etc., or to produce a stronger flow of blood to the skin, or a rapid development of warmth.

It is also a mechanical working out of disease products.

In this also the direction must be nearly always towards the heart.

In all stroking, care must be taken to follow the course of the blood and lymph vessels.

For these manipulations, the hands of the operator are usually moistened with vaseline, cold cream, or oil.

Dry massage excites the nerves. In some cases this may be intentional, but, as a general rule, excitement is to be avoided.

Kneading.

This is done either with the finger-tips or whole hand, or with one or both hands. It is not pinching, but as though a sponge were being squeezed, or dough kneaded. The right and left hand of the masseur must work alternately on the part, the fingers pressing in between the muscles, but not squeezing them together. Kneading must cause no pain, but leave behind it a warm, comfortable feeling. (Fig. 25.)

The manipulation, as though dough were being kneaded, is also called "cudgelling." Also, a more limited movement of the finger-tips is called "pinching."

Kneading can be changed into another movement by making shaking manipulations. Kneading, as well as deep

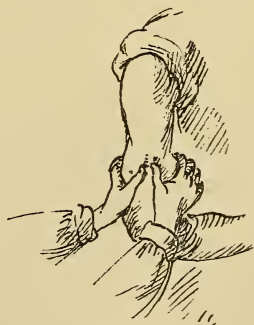


Fig. 25.

stroking, can be used either for single parts, or for whole massage. When the fingers are kneaded, only the two thumbs are used.

Kneading is an energetic manipulation.

Tapping and Knocking.



Fig. 26.

Tapping is carried out by means of the finger-tips, and knocking with the clenched fist, or palm of the hand. (Fig. 26.)

They must not be done too vigorously, but quickly and elastically, and not with the arms, but only with the hands.

They serve to act on deep-seated formations, and also particularly on the muscles and joints.

Slapping.

This is done with one hand, or both alternately, and with the inner or outer hand surface. It must be carried out lightly, quickly, elegantly, and elastically.

Hacking and Sawing.

These are done only with the side of the hand, where the little finger is. (Fig. 27; see next page.) They are more powerful manipulations than knocking or slapping, and are only employed where thick muscle groups are seated, as in the arms, legs, seat of abdomen, neck, and back. They must not be used for highly nervous or sensitive people.

Pressing, Pushing, and Vibrating.

Pressing is done more or less strongly with one or more fingers, and is always a sideways, or twisting movement.

Pushing is carried out by means of the tips of the fingers or clenched fist, and with the shoulder joints and whole arm, to produce great heat where the muscles are thickest—as, for instance, in the seat of the abdomen and thighs, as in sciatica.

In vibration, a portion of the body is grasped, and a light, trembling movement made, which can be extended into “deep vibration,” which is merely a stronger form of the manipulation.

MESSAGE OF DIFFERENT PARTS.

Abdominal Massage.

For this the patient lies on his back, the head must be raised, and the legs drawn up slightly at the knees.

With the finger-tips of the right hand, the abdomen is stroked circularly in the direction of the hands of a clock. The thumb remains stationary, and serves as a support for the

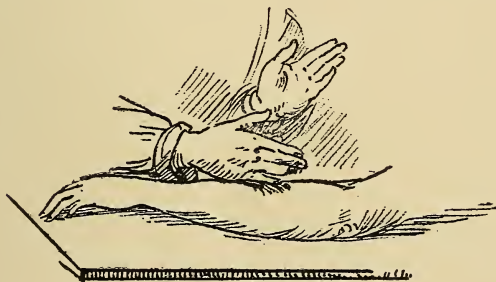


Fig. 27.

movement, which is carried out chiefly by the hand joints and first finger joint. Then, with the palm of the hand, the stroking must be continued fifty to sixty times, with strong pressure; left side downwards, right side upwards.

The operator then lays the right hand so slantingly on the left side, that the thumb nearly touches the navel, and strokes slowly in the form of an arch towards the right outside and above, to down the centre and below, continues without pressure left from the navel outwards, and with pressure again downwards in the centre.

The same manipulation then takes place on the right side, towards the left, etc., and these movements are repeated twenty to thirty times.

The stomach must also alternately be worked, both hands being placed under the ribs, and powerful strokes being made over the heart and stomach cavities in the direction of the navel.

“Hacking” and “sawing” then take place, and the vibration of the abdominal organs brings the manipulations to an end.

Abdominal massage can be carried out by the patient alone—best early—in bed.

By abdominal massage, the action of the stomach, liver, and bowels is assisted, and the muscles of the abdomen strengthened.

Particularly indicated in constipation and weakness of the digestive organs.

Stomach and Liver Massage.

The strokes must be made with the finger-tips in the form of rays, from the cavity of the heart and right under-ribs, to the left under-ribs, about twenty to thirty times. Then follows for a few times, thumb-stroking, in which the thumbs are set in the cavity of the heart, and with them powerful strokes are made. Afterwards, vibrating movements; the finger-tips are firmly planted, and light vibratory manipulations made, gradually passing into stronger ones.

Back Massage.

The thumbs rest on the centre of the spinal column, and the fingers, slightly bent together, on each side of the back. The stroking then takes place upwards to the neck, and ends on both sides of the throat under the chin. A few strokes must also be made on either side towards the armpits. The stroking is then continued, only with the thumbs locked together, down the back and over the hips.

After this has been repeated ten to fifteen times, both

thumbs are laid on the back of the head and stroked slowly, and with measured pressure, to the bottom of the spine, five or six times. Stroking with the flat hand then follows.

After these central strokings, the same manipulations must be made over the muscles of the back and the loins, always in the direction of the blood vessels.

The shoulder blades, like all prominent parts must be pressed round circularly. Then follows puncturing with the finger-tips of both hands at once on the muscles of the back, also kneading, tapping, knocking, and slapping, especially where the muscles are thickest, as in the seat of the abdomen.

The manipulations must conclude with soothing strokings with the palm of the hand.

Arm Massage.

The operator grasps the hand of the patient, and strokes the fingers with thumb and forefinger; then with the thumb, long strokes are made over the back of the hand and up the arm to the shoulder. After several such manipulations, kneading must take place, and on the upper part of the arm, knocking and slapping, finishing with soothing hand strokes.

Head Massage.

In this, both thumbs or fingers are used, stroking gently from the forehead to the temples, or from the forehead to the back of the head, in long strokes. At painful points, vibratory motions must be made.

Neck Massage.

This can be done by the patient himself. The head must be bent back, the throat grasped between the thumb and fore finger, and strokes made from above to below as far as the breast. (Fig. 28; see next page.)

When neck massage is done by another person, both hands must be used. The masseur stands behind the patient, who bends his head back. The former lays his thumb on the neck

behind, the other fingers in front on the throat, and strokes downward to the breast, and up again on the outside. The throat and neck can then be kneaded and the latter slapped, the operator standing either before or behind. A vibratory movement at the sides of the neck concludes the manipulation.

The patient must be bared to the chest.

Leg Massage.

The thigh is grasped with one hand, and the foot held by the other at the ankle. The leg is then stroked downwards to the ankle, strokes made with both thumbs on the foot over

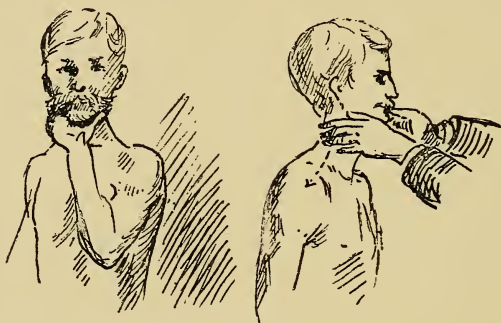


fig. 28

the ankle joints, and several times with strong pressure round the latter, then with the tips of the thumbs under certain pressure to the knee joints, which must be strongly pressed round in a circle, and then with both thumbs upwards to the top of the thigh. Then follows kneading and knocking of the muscles of the legs, and lastly soothing strokes with the palm of the hand.

Whole Massage.

Massage of the whole body is used in cases of great weakness, to thoroughly stimulate the change of matter; also in poverty of the blood, nervousness, scrofula, and many other complaints. With very nervous people only soft strokings or light slappings must be employed.

Arms and legs must first be massaged, as they are the outermost parts of the body into which the blood stream must be first conducted, if they are not to remain cold. Then comes massage of the neck, back, and abdominal seat, and afterwards of chest, stomach, and abdomen.

All parts where there are thick sets of muscles, especially the seat of the abdomen, must be knocked.

The combination of a tepid bath with this massage is of great advantage, as the skin becomes thereby flexible and soft, and the blood and lymph vessels expanded.

WHERE MASSAGE IS NOT INDICATED.

Massage must never be employed in fever, or feverish complaints, where the vital processes are already heightened, and the disease matter already well on its way to excretion. Neither where there is any formation of pus, as in abscesses, etc., or blood poisoning might ensue. Nor where there is an incurable formation as in cancer, or in skin complaints, and acute inflammations.

WHERE MASSAGE IS INDICATED.

In most chronic complaints, where the vital processes are almost invariably lowered, massage is of great importance.

1. In chlorosis, poverty of the blood, chronic liver complaints, catarrh of the stomach and bowels, piles, obesity, swollen feet and legs, etc., whole massage once or twice daily is of great use. In weakness and poverty of blood, the strokes are often made away *from*, instead of *towards* the heart, in order to fill the weak muscles with blood. In chronic swellings of liver and spleen, jaundice, catarrh of stomach and bowels, digestive disorders, constipation, etc., abdominal massage is particularly indicated.

2. In rheumatism of the muscles, or other parts, where not too painful, light strokings, and afterwards vigorous kneading, should be applied. In rheumatism of the joints, the latter must be stroked round and away from them, and the affected parts powerfully massaged twice daily. In

sciatica, also, twice daily, vigorous kneading and stroking of the affected leg, and the neighbourhood of hips and pelvis, as soon as the pain allows of it. Experience teaches that in certain inflammatory conditions, passive and active movement, when carefully carried out, assist cure, and prevent unpleasant after consequences. In gout, there must be kneading of the whole body and joints, between the attacks.

3. In acute and chronic pleurisy and asthma, besides stroking and circular friction, or deep stroking of the chest, there must be vigorous knocking, especially of the back, with the palms of both hands. A stimulation of the skin is thereby occasioned, the blood flows to the skin, and the derivative action is very favourable. In consumption, light strokings of the weakened chest muscles strengthen the latter, and relieve the chest of blood.

4. In certain children's complaints, such as scrofula, rickets, and whooping-cough, whole massage twice daily powerfully stimulates the change of matter.

5. In chronic cold feet and hands, vigorous kneading of the legs, arms, and hands, helps much to bring the clogged circulation and wrong distribution of blood into order.

6. In nervousness, the kneading of the whole body, unless it excites too much, is most useful, as a stimulation of the vital processes spares the nerve force.

7. In neuralgias, between the attacks, massage twice daily with occasional steam baths, to prevent recurrence of the attacks, or to mitigate them. Quite soft strokes are first made, without any pressure, in order to soothe the pain. If these are borne, the neighbouring parts must be stroked, and then gradually stronger movements made, with kneading and stretching of the painful nerves. In neuralgia above and under the eyes, before and behind the ears, and in sciatica, the pain often subsides very quickly through tapping, strong kneading, and stroking; for through increased stimulation of the nerves the pain is deadened. In cramps of the legs, massage is useful combined with soft packs, and in writer's cramp as well, together with calisthenic exercises.

8. In chronically affected joints, the neighbouring tissues must always be vigorously massaged, as they are usually

insufficiently nourished. In contusions and other injuries, the neighbouring parts must be stroked in order to empty the blood and lymph vessels. As soon as the parts allow of it, they must be vigorously worked, but not to increase pain or swelling.

9. In pressure of blood to the head, headache, megrim, noises in the ears, giddiness, sunstroke, etc., vigorous neck massage, combined with kneading of the legs, often does good. Neck massage is also useful in running colds, sore throat, ear-ache, and complaints of the eyes, which come from over-filling of blood. In toothache, the jaws may be strongly stroked.

10. In paralysis and stiffness of the joints, kneading and stroking are not of little advantage, because they encourage the absorption of disease matter from the tissues and joints, and influence the nourishment of the affected parts. They also compensate for the lack of movement and strengthen the inactive muscles.

People who are confined to bed should be regularly massaged, to keep the muscles strong and well nourished.

Massage is carried out best on the bare body or parts, or the covering must be very thin and light.

In many female complaints, the "Thure Brandt" massage is much employed. It must, however, only be undertaken by experts.

SWEDISH PASSIVE HEALTH GYMNASTICS.

These go hand in hand with massage, and consist in the bending, stretching, turning, and rolling of different limbs at the joints without resistance on the part of the patient. (Fig. 29; see next page.)

"Swedish Health Gymnastics," so called because the Swedes have used and formed this method, are very important in the treatment of many chronic complaints. Patients who are massaged should, immediately after, have these manipulations applied, as thereby the action of the massage is heightened; the circulation in the blood and lymph vessels,

increased by the massage, is furthered, and old deposited products in affected joints carried away. Also, after massage, the movements are not so painful, and can be more easily

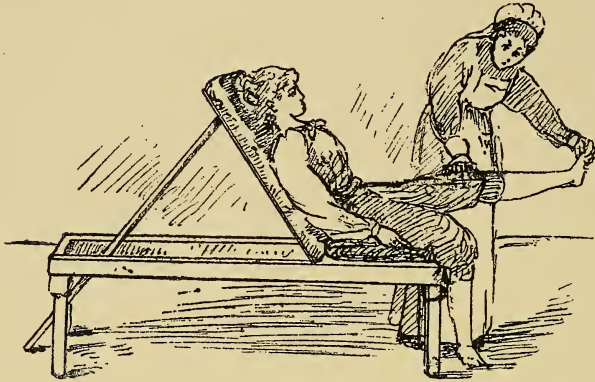


Fig. 29.

carried out. They do far more, however, than increase the action of massage, for they promote movement in stiff joints and strengthening of the muscles.

These manipulations are carried out by moving the arms, hands, legs, and feet of the patient freely backwards and forwards at the joints, in such a manner that no resistance is offered. (Fig. 30.)

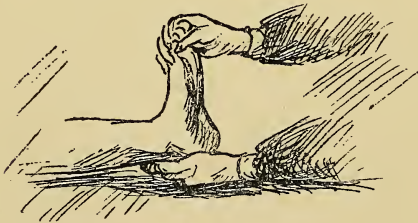


Fig. 30.

They can, however, also so be done that the patient offers resistance, and then they are called "resistance gymnastics." These play a great part in Swedish health

gymnastics, for they strengthen the muscles, excite the circulation of the blood, and draw the latter from the inner organs to the manipulated parts.

"In conjunction with massage, Swedish health gymnastics have the best results in general weakness, poor blood, scrofula, nervousness, spinal complaints, paralysis, sciatica, stomach,

bowel, and liver complaints, gout, rheumatism, diabetes, obesity, constipation, sexual complaints, etc. Besides these movements, which are carried out by the hand, there are others worked with machines, such as Dr. Zander's, etc." (*Dr. Disqué.*)

HEALTH CALISTHENICS.

"These are means for promoting the general movement of the body, especially of the muscles.

"All other exercise is more or less partial movement. Merely walking is as if one contented oneself with only washing face and hands of a morning, by which the blood is simply driven to the face, the rest of the body remaining cold and colourless.

"If the muscles are not sufficiently exerted, the blood presses into the organs which *do* work, and this leads to piles, nose and lung bleedings, enlargement of liver, digestive disturbances, and so forth. Also, the skin cannot excrete through want of blood, and the mucous membranes have to do the work of excretion; they become over stimulated, and this causes catarrh of the lungs, bronchial tubes, stomach and bowels; while from the non-cleansing of the blood, the refuse matter remains in the lungs, the bacilli find a good 'nidus,' and tuberculosis ensues.

"The movement of the muscles, moreover, stands in close relationship to the brain and the functions of thinking, feeling, and willing. Anyone weak in the muscles will be sensitive and irritable, his thinking powers weak, and power of will slight. After every bodily exertion, the thinking process goes on more easily, because the superabundance of electricity in the brain is drawn into the muscles.

"All impulse to movement goes from the brain to the nerves, and the nerves to the muscles. If we keep our four hundred muscle groups evenly exercised, as by calisthenics, the blood will be drawn from the brain to the skin, and be properly cleansed, the heart's action will be increased, the nerves, sinews, and bones strengthened, and deformities, contractions, and abdominal complaints prevented.

“ Like all other natural curative factors, artificial movement is employed with the object of regulating the composition of the blood, drawing it from the inner organs, and promoting the excretion of waste and disease matter through lungs, skin, kidneys, and bowels, thereby heightening the whole vital process of the change of matter, on which our health or sickness depends.

“ Calisthenics are particularly useful for dwellers in towns who have otherwise little opportunity for active muscular exercise. They should be done daily for ten to fifteen minutes while dressing in the morning, with open window, out of doors, or any other suitable time and place. Many complaints would thereby be prevented. They are of great importance in digestive disturbances, weakness of nerves, poverty of blood, scrofula, obesity, general weakness, gout, heart disease, stomach and bowel complaints with loss of appetite, in chronic constipation and piles.

“ Movements of the hands and arms draw the blood from head and chest in congestion, giddiness, etc.; relieve the headache of mental exertion, and, in combination with feet and toe movements, warm cold feet.

“ Combined with deep breathing, they are also useful in asthma and complaints of chest and throat, while other movements are indicated in liver and female complaints, piles, hysteria, hypochondria, etc., in order to set the clogged blood in the abdomen in motion, and to draw it away. Invaluable as calisthenics are, however, for the prevention of disease, and removal of certain symptoms of disease, they are not indicated for every sufferer. Sometimes the nature of the complaint will forbid them, or want of muscle or nerve power on the part of the patient. Massage and Swedish gymnastics, on the contrary, which require little muscular or nerve strength, can always be employed.” (*Walser and Siegert.*)

Rules for Health Calisthenics.

1. In sick conditions, these exercises must be carried on for at least several weeks at a time; with a few only, nothing will be attained.

2. They must be done quietly, slowly and precisely, and with closed mouth and in good air.

3. In the pauses, deep breaths should be drawn.

4. All tight clothing must be removed.

5. The first position must be taken in which to do them—*i.e.*, the feet at right angles, heels together, and toes slightly slanting outwards. The chest must be expanded, head upright, and arms hanging downwards.

6. The after positions are : Of the feet—

Closed Position.—The sides of the feet touch each other.

Forward Position.—One foot is placed in advance.

Standing Position.—One or other of the legs make a step sideways.

Of the arms—

Hip Position.—The hands are so placed on the hips that the thumbs are behind and the fingers in front.

Downward Position.—The arms hang downwards.

Sideward Position.—The arms stretch out in front.

Upward Position.—The arms are raised over the head.

MOVEMENTS.

HEAD MOVEMENTS.

1. *Head-turning.*—The head is turned alternately to the right and left, six to ten to fifteen times.

2. *Head-bending.*—The head is bent downwards till the chin touches the chest, five to ten times.

3. *Head-revolving.*—The head is bent round in a circle.

HIP MOVEMENTS.

1. *Hip-turning.*—With arms forward, and hands together, the hips are moved round on their axis, alternately to right and left, ten to twenty times. A good remedy in constipation, with relaxation of the bowels. (Fig. 31; see next page.)

2. *Hip-bending*.—With hands on hips, the upper part of the body is bent slowly and measuredly forwards and backwards, five to ten to fifteen times. Useful in piles, and constipation, etc.

3. *Hip-bending Sideways*.—Six to twelve to eighteen times. Removes disturbances of the circulation in the abdomen.

4. *Hip-revolving*.—The hips are bent round in a long, slow circle, five to ten to fifteen times. Acts on the circulation and abdominal organs. (Fig. 32.)

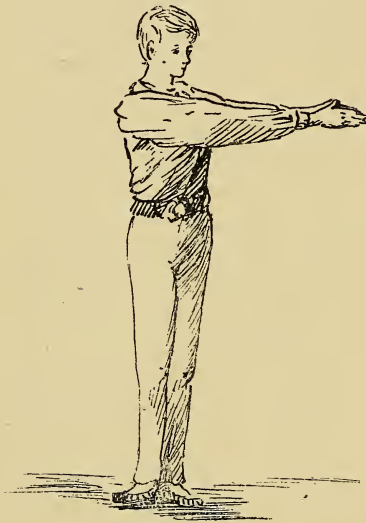


Fig. 31.



