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GOOD HEALTH

January, 1903

MENS·SANA·IN·CORPORE·SANO·

VOL. XXXVIII. *Edited by J. H. KELLOGG, M. D.* NO. 1.

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GOOD HEALTH

...For 1903...

A NUMBER of pages could be filled, telling about the feast of good things to be spread before the readers of GOOD HEALTH during 1903, but we shall content ourselves with only a partial account of these articles of surpassing interest.

The editor has prepared a series of articles on "Nature's Remedies," any one of which will be worth to the careful reader many times the price of a yearly subscription to GOOD HEALTH. These articles will treat on hydrotherapy, electrotherapy, dietetics, and other natural methods, in a common-sense manner, discarding the use of superfluous verbiage, and teaching plain facts and simple rules for the guidance of the laity.

One of the most timely articles will be an illustrated history of the Health-Food Movement, which is occupying so prominent a place in public attention. The articles will be well illustrated, and are written by "one who knows."

A series of talks on dietetics will appear, telling about the use of fruits, fruit essences, and fruit sugars. These articles will be written by specialists, and will deal with the fruits grown both in tropical and temperate climates. Many questions will be discussed and originated which have not heretofore been made public.

A number of illustrated articles will appear during the year, dealing with the discovery and development by Vincent Priessnitz, the Silesian peasant, of the so-called water cure. These will be particularly interesting and entertaining, as they are written by one who has taken pains to visit the home of Priessnitz in Silesia, in order to obtain the information at first hand.

Good Health for 1903—*Continued*

Mrs. E. E. Kellogg will contribute helpful articles on Child Culture.

The important information contained in a series of articles dealing with the new cookery, illustrating the application of medical and physical sciences, will alone be worth the year's subscription price.

Beginning with January, 1903, a new department will be introduced under the caption of "The Hundred Year Club." This department will be devoted to the subject of longevity, and will give the experience of a number of centenarians. The facts which will be presented in this department have been obtained at great expense, and have required several years for their collection.

A revised translation of the life of Cornaro, the Italian nobleman whose health was broken down by reckless living, and who adopted, at middle age, a rational dietary, with the result that he lived to enjoy good health to a ripe old age, will prove more interesting than a romance. The translation we have secured was made by Prof. A. E. Axon, Manchester, England, an eminent linguist, who was for many years librarian of the famous Manchester library, and is the most complete and correct translation of this fascinating work which has ever appeared.

At almost any price, GOOD HEALTH is the best health magazine published; but at $1 per year it is within the reach of one and all. Subscribe now, in time to receive the very first of the good things expected during the next twelve months.

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BATTLE CREEK, MICHIGAN

GOOD HEALTH

A Journal of Hygiene.

VOL. XXXVIII. JANUARY, 1903. NO. 1.

WHAT CAN BE DONE FOR THE SICK.

BY J. H. KELLOGG, M. D.

What the Physician Can Do.

THE physician does not possess the power of healing, but if well informed, and particularly if he is familiar with the methods which Nature herself employs in the healing of disease, he can do much to facilitate and to insure recovery.

First of all, it is the duty of the physician to seek out the causes which may have led to the sickness, to make these plain to the patient, and to insist that as far as the patient is himself responsible for these causes he shall do his utmost to remove them. It is unquestionably true that by far the great majority of maladies, and especially chronic maladies, are the result of errors in habits of life. Some digression of the laws of health in relation to drinking, eating, or other matters of conduct, has either been itself the direct cause of the malady, or has prepared the way for the operation of causes which otherwise would have been either altogether inoperative, or whose influence would have been insufficient to have been the occasion of any serious inconvenience. For example, obesity is recognized to be the result of errors in diet, the taking of too much food, or of food which is too fattening in character, while at the same time taking too little exercise.

It is the duty of the physician to point out to the patient this fact, and to indicate to him the amount and kind of food which he should take each day, and if necessary at each meal, and the amount of exercise required, together with such other measures as experience has shown to be helpful in such cases.

In the case of some acute malady, as a fever, the patient is also primarily at fault, as one does not suffer from fever unless his system has been previously prepared for the disease by some error in his physical habits. Typhoid-fever germs cannot pass through the stomach into the intestines, where alone they are capable of growing, unless the stomach has first been weakened by errors in diet. The same is true of cholera, but when the fever has once developed, attention to diet alone will not suffice to effect a cure. Other measures must be employed. Of course, attention to diet is of the highest importance. This the physician will direct, and the patient must implicitly obey.

The physician may be able to recognize, before the patient himself, the presence of the fever. The patient may imagine that he is only a little weak and needs tonic treatment of some sort, but the physician by taking the temperature and observing the other symptoms recognizes the presence of a grave

condition for general fever is always a serious matter, and will enjoin upon the patient the importance of absolute rest in bed until the febrile symptoms have passed away, thus giving Nature a chance to carry forward her healing work under the most favorable conditions; for nothing so certainly and immediately aggravates the febrile action as exercise. Sitting up, or even mental activity, without any considerable degree of muscular movement, may suffice to raise the temperature several degrees.