Fig. 32.

5. *Hip-raising*.—Lie on the ground, arms flat to the side, quietly and evenly rise to a sitting position, and then slowly again fall backwards. To strengthen the abdominal muscles, and exercise all the abdominal organs.

ARM AND HAND MOVEMENTS.

1. *Shoulder-raising*.—With hands on hips, the shoulders are slowly raised as high as possible, and sunk again as

slowly, ten to fifteen times. The breath must be inspired in raising, and expired in sinking.

2. The shoulders are thrown forwards and backwards, ten to twenty to thirty times. Opens the chest, and airs the lungs.

3. *Arm-bending and Stretching.*—The arms are thrown from the elbows, sideways, upwards, downwards, and forwards, the bent finger-tips each time returning to the shoulder, fifteen to thirty to forty times.

4. *Back-arm Stretching.*—The hands are clasped together at the back, and the arms moved vigorously upwards and downwards, ten to twenty to thirty times. (Fig. 33.)

5. *Arm-stretching Sideways.*—The arms are raised over the head, and then slowly brought down sideways, even with the shoulders, ten to twenty to thirty times. Good breathing exercise.

6. *Arm-stretching Forwards.*—The same thing in front, ten to twenty to thirty times. Widens the upper part of chest.

7. *Arm-throwing.*—The clenched fists are placed on the shoulders, and then the arms with open hands thrown upwards, downwards, sideways, and forwards, each time returning with clenched fist to shoulder, fifteen to twenty to thirty times. For weak chest, shoulder and arm muscles.

8. *Arm-jerking.*—Arms forward, then bent at the elbows and brought in with a jerk to the chest, ten to twenty to thirty times.

9. *Arm-rolling.*—The arms are so turned round in the elbow joints that the backs of the hands are alternately above and below; thirty to forty to fifty times. Good for developing the deep-seated arm muscles.

10. *Arm-swinging.*—The arms are stretched forwards, with



Fig. 33

clenched fists and closed feet, and then swung backwards in a half circle, fifteen to twenty to thirty times. (Fig. 34.)

11. *Arm-raising Outwards*.—The arms are brought from the downward position to the front, then raised above the head, down again to front, and then to sides, six to twelve to eighteen times.

12. *Arm-widening*.—Arms brought forward on chest, with finger-tips of hands touching, then open out backwards, and again to chest, ten to fifteen to twenty times.



Fig. 34.

Exercises muscles of breast, shoulder, and back.

15. *Arm-rolling*.—A figure of 8 is described in the air, ten to fifteen to twenty times.

16. *Funnel Movement*.—Arms stretched out sideways, and a little circle described with the finger-tips, twenty to thirty to forty times.

17. *Arm-throwing*.—Sideways, forwards, and backwards, fifteen to twenty to twenty-five times. Acts on muscles of liver, spleen, and back.

18. *Hand-revolving*.—With the arms stretched out sideways, the hands describe a deep circle, thirty to forty to fifty times. Makes the hand joints flexible, and strengthens the lower arm.

19. *Finger-bending and Stretching*.—With arms forward or sideways, the fingers are bent in and then vigorously opened out, twenty to thirty to forty times.

20. *Finger-widening*.—The fingers are widened out, and

then re-closed, ten to twenty to thirty times. These two movements exercise the muscles and joints of fingers.

LEG AND FEET MOVEMENTS.

1. *Leg-raising*.—With figure upright and hands on hips, the legs are lifted alternately forwards, backwards, and side-wards, five to ten to twenty times. (Fig. 35.)

2. *Leg-swinging*.—Legs are alternately swung backwards and forwards, each ten to fifteen to twenty times.

3. *Leg-revolving*.—The legs alternately describe a half circle, five to ten to fifteen times.

4. *Leg-turning*.—The heels are moved sharply out and in, five to fifteen to twenty times.

5. *Leg-sliding*.—A step to the right with the right leg, and to the left with the left leg, and then a jerking slide back into the first position, five to ten to fifteen times. Exercises thigh muscles, and is derivative from head and chest.

6. *Knee-bending*.—With body upright, the legs are bent deeply at the knees, five to ten to fifteen times. Strengthens leg and feet joints, and is derivative from head and chest. (Fig. 36; see next page.)

7. *Knee-lifting*.—The knees are lifted alternately as high as possible towards the chest, four to eight to twelve times. Good in constipation, and to improve the circulation in the abdomen.

8. *Knee-stretching and Bending*.—The knee is bent at the joint, then stretched out backwards and forwards, five to ten to fifteen times. Exercises knee joints, and is derivative from head and chest.

9. *Foot-stretching and Bending*.—Stand on the tips of the

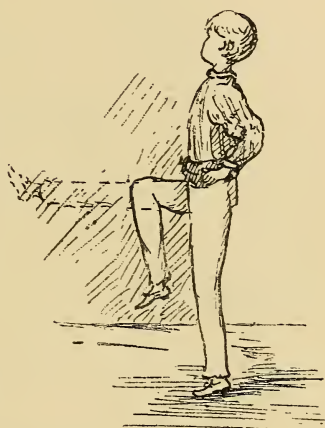


Fig. 35

toes, and alternately raise and sink the feet, twenty to thirty to forty times. Good for warming cold feet, exercises the ankle joints, and is derivative from the upper part of the body.



Fig. 36.

10. *Foot-revolving*.—With legs forward, a circle is described from the ankle joints, twenty to thirty to forty times.

11. *Foot-whipping*.—The heels are raised, so that the whole body rests on the toes; the latter then alternately rises and sinks; ten to fifteen to twenty times. A good derivative in head congestions, and to warm the feet.

12. *Trotting Movement*.—The body remains stationary, and trotting movements are made with the toes, forty to sixty times.

OTHER MOVEMENTS.

1. *Sawing*.—With the upper part of the body bent forwards, and clenched fists, the arms are alternately thrust out and in, as in sawing, ten to twenty to thirty times. Particularly strengthening to muscles of the arms, shoulders, and back, and to act on the bowels in constipation. (Fig. 37.)

2. *Reaping*.—Both arms, with clenched fists, are moved vigorously to right and left, so that a half circle is described—must be swinging and elastic—ten to fifteen to twenty times. Acts generally on the muscles. (Fig. 38; see next page.)



Fig. 37.

3. *Axe-hewing*.—Legs are placed apart, the arms lifted over the head and brought down between the legs, six to twelve to eighteen times. Also acts generally on the muscles. (Fig. 39; see next page.)

4. Chest and abdominal slapping and kneading with circular movements round the navel. The circle must be

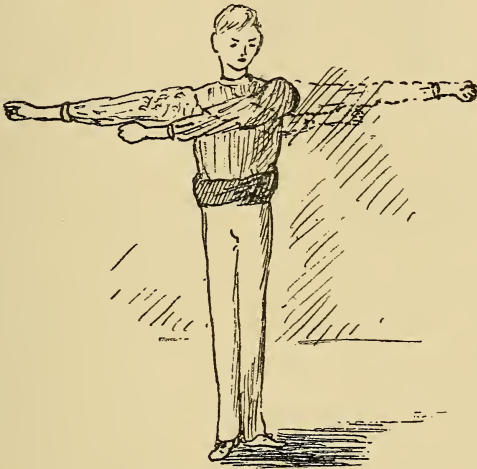


Fig. 38.

small at the beginning, and get gradually larger. Very good in constipation.

POLE AND DUMB-BELL CALISTHENICS.

A pole is often used in health calisthenics. It must be long enough to reach from the ground to the armpits.

1. Walking with the pole run through the arms behind is especially good for crooked spine.

2. Pole-raising with knee-bending.

3. Pole-sinking with leg-raising and other movements at pleasure.

In lifting the pole, the breath must be inspired, and in sinking the pole, expired.

The weight of *dumb-bells* causes energetic contraction of the

muscles, increases breathing action, circulation of the blood, and excretions.

Quite small weights must be used at first, and the exercises must never be overdone or carried out when mind or body is fatigued, or near a meal time, etc.



Fig. 39.

With the feet in the first position—(1) Arm-raising. (2) Half circular arm movement before and behind. (3) Arm-revolving. (4) Funnel movement. (5) Arm - rolling. (6) Bending and stretching of the under arms. (7) Arm-thrusting. (8) Arm - heaving. (9) Bending and stretching the hands. (10) Axe-hewing. (11)

Hand-revolving, and various leg movements with the dumbbells acting in unison.

Light Indian clubs are also equally useful, and Largiadère's arm and chest strengthener, which is much used in the German Nature-Cure. (Fig. 40.)



Fig 40.

BREATHING EXERCISES.

“The want of understanding with regard to the breathing functions, alone gives rise to all possible complaints, especially consumption, all kinds of catarrhs, asthma, and many heart complaints. Yes, it is true, deficient knowledge of the important organs of breathing lent to us by the good Creator, and which leads to their wrong and defective working, causes the death yearly of millions.” (*Hillmann.*)

“Few physicians concern themselves with regard to the breathing action of their patients, or teach them how to breathe rightly and naturally, still less are children taught it. One has only to watch the latter at their school work, or clerks at their desks, etc., to see how superficial the breathing action is: no deep inspirations, no powerful expirations; and proportionately how little fresh air is conveyed to the blood, how little bad air is exhaled—to which is added the already depraved atmosphere in rooms, schools, offices, etc., where is deficient ventilation.

“Bad and defective breathing action is the chief enemy of dwellers in towns. It leads to slow but sure poisoning and clogging of the blood, as well as brain, chest, heart, and liver congestions, and cold hands and feet.” (*Dr. Weil.*)

“Deep breathing sets the whole lungs in action; all the million lung bladders are extended, air penetrates everywhere, giving up oxygen, and receiving carbonic acid and water.

“In sedentary employments a great proportion of the lung bladders remain inactive, and dust and other matters inhaled, settle in and clog them, and inflammation of the lungs easily occurs. If the lungs only partially work, enough oxygen cannot be taken in to keep all the vital processes in active working order. Everyone, therefore, who leads a sedentary life, should at least several times daily, if not in the open air, at least by the open window, do deep breathing exercises thirty to forty to fifty times. Deep breathing can, however, be carried out anywhere, on the way to school, business, or workshop, in the pauses for meals, etc. Everyone, even the most overworked, has time for it. The custom then will gradually grow of breathing instinctively deeper, and only through the nose. Also, after any sojourn in bad air, such

as in public places of meeting and amusement, the best way of cleansing the blood, is by deep breathing in the open air.

“Through deep breathing, the circulation of the blood experiences a powerful stimulation, its stagnation in head and abdomen is prevented, and when present, removes it, while the digestion is materially assisted.

“There is only one means for cleansing the blood, the abundant reception of which into the organism by breathing, regenerates man; which cures all complaints which are connected with deteriorated juices and deficient burning and excretion of used, decayed tissue elements, such as scrofula, gout, and skin diseases—and that is the oxygen of the air, which the all-good, Almighty Creator gives us without price, for the maintenance of our health, and the cure of many forms of disease.

“But not only in the above complaints are breathing exercises splendid remedies, but also in poverty of blood, chlorosis, and rickets; in nervous conditions, weakness of nerves, hysteria, and hypochondria. Also the breathing cure is indicated in all cloggings of the blood, and congestions in single parts of the body, as in the chest, abdominal organs, head, and breast, with the accompanying symptoms of bad digestion, sleeplessness, and nervous attacks.

“Naturally, however, the breathing cure is first indicated in all complaints of the air passages, especially in conjunction with calisthenic exercises; in every kind of cough, phlegm in the air passages, catarrh of the tips of the lungs; in the tendency to consumption, and in the after effects of inflammation of the lungs; in pleurisy, asthmatic conditions; in quinsy, etc.

“There are a host of movements which help to deep breathing, such as mountain-climbing, running, riding, bicycling, and swimming; also reading aloud, declaiming, singing, and playing on wind instruments. For people in consumption, and those with heart complaints and pot belly, it is an excellent exercise—when possible two or three times daily for a quarter of an hour—to take three steps up hill, exhaling breath deeply, and one step down, inhaling vigorously.” (*Drs. Disqué and Weil.*)

Deep breathing must always take place through the nose with closed mouth. The nose is at once a respirator and a filter. In passing through it, the cold air is warmed before reaching throat and lungs, and is also freed of all impurities.

“The ordinary breathing exercises consist of three parts—(1) Inspiration of air. (2) Holding the breath (keeping back the inhaled air in the lungs). (3) Expiration of air. In artificial breathing these three parts must always be observed. The hands are supported on the hips, or laid on the back of the head, to free the lungs from pressure, and with feet in first position, heels planted firmly together, quietly and strongly the breath must be expired, then drawn in without strain or noise, and held a few seconds. It is a good plan to count eight to ten during the expiration, and four to six during the inspiration and holding of breath. Singing or whistling can take the place of counting in expiration. Daily, three to five times in the open air, or by the open window, and best in combination with calisthenics.

“*Second Exercise.*—A pole is held at the back of the neck, or laid across the back, with arms bent at the elbows. So to walk for five to ten minutes, breathing deeply.

“*Third Exercise.*—To exercise particularly one lung, the hand is placed on the hips on the opposite side, the other shoulder raised, bending towards the supported side, and then powerful breathing.

“*Fourth Exercise.*—Where strong breathing is difficult, press regularly and strongly the under part of the ribs on each side with both hands.”

BREATHING ACTIONS.

“The three breathing actions are—Stomach-breathing; shoulder-breathing; rib-breathing. Ordinary deep breathing is stomach-breathing.

“In shoulder-breathing, the shoulders and shoulder blades are raised slowly during the act. This is very good for exercising the tips of the lungs, which are always the most difficult parts to influence.

“Rib-breathing consists in contraction of the stomach during powerful inspiration of breath. This influences chiefly the lower part of the lungs.

“Whoever has learnt to execute all these breathing actions thoroughly and exactly, will be a master of breathing, and in a position to make the fullest possible use of good air.

“The calisthenic exercises used in combination with those of breathing are—(1) Shoulder-raising. (2) Shoulder forwards and backwards. (3) Arm-stretching sideways. (4) Arm-revolving. (5) Arm-lifting sideways, with bending of the hips on the other side. (6) Arm-widening. Also, arm exercises with pole or dumb-bells.” (*Disqué, Siegert, Weil, and Walsev.*)

Herr Simon, of Berlin, has invented a small instrument for the better performance of breathing exercises; also an apparatus for health gymnastics, of which there are already in Germany a great variety in use, both in Nature-Cure establishments, and in private families.

CHAPTER VII.

MAGNETISM.—ELECTRICITY.—HYPNOTIC SUGGESTION.

MAGNETISM.

ANIMAL magnetism is a hidden form of attraction which all organic forms of life, men, animals, and plants exercise reciprocally the one over the other. It exists in the highest degree of perfection between human beings.

“ Every person possesses the power of influencing another magnetically, also the capability of acting directly upon another by means of his will, with or without touching. This capability is developed in everyone in different degrees, according to the individual constitution. One possesses more, and the other less magnetic power. Through exercise, however, it can be notably increased. The conductors of this power, which represents the vital force, are, undoubtedly, the nerves, and in the emanations from these, the peculiar magnetism is contained which passes from one person to another, *viz.*, the so-called nerve fluid.

“ Those who possess a high degree of this power, or an overplus of animal magnetism, are able to give of it to others who suffer from the want of it, and this treatment is called magnetising. If animal magnetism is so employed for the purpose of healing it is called ‘vital,’ or ‘curative’ magnetism.

“ Curative magnetism, then, means a person giving up of his own vital force to help another who is weak and suffering. To be able to exercise this healing power successfully several requisites are necessary—

“ (1) The manipulant must be healthy, or else he will injure instead of help, and the sick symptoms of his patient might pass to him.

“(2) He must have a determined will to help, in conjunction with the fear of God, and true love to his fellow-men.

“(3) He must be pure in mind, as in body. Power of will alone will not do it. And his healing work must be to him always the highest task of his life.

“(4) There must be sympathetic union, a magnetic *rapport* between himself and his patient. If the magnetiser is in doubt in this matter, he has only to stand behind the patient and smell the hair of the latter. If the hair smells disagreeable to him, his magnetism will be of no avail, for the diseased cells of a patient can only absorb the health matter, the nerve fluid, radiating from the operator, when an affinity exists between the mind matter of the healer and the one to be healed.

“(5) As a general rule, the opposite sexes act best one upon the other.

“(6) The morning hours are indicated for treatment, where it is desired to reanimate the system; the evening hours for producing soothing and sleep.

“(7) Patients must always be magnetised in a quiet place, free from disturbance or curiosity, best alone.

“(8) The clothing must be light; certain materials, especially silks, are to be avoided, and sometimes it is desirable to bare parts of the body.

“(9) The magnetic sitting should, beginning with ten minutes, gradually increase to twenty, but seldom attain half an hour.” (*Mesmer, Platen, and Bilz.*)

MAGNETIC STROKES AND HAND-LAYING.

Magnetic action must always be both positive and negative at the same time—*i.e.*, the left side of the patient, must be treated with the right hand, and *vice versâ*. This is the rule for all magnetic treatment.

Hand-laying is done by the magnetiser letting his finger-tips rest on the beginning and end points of the nerves. Strokes must always be made as far as possible in the direction of the nerves and muscles, and always from above to below (*e.g.*, from shoulders to finger-tips, from hips to toes, or from the crown of the head to the toes), in such a manner that, at the finish, the

hand goes out into the air with a shake, as if one would cast away the disease matter drawn from the patient, and comes back in an arch to the starting-point.

MAGNETISM OF THE WHOLE BODY.

“The operator stands on the right side of the patient, lays his right hand on the front, his left hand on the back part of the head, holds them so for a few minutes, and then, likewise for a few minutes, at a short distance makes strokes down face and neck.

“He then stands before the patient, takes his right hand in the right, and lays the left on the patient's left shoulder, and strokes downward to the finger-tips, lightly touching the arm about ten times, each time describing an arch in the air, before beginning again at the shoulder. The same thing on the left side, stroking the left arm of the patient with the right hand. The operator then stands again on the right side, and gently touching, strokes with both hands at the same time over back and chest and stomach, shakes the finger-tips into the air, and returns in an arch to the head, and so for a few minutes.

“Lastly, he takes the right foot of the patient in his right hand, and strokes with the left from the hips down the legs to toes, and *vice versa* on the other side.” (*Hansen.*)

Strokes may, however, be made in any manner, so long as they take always a downward direction.

“According as it is wished to act strongly or weakly, the hands are held at a greater or less distance from the patient's body, or laid directly on the latter. The farther the hands are held away, the stronger, as a general rule, is the magnetic action.

“Blowing on the parts is also part of the magnetic manipulations, but painful parts must only be breathed upon.” (*Platen.*)

LOCAL TREATMENT.

The treatment of any single sick or painful part of the body takes place in the same manner as above.

COMPLAINTS IN WHICH MAGNETISM IS INDICATED.

Hysteria, epilepsy, headache, fainting, pressure of blood to the head, colds, ear and eye complaints, toothache, faceache, head and face eruptions, fistula and cancerous wounds, inflammation of the throat, croup, diphtheria, cough, asthma, inflammation of the lungs and throat, palpitation of the heart, inflammation of stomach and abdomen, cramp and pain in the chest, digestive difficulties, boils, abscesses, metallic poisonings, injuries, gout, pain in the back or spine, rheumatism, chlorosis, weakness of nerves, brain and spinal complaints, St. Vitus's dance, rickets, liver and kidney complaints, diabetes, and in all feverish illnesses.

MAGNETISED WATER.

The glass of water, filled to within an inch of the brim, is taken in the left hand, and the finger-tips of the right hand held over it for about five minutes at the distance of about half an inch from the glass. The hand is then laid on the glass for two or three minutes. The water is then ready for use: must be covered and kept apart from iron or metals.

Magnetic water is used in all internal complaints. It must be drunk in sips from time to time, about two glasses in the day. In sleeplessness, a half or whole glass before going to bed.

MAGNETISED PAPER.

This is used to lay on sores and painful parts.

A piece of thin paper (best, silk paper) is laid on the table, and the hands and finger-tips moved over it from the centre to the edge, on both sides, for a minute. The paper is then folded, and both sides stroked for a minute, and so on, till the paper is of a suitable size for use. The paper is simply laid on the sick part, and renewed every day or alternate days. Also useful for cold feet.