The physician may also call attention to the importance of regulating the temperature of the room, the maintaining of quiet about the patient, the institution of measures to prevent the extension of the disease to other members of the family, and such measures of treatment as may be indicated in the individual case.

While it is true that Nature is the real physician, and that a large proportion of all cases of acute disease may be brought to recovery by the aid of simple nursing intelligently applied, it is nevertheless true that there are very few cases of illness in which an intelligent rational physician may not render very material and important service, whereby the patient's recovery may be accelerated or rendered more certain and his comfort greatly promoted. By constant contact with the sick, physicians acquire a vast amount of knowledge and skill which cannot possibly be possessed by persons of no greater ability or experience, whose opportunities have been infinitely less; hence, nothing could be more absurd than the hostile attitude toward physicians and the medical profession which is sometimes assumed by those who have learned a little of Nature's power to heal and have obtained, perhaps, a smattering of knowledge concerning the use of water and other physiological or natural remedies. Of all persons, the physician himself, when ill, is most appreciative of the counsel and assistance which may be rendered by one who is well trained in the science and art of medicine.

What Nurses May Do to Aid the Sick to Recovery.

The work of the nurse in connection with the sick can scarcely be considered, to any extent whatever, second to that of the physician. It is the duty of the well-trained and experienced nurse first to become thoroughly familiar with the nature of the patient's case, both through instruction from the physician, and from personal study and observation; and to know, not only present dangers, but those which may be expected in the natural course of the malady. The nurse must be familiar with all the methods whereby disease processes may be checked, pain and other symptoms alleviated, and the work of Nature aided to a successful issue. Threatened evils must be warded off. The nurse must be familiar with every principle of medical dietetics, and skillful in the preparation of food for the sick. It is especially important that the nurse should understand all that pertains to the use of water, massage, the medical use of electricity, medical gymnastics, clothing, ventilation, and everything that can influence the patient's condition healthfully or in the opposite way.

In the absence of the trained nurse, it is important that the best possible substitute should be found. Most frequently, and very naturally, this duty falls upon the mother of the family, or if the mother is herself disabled, some neighbor mother or some kind-hearted

woman who comes forward to meet the emergency. In this article the writer has not undertaken to supply all the information which a trained nurse is expected to possess, but has given such hints as will enable the intelligent mother or emergency nurse to co-operate with the intelligent physician in the carrying out of physiological treatment, and when for any reason the attendance of a physician cannot be secured, to render such helpful service as may aid the patient toward recovery.

What Patients May Do to Aid Themselves.

In the majority of chronic diseases, such as obesity, diabetes, chronic rheumatism, dyspepsia, consumption, and various constitutional disorders, those things which the patient can himself do, and for which he must be held chiefly responsible, are far more numerous and more important than those dependent upon the services of a physician or nurse. This is true for the reason that the majority of chronic diseases are primarily due to causes which are under the patient's control, and which concern chiefly his habits of life,— eating, drinking, exercise, etc. When these habits are brought into harmony with nature's laws, or in other words, when the causes of the malady are removed, that marvelous life intelligence which is manifested in every human being, is enabled to carry forward the work of healing to a successful recovery.

It must not be supposed that the healing powers of nature are idle, or refuse to act until man himself comes into harmony with nature's laws, by correcting his wrong habits, whatever they may be. Nature is not hard-hearted, but infinitely kind and merciful. She always does for us the very best she can under the circumstances. If, while we are cultivating disease by the indulgence of wrong habits of life, or while the bodily functions are disturbed, we do not see evidence of a creative power at work, it is only because of our inability to observe the intimate processes of life. If we were possessed of means whereby the actual processes taking place in our various vital organs could be made perceptible to our senses so that we could see or hear the work which is going on, we should find that the life forces were diligently at work, combating every morbid tendency, heading off as far as possible every death-dealing influence, doing their utmost to save the individual from the consequences of his own wrongdoing.

It is due to this fact that we are able to so long violate the laws of nature with apparent impunity. The tobacco user, for example, insists for years that the drug does him no harm, and wonders why he should at last find himself suffering from tobacco heart, or tobacco blindness, or other grave disease due to the long-continued action of this poisonous drug. He does not comprehend the fact that Nature has been all these years battling in his behalf, and has only yielded when unable longer to maintain the struggle. The final collapse comes, not because of Nature's unwillingness or neglect, but because her resources are exhausted. Let the man who suffers from tobacco heart or tobacco blindness cease the use of the drug, and if irreparable damage has not been done, the disturbing symptoms will rapidly disappear; not because Nature good-naturedly co-operates with the man when he undertakes to help himself, but because Nature, by simply continuing the efforts which she has

been making all the time in the man's behalf, attains success because the man himself has ceased to thwart her efforts by his own wrongdoing. When the tobacco poisons are no longer introduced into the system, the processes of destruction and elimination carried on in the liver and in the kidneys soon rid the body of the baneful drug, thus permitting the reparative processes to be carried forward in a natural way, and making success possible in place of failure.

It is the duty of the patient to learn from every available reliable source, all he can respecting the nature and origin of his disease, so that he may, by his own voluntary efforts, cease to cultivate disease, cultivating health instead.

In cases of acute disease, and when the patient has by chronic disease been reduced to a very low state, it is often necessary that the patient should surrender himself wholly to the control of his physician and his nurse, yielding implicit obedience to the directions given him. It is indeed often best that the patient should not even discuss or think about his malady more than is absolutely necessary to make known his condition to his physician or nurse. Mental rest and quietude are often as essential as rest of body in cases of acute illness, especially in fevers and maladies involving the brain and nerves. Nothing is more conducive to the perpetuation of certain chronic maladies than morbid dwelling upon the symptoms. Chronic invalids do themselves great harm by discussing their maladies with other invalids, or pouring into the ears of friends their tales of woe, to satisfy their own morbid cravings for sympathy, or the curiosity of inquisitive inquirers. The mind should always be set to work on the side of health rather than on the side of disease. Hope, good cheer, and amiability grow with cultivation; the same is equally true of despair, misanthropy, and pessimism. If patients cannot altogether control their mental states, they can at least make an effort to do so, and doctors, nurses, and kind friends are always ready to aid the sick to hope for the best as long as there is a reasonable prospect for recovery.

WHY TYPHOID FEVER PREVAILS.

BY F. J. OTIS, M. D.

NO disease so thoroughly understood by the medical profession is so unmanageable in its devastations as typhoid fever. The physician understands it well, but he is powerless to stop it simply because he cannot control the habits and customs of the people. If the people understood it as thoroughly as the physicians, co-operation with them in a successful limitation of the disease could be easily accomplished. This can be more readily understood by knowing the cause of the disease.

Typhoid fever is always caused by a little rod-shaped plant composed of a single cell. It can be seen only with the more powerful microscopes. It would take twelve thousand of these tiny plants placed end to end to measure one inch. They do not have roots, and remain stationary. On the contrary they swim about, reminding the observer of minute tadpoles. They travel ten to twenty times their length in a second, yet by the most powerful lens we are unable to see that which

propels them. It is only by staining the bacilli with the utmost care that the propelling organ may be seen, as in the accompanying illustration. The wavy threads extending out from the germs are called flagella. It is by the vibration of these whips that they are able to travel so rapidly.

The germs multiply by growing long and dividing into two, each half being an active plant. This happens every half hour or oftener, so that one germ is capable of producing about 100,000,000,000,000,000 in twenty-four hours.

If a few of these germs are taken into the body, they may grow in large numbers in the intestines, form ulcers, and may even enter the circulation. They are also given off in large numbers from the bowels and kidneys, so that in a short time the bed upon which the sick person lies, and other things which are near him, have great numbers of these germs scattered over and through them, so one cannot touch anything in the room without getting typhoid germs on the hands. That is why the doctor isolates the patient. This isolation should be absolute, but often it is necessary for the housekeeper to be both cook and nurse. She attends to a few of the patient's needs, and then returns to the kitchen, where she picks up perhaps a milk strainer, strains the milk into dishes and sets it away. The germs from the hands were left on the strainer and then washed into the milk, where they multiply with astonishing rapidity. Most germs will sour or change the milk, but typhoid-fever germs have no effect upon it that can be seen even by the most expert eye. Next day the milk (now a poison) is given to the family. What wonder if in a few days all are taken with typhoid fever!

Again, something similar to the following incident, which was recently reported, may take place. Some of the material from the sick room was emptied into a yard. There came a heavy rain that washed up the germs and carried some of them into the well. These multiplied rapidly, but no sign of their presence was possible. Shortly other members of the family were taken sick. Then there came a crew of men putting up a telephone line. A large number drank of the water from this well. Soon about one half had typhoid fever. They scattered to their homes, taking the germs and spreading them in their respective neighborhoods.

The germ dies when it is allowed to remain dry for a long time, or if it has no organic material to feed upon. The organic material in well water is very much increased when it receives drainage from the surface. Leaves begin to drop and decompose in the fall of the year, and the extracts produced by this decomposition furnish a very good food upon which the typhoid-fever germ may feed. Then the rains wash these extracts from decaying heaps of leaves and rubbish through the soil into the surface water, thence into

the well. The germs cannot pass down through the soil to the surface water, even when it is quite a rapid downward flow; they are seldom carried more than five or six feet through a sandy soil. So it is during the heaviest rains when the water runs along the surface that they gain access to our water supply. Here they may grow and multiply, remaining in the well for weeks. Freezing does not destroy the germs, as is generally supposed, but preserves them in good condition so that when the ground or other material containing them thaws, and the conditions are favorable for their growth, they are as dangerous as ever.

From these facts it can be readily seen that there would be the largest number of typhoid-fever germs in the fall when the leaves are decaying, also in the spring shortly after the first thaw. Typhoid fever, then, would be most prevalent during the autumn and spring months. A little care will make it possible to avoid the spreading of the disease. First, no infected material should be thrown about the house or the yard; it can be readily disinfected by putting into it one part to twenty of chloride of lime. Leave them together an hour before throwing away or burying. All wells designed to furnish water for family use should be so arranged that it is impossible for surface water to run into them, without passing through from six to ten feet of sandy soil. Open wells have often been cleaned out, false bottoms placed in them, and the mouth of the well filled with five or six feet of sand, rendering it almost impossible for germs to enter.