MAGNETISED FLANNEL.

“This (best, red) must be breathed upon for some time. Used like the paper.” (*Hansen.*)

“In magnetism, as with all other treatment, especially in long-standing, deeply-rooted complaints, patience and perseverance are absolutely necessary. If these are there, often astonishing curative results are obtained.

“Also, during treatment with magnetism, as with all other natural factors, crises occur, or what seems a worse state of the patient. Through a corresponding magnetic palliative treatment, however, their intensity can be mitigated. Curative magnetism is, without doubt, one of the most effective remedial agents, and has a great future before it.” (*Bilz and Platen.*)

ELECTRICITY.

“Electricity is the groundwork of action of all power. The indwelling vital force in man is also dependent on the co-operation of electricity. All organs of the body, all muscles and veins, are connected with the nerve fibres, which form the medium for the electric stream between all parts of the body, and are the source of all mental functions. All action in the body is produced by electricity; so also the nourishment, waste, and renewal of tissues, take place through its repelling and attracting power.

“Our mind can markedly influence this action, whereby we are in a position to gain the mastery over many sickly sensations.” (*Bilz.*)

“Electricity acts (like water) derivately in cold feet, headache, and giddiness; soothing, pain-stilling, sleep-producing in nervous complaints; stimulating in poverty of blood, weak or paralytic conditions; it acts like massage in quickening the circulation of the blood, and strengthening the muscles; and has also a favourable action in digestive disturbances, nervousness, gout, rheumatism, diabetes, etc.

“It is only successfully employed by means of an electric machine or battery.

“There are two kinds of electric streams—the constant or galvanic, so called after the Italian physician Galvani, and

the broken or faradaic, so named after the English physicist Michael Faraday. The galvanic stream is scarcely felt, and is employed in brain and spinal complaints, St. Vitus's dance, children's paralysis, progressive dwindling of muscles, in neuralgia and sciatica, hysteria, etc.

“One of the electrodes through which the electricity is conveyed to the body, is laid on the neck, the other on the lower part of the spine. Duration, five minutes. Also, in neuralgia of the head, face, or chest, and in severe rheumatic pains resulting from rheumatism of the muscles or joints, the one electrode is placed on the painful part, and the other held in the hand.

“The faradaic stream is employed in paralysis and loss of feeling; in atrophy of the muscles, paralysis of the bladder (bed-wetting); in enlargement of the stomach, to contract the relaxed muscles; in constipation, to excite the activity of the bowels; also, in long-lasting rheumatic pains. It assists the action of derivative packs in pain and cold feet.

“Electricity must never be employed in inflammatory states, and at all times care must be taken that a too strong electric stream is not used, else the patient will be injured instead of benefited.

“ELECTRIC BATHS.

“These play a great part in the treatment of chronic complaints. There are also two kinds of electric baths—the galvanic and the faradaic. They are taken from 88 to 92 deg., for five to ten minutes.

“The galvanic baths are soothing and pain-stilling. They are, therefore, especially employed in neuresthenia (general nervousness), excitable states, pollution, sleeplessness, neuralgia, sciatica, spinal complaints, gout, rheumatism, cramp, St. Vitus's dance, twitchings in the face, etc.

“The faradaic baths are more stimulating; they find special employment in paralysis and apoplexy, paralysis of the nerves, weakness, and atrophy of the muscles, constipation, bed-wetting impotence, rheumatism, cold feet, etc.

“ELECTRIC MASSAGE.

“Galvanic massage acts soothingly in nerve pains, rheumatism, and cramp. Faradaic massage acts as a stimulant in poverty of blood, weak muscles, corpulence, gout, thickness of the joints, muscles, and sinews.

“The circulation of the blood is much more energetically affected through faradaic massage, than by massage alone.

“Faradaic massage is also successfully employed in cold feet, headache, giddiness, chronic catarrh of the stomach and bowels, and in constipation.” (*Dr. Disqué.*)

ELECTRIC LIGHT BATHS.

These are at present only in use in two German Nature-Cure establishments—Dr. Disqué’s in Chemnitz, and one in Berlin. They are in reality an American invention.

The patient sits in an octagon-shaped cabinet, lined with mirrors and small incandescent lights.

The effect of the bath is the same as one of hot air, with the additional action of light ; indeed it takes more the place of a sun bath.

HYPNOTIC SUGGESTION.

“It is well known that bodily functions are more or less influenced by ideas and imaginations. The paling from fright, the heart beating from fear, the reddening from shame—all show us this. Also, it is well known that the circulation of the blood and process of breathing can be similarly affected. We know, too, that the digestion goes on more slowly under the influence of sad thoughts than of cheerful ones. Excitement or fear will act stimulatingly on the glands of the digestive canal, so increasing the secretions, that diarrhœa will ensue, and so on. In such cases, and especially in hysteria, it is not necessary that the body should be encumbered with

injurious foreign matter; the appearances of disease are produced by the sickly excited imagination.

“If anyone cannot move his leg because he believes it is paralysed, such a person is ill. The sickness is in the brain, and it is the diseased imagination which must be combated. This can only be done by putting the idea into such a person’s mind that the leg is movable, in place of the conception that it cannot be moved. This is hypnotic suggestion.

“Hypnotism is founded on the theory that the individual must be artificially put into a state that will make him most sensitive to the reception of foreign ideas, and that state is sleep. Hypnotic sleep, however, differs from sleep itself, in that the person hypnotised remains *en rapport* with the hypnotiser, can answer questions, and knows what goes on around him. Hypnotism is not the means of cure, but serves to heighten the effect of suggestion, and the concentration of thought. The means of cure is suggestion, *i.e.*, the penetration of the imagination with foreign, favourably influencing thoughts.

“The word, ‘hypnotism,’ includes many different states of the nervous system. Between a feeling of heaviness in the limbs, that light dozing state in which every noise is heard, and the deep sleep, which no noise disturbs, and which can only be removed by the hypnotiser, there are endless modifications. The following six states are recognised:—

“(1) *Somnolence*.—Weariness of the eyelids, and feeling of fatigue. Full consciousness retained.

“(2) *Catalepsy*.—The eyelids are closed, and the limbs hang limply down. Full consciousness retained.

“(3) *Automatic Movement*.—Limbs are moved automatically, as soon as the hypnotiser suggests that they cannot keep still. Suggested contractions, lowered sensibility. Consciousness retained.

“(4) The sleeping person feels only the attraction of the operator; uninfluenced by any sensation, except those suggested by the hypnotiser. Consciousness retained.

“(5) *Light Somnambulism*.—Lowered or extinguished sensibility. Suggested hallucinations possible. Consciousness dulled. Memory uncertain.

“(6) *Deep Somnambulism*.—Unconsciousness, and entire loss of memory after waking. These states are seldom clearly defined, but pass gradually from one into the other.

“According to Professor Forel, there are three degrees of hypnotism—(1) *Sleepiness*.—The patient is only lightly influenced, and can by the employment of his will resist the suggestion, and keep his eyes open. (2) *Light Sleep*.—The patient cannot keep his eyes open, and must follow the suggestion fully or partially. (3) *Deep Sleep*, and entire loss of memory after waking.

“The more frequently a patient is hypnotised, the easier are the suggestions received. For purposes of cure, a light sleep is often sufficient.

“There are several different methods of producing hypnotic sleep. As for instance the concentration of a patient’s eyes on some bright object, glass or metal, or with simple strokes with warm hands, or holding a finger on the root of the nose, etc.

“Every person has his own method of operating and suggesting.

“Hypnotism is useful in all kinds of pains that have no anatomic foundation, such as neuralgia, headache, rheumatism, stomach pains, etc.

“Also in sleeplessness, hysteria, and especially paralysis of the extremities, in menstrual disturbances, sleep-walking, unquiet dreams, bed-wetting, stuttering, twitching, noises in the ears, giddiness, sciatica, and difficulty of breathing.’
(*Gerling, Siegert, and Disqué.*)

CHAPTER VIII.

THE TREATMENT OF DIFFERENT FORMS OF DISEASE.

THIS is too large a subject to be dealt with otherwise than cursorily in a work of these dimensions.

The examples brought forward, however, will be of as representative a nature as possible, so that, given a thorough comprehension of the principles which underlie all practice in the natural method of cure, complaints of every kind can be treated on the same basis and according to the same general rules.

In any case, it is impossible to give more than *general* guidance, for, as has before been stated, and too much stress cannot be laid upon the fact, it is always more the individual that has to be dealt with than the complaint itself.

In so far, however, as such general directions can help and assist in self-treatment, and the treatment of others, the following lines laid down by the united experience of some of the best known practitioners of the German Nature-Cure, may always be followed more or less, or form the foundation for more individual handling, and the treatment of further forms of disease.

It will be found that the prescriptions given for all classes of complaints are invariably based on the leading principle of all natural treatment, *viz.*, its combined general, local, and derivative action. General—because, in any disturbance of health, the whole system is involved, and all organs of the body must assist in ridding the latter of what is causing the sickness. Local—(1) because the unnatural accumulations are always greater in some parts than in others, and, in the former case, require to be specially influenced; (2) because the vital juices circulate feebly in some parts, and violently in others—in the one case movement has to be stimulated, and in the

other reduced. Derivative—in order to draw the blood away from overfilled organs to the extremities, and parts that are lacking.

In all cases the same natural influences which keep us in life, such as changes of temperature conveyed to the skin through light, air, and water, also food and drink, movement and rest, etc., dietetically employed, are the only means that can avail if a radical cure is desired, and not the semblance of one.

TREATMENT OF ACUTE FORMS OF DISEASE.

All acute forms of disease are accompanied by more or less fever or inflammation. It must always be remembered that fever and inflammation are healing, cleansing processes—the health strivings of the body to rid itself of what is injuring it. In fever illnesses, therefore, the height of the fever is in proportion to the amount of disease matter in the body, and the capability of its excretion through lungs, skin, kidneys, and bowels. If the organs of excretion are inactive, the morbid matters, which are stirred up and put in vigorous motion by the fermentation, will accumulate and cause dangerous fever heat. The groundwork of all treatment must, therefore, be to keep all the natural outlets open, and in as active a condition as possible.

Fresh air for the lungs, whatever the illness is; the windows constantly opened, or remaining open in the sick or adjoining room. “Fresh air is the best medicine.”

For the skin, water in its various temperatures and forms of application, and light-air baths, which, in the hot stage of fevers, may always replace treatment by water, just as sun baths may do the same in the chilly stage.

Careful attention to the requisite diet both as to food and drink, and the bowels kept open by enemas; these, together with complete rest in severe cases, are the general ways in which the all-important excretions can be encouraged and promoted, the heat of the fever mitigated, and the latter made a useful servant instead of a dominating power.

There are always premonitory symptoms for some days before the outbreak of an illness, and often long before the

nature of the complaint is known. Such symptoms should always be treated at once. Much severe sickness may thus be prevented, or its after intensity considerably lessened. "The quicker the help, the earlier the recovery." When there are sensations of chilliness, lassitude, loss of appetite, etc., it is always safe to take a mild steam or hot-air bath, warm baths, foot baths, or sun baths, stimulating packs and compresses, and warm drinks.

If there is heat with headache, cool and tepid washings, tepid baths and hip baths, light-air baths, soothing and derivative packs and compresses, the temperature corresponding to the degree of fever and natural vitality, and a light and cooling diet.

When perspiration begins, warm applications, such as bed steam baths, or partial packs with hot water bottles, in alternation with stimulating and strengthening water procedures.

Constipation should always be relieved by enemas.

General Rules.

1. The fever heat must invariably be tested by the clinical or fever thermometer, placed in the armpits, under the tongue, or in the anus. Normal temperature is about 98 deg.

2. The higher the fever, the higher must be the temperature of the water employed and the shorter the application, at anyrate at first. Gradually the former may be lowered, and the duration of bath extended.

3. Baths and packs must be repeated as soon as the fever heat regains the upper hand, but not while the patient is perspiring, unless the perspiration is caused by pain or cramps. The thermometer is the best guide for repetition.

4. With packs, whenever the feet are cold, hot bottles, etc., must be applied.

5. Compresses must be laid on any part that is locally inflamed, in addition to the general pack. In a high degree of fever, several folds of wet linen must be laid over the abdomen.

6. The instinctive longings of the patient, for either warmth or coolness, must always be attended to.

7. The patient should be kept perfectly quiet, and nothing be allowed to excite him.

8. The proper temperature of a room during the feve period is 63 to 68 deg. In typhoid only 63 deg.

9. In everything to do with the sick-room and the treatment, there must be painstaking cleanliness, and most careful attention to details.

10. During the menstrual period of females, only tepid washings must, as a rule, be given.

11. During convalescence, the treatment must not be abruptly discontinued, but gradually lessened, and strengthening tepid whole rubbings, or tepid baths given.

MEASLES.

To prevent the spread of measles, the patient must be isolated, boiling water poured over all expectorations, and all bed, body, and pack linen carefully boiled.

Prescription I.—When the temperature reaches 100 deg., two to three times daily a three-quarter body or waist pack (the body pack is the most convenient), from 74 to 83 deg., with following cool washings from about 70 deg. These latter can, besides, be given every one to two hours.

Prescription II.—Two tepid half baths in the day, and afterwards stimulating waist packs with hot bottles to thighs and feet. Also hand, leg, or foot packs, if it is desired to draw the blood from the head.

Prescription III.—Whole washings (cool) with following stimulating waist packs (74 to 77 deg.), and leg packs (65 to 74 deg.), renewed every hour or so as necessary.

Fever diet, and plenty of fresh air. If the eyes are weak, they must be shielded from the light.

To prevent constipation, enemas daily (74 to 77 deg.). Stationary enemas are also useful, as they act very derivatively in fever. In the peeling stage, bed steam baths, or warm baths; these may also be given when the eruption does not come out properly. Also, every two hours, gargles with cool water, frequent nose baths, and wiping out of the mouth and ears with a damp cloth or cotton wool.

Great care must be taken during convalescence that inflammation of the eyes or lungs does not occur. The eyes must often be bathed morning and evening with tepid water.

In mild cases of measles, children should go out freely into the open air, only well wrapped up.

Dry diet and packs, etc., for some little time afterwards. (Chicken-pox, nettle-rash, etc., can be treated on the same lines.)

SCARLET FEVER.

Complete isolation, as in measles. Bed, body, and pack linen to be boiled. Boiling water to be poured over all expectorations and evacuations, which it is best to bury.

The fever is much more violent than in measles, combined with shiverings, inclination to sickness, diarrhœa, cold in the head, cramp, sore throat, etc. Children who have been most fed with meat have the strongest fever, a sign that there is much unhealthy matter in the body to be expelled.

Prescription I.—For the throat, hourly gargles with cool water, or when this is not possible with little children, a dessert-spoonful of cold water. Also, three times daily, inhalation of steam. In the beginning, cool neck packs every five minutes; later, when the throat is easier, every two hours.

If the temperature is up to 100 deg., hourly whole washings with tepid water (no rubbing) two or three times daily; three-quarter or body packs (74 to 82 deg.) for half an hour, with following cool washing.

If the temperature rises higher (104 deg.), one to three hip baths daily (83 to 90 deg.) for five minutes, with following cool washings or gentle douches. With constipation and swollen stomach, daily warm enemas, and cooling stationary ones. For diet, besides the ordinary fever diet, milk, both sweet and sour, or butter-milk, is advisable to prevent after inflammation of the kidneys; also, especially, stewed fruit. In the peeling stage, every two to three days, a warm bath at 95 deg.

Should legs, arms, and face swell, and inflammation of the kidneys ensue, known by albumen in the urine, warm baths

(100 to 104 deg.) twice daily for half an hour, with following sweating in bed; packs (two to three) daily for two hours, with following cool washings, or steam baths, bed steam baths, with after packs, washings, etc.

Should swelling of the neck glands, or inflammation of ears, nose, etc., occur, neck packs every ten minutes, and syringing of nose and ears two to three times daily.

Prescription II.—Same as for measles.

Children should not be allowed to go out for four to five weeks.

SMALL-POX.

As soon as the symptoms of small-pox appear—loss of appetite and sleep, lassitude, headache, shivering alternated with heat, pain in back and loins, sickness, nose-bleeding, digestive disturbances, with bad smelling breath and urine—the patient must be completely isolated, keep his room, and have only fever diet.

A good airy room, abundant fresh air, cleanliness, and the most careful attention to details, are of the utmost importance.

Prescription I.—As soon as the pock marks appear, a warm enema should be given to cleanse the bowels, and then a whole three-quarter or body pack (68 to 74 deg.), with extra folds over the abdomen to draw the pock marks as much as possible from the face and eyes; also, for the same purpose, neck packs. The pack must remain for one and a half hours, or so long as the patient is not uncomfortable. Then a mild whole washing, or a tepid bath with light overpourings of water, etc. Afterwards the patient can be either dried and put to bed, or, better still, wrapped dripping in a dry linen sheet, and well covered in bed.

As soon as the fever again gets the upper hand, this treatment to be repeated.

Prescription II.—The patient must be often washed, or laved with tepid water, or three times daily a half bath (86 to 90 deg.) for ten minutes, with moderately wrung-out stimulating body and leg packs between times in bed. When the violence of the sickness has abated, only two half baths daily. After the baths, the patient must be softly wiped, or put undried into

bed. At night, cool neck packs, leg packs, and thick body or waist packs, to be renewed when they become uncomfortable to the patient.

As soon as the fever has nearly or completely disappeared, daily, one to two bed steam baths, with following cool application.

Wet compresses should be continually laid on the face, with holes for eyes, nose, and mouth, to prevent disfigurement.

Enemas, gargling, nose and ear-syringing, and wiping out of mouth, the same as in measles, throughout the whole illness.

The same rules as to boiling of linen, disinfecting, as in measles and scarlet fever, etc., must be observed.

TYPHOID FEVER.

This is one of the most violent and dangerous of illnesses.

The symptoms appear in so many forms and ways, and so often special organs are attacked, that typhoid is often taken for something else, such as inflammation of the lungs, brain, kidneys, etc.

For days, even weeks beforehand, there are premonitory symptoms, such as lassitude, heaviness in the limbs, headache, irritability, sickness, nose-bleeding, and sleeplessness, then shiverings, and lastly fever.

From the time the patient takes to his bed, the illness lasts from three to four weeks. Typhoid differs from other fever illnesses, in that the fever increases slowly, and as slowly decreases.

Prescription I.—Cool washings (65 to 70 deg.) every half or whole hour. If the temperature rises to 100 deg., daily, two to three whole packs (for children three-quarter packs) from half to one hour, or until they are hot. Tepid washing after, or half bath (83 to 90 deg.) from one to five minutes. If the temperature rises above 100 deg., two to four half baths daily, with or without previous packing. If, after the bath, the thermometer shows that the fever is not properly lessened, cold water should be added, down to 74 deg. It is not desirable to employ too cool water in typhoid, as the blood is driven too quickly to the brain, and upon the inner organs.

Derivative treatment is also very important. Cold compresses to the head, tepid waist packs and leg or foot packs for one to three hours, and small cool enemas. Cool gargles every one to two hours.

Prescription II.—According to the height of the fever and patient's constitution, daily, four to six half baths (85 to 88 deg.) for five to ten minutes, in conjunction with overpourings of water (77 to 83 deg.), or the same number of hip baths (83 to 86 deg.) for fifteen to twenty minutes. Between times, stimulating abdominal compresses (74 to 82 deg.), and ditto leg packs (77 to 83 deg.). Two to four times in the day enemas (77 to 83 deg.), with following cold small ones from 68 deg. It does not matter for these, whether diarrhœa or constipation is present, as they act on the affected mucous membrane of the bowels, and thin the typhoid poison in those parts.

Fever diet, especially mucilaginous soups, milk, and thin cereal stews; also stewed fruit (puréed) with very little sugar. Typhoid needs particular care with diet during the whole time of the illness, in order that the abscesses in the bowels may not increase or break out again. Quantities must be limited. Abundant fresh air, even draught in the room. All motions to be disinfected with boiling water and buried. Careful cleanliness, and immediate boiling of bed, body, and pack linen.

DIPHTHERIA.

The patient must be isolated, nose and throat mucous disinfected with boiling water, and motions buried. All linen in use to be well boiled. The treatment of diphtheria consists in reducing the fever and removing the pressure of blood to the throat and inflammation of same.