The water from fields and meadows covered with decomposing vegetable matter runs into the lakes and rivers, furnishing excellent food for germs which may be in the water. In the autumn these bodies of water are frozen over, and from them ice for summer use is obtained. From this it is easy to see why the habit of putting ice directly into drinking water is not a good one. Better place the water in a receptacle which is surrounded by a salt-and-ice mixture.

An incident that occurred in an eastern town of about five thousand inhabitants, will illustrate how extensively these germs may infect a community.

One of the members of a family living a few hundred yards from a small stream that flowed into a reservoir from which the public water was drawn, was suffering from typhoid fever. The material from the sick room was thrown far out into the back yard during the autumn months just as the ground was freezing. It remained there in perfect condition until the spring thaw, none of the neighbors or people of the city coming down with typhoid fever. After the spring thaw, cases began to develop very rapidly in the city. The ground being frozen where the germs were thrown, as soon as spring opened they very soon found their way into the little stream and down to the reservoir where the conditions for their multiplication were quite good. From there they flowed into the water mains, and very soon over a thousand cases of typhoid fever developed. It was observed that the disease developed only among those who used the city water, and an investigation revealed the above facts.

It now becomes extremely important for us to be certain of the purity of our drinking water, and if there is any question at all, it should be boiled before it is used, or filtered through a scientifically approved filter.

This germ has been very thoroughly distributed everywhere civilization has

gone. In the Western States it produces a disease known in the mountains as mountain fever. It is interesting to note that whenever soldiers are together from different parts of the country and go into camp, in two to four weeks typhoid fever develops there. It is one of the worst enemies of an army, and destroys about one fifth of the soldiers, often even more than are destroyed in real battle. It would be quite easy to stamp out the disease were the germs distributed only while the patient is confined to his room; but during convalescence, in some cases for a year after, the germs are cast out from the kidneys or found in the intestinal contents. So that to live free from the disease one must regard it as always being possible, and use individual measures to protect himself from the disease. Were every individual perfectly conversant with the disease, and careful in accordance with his knowledge, it would be possible in time to reduce the number of cases to such an extent that the disease would be almost exterminated. The germs play such an important part in market business and in municipal matters, such as water supply and milk supply, and in international affairs, as in the army, that the difficulties confronting the hygienist are almost unsurmountable.

The yellow fever can be controlled by controlling the mosquito; but typhoid fever can only be controlled by regulating the commerce in food stuffs, and giving attention to the sanitary habits of the public and the home.

STUDIES IN COSTUME.[1]

BY ETHEL REEDER FARNSWORTH.

THE early progenitors of our race no doubt roamed the forests of the tropics quite as much untrameled by the conventions of clothes as some of their barbaric progeny of to-day. But as the tides of emigration moved outward, away from the region of perpetual summer, coverings of some sort became necessary. Just what forms these garments assumed before they were watched over and reported to us by historians and artists, must ever be a matter of conjecture. But as it comes to us, correct dress is at once an art and a science, well deserving of the most careful thought and study. And when we say that dress demands careful study we do not in any way ally ourselves with that large and apparently increasing class which seems to consider clothes as the chief end of man.

The subject of dress is deserving of careful and painstaking study, because correct dress is a means toward the physical, moral, and intellectual betterment of the individual and the race, while improper dress is detrimental to an equally great extent. As an art it demands the study of form, color, harmony, the principles of contrast, and the study of anatomy, physiology, hygiene, and mechanics.

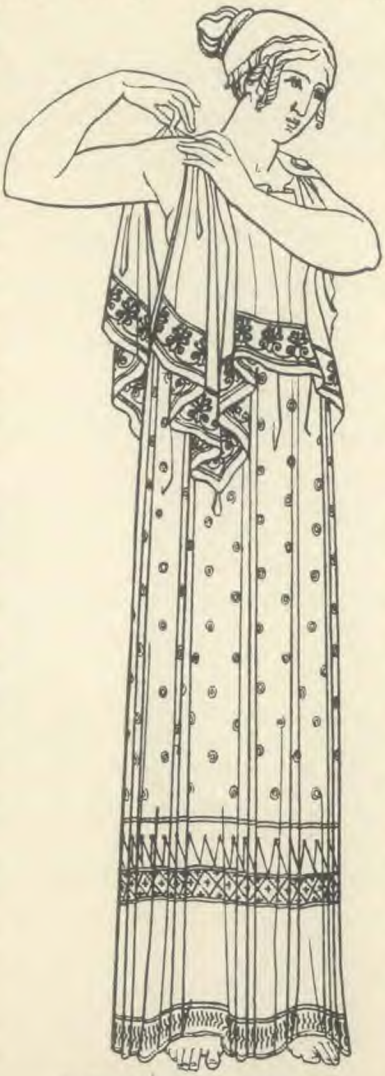
Without a comprehensive knowledge of the form, structure, and motion of the human body, it is impossible to clothe it either healthfully or artistically. And yet one cannot walk half a square on any of our city streets without being impressed with the great need for education on this line. The wearing

[1] Extracts made from Vol. I, "Costumes of the Ancients," by Thomas Hope.

apparel of the average man and woman falls so far short of what properly constructed and correctly worn garments should be, that it often fulfills but one requisite of the fourfold mission of clothes,— that of the covering. To fulfill its whole mission, dress should be for covering, protection, warmth, and beauty; and must in addition be convenient, healthful, and suited to the occasion.

As a covering, it has to cater to the demands of modesty which are governed altogether by the advancement a people has made in civilization. As a protection from external injury, the necessities vary greatly with the work or pastime in which the individual is engaged; for example, the lumberman's clothes are much more of a protection to him than those of the salesman behind the counter. In their office as a protection from cold the value of clothes increases in direct ratio with the distance from the equator. As far as warmth is concerned the man in the tropics needs no clothes, while his brother at the Arctic circle could not exist without them.

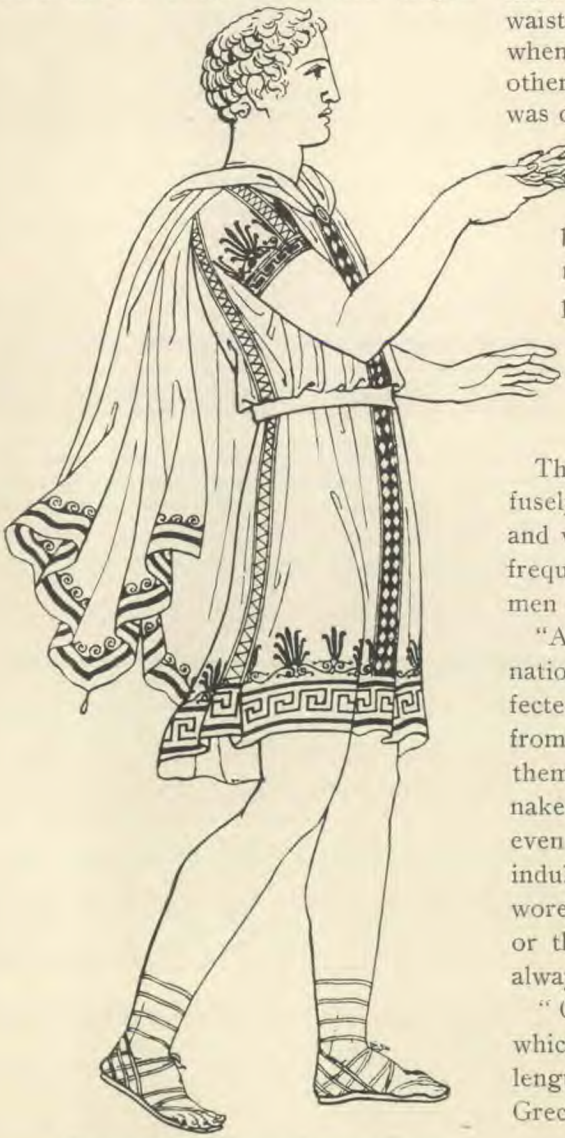
Then, since clothes are a threefold necessity, it is very desirable that they should in no way offend the artistic sense, and that in maintaining their own beauty they should in no way detract from the inherent beauty of the human form. But unless one is conversant with the form structure and physical necessities of the human body, as well as possessed of the artist's sense in color and line, it is impossible for him to design garments which will not detract from the beauty and activity of the body. Without this knowledge and a careful regard of it, it is impossible to clothe the human figure with elegance; for to be truly pleasing to the eye the clothed human figure must preserve, unaltered, its normal proportions and sweeping curves. When this is overlooked, as it so often is, the body ceases to have any individual and distinctive beauty of its own, save as it borrows from the clothes which are draped about it; it is beautiful only as a bundle of clothes might be.



In Tunic and Short Peplum.

The Greeks, with their fine ideas in art and their high standard of physical perfection, developed a system of dress which, though it is impracticable in our more rigorous climate, is still well worthy of our study. The principal garment, that which was worn next the body, and formed the chief article of apparel for both sexes, was made of light-weight, gauzy fabric, woven in the earlier period of wool, later of flax and

still later of flax and silk mixed, or even pure silk. In the earlier times this garment was cut to fit the body and the arms closely, though it was sometimes sleeveless. In later times, however, even this garment seems to have been worn very wide and loose, being made of two squares of material sewed together at the edges and confined over the shoulders with clasps or buttons. Then again they were made with long, wide sleeves which were often draped up to the shoulder, leaving almost the whole arm exposed. Usually the body of the tunic branched out into a pair of close-fitting sleeves reaching to the elbow, open down their entire length, and drawn together by small buttons, set so close to the edge of the hem that the opening was allowed to spread apart and the skin beneath to show through.



GRECIAN VICTOR IN THE CHARIOT GAMES.

Women generally wore the tunic confined by a girdle, sometimes about the waist, sometimes about the loins. Often, when the tunic was long and would otherwise have impeded the walking, it was drawn over the girdle concealing it, and allowing the upper part of the tunic to fall in a sort of blouse. When greater freedom of motion was required than was possible in the long tunic, it was not uncommon to see two girdles worn, one high up, the other very low down, and the tunic bloused over both.