Before the throat is affected, a bed steam bath, or cool whole or three-quarter packs may be given, with following tepid washings, and daily several cool enemas (quarter to half a pint) with following cool small ones (half a wine-glass.) By these latter a quantity of diphtheric matter will be removed from the bowels.

As soon as there is fever, cool washings (65 to 74 deg.). If the fever still rises, three-quarter packs (83 to 88 deg.) two to three times daily with following washings (104 deg.); or half baths (83 to 88 deg.) for five minutes, two to three times daily with or without following cool washings.

In the beginning, to draw the blood from the neck, cool throat packs and forehead compresses (65 to 74 deg.) every three to five minutes; later, neck packs (74 to 83 deg.) for three hours. As the best derivative remedy, waist packs from 83 deg., and feet or leg packs for three hours, and sometimes warm hand and foot baths, or warm compresses on the stomach, arms, and legs.

For the mouth, gargles; for the nose, nose baths, with or without lemon juice every hour, and with little children syringing of the throat and nose, by means of a ball syringe, with cold water. Also frequent drinking of cold water, one to two dessert-spoonsful. To loosen the white covering in the throat, inhalations of steam every one to two hours, dabbing the throat with pure lemon juice, light throat massage, and bathing the throat with water.

For the bowels, small cool enemas.

As diet, cool sweet or sour milk in teaspoonfuls, mucilaginous soups and cooked fruit. Cool water and cool lemonades.

MALARIAL OR INTERMITTENT FEVER (AGUE).

The treatment must vary according to the different stages.

Prescription I.—In the ague stage, friction the patient with hot towels, put him into a bath (77 to 100 deg.), and friction also in the bath. By these means, it is sought to draw the blood from the internal organs to the skin. If the patient is warmed, a bed steam bath can then be given. Also, to relieve the internal heat, cool enemas.

In the hot stage, a cool washing (74 deg.) and then a whole or half bath from 95 deg., and repeat the procedure till the attack is ended.

Prescription II.—In the cold stage, a vapour bath to excite the activity of the skin, an after warm rubbing from 100 deg. As soon as the heat begins, a half bath (83 to 88 deg.) for ten

minutes, cooled gradually down to 74 deg. After the bath, a whole pack for two to three hours.

Prescription III.—Bed or other steam bath in cold stage with previous friction of the body with hot, dry towels, or a warm whole bath (100 deg.) Afterwards a hip bath (83 to 86 deg.) for ten to fifteen minutes, or half bath (82 to 90 deg.), five to ten minutes.

In the hot stage, whole washing (77 to 83 deg.), with following whole bath (90 to 92 deg.) fifteen to twenty minutes. or half bath (83 to 90 deg.) for ten minutes. Afterwards a soothing body or waist pack (74 to 77 deg.), and stimulating arm, hand and leg packs (68 to 74 deg.), renewed every one to two hours.

In both cold and hot stages, frequent enemas (77 to 83 deg.) with following cold ones (68 to 74 deg.)

In the sweating stage, if there is inclination, mild steam applications.

For diet, hot drinks or gruels in the cold stage, cool drinks in the hot stage, and afterwards mucilaginous soups and cooked fruit. To prevent a repetition of the attacks, avoid raw fruit, milk, and bad drinking water, and utilise the periods when free from fever, by taking bed steam baths with massage, or other vapour baths daily, with strengthening treatment, in order to dislodge and eliminate the poisonous matter contained in the blood, and so to remove the *cause* of the illness. The attacks will first come more seldom, and then quite disappear.

Remittent and all other malarial and tropical fevers can be treated on the foregoing lines, the treatment varying according to symptoms, etc.

CHOLERA.

In cholera and choleraic diarrhœa, etc., three important points have to be kept in view:—(1) To compensate for the loss of water occasioned by the motions and sickness; (2) to mitigate the pain; (3) to stimulate the action of the skin.

Prescription I.—For the first, every two minutes two to three spoonful of fresh or boiled water, mixed with lemon or

fruit juice, to drink, and tepid mucilaginous soups, if there is any desire for food. Small cool enemas after every motion. These lessen the inflammation in the bowels, cleanse them, decrease the motions, and make the mucous membrane again capable of absorption. For the pain, especially in legs and stomach, waist and leg packs, hot fomentations and bed steam baths.

To excite the skin to action, cold wet sheet rubbings for five to seven minutes, or rubbings only with warm hands, often dipped in cold water, then put the patient undried into a dry, warm blanket, and friction vigorously the arms, legs, and feet. These measures must be repeated till perspiration breaks out, when the patient is saved. Or hot compresses may be applied, or a steam bath, or bed steam bath, with vigorous friction afterwards for fifteen or thirty minutes, or a very hot bath with cold rubbings with a rough towel.

In the second stage of collapse, only quite cold applications are of use, douches with the coldest water during the cold rubbings, cold half baths, in which the patient is constantly rubbed, and cold overpourings of water till the skin reddens, ice-cold water to drink, etc. Then into dry packs, and treatment to be repeated.

Prescription II.—In the first stage, body packs with whole packs, and hot drinks, sugar water, and mucilaginous drinks, etc. In the second stage, body packs and hot drinks.

If hands and feet begin to get cold, hot vinegar packs, and then feet packs with hot bottles.

In the last stage, quickly change hot vinegar packs on abdomen, feet, and hands.

Rules for disinfection, etc., as before.

DYSENTERY.

For the pain, nightly stimulating waist packs (74 to 77 deg.) and leg packs (77 to 83 deg.), or every three hours in the day. If the pain is very bad, hot fomentations, renewed every eight to ten minutes. Warm sitz or half baths may also often be taken in the day. Also steam baths and bed steam baths when very little fever is present. When the feet are very

cold, vigorous friction with hands dipped in cold water. Enemas from 83 deg. (half a pint), and small cool enemas from 59 deg. (half a glass), after every motion.

For diet, especially mulicaginous gruels and soups, and milk if it agrees.

DIARRHŒA.

Steam baths, with following pack, to draw the blood from the bowels to the skin. In frequent stools, enemas of half a pint of boiled starch, twice daily, or stationary enemas of a wine-glass of water from 59 deg. In diarrhœa, arising from indigestible food, a large enema from 88 deg., and then plentiful fasting.

For diarrhœa arising from chill, warm clothing, warm cloths, hot salt, or bran on the abdomen, and also moist heat, such as hot fomentations, linseed meal compresses, and daily warm baths (95 to 102 deg.), for ten minutes.

As dry a diet as possible; mucilaginous soups, cereal stews, and rice or white of egg water or plain water for thirst.

RHEUMATIC FEVER.

To relieve the perspiration from pain and fever, whole washings every two hours, without drying. When the pain allows of it, one to three half baths daily, from 92 deg., for ten minutes, with overpourings of one can of water (86 deg.), or one to two whole packs (86 deg.) daily, with or without hot vapour bottles (hot water bottles wrapped in hot wet cloths, with woollen coverings), and following cool whole washings. The painful joints can be packed for one to two hours (83 deg.), and leg and arm steam baths also taken, with following cool washings.

If these procedures are impossible, on account of the great pain, compresses (83 deg.) with warm woollen coverings must be applied. Good motions must be obtained through enemas from 90 deg. (about one pint), or when, owing to pain, this is impossible, through prune and bran mash, castor, or Provence oil.

Fever diet, especially gruels and cooked fruit, and milk if it agrees.

CROUP.

Cool compresses every ten minutes on the throat, with a tepid body pack changed every two hours, and leg packs changed every three to four hours. Small stationary enemas from 74 deg. (half a wine-glass).

Gargles every half to one hour, or syringing of the throat with small ball syringe. Inhalation of steam every one to two hours.

If there is difficulty of breathing, a tepid three-quarter pack, renewed as soon as hot, every half to one hour, with or without warm bottles.

Hot fomentations on chest and stomach, and feet steam baths to act as derivatives.

In great difficulty of breathing, half baths from 95 deg. for ten minutes, with douching of hips and throat with cool water (74 deg.).

When improvement sets in, neck packs, renewed every two hours, from 74 deg., and leg packs, renewed every three to four hours from 77 deg.

Liquid nourishment.

All expectorations, etc., to be disinfected with boiling water, linen boiled, room well aired, and complete isolation.

BRONCHITIS.

A few vapour baths for half an hour, or bed steam baths for one hour and a half, with following cool washings (83 deg.), or half bath (84 to 88 deg.) with vigorous douching of chest, or tepid hip bath, or whole washings, will generally remove the chill in a few days; also derivative or chest or body packs from 83 deg., for two hours, combined with leg packs (77 deg.) for four hours, and small stationary enemas from 74 deg. (half a wine-glass) two to three times daily. The packs can remain at night, as long as they are comfortable.

Gargles every one to two hours. Chest compresses, well

covered with flannel (83 deg.), every two hours, or hot fomentations at 165 deg. every twenty minutes to loosen the phlegm, particularly with old people and little children.

The fever must be combated by tepid half baths, whole three-quarter or body packs, and repeated whole washings, and the danger of suffocation through half baths (90 deg.), with neck douches at 85 deg.

Fever diet.

Sleeping with open windows (this is unconditionally necessary), and afterwards a bracing cure to harden against chills.

PLEURISY.

Cool, soothing compresses, very little wrung out, and changed every half hour on the painful part, and waist packs from 83 deg., with leg packs from 77 deg.; later, soothing chest or body packs from 83 deg., with leg packs, to be changed when hot, or twice daily three-quarter packs from 83 deg. for one hour, with following cool washing. If fever is present two to three tepid half baths daily for ten minutes, or hourly rapid whole washings (65 to 74 deg.). When the fever has abated, hot fomentations on the painful part, or, in order to eliminate the disease matter, bed steam baths for one hour, or other steam baths for twenty minutes with following cool washings, or tepid half bath with cooler overpourings.

Bowels must be kept open with enemas, and every hour a spoonful of water (not hard).

Chest massage is also good.

Fever diet, such as gruels, puréed vegetables and fruit (pressed through a sieve); puréed prunes and wheat bran if there is constipation; and for the cough, sugar candy melted and mixed with white of egg. Window kept open.

INFLAMMATION OF THE LUNGS.

The two chief points to be guarded against in inflammation of the lungs, are weakness of the heart, caused by the fever, and the difficulty of breathing, caused by the pressure of blood to the lungs.

In combating the fever, the strength of the heart must be upheld by suitable nourishment; and through the removal of the pressure of blood by derivative treatment, the difficulty of breathing will be relieved.

For first treatment, see under "Premonitory Symptoms." If the temperature rises to 100 deg., half baths (77 to 88 deg.) for ten minutes, and if higher, three-quarter packs from 77 deg. for half an hour, with following cool washing, or half bath from 88 deg., with overpourings three degrees cooler.

As derivative treatment, cool compresses every ten minutes from 65 deg. on inflamed part of chest, waist packs from 85 deg. for one hour, leg or foot packs from 77 deg. for two hours, and occasionally a foot steam bath for half an hour, with following friction from 74 deg. The patient must sleep on a mattress, and lie high. The diet must consist of milk, cream, cereal stews cooked in milk, gruels, puréed apples, apple water, toast and water, etc.

For the cough, boiled malt with honey, and honey water. Egg beaten up in water with sugar, sugar candy melted and beaten up with yolk of egg.

SORE THROAT.

At first cool neck packs (65 deg.), changed every ten minutes; later the same from 74 deg., changed every two hours. To loosen the phlegm, cool gargles every one to two hours, and inhalations of steam three to six times daily. As derivative treatment, cool leg or foot packs, with waist packs at night, and chest packs or compresses, and stationary enemas from 74 deg. (half a wine-glass) two to three times daily.

Also mild steam baths or bed steam baths, whole packs, with cool neck packs, and following tepid bath, or whole washings or overpourings (77 to 88 deg.).

Fever diet, with hot milk, and hot boiled malt and honey.

COUGHS.

In coughs, the system seeks to remove disease matters through mucus, phlegm, and pus. Shoulder packs and other treatment same as for sore throat, influenza, bronchitis, etc.

To quiet the cough, boiled or fried onions, malt and honey, sugar candy and egg, etc.

COLDS.

Colds are a vigorous effort of nature to rid the system of disease matter. Often, if directly the first symptoms appear, the treatment under "Premonitory Symptoms" is applied, the cold will disappear, or be prevented rising to an unpleasant height. If otherwise—

Prescription I.—In the morning a head steam bath, and later a foot steam bath, with following whole or partial washings, or a mild whole steam bath, to draw the disease matter from the nose to the skin. At night a body pack, with or without hot bottles. Warm milk or lemonade to drink.

Prescription II.—Tepid washings every hour, with after wrapping up in woollen blankets, a tepid half bath, with similar wrappings. Also, it is a good thing as a derivative before going to bed, to rub the feet with a rough wet towel, (cold), but only if the feet are warm.

INFLUENZA (LA GRIPPE).

Prescription I.—To reduce the fever, half baths (83 to 88 deg.) for ten minutes, whole packs (65 to 83 deg.) for half an hour, or whole washings from 65 deg. Also derivative treatment, body pack (85 deg.) for two hours, leg packs (77 deg.) for four hours, and feet steam baths.

For the headache, cool compresses on head and neck, changed every ten minutes.

To loosen the phlegm, inhalation of steam and cool gargles after every one to two hours.

Three times in the week a steam or bed steam bath.

Patient to sleep with open window, and to be out in the open air as much as possible, well wrapped up. If the fever is only slight, a vapour bath of any kind, followed by a cool washing, a tepid half bath, or hip bath once or twice in the day, and between times, stimulating waist and leg packs.

Gargles, and frequent sips of water with lemon juice.
Fever diet.

WHOOPING-COUGH.

Rules as before for isolation, disinfection, etc. The principal thing is to keep up the strength of the patient and energetically to combat the fever.

Milk, both sweet and sour, or butter-milk, onion stews, cereal stews, puréed fruit, and mucilaginous drinks, but no meat. The drier the diet is, the more will the sickness be relieved.

Tepid baths up to 90 deg. for ten minutes, or cool washings two or three times a day, and packs from a half to one hour.

Also vapour baths two or three times a week, and nightly stimulating shoulder or body packs with leg packs and warm bottles to feet. Stationary enemas (74 deg., half a wine-glass) after motions. Cool gargles, a sip of cool water every half hour. The patient should be out in the fresh air as much as possible in the day, suitably wrapped up, and sleep with open window at night.

MUMPS.

Prescription I.—Hot fomentations on the swollen and painful glands. Cool whole washings, tepid half baths, three-quarter, half, or body pack, combined with derivative leg or foot packs, feet and arm steam baths, with following cool washings.

Prescription II.—Daily a bed steam bath, with soothing neck pack, and following vigorous tepid whole rubbing.

Daily an enema, if necessary.

Prescription III.—Stimulating neck, feet, and leg packs for two or three hours, followed by whole rubbings. This repeated once or twice in the day. Should strong fever occur, a soothing, three-quarter pack for one to two hours, with following whole rubbing.

Massage. Soft stroking of the swollen glands, then of throat, neck, and back, always downwards.

For diet, mucilaginous soups and gruels, lemonade, fruit juice, etc., and milk when well borne. Plenty of fresh air.

ERYSIPELAS.

Erysipelas is an inflammation, swelling and reddening of the skin, whereby disease matter is excreted. It often accompanies wounds when not kept quite clean.

Soothing compresses must be applied to the affected parts, and, when in the face, much bathing besides with tepid water.

Derivative and local packs. Bed steam baths, with extra compresses on the affected parts (when not in face).

For the fever, whole washings, and tepid half baths. The bowels kept open by enemata.

For diet, mucilaginous soups and gruels, etc., and cooling drinks. Plenty of fresh air, but chills must be carefully avoided. In chronic erysipelas, a diet cure is necessary.

INFLAMMATION OF THE EYES.

In all cases of inflammation of the eyes from whatever cause, derivative and stimulating treatment should be combined. Daily a tepid bath for ten minutes, with cool foot bath for five minutes; every evening before going to bed a foot steam bath, with following cool leg rubbings; then in bed a waist pack and leg packs (cool); mornings a whole washing, before noon a whole douche, or every day alternate partial douches, such as thigh or back douche (two cans of tepid water), also leg bath, and particularly barefoot-walking.

After the motions daily, cool stationary enemata are very useful. The local treatment consists in tepid eye baths, three to six to twelve times daily, tepid washings of the eyes with pure water every two hours, and eye massage once or twice daily. Between times many folded linen compresses (74 to 88 deg.) laid on the eyes, and renewed when hot. The matter to be removed with soft damp pieces of rag or damp camel's hair brush.

Paralysis of the muscles of the eye, seeing double, and cataract, are to be treated in the same way. If not successful with the latter, an operation will be necessary.

The diet in all cases should be unstimulating, plenty of milk (sweet and sour), fruit, etc. Abundant fresh, pure air.

SUNSTROKE.

A half bath (77 to 85 deg.) with constant overpourings of water (68 deg.) for five to seven minutes, and at the same time moderately wrung-out head and forehead compresses (62 to 68 deg.) without flannel coverings. The patient must then be rubbed dry and put to bed. The feet should then be well rubbed and one or more vapour bottles applied. Afterwards an enema (74 to 77 deg.), with a following small cold one from 62 deg.

After a pause of half to one hour this treatment should be repeated, till improvement takes place.

Instead of the half bath, a hip or sitz bath (74 to 77 deg.), or wet rubbings (68 to 74 deg.), may be employed. With, or immediately after the water application, there must be always vigorous treatment of the legs through wet and dry rubbings, and continual enemas, hot bottles to the feet, and head compresses.

In the intervals, stimulating waist packs (77 to 83 deg.) and leg packs (62 to 68 deg.). Also later cold friction baths (Kuhne's), and tepid body, or three-quarter packs, as there is opportunity. Also neck massage.

Fever diet.

NOSE-BLEEDING.

Violent nose-bleeding may be a health-striving of nature in headache, clogging of the blood, piles, suppressed menstruation, etc., and if it is not too violent, or lasts too long, will be a great means of relief. Or it may be an accompaniment of heart or liver disease, or the beginning of consumption, scarlet fever, measles, or typhoid.

Prescription I.—Very cold wet compresses, changed every two to three minutes, applied to the back of the neck, will stop nose-bleeding in most cases, or the same laid on the abdomen. If these do not help, the compresses should be laid on the generative parts. Also, a very cold sitz bath should be given, and at the same time cool neck and forehead compresses.

Prescription II.—Perfect rest and lying rather high, neither moving, speaking, whispering, nor coughing.

Cold compresses, constantly changed on forehead, neck, or between the shoulder blades, and also on the generative parts. Derivative waist packs, with leg packs, remaining for several hours till quite hot; when possible, alternate foot baths (two minutes in hot and one minute in cold, often repeated), or cool feet and arm baths, from 65 deg., for five to ten minutes, to draw the blood to the arms. Cold water slowly drawn up the nose, and small bits of wadding tied with thread pushed up the nose till it is quite full.

JAUNDICE.

This arises when the bile, so necessary for the digestion of fat, goes into the blood, instead of flowing into the intestines.

The chief point in the treatment is the regulation of diet. All fatty things must be avoided, also milk, etc. Cooked fruit and green vegetables and carrots may be eaten, also sweet-breads, calf's feet, lamb, and oatmeal gruel.

For the constipation, every hour a spoonful of fresh water, also enemas.

Daily, a whole pack; at night, a waist pack. Mornings, a whole washing, or tepid half bath with overpourings. Also massage of the liver (strokings). From time to time a bed steam bath, with following washing.

INFLAMMATION OF THE LIVER.

This chiefly occurs in the tropics, where the liver works more than the lungs, and products of inflammation are easily deposited in the former, and cause abscesses.

Stimulating packs to excite sweating. Cool compresses on the affected part every fifteen minutes, tepid baths, and nightly waist packs, etc.

Fever diet, especially oatmeal gruel, and lemon juice. In some cases hot fomentations, or warm packs, may be applied.

INFLAMMATION OF THE KIDNEYS.

The principal thing is to increase the excretion through skin, lungs, and bowels, so as to relieve the kidneys.

Body packs, with extra compresses on the affected parts from 86 deg. for two hours, with often-changed leg packs. A daily bed or other steam bath, with following cool application. Body packs from 86 deg., with extra compresses on inflamed parts, and between times compresses changed every fifteen minutes. Warm baths for half an hour may also be taken; and massage is useful.

The diet must be quite vegetarian—plenty of fruit and green vegetables, sweet and sour milk, orange and lemon drinks, etc. As little fluid as possible must, however, be taken.