This garment which was often profusely embroidered with spots, stars, and with elaborate border designs, was frequently the only garment worn by men or women, both indoors and out.

"Among the male part of the Greek nation, philosophers and those who affected great austerity abstained entirely from wearing the tunic, and contented themselves with throwing over their naked bodies a simple cloak, or mantle; even those less austere personages who indulged in the luxury of the tunic, wore it shorter than the Asiatic males, or than their own women, and almost always confined to a girdle."

"Over this tunic or undergarment, which was made to reach the whole length of the body down to the feet, Grecian women generally, though not

THE TUNIC WITH TWO GIRDLES.

always, wore a second and more external garment, only intended to afford an additional covering or protection to the upper half of the person. This species of bib seems to have been composed of a square piece of stuff, in form like our shawls or scarfs, folded double, so as to be apparently reduced to half its original width, and was worn with the doubled part upward, and the edge or border downward, next the zone or girdle. It was suspended round the chest and back so that its center came under the left arm, and its two ends hung down loose under the right arm; and accordingly as the piece was square or oblong, these ends either reached to the hips or descended to the ankles. . . .

"The whole was secured by means of two clasps or buttons, which fastened together the fore and hind parts over each shoulder."

"The peplum constituted the outermost covering of the body. It was worn in common by both sexes, but was chiefly reserved for occasions of ceremony or of public appearance, and as well in its texture as in its shape, seemed to answer to our shawl."

"This peplum was never fastened on by means of clasps or buttons, but only prevented from slipping off through the intricacy of its own involutions. Endless were the combinations which these

IN LONG PEPLUM AND BUTTONED SLEEVES.

exhibited; and in nothing do we see more ingenuity exerted or more fancy displayed than in the various modes of making the peplum form grand and contrasted draperies. Indeed, the different degrees of simplicity or grace observable in the throw of the peplum were regarded as indicating the different degrees of rusticity or refinement inherent in the disposition of the wearer."

"Among the Greeks the peplum never had, as among the barbarians, its whole circumference adorned by a separate fringe, but only its corners loaded with little metal weights or drops, in order to make them hang down straighter and more even.

A Greek Philosopher.

"A veil of lighter tissue than the peplum was often worn by women, which served as an appendage of rank."

"The numerous colorless Greek statues still in existence are apt at first sight to impress us with an idea that the Grecian attire was uniform in its hue; but the Greek vases found buried in tombs, the paintings dug out of Herculaneum and of Pompeii, and even a few statues in marble and in bronze enriched with stained or with inlaid borders, incontestably prove that the stuffs were equally gaudy in their colors and varied in their patterns. The richest designs were traced upon them, both in painting and needle work."

SERVICE.

The sweetest lives are those to duty wed,
Whose deeds both great and small,
Are close-knit strands of an unbroken thread
Where love ennobles all.
The world may sound no trumpets, ring no bells;
The Book of Life the shining record tells.

Thy love shall chant its own beatitudes
After its own life's working. A child's kiss
Set on thy sighing lips shall make thee glad;
A poor man served by thee shall make thee rich;
A sick man helped by thee shall make thee strong;
Thou shalt be served thyself by every sense
Of service which thou renderest.

— Mrs. Browning.

AMBITION AS A TONIC.

BY EMMA WINNER ROGERS.

THE world is full of "beaten-track" people who exist exactly after the fashion of millions of men and women who have preceded them. New ideas, new methods, new undertakings, are alien to them, and to move them out of the beaten track would require little less than a moral or material cyclone. Their gait is plodding, and their motto, "Let well enough alone." These people have their uses no doubt in the general scheme of things mundane. They are important factors in making life a severe discipline. They hold in check the enthusiastic, progressive, and original people who would otherwise run this poor old world too swiftly.

Granted their usefulness, it might easily be possible, and would surely be advantageous, for a far smaller number of beaten-track people to serve the purposes for which they seem to exist; and some power evoked to transform the majority of them into progressive and enthusiastic citizens of the world. Their numbers have far outgrown the needs, while the ranks of the advance guard of humanity have grown thin.

Our attitude toward the sluggish and satisfied people ought to be one of pity rather than scorn, perhaps, for they are generally the product of untoward circumstances. Physical or mental or moral incapacity is responsible for their apathy, and has left them only energy or will sufficient for the beaten track. They at least are far above the degenerate and criminal classes in humanity's scale, for these are too feeble in intellect and will to keep even in the beaten track, not to mention the power to blaze a higher and finer way through the world.

Many ideas for transforming the plodders and making them of greater value and inspiration to their generation occur to one, and innumerable methods are continually being tried to this desirable end. Give them sound bodies! and straightway new sanitary laws are urged, and experiments and advice offered on the vital subject of the world's food and drink in relation to vigorous bodies and minds. Give them keen and well-disciplined minds! and there follows the wisdom of the time in advocacy of the new education which shall get the young out of ruts, and give individuality a chance to develop. Whatever training or stimulus the human body, mind, and heart will respond to, which shall awaken dormant energies, inspire wise enthusiasms, and put men and women into the progressive ranks of life, it is well to recognize and make use of. These all work together for the evolution of a saner and sounder people, capable of conserving all that is best in the old, and seizing progressive ideas and methods of the new, civilization.

It may be timely to recall that a partially discredited quality or characteristic of human nature has had a vast deal to do with the upward trend of civilization, a quality specially human, and admirable in its best estate,— ambition, which Shakespeare has associated unpleasantly with the fall of the angels, and which people quite commonly use as a term of opprobrium concerning those who are not content to stay in the beaten track.

Ambition is a tonic which works effective changes in young and old, and in spite of its incidental dangers is an immense and invaluable factor in the

world's progress. The chief trouble is there is too little of it to go around! The multitude of plodders might be transformed into useful and progressive people if ambition could be infused into them. How to inspire and guide it aright might well be investigated diligently by the prophets of the new education. It is the quality needed with which to seek even the kingdom of heaven, after which all things are to be added to the finder thereof.

The discouragement of ambition as a character trait arises from the very common error and human weakness of being afraid of good gifts which involve responsibility and possible danger. It is beaten-track people who have tried to drive it from its high place, for wherever ambition enters, a new and difficult roadway is cast up, and this is too much for the plodders.

Only in the evil natured does ambition become an evil, or in the unbalanced mind. It is an essential trait in high character. It is a ladder toward perfection. Ambition is the purpose to excel; to be or do or create something which is fine and high and beautiful, worthy of the approval of our fellow men and our better selves, and of value to the world. It will uproot more bad habits and inspire more forethought and industry and unselfish action than a hundred preachers and teachers. It will overcome indolence and ignorance. It is a tonic unmatched in the pharmacopoeia of the world for mental, moral, and physical shiftlessness.

It is unnecessary to dwell on its dangerous side, for that has been sounded endlessly. Any one of the virtues may develop into a vice where judgment and a sense of proportion are lacking. Generosity may become extravagance, economy may develop into parsimony, and decision become stubbornness; so ambition may become inordinate and hateful, selfish and ignoble. Like every great quality, it has the power to blight as well as to bless. But when it fills its true place with the other qualities that go to make up a sound character, it has the power to vivify them all, and to make all things possible to its possessor. It opens the soul to the divine creative influences with which life is electric; it touches with potent fire the sluggish will of child or man until he "laughs at impossibilities and cries, 'It shall be done.'"

The strenous life of which we hear so much, is only another name for the life stirred by an ambition to reach high exceilence of being and doing, and enabled through this goodly ambition to toil and struggle, in spite of obstacles, to the desired end. It would be well then that the germ of this almost universal trait should be fostered aright, and not frowned down. It is potential for good and evil as is every high endowment. A dead level of mediocrity would exist without it, while a just appreciation and a wise control of the quality of ambition would result in a vastly more rapid moving on of the world toward perfection.

WAND EXERCISES.

BY J. W. HOPKINS.

THE wand is one of the most useful articles in the home gymnasium. It can be used in most free gymnastic exercises, and adds to their value by localizing many of the movements. It may be of sufficient weight to require considerable effort in lifting, or may be light, with movements more easy and graceful.

TABLE III.

1. (a) Place the left foot forward two footlengths, and raise the wand forward upward. Transfer the weight of the body to the forward foot, raising the heel of the rear foot, allowing only the toes to touch the floor (See Cut 1). (b) Resume position. Inhale on (a); exhale on (b). Arch the chest and body well, and stretch from the hands to the rear foot. Later this may be extended by raising both heels. This should be taken from five to eight times with each foot.

2. Wand on the shoulders as in Cut 3. (a) Bend the body backward. (b) Raise the body. This bending or arching of the trunk should begin in the upper part of the spine and continue downward. Although the whole spinal column may be flexed, the effort is best confined to the upper chest. The breathing, as before, is regular, deep, and full. The knees are straight. (aa) With wand on shoulders, and feet in a walk stand, left foot front, bend forward about 45 degrees. (bb) Resume position. It is very easy to do this badly. The correct bending is taken in the hips mostly, the back being arched, and the chest and the head well lifted. Repeat movements two to four times.

3. (a) Raise wand to shoulders, and rise on the toes. (b) Bend the knees and thrust the wand upward. (c) As in (a). (d) Resume position.

4. (a) Raise the arms forward to level of the shoulders, and the right knee upward, hip high (See Cut 2). (b) Raise the arms upward, and extend the knee backward. (c) As in (a). (d) Position. In (b) the backward knee must be well extended. Repeat two to eight times for each leg.

5. Knee standing, wand on the shoulders (See Cut 3). (a) Bend backward. (b) Trunk raise. A splendid exercise for the abdominal muscles.

6. Feet at stride stand, wand as in Cut 3, but projecting altogether to the turning side, the opposite hand grasping the wand at end. (a) Twist strongly to right. (b) Return. This is a vigorous exercise

CUT 1.