Rest, breathing exercises, fresh air by day and night, and open bowels are all important adjuncts of the treatment.

INFLAMMATION OF THE BLADDER.

The chief point is to draw the excretions to the skin.

Half vapour baths, warm baths from 95 deg., with following packing in woollen blankets, and afterwards a tepid bath from 86 deg. At night, waist packs with cross packs and leg packs.

For the pain, hot fomentations, linseed or oatmeal poultices, massage (stroking and pressing). When the urine is detained, immediately a sitting vapour bath, or passing the catheter in a warm bath from 95 deg.

An absolutely unstimulating diet—gruels, cooked fruit, spoonfuls of apple water, milk and water, lemon and water, etc.

Care must be taken for good motions, with tepid enemas, half a pint, with addition of linseed oil and salt.

TREATMENT OF CHRONIC FORMS OF DISEASE.

“The most important difference between acute and chronic complaints is, that in the latter there is a diminution of natural healing power, a want of a vigorously-healing fever to loosen and eliminate the matters of disease.

“This is the reason why chronic complaints can hardly ever be cured without much assistance and support.” (*Liskow.*)

“In acute illnesses, the natural healing method of cure works quickly and surely. In chronic complaints, it seeks slowly to lead to recovery. Where, however, the vital strength has not sunk too low, and any important organ or organs are not wholly or partially destroyed (organic disease), courage must never be lost, hope never abandoned, let the complaint have what name it may. Just as it may be months or years before a tree deteriorated in its juices again bears fruit, so it must be also with a chronically sick system. Patience and perseverance will, however, invariably bring their reward.” (*Siegert.*)

Sometimes, during any course of treatment, it may seem that, instead of an improvement of the condition, everything rather goes wrong. Excitability of the nerves, sleeplessness, and other symptoms may occur; or even old complaints which were suffered from, perhaps years before, may appear in a lighter form. The first are the natural consequences of a general upheaval going on in the system, and are to be hailed as signs of the dislodging and movement of the disease matter in the body. As this is gradually eliminated, and the system becomes purer and healthier, all such disagreeable symptoms will by degrees disappear, and an even balance be restored.

The latter are signs that the complaints in question were never really cured, but merely suppressed. Their appearance, therefore, is to be greeted with joy; for to be brought out of the latent stage into the acute, is the only means to ensure their radical removal from the system.

The chief point to be kept in view in the treatment of all chronic complaints is the strengthening of the natural healing

power or vital force, through which alone the abnormal change of matter products, or morbid matters, are eradicated.

“This is to be accomplished only through the general invigoration of the whole system, by means of what is called, in Nature-Cure parlance, the ‘strengthening cure,’ and is the principal necessity; the local after help, the secondary consideration.” (*Bilz.*) “If the nervous system is first recovered, Mother Nature understands well enough herself to find the fault, which we shortsighted people frequently cannot; she will remove the same in a longer or shorter time, if cure is possible, *i.e.*, if there is no organic degeneration.

“The practice of the natural healing method is not confined to any time of the year, and the summer has only the advantage over the winter, in that re-warming takes place sooner; but, on the contrary, in the winter the first contact with cold water or cold air causes less shivering, because through the continuous cold of the winter the skin is more or less prepared for it.” (*Rikli.*)

In all treatment, too much stress cannot be laid upon the point that excess in any form, instead of hastening the desired cure, will only retard and delay it. Nature works ever slowly and gradually. The mildest measures spread over the longest time will always be found to act the best in restoring health and strength to the sick organism.

THE “STRENGTHENING CURE.”

“By this alone many deeply-rooted, deeply-seated chronic complaints can be cured. It acts always healingly and beneficially, let the complaint be what it may, whether its nature is known or not.” (*Bilz.*)

1. Natural, non-heating, non-stimulating nourishment, combined with strict moderation both in eating and drinking. Self-control and common sense are needful requisites here. A dry diet frequently does good service.

2. Perpetual enjoyment of fresh, pure air, both in dwelling and sleeping rooms by night and by day, and frequent and long sojourns in the open air, only without overfatigue. When this latter is impossible, owing to severe cold, or weakness,

etc., remaining in a well-aired room at a temperature of 65 to 68 deg. Plentiful breathing exercises out of doors.

3. Light, especially direct sunlight, as much as possible, and for as long as it can be comfortably borne. Light-air baths and sun baths, both whole and partial.

4. Care of the skin. Daily one to two whole tepid washings or baths, with after re-warming, the temperature being gradually lowered as the body gets more braced. Two to three bed steam baths in the week for one and a half hour, with following tepid or cool application, or other whole or partial vapour baths, very mild, with occasional sweatings as recovery proceeds. Hand and feet steam baths every day, or alternate days, are most useful in many chronic states; also whole, three-quarter and body packs after or without a vapour bath.

To gently stimulate the digestive organs, cool, thin, well wrung-out waist packs at night, several times in the week.

In the course of the "cure," also mild sitz or hip baths to strengthen the abdomen, etc., and gradually, as recovery proceeds, the patient can go on to other applications, such as douches and so forth, as they suit his state and individuality.

5. Work or exercise out of doors, barefoot-walking, and health calisthenics according to strength. Self and other massage, and health gymnastics.

6. Mental work, recreation and amusement without overstrain, plentiful rest, and freedom as far as possible from care and worry.

7. Porous clothing and bedding, etc., often changed.

8. Constipation to be avoided through enemas or following method:—Half a cupful of stewed prunes, puréed (pressed through a sieve) and mixed with two spoonsful of wheat bran or meal, and taken early, fasting. If necessary, also, two or more times in the day half an hour before meals. There should be a daily motion.

9. Strict regularity as to meals and retiring to rest. Avoid eating (as a rule) and all excitement some time before the latter.

It is the careful regulation of the whole manner of life

which will alone gradually improve the powers and cure the complaint. Should the patient feel worse instead of better during the treatment, the latter must still be perseveringly carried on, for, as before said, the whole system is often disturbed and upset in its endeavours to dislodge and excrete disease matters, and every healing crisis is only a distinct step towards recovery.

ABSCESSSES, BOILS, AND CARBUNCLES.

Abscesses and boils are merely symptoms of other complaints, or an unhealthy state of the body. The general treatment of the whole system must therefore always be kept in view, while the local treatment is as follows:—

Prescription I.—Thick, cool, moderately wrung-out compresses on the inflamed parts, with a double fold of soft, fine linen beneath, the former to be renewed when hot, but not the latter. Good flannel or cotton wool coverings. Colder compresses on the part through which the blood flows to the inflamed place, and also distant parts, to act as derivatives. Daily, one to two cool whole packs for two to three hours, or bed steam baths. Enemas with following cold small ones, can only act beneficially.

Prescription II.—Rest for the parts that are discharging, and keeping them thoroughly clean, are most important. Light tepid compresses must be laid on, not too much covered, and changed when there is the least feeling of dryness or discomfort. Abscesses which have been treated for years with ointments in vain, can be treated in this manner and often quickly cured. For the pain, hot fomentations and warm baths are useful. Also douches and packs often remove old abscesses in a very short time.

Weak people should follow the rules of the “strengthening cure” for some time. Strong people should do the “regeneration or dry diet cure.”

In all cases the diet should be simple, with strict avoidance of meat.

Carbuncles must be treated at first with cool, soothing compresses; later, hot fomentations, or steam douches, and

when broken kept open with cotton wool. Other treatment consists in washing the parts with cold water, by means of an irrigator, general care of the skin through tepid half baths, with overpourings, steam baths, etc. Also very warm hand and arm baths, hot foot baths from 100 deg., with alternate dipping in cold water (alternate foot baths), and a cloth wrung out of hot water and vinegar, and laid on the chest and abdomen, is of great service.

Diet as above.

ASTHMA.

Plenty of fresh air by night and day. Short light-air and sun baths, with following tepid hip baths, are very useful. Also bed steam baths for twenty-four to twenty-five minutes every alternate day, with following tepid half or hip bath. Cool washings of the chest, cold half baths for four to five seconds, cold sitz baths, cold foot baths, upper douches, water-treading, barefoot-walking—all these, suitably and judiciously carried out, act very favourably as derivative and bracing remedies. Also mild back and chest massage, whole massage, and abdominal massage.

The great thing is to restore the digestion. Constipation must be avoided by enemas or figs at night and early in the morning, or prune soup, and gruel, etc., and by hip baths and stimulating abdominal packs.

Light and digestible food, plenty of fruit, vegetables, and milk (if it agrees), a little meat, etc. The evening meal should be light and early. Loose clothing must be worn.

In a sharp attack, foot steam baths for half an hour, and after cool leg rubbings, a foot bath (65 deg.) for five minutes, then cool leg and abdominal packs for two to three hours. Hot fomentations on stomach and legs are useful, as well as wet rubbings of the whole body, and small cool stationary enemas. Between attacks, strengthening treatment as above.

BRONCHITIS (CHRONIC).

The treatment in general must be the same as for acute bronchitis, but much more energetically carried out.

Cold feet must be warmed by foot steam baths, with following cold rubbings, or foot baths, for five minutes. Bed and other steam baths, the former for one and a half hour three times in the week, with following cool applications. Cool washings in the mornings in bed, beginning at the feet, and no drying. Also massage of chest, sleeping in air huts, or with open window. Breathing exercises, arm and chest calisthenics, gargles, and at night, chest and leg packs. A non-stimulating diet.

COLDS (CHRONIC).

These are chiefly combined with scrofula and poverty of the blood.

All the bracing remedies of the "strengthening cure" are the chief thing, besides nose baths and other suitable water treatment.

Chronic coughs must also be treated on the same lines.

COLD FEET AND HANDS (CHRONIC).

For the removal of cold feet and hands, alternate foot baths, hand and foot vapour baths, and hot hand and foot baths, with following cold overpourings, vigorous bodily exercise, hand and feet gymnastics, water-treading, knee and under douches, are particularly employed.

CONSUMPTION (TUBERCULOSIS).

The treatment must follow the lines of the general "strengthening cure."

The chief healing factor is the air, pure air, free from dust and smoke, and rich in oxygen, and also breathing exercises. For the consumptive, methodic deep breathing is the best medicine. Also light-air and sun baths taken carefully, and according to strength, and for strong patients, barefoot-walking. Also sleeping in air huts, and with open window (in winter the room must be warmed). Draughts must be

avoided, and sudden changes of temperature. The clothing must be loose and porous.

The care of the skin is also very important, for when the lungs do not act properly, the skin has to undertake their work; hence the violent night sweats. Weak people can take daily a cool whole washing (77 to 85 deg.), with soft drying; stronger people a rubbing (74 to 77 deg.). Washing and rubbing should always be from the extremities, hands and feet, towards the heart. Weekly, two to three half baths (85 to 88 deg.), for five to ten minutes. Stronger people can take three times weekly a three-quarter pack (83 deg.), for one hour, with warm bottles when necessary; a half bath at 90 deg. for ten minutes following, and whole massage. At night, to reduce the fever, stimulating shoulder and leg packs. Strong people should apply these nightly, weaker ones two to three times a week. Cold feet must be warmed by hot vapour bottles, and in the day with feet vapour baths, alternate foot baths, etc. Also arm and leg douches.

The diet is best quite vegetarian, or a little white meat may be taken. Milk, pulses, cereal foods in every form, and abundant fruit and vegetables, etc.

CONSTIPATION.

Constipation is only a symptom of disease, not a form of it. The fundamental cause must be removed.

For the constipation itself, a judicious diet is of the greatest importance. It should be fairly fluid, no meat, plenty of green vegetables and cooked and raw fruit, whole-meal bread, honey, etc. Mornings, fasting, a glass of cold water, or prune mush (stewed prunes stirred through a sieve and mixed with two spoonsful of rye or wheat bran). These may also be taken in the day every half hour before meals; or figs may be eaten early and at night. Sour milk or butter-milk is also good to drink before sleeping. Purgatives, which only weaken the bowels, must be strictly avoided.

For the water treatment, two to three hip baths in the day (83 to 86 deg.), for ten to fifteen minutes, always with abdominal friction, or sitz bath (86 to 90 deg.). Upper douches,

thigh, knee, and back douches, and cold abdominal douches, or hip baths for half an hour, combined with massage. Very moist waist packs.

Enemas may be taken daily if necessary (83 to 86 deg.), about half a pint. Also, stationary enemas from 59 deg., a wine-glassful after every motion, or after other enemas, or before going to bed. These are very strengthening to the bowels. Sometimes a spoonful of salad oil is necessary.

Massage of the abdomen, hip calisthenics and breathing exercises, active work and exercise in the open air.

DIARRHŒA AND CATARRH OF THE BOWELS (CHRONIC).

The treatment must also here greatly depend on the cause. A dry diet, consisting principally of cereal stews and white bread, is very useful. All acid, fat, strongly-spiced and sugared foods must be avoided. Chicken, pigeon, game, etc., may be taken. Rice or white of egg water for drink. Chills of the abdomen must be avoided, and also wetting of feet. The former must be hardened by judicious cold water applications, barefoot-walking, light-air and sun baths, etc. A waist pack, changed every two hours and worn day and night, and daily one whole pack, with following cool washing, are very beneficial.

Enemas are also of great use. First a large one, one pint, from 88 deg., to empty the bowels; then daily one to two small stationary enemas (74 to 77 deg.) after every motion.

Chronic Dysentery may be treated in the same way.

DYSPEPSIA.

Dyspepsia or indigestion consists in a deficient or faulty secretion of the gastric juice, or incomplete movement of the stomach during the digestive acts. It is more or less the accompaniment of all other forms of disease, and frequently arises from the continued partaking of unsuitable, indigestible, or too much food.

The removal of the fundamental cause must be the chief aim. There must, however, invariably be general treatment of the whole body, as well as local treatment of the stomach and abdomen, such as massage of the abdominal regions, galvanic baths, three-quarter and abdominal packs, hot fomentations, stomach douches, etc. In doubtful cases the rules of the general "strengthening cure" can be safely followed.

The diet in dyspepsia is extremely important. Food must be taken in strict moderation, and it must be light and easy of digestion. Rich, fat things must be avoided, as well as stimulating drinks. Meat is better left off for a time, and then only such taken as is rich in lime—lamb, chicken, pigeons, sweetbreads, etc. Leeks, onions, parsley, and all kinds of herbs and spices must be avoided.

A dry diet is always useful.

DIABETES.

In this, the "general strengthening cure" is indicated, especially frequent light-air and sun baths.

Prescription.—Every morning a whole washing from 74 deg. with soft friction, to excite the activity of the skin. Every day, a half bath from 88 deg. for ten minutes, with whole massage. Three times a week a steam bath for ten minutes (or sun bath), or for people who are not very strong, a bed steam bath for one and a half hour; also whole packs from 83 deg. for one hour. After all these applications, whole washings or overpourings with one can of water at 83 deg.

Daily, an enema (74 to 77 deg.), with following small, cool, stationary one (62 to 68 deg.).

General massage, abdominal massage, health calisthenics, and hip baths for the obstinate constipation.

The diet should be quite vegetarian, or only white meats and young fish, two or three times a week. Egg foods, sour milk, butter, cheese, and cream may be taken, as well as green vegetables, salads, and cooked fruits. All sugar-forming foods to be avoided, as well as sugar, lentils, peas, and carrots.

Soups of game, oysters, lobsters, sweet bread, and eggs twice weekly are also admissible. The food taken must excite as little thirst as possible, as drinking augments the sugar in the urine. The eating must be moderate.

DROPSY.

Dropsy is not a complaint of itself, but is always the consequence of diseases which hinder the circulation of the blood, and alter its nature, such as heart, lung, liver, kidney, and spleen complaints, gout, scorbutus, etc.

A radical cure can, therefore, only be effected by removing the fundamental cause. Until this is done, although the fluids may be lessened, they will always again and again accumulate.

The treatment must be principally of a sweating nature. Bed steam baths, or packs with hot vapour bottles, or half or three-quarter packs, with following cool whole rubbing or tepid bath. One to two such packs can be given in the day, the patient to perspire in them as long as possible. Also daily, one to two sitz baths (tepid), fifteen to twenty minutes, and often repeated waist packs, with extra compresses on the region of the kidneys; also enemas. Sun baths are also excellent.

The diet must be simple and unstimulating, and there must be plenty of fresh air.

Sometimes a long-continued "strengthening cure" is of great service, or the "regeneration cure."

EPILEPSY.

Galvanic baths are useful in this complaint; also whole washings from 83 deg., sitz and half baths (77 to 88 deg.), for five or ten minutes, douches, whole or partial, whole packs from 83 deg., with following whole washings, overpourings, or half baths, three-quarter or hip packs, with following half baths, overpourings, and massage.

Vegetarian diet, barefoot-walking, and water-treading.

FEMALE COMPLAINTS.

The majority of female complaints are connected with disturbances of the circulation, from inherited causes, or a wrong manner of life, clothing, etc. The great aim of all treatment must therefore be to restore the disturbed circulation to its normal and regular condition. Hence, before all things, the rules of the "strengthening cure" must be observed, in order that all the natural influences may work together to produce the desired effect.

As local treatment, sitting steam baths, feet steam baths, tepid sitz baths, tepid hip baths, cool cross packs, tepid vaginal injections, and cool enemas, with following stationary cooler ones, judiciously employed and in right alternation, and with regard to the necessary pauses, will, in most cases, effect the most splendid results.

In Inflammation of the Womb and Ovaries, Abdominal Pains and Disturbances of the Period, particularly packs (70 to 83 deg.), cross packs and leg packs, sitting steam baths, feet steam baths, and hot fomentations; also sitz baths, half baths (77 to 92 deg.), for ten minutes, and foot baths from 65 deg., for five minutes. The diet should be vegetarian, plenty of milk, both sweet and sour, farinaceous puddings, fruit and vegetables, etc., and the avoidance of all stimulants, such as tea, coffee, beer, and wine.

In Chronic Catarrh and Abscess of the Womb, which arise from too frequent coition, impure habits, infection, etc., and also is the accompaniment of certain complaints, such as poverty of blood and chlorosis, weakness of the nerves, scrofula, etc., a white flow generally takes place from the womb (whites), and a high degree of nervousness and also hysteria are frequent symptoms. The remedy consists—first, in avoiding the cause, and treatment of existing complaints; secondly, in complete rest during the period, and the careful avoidance of chills, and of all irritation and stimulation of the womb. (A flannel bandage should be worn.) For the whites, two to three vaginal injections daily, at 88 deg., of oak bark decoction. (A handful of oak bark, which can be bought of a chemist, to one quart of water.) For abscesses of the womb,

local injections with one pint of water and lemon juice at 88 deg., or five dessert-spoonsful of vinegar; afterwards a sitz bath or tepid hip bath from 86 deg., for ten minutes; at night a cross pack from 83 deg., and leg packs from 77 deg.; mornings a whole washing from 83 deg., before noon a three-quarter pack for one hour, with hot vapour bottles at the feet, or a sun bath, or two to three vapour baths weekly, with following half bath from 88 deg., for ten minutes, and whole massage for twenty minutes. Sometimes Kuhne's friction bath is of great service, combined with a strict vegetarian diet. The bowels must be kept open by enemas.

Profuse, Frequent, or Long-lasting Period comes from many causes—poverty of blood and anæmia, tuberculosis, scrofula, obesity, and sedentary life; immoderate excitement through novel-reading, ball and theatre-going; too warm baths, too warm clothes, too stimulating drinks, too luxurious a life, etc.—all, or any of which cause pressure of blood to the generative parts.

The cause must first be ascertained, and the treatment be in accordance. Excitement must be avoided, and plenty of fresh air be enjoyed. Cool compresses should be laid on the abdomen at night; also leg and foot packs should be employed, half baths and sitz baths (65 to 77 deg.), for five minutes. Stimulating arm and hand baths, in alternation with feet and hand vapour baths, and knee douches. Diet, quite vegetarian. General treatment with air, light, water, calisthenics, etc., must also be attended to.

Too Scanty or Failing Period.—The former arises from insufficiently developed womb or ovaries, or inflammation of the same, from chlorosis, scrofula, obesity, etc.; the latter often from a sudden chill, emotional excitement, overstrain, or digestive disturbances. The cause must be ascertained, and such general complaints as chlorosis, obesity, tuberculosis, and scrofula be improved by treatment which shall stimulate the vital processes, such as calisthenics, general massage, light-air and sun baths, and a strengthening, unstimulating diet. To excite the period, warm baths, steam baths, warm abdominal compresses, warm womb injections, cool overpourings of the back, foot baths, knee douches, and electric baths.

For Irregularity of the Period, much exercise in the open air, gymnastics and calisthenics, swimming, light massage, douches, whole washings, both kinds of enemas, excitement and bad habits to be avoided, and a nourishing but unstimulating diet.

In all cases the clothing must be loose and porous, and as light as is compatible with warmth. The same rules as to bedding.

GOUT.

Gout is an inflammation of different joints, occasioned by accumulations of uric acid salts.

The first thing is to avoid the cause, which often consists in the use of too much meat and alcoholic drinks. The diet must be thoroughly unstimulating and moderate. The "regeneration cure" is often advisable. There must be plenty of fresh air and exercise, and a daily stool.

During a severe attack, by which Nature strives to rid the system of the hurtful poisons, very moist compresses must be laid on the painful parts. Each time they are removed, light washings with only the hands must follow, and then massage, at first soft, but gradually more penetrating. In the pauses between the attacks, daily, or three times weekly, a sweating bath of any kind, with following tepid bath or cool whole rubbing; the painful parts to be again massaged during and after the bath. Hot fomentations, nightly feet or leg packs, and warm baths for ten minutes, with after cooler washing, may also be employed for the pain.

HÆMORRHOIDS (PILES).

These consist of a swelling of the veins of the lower bowel and anus, caused by stagnation of the blood. Generally, catarrh of the bowels is present, bleeding and constipation.

To excite light bleeding, back douches and the cold sitz or half bath. To arrest bleeding and reduce pain, hot sitz baths (118 deg.) for ten minutes, also abdominal vapour baths and hot fomentations on the anus. Two to three daily hip baths

(83 to 86 deg.), nightly waist and leg packs and enemas, are besides the principal points in the treatment. Also general massage, passive gymnastics, light-air and sun baths, and all the general rules of the "strengthening cure."

For diet, young, tender sorts of meat, light egg foods, oysters, young green vegetables (except cabbages), herb soups, salads with lemon juice, acid fruits, fruit purées, and whole-meal bread, very few potatoes or farinaceous foods.

KIDNEY AND BLADDER COMPLAINTS.

In Chronic Inflammation of the Kidneys, there is no fever, little pain in the back, but much albumen in the urine, want of appetite, and digestive difficulties. The chief thing is to stimulate all the other organs of excretion, and so relieve the kidneys. The skin must be excited to active evaporation, by means of baths, packs, bed and other steam baths, but no *cold* water procedures; the lungs to active work, by means of breathing exercises and fresh air by day and night, and the bowels must be kept regularly open. An absolutely unstimulating diet, consisting of whole-meal bread, oatmeal gruel, milk and milk foods, much raw and cooked fruit, green vegetables, turnips and carrots, but the avoidance of other roots, such as asparagus, celery, parsnips, etc., and all spices and salt. Plenty of rest and massage.

For Stone in the Kidneys, Sand and Gravel, the principal thing is to avoid the painful complaint by eating only such things as will cause no acids in the blood. An exclusively vegetarian diet, but little bread; much fruit and vegetables (except peas), and salads with lemon juice, which will render the blood alkaline, and so arrest the formation of stone.

For the pain, nightly body packs; mornings, whole washings; daily, three-quarter packs for one hour, with extra compresses on the region of the kidneys, hot vapour bottles at the feet, and after whole washings, or tepid half bath with cooler overpourings of the kidney region. Also a daily, tepid sitz bath for ten minutes, with same overpourings, is useful; and between attacks, calisthenic exercises, especially of the hips and back. During very painful attacks, massage of the

kidneys outward in warm sitz baths, or hot fomentations, and light massage on painful parts.

Stone in the Bladder must be treated like inflammation of the bladder, with kneading of the parts in sitz baths. Sometimes an operation will be necessary.

In 'Chronic Catarrh of the Bladder a dry diet cure is the best thing, and Swedish health gymnastics and calisthenics, such as—(1) Upper arm-stretching. (2) Arm and leg-rolling. (3) Back-raising. (4) Back-slapping. (5) Hip-turning and rolling. (6) Bladder - pressing. (7) Bladder - shaking and puncturing, etc.

In Weakness of the Bladder (bed-wetting), no fluid foods must be taken at night, but bread and butter and thick cereal stews. In the day, a light digestible diet without meat. The child to sleep on a mattress, and to be awake every two or three hours. Mornings, a whole washing; evenings, a sitz bath from 88 deg. for ten minutes, or daily one cold sitz bath, eight to six seconds long, or twice weekly two cold half baths eight to six seconds. Frequent cold water-treading.

LIVER AND SPLEEN COMPLAINTS.

Inflammation of the Liver may be chronic as well as acute. The whites of the eyes become yellow, and catarrh of stomach and bowels is present. The circulation of the blood must be stimulated through upper, back, knee, and thigh douches. Also by leg steam baths, whole packs, whole and half baths, calisthenics, and abdominal massage; every month a vapour bath. Or the treatment may be the same as for enlargement of the liver. Diet, quite vegetarian, no spices, and fruits containing much water, such as melons, peaches, apples, plums, cherries, etc., and in spring a herb cure.

Enlargement of the Liver is the overfilling of the liver with blood through clogging of the blood in heart or lung complaints, through alcoholic beverages, immoderate meat eating, insufficient exercise, piles, irregular menstruation, and through a weakened circulation owing to malarial poison.

The treatment must be directed to removing the primary cause. Further, derivative treatment is best, such as nightly

leg or foot packs; mornings, cool whole washings; three times weekly a whole pack, and as often a leg steam bath for twenty minutes, with following cool application and douching the liver with one can of cool water. Or instead of these procedures, daily a hip steam bath, with following half bath and nightly waist and leg packs. Also sitz baths at 86 deg. for ten minutes, with kneading of the abdomen, may be taken daily, and foot baths (65 deg.) for five minutes.

Daily barefoot-walking and calisthenic exercises, especially all the hip movements. Whole and liver massage, and small cool enema, half a glass twice daily. At least twice in the day the bowels must be moved; for this, enemas must be employed if necessary.

A light vegetarian diet, avoiding foods with fat. If, however, there is heart complaint, lean meat may also be taken. Parsley, celery, parsnips, and asparagus should especially be eaten to excite excretion through the kidneys, and in spring a herb cure.

For Enlargement of the Spleen (ague cake), bed steam baths, with extra compresses on the region of the spleen; tepid sitz baths, with massage and cold douches on the spleen. Feet steam baths, with waist and leg packs. Upper and knee douches, enemas, calisthenics, and abdominal massage.

A dry diet.

NERVE COMPLAINTS.

“These are the most frequently occurring and constantly increasing complaints of our times, the product of hyper-civilisation. Many suffer from them who are considered to be, both by themselves and others, ‘perfectly well.’ These are the imaginary healthy people, a very large contingent. Others suffer from them, and they know themselves to be ill and miserable, but their illness is regarded by other people as fanciful and imaginary.” (*Platen.*)

The symptoms of *Neurasthenia*, *Weakness of Nerves*, *Nervousness*, for instance, can imitate every possible sickly sensation in the body, as well as functional disturbance of different organs, and pain can everywhere occur.

The disposition frequently changes—high and low spirits, excitability and depression, rapidly succeeding each other. It

can be inherited or produced by a wrong manner of life from early childhood, and is an accompaniment of many chronic complaints, especially long-lasting ones.

For treatment, the change of matter must be stimulated by increasing the action of the skin through baths, packs, general massage, and moderate steam applications. Too cool procedures must be avoided, also sea-bathing. Half baths and sitz baths from 90 deg. for ten minutes, and following washing or overpouring of water down to 77 deg. The temperature of these baths can be gradually lowered to 77 deg., for five minutes, as they are borne. Cool whole washings mornings in bed half an hour before rising without drying.

Daily, two to four cans of water (88 to 77 deg.) poured over the whole body. Whole packs three times in the week, with or without warm bottles. One, two, to three steam baths weekly, mild and short.

Bowels kept open. Barefoot-walking, water-treading, work, exercise, and calisthenics out of doors, breathing exercises twice daily, fresh air by night and day, light-air and sun baths, and the avoidance of all enervating clothing and bedding. General massage twenty to thirty minutes. Faradaic massage and baths. More rest than movement.

The diet should be nourishing and digestible, but thoroughly unstimulating. Meat only once a day, and those who suffer from pressure of blood to the head should avoid the latter entirely. No tea, coffee, or spices.

For *Neuralgia*, galvanic baths, electric douches, galvanic massage, steam baths, bed steam baths, hot fomentations, vapour douches, whole and partial packs from 83 deg. for one or two hours, with following tepid half bath from 88 deg., overpourings from 83 deg. (two to four cans), spray douches from 77 deg. one to one and a half minute, are all of beneficial action; also massage, Swedish health gymnastics and health calisthenics. For the one-sided pain of head and face (megrin), massage of the face, back of head and neck, etc.

General rules of the "strengthening cure."

Hysteria can be inherited, or is caused by other complaints, as female, stomach, and bowel complaints. The whole

nervous system must be treated as under "Neurasthenia." When the generative organs are in fault, there must be derivative treatment, such as sitz and half baths, cross packs, leg steam baths, barefoot-walking, water-treading, etc.

The diet must be easy of digestion, strengthening and stimulating, very little meat, at most once a day.

OBESITY.

There are normal conditions of fat and leanness differing according to constitution, temperament, age, sex, and manner of living.

Abnormal *embonpoint* is occasioned by accumulations of foreign matter in the body, the products of imperfect formation of blood and slow change of matter. Poverty of blood is always present, often shortness of breath, head congestions, palpitation and weakness of the heart, etc.

In some cases the regeneration cure is indicated, or the modified dry diet cure. In all cases the diet should be as dry as possible, only such foods taken as will excite no thirst. As a rule, meat should be avoided; also sugar, fat and starchy foods, except in great moderation.

Massage, calisthenics, light-air and sun baths, whole washings and rubbings, whole packs, or tepid half baths (two to three weekly); or daily, two to three tepid hip baths for five or ten minutes; weekly one or two bed or other steam baths, with following tepid half or hip baths; nightly, cool waist packs, and if constipated, enemas, with following cool stationary ones. Douches as they can be borne.

Plenty of exercise in the open air, mountain-climbing, etc.

PARALYSIS.

In severe cases, the chief thing is the "strengthening cure." Beyond that, about three daily cold rubbings of the affected part for fifteen or twenty minutes. Daily cool whole rubbings or tepid baths, with cooler overpourings and rubbings, especially of the spine. Also bed steam baths for one hour, with extra compresses on the heart, and following cool whole

rubbings or tepid bath; in fresh cases daily, in chronic cases three times a week.

Also electricity (galvanic) and careful Swedish gymnastics of paralysed part, massage, and local stimulating compresses and derivative treatment.

POVERTY OF BLOOD AND CHLOROSIS.

These both arise from the slow working of the vital processes. The former consists in a decrease of the firm albuminoid elements of the blood, and the latter, which is only a female complaint, in a lessening of the red corpuscles.

The treatment for both is similar. The first thing is to remove the cause, whether wrong nourishment, wrong conditions of life, bad habits, improper clothing, etc. For the rest the general rules of the "strengthening cure" may safely be followed, especially light-air and sun baths, and if possible sleeping in air huts, or at any rate with open window. Weak people must take more rest than exercise out of doors. Bare-foot-walking, water-treading, and douches must only be gradually undertaken as they are borne. Breathing exercises three times daily, and light calisthenic exercises. Clothing and bedding must be warm, light, and porous; absolutely no wearing of corsets. A vegetarian diet is best, simple and easy of digestion.

As water treatment, a daily sitz bath from 90 deg. for ten minutes, with outpourings of one to two cans of water (88 deg.), or once or twice daily a whole washing from 86 deg., or a nightly waist pack, a vapour bath three times a week for ten minutes (or sun bath), or a whole pack (tepid) for one hour.

RICKETS.

In the treatment of rickets, preventive measures play a great part. Before weaning, mother's or ass's milk. After weaning, fresh sweet milk, milk and egg foods, young juicy vegetables, whole-meal bread, and plenty of fruit. The child must not be encouraged to walk early, must sleep cool, be

constantly in sun and air, and the skin carefully attended to. The general rules of the "strengthening cure" are in place here.

RHEUMATISM.

As Rheumatism of the Muscles is a disturbance of the circulation, the treatment consists in removing that disturbance by so stimulating the circulation that the blood shall carry away the disease matters.

Prescription I.—Steam baths for thirty minutes, bed steam baths for one and a half hour, whole packs from 83 deg. for one hour, with following half bath from 88 deg. for ten minutes, and overpourings of one to two cans of water at 83 deg. and whole massage, and massage of the painful parts for ten to thirty minutes. Also hot fomentations every fifteen minutes, partial packs for two hours, such as of arms, legs, and chest, and likewise local steam applications.

Prescription II.—Local treatment, consisting first of soothing, later of stimulating compresses, according to the degree of inflammation, bed or other steam baths, massage, or other health calisthenics, moderate exercise, an unstimulating diet, fresh air, enemas, etc.

Chronic Rheumatism of the Joints.—This frequently follows an acute attack of the same.

As treatment, three times weekly steam baths twenty to thirty minutes, or sun baths or bed steam baths for one and a half hour, or whole packs from 83 deg. with hot vapour bottles, a half bath from 88 deg. to follow—either for ten minutes, with following overpourings of the whole body and the joints (83 deg.), or spray douche for one minute (cool). Partial overpourings (65 to 88 deg.), two to four cans; leg, thigh, and arm douches, alternately employed from day to day.

Massage, with following Swedish gymnastics, is very important, and also calisthenics, etc. Nightly packing of the affected joints (77 deg.), and daily partial baths (arm and leg), from 88 deg. for ten minutes; also arm and leg steam baths, with following cool washings or overpourings,

and mornings whole rubbing in bed, may all be employed with good success. Exercise to be taken as much as possible, and the painful joints vigorously stroked and kneaded every morning in bed.

An absolutely mild, vegetarian, non-stimulating diet.

SCROFULA.

Scrofula can either be inherited from scrofulous parents, or developed through the wrong nourishment of children and other faulty conditions of life; through vaccination, or suppressed acute illnesses. It is a sickly condition of the blood, which produces inflammation and swelling of joints, bones, and lymph glands, wearisome skin eruptions and catarrhs, especially of the eyes and air passages.

The first condition of treatment is a simple unstimulating diet—plenty of milk, fruit, and vegetables (older children, also eggs and white meat, peas, beans, and lentils, but without sauces or spices). Potatoes and other starch-containing foods only to be taken sparingly. Stale whole-meal bread or other bread, and fruit lemonades.

The next is sleeping with open window or in air huts, no feather beds, and in the day time the enjoyment of as much fresh air and sunshine as possible. Children suffering from eyes with scrofulous inflammation should always be sent into the sun.

Daily whole packs from 86 deg., with hot vapour bottles for one and a half hour, or sun baths, steam baths, or bed steam baths, with following half bath from 90 deg. for ten minutes, a whole washing or overpouring from 88 to 83 deg. and whole massage, particularly of the affected glands. Every evening a waist pack from 83 deg., and in the morning a warm whole washing in bed without drying.

For scrofulous eyes and ears, besides the general treatment, derivative leg packs, leg steam baths, cool foot and thigh baths for five minutes, sitz baths from 88 deg. for ten minutes, and daily barefoot-walking from ten to thirty minutes. Partial overpourings and calisthenics.

SYPHILIS.

Syphilis is a poisoning of the blood, which causes breakings out on different parts of the body. The great thing in the treatment of syphilis is to promote as much excretion as possible from the body, so that through a quickened change of matter, the organism may be completely renewed.

For this, the Schroth regeneration cure takes the first place, or a very strict dry diet. The excretions can be encouraged through daily vapour baths for twenty minutes, with following whole pack for one hour, and following half bath, or by sun baths, bed steam baths, sitz baths from 88 deg. for ten minutes, nightly hip and leg packs, and whole washings in the morning.

SKIN DISEASES.

Chronic skin diseases are milder, less stormy endeavours of Nature to eliminate poisonous disease matter, or change of matter products through the skin. By whatever name they are called, eczema, nettle rash, or anything else, the treatment must be the same for all. The entire vital processes must be so strengthened that the excretion of morbid matters can take place properly through skin, lungs, kidneys, and bowels.

The kind of underclothing worn next the skin is very important. It must be porous, and either of cotton or linen. For a very inactive skin, coarse linen is the best, as it stimulates the blood and lymph vessels, which take up the poisonous matters from the tissues, and draw the blood to the surface. Great care of the skin, and keeping all the other outlets open, is the surest means of protection from all skin diseases. Washings, baths, packs, bed, and other vapour baths, massage, light-air baths, sun baths, and enemas are the principal curative factors in skin diseases. The diet should be vegetarian: meat, salt, vinegar, spices, sugar and fat to be avoided. Plenty of exercise and calisthenics to excite the general activity of the muscles.

When there is much skin irritation, cool applications must be employed.

For the itch, the best remedy is a vapour bath, with vigorous rubbing with soft soap, and following soap bath.

SCIATICA.

When sciatica arises from rheumatic causes, daily bed or other steam baths should be taken, particularly of the legs. Also hip baths from 95 deg., every half hour, are very good, as well as vigorous massage of the nerves of the hips. In very severe pain the legs should be packed in hot steam compresses. If there is any icy feeling of chill in the seat of the abdomen, steam baths are the best remedy. Warm applications are the principal thing in this complaint.

SLEEPLESSNESS.

Everything which occasions pressure of blood to the head, such as alcoholic drinks, tea, coffee, and strong cigars, must be avoided; also, reading and mental work in the evening, and late suppers. The evening meal should, as a rule, be light, as well as early; and early and regular hours be kept. If there is pressure of blood to the brain, the head should lie high. A warm bath from 92 deg., for ten minutes before retiring to rest, is often of great use; also cool washings (65 to 77 deg.), or cool overpourings (74 to 77 deg.), or a sitz bath from 83 deg. for one to three minutes. Also waist packs at night, small cool enemas, feet and leg packs, cool foot baths from 65 deg. for five minutes, and cool compresses on head and neck; sleeping on a mattress, and window open.

Also general massage, air baths, barefoot-walking, and to be much in the open air without fatigue. For chronic sleeplessness, nothing is better than to follow the general rules of the "strengthening cure."

TUMOURS.

Tumours are the concentration of the impure juices of the body. The general treatment must therefore be directed

towards removing the causes of their impure condition. In doubtful cases the "strengthening cure" should be followed, or a modified "regeneration cure." Tumours can often be dispersed or their progress stopped by derivative treatment, such as half baths, sitz baths, leg and abdominal packs. As local treatment, stimulating compresses, in alternation with hot fomentations, or local partial vapour baths. Kneipp says, "If the tumour is hard, warm compresses must be applied to dissolve it, and cause it to discharge. Two whole washings of the body and one short pack daily, to distribute the disease matter and remove the tumour. Violet leaves crushed and bound on the parts, cool and dissolve heated tumours. In hard tumours without inflammation, sitz baths with decoctions of young oak bark. Tumours without inflammation should be softly rubbed with almond oil, and then bound with the violet leaves."

For internal tumours and cancer of the womb and ovaries, all pressure of blood to the generative parts must be avoided. The diet chiefly vegetarian, clothing and bedding as light as possible, and fresh air both by night and day. Cool abdominal packs, or compresses, half and sitz baths (65 to 77 deg.) for five minutes. Hot vaginal injections (110 to 122 deg.). In chronic states, cool cross packs, and if the period occurs too frequently, general treatment with air, light, water, diet, and calisthenics (see "Strengthening Cure").

For ovarian tumours, cool compresses every fifteen minutes in pain and inflammation: then cool abdominal packs (83 deg.) for two hours, leg packs (77 deg.) for three or four hours; once or twice daily a sitz bath (from 88 deg.) for ten minutes. Stationary enemas (from 77 deg.) after every motion. Bowels kept open. Operations will be sometimes necessary.

WORMS.

Tape-worm.—To remove tape-worm, pounded pumpkin or cucumber pips mixed with cranberries, followed in the course of an hour by a dessert-spoonful of castor oil; nothing must be eaten the evening before but a little soup, or a fresh cocoa nut very quickly eaten, the milk being first drunk up. Or

a decoction of pomegranate bark, or extract of male fern with castor oil. Before taking any of these remedies, a dry diet should be followed for some time previously, principally of whole-meal bread and fruit; and vapour baths should be taken, and sitz baths (from 86 deg.) for a quarter of an hour.

Round Worms.—Plenty of carrots must be eaten, and carrot juice; also, cranberries with crushed pumpkin, and vegetable marrow seeds. A dry diet for some time, principally of whole-meal bread and acid fruits. Worm seed, worm chocolates, or worm sugar tablets.

Thread Worms.—Enemas of boiled garlic in which a few drops of vinegar are mixed.

WARTS.

The broad bean, must be picked when it is ripe, and the white fur lining of the shell rubbed on the wart. Or the milky juice of the *Euphorbia cyparissia* (wolf's milk, a common garden weed) must be rubbed twice daily on the place for three or four weeks, after which the wart can be picked out. All nostrums should be avoided.

CHAPTER IX.

TREATMENT OF INJURIES AND WOUNDS.—TREATMENT OF HAIR AND TEETH.—HERBAL REMEDIES.
—SCIENCE OF FACIAL EXPRESSION.

INJURIES AND WOUNDS.

BURNS.

WHEN the burns are in the hands, arms, or legs, the part affected should be held first in tepid, and then in cold water, till the pain has abated, cool or cold water being constantly added. Afterwards, compresses can be employed. Tepid water (74 deg.) should always be used first with burns, if the skin is not broken, and water at 88 deg. if it is, or the reaction will be too great. Gradually, as the pain lessens, the temperature must be lowered. If the burns are in the face, or in parts which cannot be kept in water, compresses alone must be applied. For burns, the compresses must be cooling ones, as thick, wet, and cold as possible, and only lightly covered. For this purpose old linen, folded eight to twelve times, wrung lightly out of cold water (55 to 65 deg.) must be laid on the burnt part, and renewed every three to five minutes till the pain is subdued. After that, the compresses must only be renewed when they become hot, and pain is again felt. Gradually they must be more wrung out, and more covering used. If one third of the body is burnt, life is in danger, because the blood accumulates internally, being unable to flow to the skin. The continuous tepid water bath is the best application in such a case, and in all severe kinds of burns. If this is impossible, compresses must be employed. Dressings for burn blisters are made first with tepid water from 86 deg., later from 68 deg. If the skin is broken, a thin

piece of linen dipped in salad oil, or tepid water, must be laid on the part, and not changed. This must be covered by a very wet tepid compress, which must be changed when needful. These compresses must be continued till matter forms, which will always occur when not only the upper skin (epidermis) is burnt, but also the part below. As soon as pus appears, cool compresses must be laid on, the under piece of linen remaining, but not further dipped in oil. When the granulation or new formation begins, the latter must be damped and carefully removed, and the part covered with a fine twice-folded piece of soft old linen, which must be changed every time the upper compress is removed, both being dipped in tepid water (74 deg.). When but little matter remains, the compresses must be cooler and more wrung out, and better covered. As soon as the wounds begin to close, they must be often washed carefully with cool water, and covered with dry linen. Light burns can be covered at once with linseed oil or the white of an egg. Raw, grated potato or fresh curds, laid on linen, and covering the place, are also very cooling. If the blisters are not broken, these exclude the air, and prevent inflammation.

Scaldings may be treated in the same way as burns. With severe scalds, as with severe burns, derivative treatment, as well as local (leg, feet, arm, and waist packs, sitz, half, foot baths, etc.), as it can be borne, must never be neglected, for, by such applications, the heat is drawn from the wound, and the healing hastened. The diet in all burns and scalds should be very simple and unstimulating (fever diet is the best), and very moderate, in order to give the system little else to do but its healing work. Complete rest of the whole body or injured parts is absolutely necessary.

BRUISES AND CONTUSIONS.

These must be treated much in the same way as burns and scalds. The best plan is to lay a piece of soft, fine old linen, folded double, and moderately wrung out of tepid water, on the injured part, and upon this to lay the thick, wet cool compress, which must be renewed as often as it becomes hot

and uncomfortable. The whole must be covered with flannel or wadding, and this again secured with a flannel binding. Massage is also useful, and complete rest of the injured parts.

In severe cases, diet and derivative treatment as above.

WOUNDS.

Two things are absolutely necessary in the treatment of wounds.

(1) The greatest outer cleanliness. The wounds must be constantly washed with tepid water that has been boiled, and bound with dressing material, prepared with hot steam (no lanoline, glycerine, sublimate carbolic, or any such thing). At first, the temperature of the wet dressing must be tepid (83 to 86 deg.), in order not to irritate the wounds; later, when the little flesh warts multiply, as low as 68 deg.

(2) The greatest internal cleanliness. A simple unstimulating diet, such as white sorts of meat, gruels, fruit, vegetables, milk, baked potatoes, etc., but no salted or acid foods, no wine, or other alcoholic drinks. With luxurious living, wounds fester badly.

With wounds on the feet, joints, etc., bandages that can be rolled round the part are the best form of compress to be employed.

Wounds and abscesses can, without any danger, be treated solely with pure water, only the greatest cleanliness being observed.

After the wound, by means of a small syringe, has been carefully cleansed with water (52 to 59 deg.), the injured member should be bathed for one to two minutes in water from 58 to 74 deg. In cases when, on account of inflammation, a soothing of the pain is necessary, derivative baths should be employed. With wounds in the head, for instance, knee packs, foot baths (one to three minutes), back douches or back compresses, and back washings.

If the wounds are accompanied with fever, there must be whole washings, and washings of the lower part of the body, repeated several times in the day. If the wounds are already old, and matter formed, they must be cleansed with syringing

or overpourings of water, from 83 to 90 deg., and a thick, wet tepid compress laid on, secured by a light dry towel. This should lie for one hour and a half, or, if the pain is violent, be constantly changed. If, however, the sensitiveness is so great as not to allow of frequent change, steam compresses (hot fomentations) can be applied as local packs. If these do not suffice to still the pain, grated potato should be laid thickly on the wound.

Wounds can be of a very different character, such as cuts, blows, stings, stabs, gunshot wounds, etc. In light cases, it is often enough to protect the wound from dirt and pressure; in other cases, as soon as the bleeding has stopped, and the place has been thoroughly cleansed, to bind it with something that will keep out the air, such as sticking-plaster, animal gut, etc. If this feels uncomfortable from the dryness, the whole can be wetted, or little compresses applied. The great thing is to keep out the air.

In bad cases, compresses (as above) must be laid on, and sometimes the edges of the wound must be sewn together.

It is good in all cases to instantly lay on wet lint, to be changed when dry.

Bleeding wounds must be treated with very cold, thick compresses, laid on and renewed by the sprinkling of cold water. Bleeding wounds must be held in very cold water, even for several hours, till bleeding and pain are alleviated. Sometimes the bleeding can only be stopped by the finger or hand being held over the place, it may be for days together. Inflamed wounds must be treated with cool whole washings, tepid baths, soothing packs, and local compresses.

Gathered wounds must be cleansed with tepid water, and stimulating compresses laid on as for abscesses. The old skin must not be removed, as it serves for protection for the newly-forming skin.

General derivative treatment (as under "Burns") must always be well kept in view in the treatment of wounds.

In the case of gunshot wounds, the object should be, not to remove the shot or ball, but to allay the heat, and cool the wound. Treatment as above.

FRACTURES.

Cooling treatment must first be employed till all pain and swelling are subdued (bathings, compresses, etc.); then, if the limb cannot be kept in position by means of water compresses, a firm bandage of splints of paste-board, covered with wire netting, wood bark, or the like, must be used, but never plaster, because the latter does not permit of treatment with cold water compresses. The fracture should be kept constantly cooled with compresses. A simple, non-irritating diet, with great moderation, and general soothing and derivative treatment.

TREATMENT OF HAIR.

The growth of the hair is dependent on inherited and constitutional peculiarities, the means taken to preserve it, and the general state of the health. "As a rule, when the hair falls out much, it betokens a constitutional weakness, and the first thing necessary in such cases is to remove the primary evil by a strengthening cure."

"That care, grief, worry, overstrain, mental work, and sleeplessness also affect and hinder the growth of the hair, is certain; they do not do so, however, as much as the ordinary means taken to remove sleeplessness, or to prevent the hair falling out, or turning grey.

"Nothing is more fatal to the growth of the hair than the favourite curling-irons, and hair dyes are always injurious.

"Also, the softer the hair is, the more carefully must it be handled. Particularly should mothers understand that if children have soft hair, they will also have a finer and more sensitive scalp, and that if both are not treated judiciously from the beginning, they will suffer in the future from weak hair and early baldness." (*Natur Arzt.*)

"Hard brushes by their use exhaust the skin of the head too much, and close-toothed combs tear out even healthy hair.

“The hair should not be too frequently greased, and only after a previous head washing. Lanoline pomade serves the best for the purpose, as it is a wool fat, which possesses peculiarly the capability of penetrating the substance of the hair, and rendering it soft and pliant.” (*Platen.*)

“The surest way of removing the hair altogether, and promoting tedious head complaints, is to smear the head with oil and fatty compounds, because, through them, the otherwise active perspiration of this most important part of the body is suppressed. Happy are those who are speedily warned, by the breaking out of eruptions, to apply instead only mild washings.

“If children suffer from scurf, etc.—which is always an indication of a critical state, and often of the excretion of scrofulous morbid matter—instead of their heads being washed with warm soap and water, and tepid oil applied, which often induce chronic head and brain complaints, only mild washings should be given, without soap, from 74 to 77 deg. These will often dissolve and expel all bad matters.

“The application of glycerine is very dangerous; it may cause imbecility or weakening of the brain. Glycerine penetrates the tissues, gradually saturates them, and then, in the form of spots and eruptions, is again expelled. Its very property, when thinned with water, to penetrate every tissue, is dangerous; skin, kidneys, and even lungs can be affected thereby.

“Any applications, or so-called hair washes with spirit, should be as much avoided as oil and grease, as they cause contraction of the skin, and exhaustion of the roots of the hair.

“The washing of the head with soap is quite unnecessary; but if more of an application than tepid water is desired, wheat bran or almond milk can be used, employed once in four to six weeks. These are, at least, harmless, and cleanse the head as thoroughly as soap.” (*Natur Arzt.*)

An excellent mild head wash is the following:—

A dessert-spoonful of wheat bran must be put into boiling water, and boiled for about five minutes. It must then be strained, and used tepid or cold.

To remove scurf on children's heads, the latter should be often washed with tepid water in which malt (roasted barley) has been boiled.

A decoction of lady fern is a popular remedy for promoting the growth of the hair.

All secret and supposed wonder-working remedies must be carefully eschewed. The best thing is to go bareheaded in the sun and air as much as possible. The hair, to remain healthy, needs as much the action of the sun and light as everything else that grows on the earth.

TREATMENT OF TEETH.

“After every meal the mouth should be washed out. Hot and cold food should not be taken one upon another, as this injures the enamel of the teeth. Meat should be avoided as much as possible, for the fibres of the meat putrify between the teeth, and thus a breeding-ground is formed for the fungi, which irritate the teeth, and occasion so-called caries of the teeth.

“Teeth can be cleaned by dipping the wet finger in whole meal, and moving it backwards and forwards over the teeth.

“In toothache, the *cause* of the pain must be first discovered, and the tooth should not be extracted too hastily.

“If the teeth are hollow, they must be stopped. If there is pressure of blood to the head, toothache is often an accompaniment. In this case, cool compresses, hot foot baths, and leg and feet steam baths are of great service; also washing the mouth out with cool water.

“When it is a result of gout or rheumatism, gargles with tepid water are in place, and head steam baths, alternated with feet steam baths; also whole packs, and a dry diet.

“The same with toothache from syphilis.” (*Dr. Walser.*)

HERBAL REMEDIES.

(*Extracts from Dr. Walsler's "Kräuter Apotheke."*)

"The nourishing salts of plants form an important element of the bodily tissues; they are necessary for the change of matter, and together with other natural curative factors, such as light, air, water, etc., can be used in a judicious manner to assist the natural healing power. Mineral salts, on the contrary, being of no use for the vital processes, are expelled by the reactionary power of the organs."

"Plants which grow wild have a stronger healing power than those grown in gardens. All leaves and flowers should be dried in the shade, best on paper, or on the bare ground. They should not be gathered either mornings or evenings, but in the middle of the day. Many plants can be tied in bundles, and hung up to dry in any airy place. Those that are fresh gathered may be pounded in a mortar or wooden press, and the juice extracted."

"Plants are distinguished by their root, stems, leaves, flowers, and fruit, and are employed in different forms, as decoctions, infusions, powders, extracts, tinctures, etc."

ACORNS AND OAK BARK.

Acorns can be roasted and made into coffee. Mixed with malt coffee, they form a good, astringent, strengthening remedy in children's diarrhœa. Pounded, and taken with white of egg, they are useful also in the diarrhœa of adults.

Oak bark is astringent, and is therefore used as an injection in whites.

ALMONDS.

The oil pressed out of the nut is used to drop into the ear in ear complaints. Almond milk is good for diarrhœa and urinary troubles. (The almonds are pounded, mixed with sugar, and water poured on.) It is also useful in coughs and cough spasms.

ALOES.

Two parts of aloe powder to one of myrrh powder, strewed on wounds, is healing to the most malignant growths, fistulas, and bad-smelling hurts. In jaundice, as much aloe powder as will go on the point of a knife is mixed with elder flower tea. Double the quantity mixed with honey makes an excellent electuary for the cleansing of the bowels. Mixed with yarrow and currant herb tea, it acts well in cases of delayed menstruation.

ANGELICA.

The leaves, stems, and seeds are used as a tea for cleansing the blood. The pulverised roots act as a tonic to heart, liver, and stomach, and on account of its blood-cleansing, sweat-producing character, can assist in removing many sickly dispositions.

ANIS.

An infusion of aniseed (boiling water poured over, and left to draw), drunk warm, is a good remedy in asthma. In the flatulency of children, anis water is a household remedy. Powdered anis is a popular remedy for hiccough. Employed like fennel and caraway seeds, it is useful in constipation and weakness of the stomach.

APPLES.

Apple tea is a useful drink in fevers and inflammation. The apples are cut in slices (rennets are the best), boiling water poured over, and covered. Lemon juice and sugar afterwards added to taste.

ARNICA.

Arnica tincture has antiseptic qualities, and is useful in wounds without matter. One part of the tincture is mixed

with four parts of water, the wound well cleansed with it, and covered with gauze soaked in it ; the whole fastened with a flannel binding.

ARECA PALM.

From the fruit the extract of catechu is prepared, which natives of hot countries use in diarrhœa, dysentery, etc.

BARLEY.

Barley water is a good fever drink. Roasted barley is called malt. Ground malt, boiled with honey and strained, is a good loosening drink in chest complaints. In scrofulous skin diseases, malt baths are very useful. Two pounds of malt powder are boiled in water, and put into the bath, in which the patient must remain for half an hour.

BERBERIS.

The berries contain much acid and sugar ; they, therefore, make a cooling drink in fevers.

BEETROOT.

Cut small, put into a covered pot, and baked twelve hours in the oven, and the juice then mixed with sugar candy, a soothing drink for coughs is prepared. It must be taken in small quantities.

BLACKBERRIES.

When dried unripe, they are good in diarrhœa. Stalks, leaves, and flowers make a good astringent gargle. A small handful of young sprouts which have been dried in the shade, boiled, and left standing overnight, and drunk fasting in the morning, makes a good tea in spots and skin eruptions.

BRAN.

Bran is rich in gluten and albumen, therefore is whole-meal bread so much more nourishing than white.

Made into a mush with stewed prunes and taken at breakfast, and half an hour before dinner, it makes an excellent remedy for constipation.

CARRAWAY SEEDS.

These made into a tea are a good remedy in wind, colic, cramps of the womb, etc.

CARROTS.

If the juice is pressed out and boiled to a syrup with sugar candy, it makes a good loosening remedy in all catarrhs of the breathing organs, especially of children.

Compresses of grated carrots are a popular remedy in abscesses.

CHAMOMILLA.

Used as a tea, this herb is slightly stimulating to the nervous system; soothing in cramps and flatulency, and sweat-exciting. A chamomilla pillow is useful in rheumatic swellings. A good compress for abscesses can be made from linseed, oatmeal, and chamomilla. Chamomilla oil is useful in cramps of the stomach, painful menstruation, painful diarrhoea, etc. As local hand baths, in wounds and injuries of the hands, on account of its stimulating properties, chamomilla is frequently employed.

CHICORY, OR WILD ENDIVE.

The root has blood-cleansing qualities, and is also useful in clogging of the abdomen, piles, and jaundice. It is used as an infusion, or the juice is pressed out and mixed with other herb juices, or milk, as a spring cure.

Chicory coffee is also made from the root.

CORIANDER.

Coriander oil or powder promotes the activity of stomach and bowels, and is also a remedy against flatulency. Coriander seeds with anis and carraway seeds remove wind.

CUCUMBER.

The juice of the cucumber is a soothing remedy in consumption, and a healing, cooling one in skin eruptions.

DANDELION.

The powdered root, with burnt chicory root, is used as coffee. The bitter juice of stalks, leaves, and roots acts upon the mucous membrane of lungs, liver, and digestive organs. In spring, the young leaves make a blood-cleansing salad. The juice of the whole plant can be taken with fennel tea in dropsy and skin diseases.

ELDER.

Elder flower tea is useful to promote perspiration in coughs, colds, and feverishness. Mixed with stewed fruit, elder berry mush is blood-cleansing, soothing, and loosening in catarrhal affections.

EUPHRASIA.

The leaves of the flowers made into a decoction are employed in weakness of the eyelids, weakness of sight, and chronic inflammation of the eyes.

FENNEL.

A spoonful of the seeds to one cupful of boiling water, and drunk as tea, is useful in colic, flatulency, and weakness of the womb.

Fennel tea, with candy sugar, is a well-known remedy against the flatulency of children. Fennel powder, with hot milk, taken in spoonfuls, is a good remedy in colic.

FLAX (LINSEED).

Employed internally, linseed make a mild emulsion in chest catarrhs, inflammation of the bowels, urinary and generative organs.

Externally, the crushed linseed is employed as poultices, or used whole, it is boiled in milk, and bound on the part with gauze while quite hot.

In burns, a compress of two parts of linseed oil to one part of almond oil is very good. A good plaster for wounds is made of linseed oil and wax, melted over a slow fire. In catarrh of the bladder and gonorrhœa, linseed milk is useful. The linseed is pounded in water, boiled, and strained.

GARLIC.

The root contains the garlic oil, which acts stimulatingly on the mucous membranes, assists the digestion and worm-like movement of the bowels, and therefore evacuations of the latter. It also promotes urine, and is a remedy against worms. Against maw worms, garlic is used in enemas, and also boiled with milk and drunk. A well-known remedy for scall, nits, and louse is an ointment made of garlic, cut up, and mixed with butter.

In colic it should be cut up very small, mixed with fennel in boiled milk, and drunk warm.

GARDEN CRESS.

This with chervil makes a blood-cleansing salad. Cress water, made by pressing out the juice and mixing with water, acts on the urine and worms of the intestines. Mixed with parsley water, the effect is increased.

GINGER.

Ginger in small quantities is strengthening to the stomach. In stomach complaints it is useful to eat candied ginger half an hour before meals.

GRASS.

Dried grass is called hay. A decoction of hay flowers is supposed to heighten the effect of the water in which packs

and compresses are wrung out. In gout and nervous complaints, the hay flowers are put into a bag and well pressed in the water.

Hay flower foot baths are excellent in all injuries of the feet.

HAZEL WORT.

The dried root ground to powder, and a teaspoonful taken in milk, mornings fasting, is useful in delayed menses, jaundice, constipation, and piles.

HYSSOP.

Hyssop tea, mixed with a little tea, expels worms. It is also useful in the relaxation of the mucous membranes and organs of breathing and digestion.

HOPS.

The young hop sprouts and stalks are eaten in spring as salad. Hops, prepared as tea, are useful in digestive weakness, dropsy, and jaundice. A soft rubbing of the skin with hops is very strengthening to the nerves. A pillow filled with hops is sometimes useful in sleeplessness. Pounded hop flowers, mixed with fat, soothe pain in cancer.

HIP-HAWS.

An excellent aromatic tea is made from the dried seeds of the hip-haw. The dried fruit—boiled, strained, and thickened with a little corn flour—makes a good soup in urinal complaints, especially stone or gravel; or the fruit can be pounded in a mortar, and used as tea. For whooping-cough, one part of hip-haws to three parts of water, with candy sugar added, to be taken in spoonful. (One third part of a glass filled with mashed hip-haws to two thirds water.)

ICELAND MOSS.

A jelly made from this, and taken with milk, is used in consumptive illnesses, and also for strengthening the digestive organs.

MALE FERN.

The root is considered a specific in tape-worm. The extract is used.

MARJORAM.

Marjoram tea promotes urine in dropsy, gravel, stone, colic of the bowels, and cramps of the stomach. The herb can also be used in baths and pillows. The fresh leaves make a good disintegrating compress. Marjoram oil (three to four drops) is taken in cramps, flatulency, and swelling of glands. Outwardly, it is used for rubbing in paralysis.

Mixed with figs, balsam, and honey, and cleared with hazel nut shells, wild marjoram makes a useful tea in colds.

MELONS.

A good, strengthening fever drink is made from a melon cut up and boiled. As it is very cooling, too much must not be taken, or colic may ensue.

MILFOIL.

The whole plant is used as tea in bleeding piles, weakness of the bladder, and bed-wetting. The fresh, pressed-out juice is useful as a blood-cleansing remedy in spring, and the whole herb for herb baths in the nervous weakness of convalescents. The herbs must be put in a small bag and soaked in the water.

NETTLES.

The young sprouts and leaves make a blood-cleansing vegetable like spinach, and are also eaten as salad.

NUTMEGS.

Grated nutmeg has a mild action in digestive weakness and flatulency.

OATS.

Oatmeal gruel is the best nourishment in exhaustion, particularly in fever. In colic, roasted oats and salt should be put in a bag, heated, and laid on the abdomen. Oatmeal and chicory root, boiled with honey, strained, and drunk in small portions, is a good fever drink in chest complaints. Oat straw baths (finely cut straw boiled for half an hour and added to the bath), with the internal use of oat tea (ground oats, boiled and strained), act well in chronic gout and rheumatism. The patient should sit for half an hour in the bath, which, like all aromatic baths, should be well covered.

OLIVE OIL.

This is a soothing, softening, and pain-stilling remedy. In burns, a good ointment is made of olive oil and wax. It is also used successfully in tape-worm. For three days the patient must take nothing but thick soups of bread and oatmeal; the fourth day, four spoonful of olive oil, then an enema of milk, and lastly, to sit over a tub of hot water, dipping the abdomen in same. The probabilities are that the worm will slowly pass away into the water.

In dropsy, the whole body should be rubbed with warm olive oil.

ONIONS.

The juice squeezed out, and mixed with linseed, promotes discharge of tumours and abscesses. Onions, boiled with sugar candy or honey, form a popular remedy for coughs.

RAISINS.

A drink made from raisins, boiled and strained, is a loosening remedy in catarrhs of the chest. Raisins eaten morning and evening are good in constipation.

ROSEMARY.

Two to five drops of the oil, in sugar water, is useful in digestive weakness, flatulency, and colic; rubbed in outwardly, it is useful in paralysis and nervous exhaustion; so is the tea made of the leaves and drunk in small spoonfuls.

RYE.

The bran is used as disintegrating compresses, and also as stimulating compresses in abscesses of the legs. Toast and water made of rye bread crusts, with sugar and lemon added, is a strengthening fever drink.

STRAWBERRIES.

The dried leaves make an aromatic tea. Strawberries are a good remedy for worms, and on account of their blood-cleansing properties, when taken abundantly are useful in gout.

SALVIA.

The leaves made into a tea are a gentle astringent in the night sweats of consumption, and also in diarrhœa. Also as a gargle, mixed with a little honey, in inflammation of the throat and mouth.

SHAVE GRASS.

Shave grass tea is a well-known remedy for sand, stone and gravel.

SENNA.

Senna leaves, cut up, soaked in water overnight, strained, and mixed with stewed prunes or raisins, may be used in obstinate constipation.

SPINACH.

Spinach contains much iron, which is easily assimilated by the tissues, unlike the mineral iron, which is merely expelled through the bowels.

TAMARIND.

This can be used as a cooling remedy in feverish diarrhœa.

VALERIAN.

This is a powerfully-stimulating remedy in cramps of the nervous system, and is employed also in hysteria—taken towards evening, nothing being eaten after it. An infusion of valerian is useful in weakness of the heart following on fever illnesses. Valerian enemas are good against worms. In nervous headache, a cupful of valerian tea drunk morning and evening.

WATER CRESS.

The pressed-out juice, with that of other herbs, is good as a spring cure. In blood poisoning, scurvy, skin eruptions, etc., two spoonful daily (mornings), in warm water. In lung complaints, a handful of water cress should be taken without salt or vinegar (mornings, fasting), from February to May. In spring, it makes a blood-cleansing salad, with lemon juice.

WHITE AND RED BIRCH.

In rheumatism it is useful to drink a fresh infusion of birch leaves; also in gout and erysipelas. With gout in the foot, a bag should be filled with birch leaves, and the foot placed therein.

WALNUT.

Walnut leaf tea is good for scrofula, with swelling of the glands, and skin eruptions. The green shells of the nut are useful in weak digestion, and to expel maw worms.

WHEAT.

An excellent drink for convalescents, and also for ricketty children, is made of coarse wheatmeal stirred into cold water, and mixed with boiling water or milk.

Whole-meal bread, with fruit, is the true remedy for piles and obstinate constipation.

SCIENCE OF FACIAL EXPRESSION ; OR, L. KUHNE'S
SYSTEM OF DIAGNOSIS.

Herr Louis Kuhne bases his system of diagnosis through examination of the head and neck only, on the theory that the encumbrance of the body with foreign or disease matter is invariably indicated by the changes which occur in shape, colour, and form of those parts.

A person perfectly free from foreign matters will have a normally-shaped head and neck. The head will be small and well formed; the forehead smooth, with no wrinkles; the eyes open, clear, and quiet; the nose in the middle, straight, and not slanting; the mouth in the centre, and kept shut; the lips not hanging over; the face will be oval, with a defined boundary line from the tip of the ear to the neck; the chin neither too long nor too short; the neck well set, and also neither too long nor too short, and showing no tension in turning.

The head will not be bald, and from the back of the head to the neck there will also be a defined boundary line. The bearing will be straight and firm, however old a person may be.

The colour of the skin will neither be too red, yellow, brown, nor grey. As, however, even the slightest cold, pain, ache, or indisposition of any kind betokens the presence of foreign matter in the body, there are few people in the world who can claim the distinction of being "perfectly healthy"—*i.e.*, free from any encumbrance of disease matter. Such encumbrance can reveal itself as a front, side, or back encumbrance, or as a mixture of all.

FRONT ENCUMBRANCE.

A front encumbrance begins in the lower part of the abdomen, and spreads upward, gradually extending itself in head and neck. The neck becomes somewhat thickened, and face enlarged and fat; sometimes the mouth protrudes, foreign matter having settled itself there. The boundary line between ear and neck is extinguished, or else it lies quite behind the normal line. Wrinkles, or folds of fat, form themselves on the forehead; this shows the foreign matter has reached the brain. These folds, or wrinkles, also occur with a back encumbrance, so they are not an infallible sign of a front encumbrance.

Lumps in the neck show a very severe front encumbrance; also the unnatural colour of the face, white or red. Another special sign is the movement of the head. The head cannot freely stretch itself upwards, and there is visible tension in the neck when the head is thrown backwards. Small or large lumps are then visible, which are not seen otherwise. Deposits of foreign matters may occur in any part of the face. Sometimes the face is one-sided, or one side longer or shorter than the other.

As in a front encumbrance every part of the body is encumbered, every part can share in the efforts the system will make from time to time to rid itself of its enemy. Measles, scarlet fever, diphtheria, inflammation of the lungs, etc., can occur, or children's eruptive diseases; also, all kinds of chronic complaints, beginning with those of the face and neck. The teeth become bad, especially the under ones. Nerve and eye complaints also occur, nose-bleeding and nose complaints, and the hair falls out.

If the mouth is thick and the lips hang over, if the tongue is bluish and scaly, it shows that there is inflammation in the front of the abdomen.

The digestion is invariably affected.

A front encumbrance is not dangerous. Its treatment has very quick effects, so that it is possible to give patients hope of an easy cure, and to know what time it will take.

Mental disease is not possible with a front encumbrance.

SIDE ENCUMBRANCES.

With side encumbrances, there is tension in turning the neck, like strained muscles, on both or only on one side; sometimes the neck will only turn with great difficulty. There is a thickening of the neck on the side affected, and often also a widening of the whole side, and the neck is a bad colour. The head often gradually becomes one-sided, and lumps may form on the neck and face, or the neck may be swollen, and a spot in the middle of the eye on the affected side, or a wart may appear on the neck, which is really an air channel for the foreign matter. Toothache occurs with side encumbrances, and decay of teeth. Deafness often also, if there are front and side encumbrances at the same time.

Eye complaints and cataract are likely on the side affected. A left side encumbrance indicates more or less affections of the stomach, heart, and lungs. The skin is inactive, and rheumatism is liable to occur.

A right side encumbrance is not so severe, as perspiration occurs easily. Liver and lung complaints are common with a right side encumbrance, and sweaty feet, which are really a great benefit, being an outlet for the foreign matter.

The latter can easily be cured by natural means; but if artificial remedies are used, the disease matter will only be driven internally.

The body must be pretty heavily encumbered before the lungs are affected. The foreign matter presses into the lungs from above, which is why the tips of the lungs are always first affected. All children with large heads and

scrofula have in them the seeds of consumption. The body constantly seeks to free itself of disease matter through colds and coughs.

Side encumbrances are not so harmless as front ones. The illnesses are more painful, and the cure takes a longer time.

BACK ENCUMBRANCE.

This is the most severe encumbrance of all. It is shown by the want or lessening of a defined boundary line from the back of the head to the neck. Also by the colour of the neck behind, and tension at the back of the neck; when the head cannot turn properly, it is very dangerous.

Nervousness, restlessness, excitability, and incapacity for work betoken a back encumbrance. (A good diplomatist, *e.g.*, would never have a back encumbrance.)

When people talk very much, and say out everything they think, it is a sign of a back encumbrance.

Mental disease is also often a consequence.

Children with back encumbrances develop rapidly, but do not fulfil afterwards the hopes excited.

With adults, their nervousness is often considered imaginary, as with their full bodies and high colour they may look the picture of health.

A back encumbrance drives to masturbation, and often leads to impotence.

If both husband and wife have back encumbrances, they are generally sterile. If only a part is affected, propagation is possible; but the children are sickly, and die young. If the wife only has a back encumbrance, miscarriages or premature births occur, and she cannot nourish her children. A back encumbrance also shows itself in the legs. Bow legs, bending outwards, reveal an outside encumbrance; bending inwards, an inward one. A large back encumbrance denotes a very feverish, nervous condition. It occasions the worst nervous cases and mental disorders, which always are preceded by a sickly state of the body.

MIXED ENCUMBRANCES.

Encumbrances are generally mixed: the symptoms are according to the sides affected.

Front and side encumbrances are frequently found together. Also, side and back; sometimes front and back.

The worst, of course, is when all sides are encumbered. The persons so affected are disposed to every kind of illness. They are nervous, restless, dissatisfied, and do not know what they want. If an acute illness occurs, they are in danger of life. Their overloaded body is often taken as a sign of health; and as there is seldom outward fever present, people are surprised when sudden death occurs.

GENERAL REMARKS.

The digestive organs are in fault with every encumbrance. The worst state is when the foreign matter is dried up, and there is internal burning, which results in constipation or diarrhœa. Both are caused by heat. In both cases the blood is insufficiently nourished, and often poverty of blood and consumption ensue. If the digestive organs are much encumbered, the generative organs will be also affected, especially with women.

When a child is very full in chest, head, and nose, it shows a very bad digestion, a feverish condition, and disposition to lung disease. Later, there comes a thin stage, a tendency to coughs and colds, and the nose shows inflammation, becomes very thin, and there is an anxious look on the face; the subject sleeps with open mouth, and the breaths are drawn slowly from above to below, instead of being merely chest respirations. Gradually, the neck becomes either long or thin, because the lungs are shrinking together; or short and thick, which means very serious illness.

The kidneys can be affected with every encumbrance. The signs are the state of the urine, and soft, watery bags under the eyes.

The heart is, as a rule, affected with a left side encumbrance, especially when joined with a front encumbrance.

Leprosy begins with lumps on those parts of the body which cannot perspire. The want of perspiration shows a lack of sufficient vitality in those parts to produce abscesses. If abscesses can be produced, a cure is possible.

Back encumbrances are the most difficult to remove: they require long patience and perseverance.

In all cases, the restoration of the natural or healing power, through natural means, is the only thing that will radically avail to restore health and strength to the sick organism.

CONCLUSION.

THE German Natural Method of Cure may be said, perhaps, to be still in a state of development—of experiment. To a certain extent, this must always be the case. The curative factors with which it works, and the human body with which it deals, being all parts of God's infinite works in Nature, must ever present a field of endless diversity and variety in application and practice. It is not, however, that now, or at any time, there are, or have been, differences in the fundamental principles of the system, or the means employed, but that the former have been worked out, and the latter used in various ways, according to individual views and ideas.

In one sense, this has been a cause for regret. The Nature-Cure, instead of being regarded as a whole, has rather been the expression of many different and distinct methods of treatment, all more or less partial, or one-sided, in their application. On the other hand, the free scope which has thus been afforded to individual intuition and genius, has undoubtedly reacted beneficially, not only in enlarging the sphere of the natural healing art, but its methods and manners of practice as well.

More and more, however, at the present time, are these different methods of treatment, evolved and practised by Priestnitz, Schroth, Rausse, Hahn, Schindler, Wobold, Meinert, and others in the earlier days, and by Rikli, Kneipp, and Kuhne, in our own times, losing their distinctive individual character, and combining to form one consolidated natural method of healing. Time has served, and is serving, to balance correctly what is good and what is mistaken in each independent system; and the surest and best results are undoubtedly obtained by those Nature-Cure practitioners, who, avoiding what they see to be one-sided and injudicious, take the best from each, and incorporate it into their practice. A further

step was taken in the right direction at the last general Nature-Cure and Hygienic Conference, held at Berlin in the autumn of 1896, when it was determined to found an institute for the instruction and training of would-be practitioners in the natural healing art. This is a great want. There are still too many "Nature physicians," who have started on their work of healing without adequate comprehension of the fundamental principles of the system, or because they have been cured, or cured themselves, by a "Schroth," "Kneipp," or "Kuhne" cure, treat all who come to them in the same way, without sufficient regard to individual conditions and peculiarities. This leads often to failure and disappointment, and brings the method, as a whole, into discredit.

In fairness, however, it must be said that when good results are wanting, the public themselves are also largely to blame. Too strong or vigorous treatment, or, in German Nature-Cure parlance, "perforce treatment," is often the consequence of impatience on the part of the patients, who labour under the fatally-mistaken idea that "the more they do, the sooner they will be well," or because they "wish to get as much as they can for their money."

Where, also, in the matter of food, there is too much concession to the wishes of the patients, or it is not simple enough for a "cure" dietary, the same causes are almost invariably at work. There is imperfection, however, in everything human. That, in spite of individual mistakes and errors in the application of the system, the natural method of cure is responding to and meeting a deep, enduring need, is shown by the manner in which it is working its way into the lives and houses of the German people, and by the fact, that when medical men have joined its ranks, their practice is far larger than in the days when they treated according to the old system.

"Truth must prevail. Grounded firmly on the laws of unerring Nature, the natural method of cure must inevitably, in the surest sense of the word, become the people's healing art of the future all the world over, as it has in Germany already partially become. Through a natural manner of life to prevent sickness, and through natural means to cure it,

is the aim of its teaching and practice. It has, moreover, a great social task to perform. It fights against the immoderate love of pleasure, the luxurious living of the present day; against drunkenness and excesses of all kinds; and with its hygienic teachings for the individual, strives in every way to promote the health, happiness, and morality of the masses. The health of the people is the prosperity of the nation.”
(*Platen.*)

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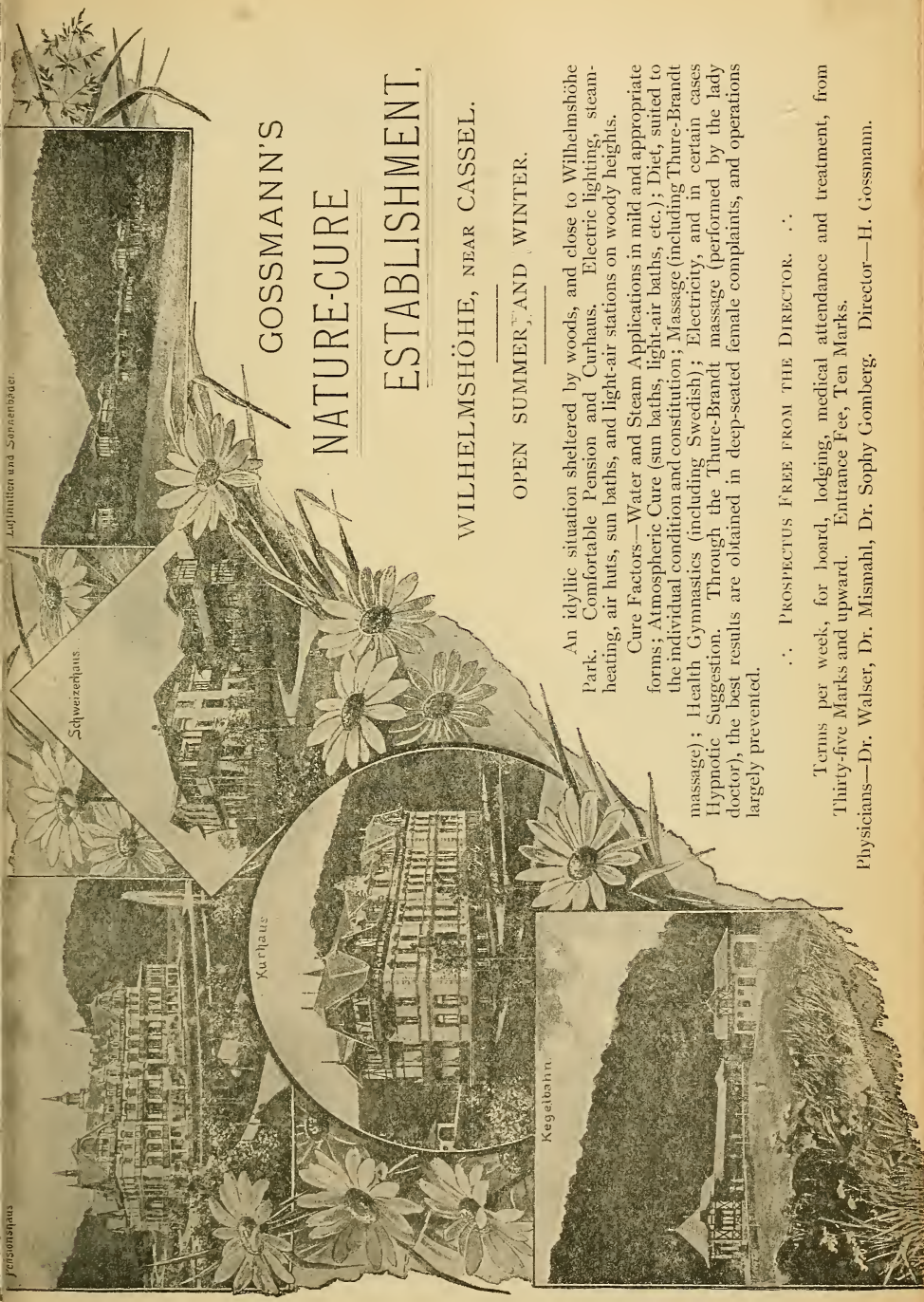
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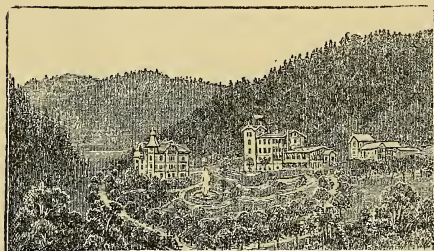
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