CUT 2.

if taken with the iron wand. Repeat movement from six to sixteen times; then shift the wand until the weight is to the left, and repeat the quick rotation to that side.

7. Feet at stride stand, wand as in Cut 3. (a) Bend to the right; (b) bend to the left. Repeat two to eight times on each side.

8. Wand on the shoulders, then front as in Cut 2. Run in place with knee bending upward, taking forty to one hundred steps. Follow this with exercises (aa), (bb), of Exercise 2. Inhale on forward bend; exhale as the body raises.

TABLE IV.

1. (a) Raise wand forward upward, and left leg backward. (b) Resume position. Breathe in on (a); out on (b).

2. Repeat second exercise of Table III. After bending the trunk backward (a), thrust the wand upward in the prolongation of the body; (b) bend the arms, then raise the body. The number of bendings and stretchings of the arms may be increased, as one becomes accustomed to the exercise. Follow this with forward flexions of the trunk as before.

3. (a) Raise wand forward, shoulder high, bend left knee and lift right leg forward, with the knee straight. (b) Raise the wand high over head, and move the right leg sideways. (c) Bring wand behind the shoulders, and move the leg backward. (d) equals (b). (e) equals (a). (f) equals position. About four times with right leg, then four with left.

4. Repeat fifth exercise of Table III. As the abdominal muscles become stronger, and the body can be carried farther back, the reclining position may be held for a moment, and alternate trunk rotation or twisting taken.

5. Exercise 6 of the foregoing table.

6. Wand high overhead; feet at stride stand. Alternate side bending.

7. Wand on shoulders. (a) Jump to stride stand. (b) Jump to position. Continue rapidly, jumping from thirty to one hundred jumps. Follow with the forward bending.

8. Breathing exercise.

CUT 3.

SLEEP PROMOTERS.

BY MRS. E. E. KELLOGG.

PLENTY of sound, refreshing sleep is a requisite for the maintenance of health in every condition of life. The child or youth, man or woman, deprived of necessary sleep soon becomes ailing and miserable. This is Nature's compensation for transgressed laws. From a physiological standpoint, the time spent in sleeping is the most important portion of our lives. It is during sleep that the processes of growth and repair chiefly take place. After fatigue and during illness sleep restores strength and energy as no other remedy can.

Since sleep is such an essential vital function, it is important to maintain those conditions which will be most conducive to it. One's daily habits in eating, exercise, work, and thought have largely to do with one's ability to secure good sleep; so likewise have one's environments during the period of sleep.

In weight, oxygen makes up the greater proportion of nerve tissue and other bodily components. The worn-out portions of the body cannot be repaired without the necessary building material at hand. To occupy during sleep a room with an inadequate supply of fresh air is but another attempt to "make bricks without straw." Every sleeping room should be large and well ventilated. Fifteen feet square is not too large a space to afford an adequate supply of air to maintain a healthful atmosphere during the hours of sleep if, as is customary, two persons occupy the room. Seldom, however, are such commodious quarters set apart for sleeping rooms. The parlor and other day living rooms are chosen with a care for comfort and health, but the smallest and most inconvenient rooms on the shady side of the house are considered quite "good enough to sleep in," apparently assuming that because during the time spent in sleep one is oblivious to the things around him, therefore it matters little what these surroundings be. Few people but would object to spending one third of their lives amid unwholesome surroundings during the daytime, and why should any one be willing to spend thus the same proportion of time while asleep?

The ideal sleeping room should have windows upon both sides, one facing the east, that the morning sun with its disinfecting rays may freely enter to dry and purify the bedding as it is spread open for its daily airing, and to search out and disinfect any nook or corner where dust and germs may have found lodgment.

Whatever other luxury there may be lacking in the sleeping room, it should not lack the luxury of fresh air. The rebreathing of air already contaminated by waste products from the lungs is undoubtedly the cause of many of the increasing ills to which flesh is heir, many more than are so recognized. The modern well-built house provides for a plentiful supply of fresh air indoors through some efficient system of ventilation, but the ordinary village home, the farmhouse, the cottage, is dependent upon window ventilation. One window, if raised a little from the bottom and lowered slightly from the top, is better than no ventilation, but two windows, preferably on opposite sides of the room, the one opened at the top as a fresh-air inlet, the other raised from the bottom as an outlet for foul air, will serve the purpose much more satisfactorily. The size of the opening

must be dependent somewhat upon the condition of the weather and the number of occupants in the room. Under ordinary circumstances, lowering the window one inch for each occupant has been found sufficient for the requisite supply of fresh air in cold weather. When a strong wind is blowing, or during very cold weather, a smaller opening will suffice.

Besides provision for an abundance of sunlight and fresh air, the sanitary sleeping room should be supplied with some means of heating in cold weather; for while a cool atmosphere is the most conducive to good sleep, and much heat is undesirable at night, a room unprovided with some means for frequent warming in wet and cold weather is likely to collect so much dampness as to become a serious menace to health.

At all seasons the bed should be comfortably warm and thoroughly dry. A cold, damp bed is a deadly contrivance, by which many have lost their health and even their lives. If there are no arrangements for heating the bedroom, the bedding should be taken to some other room, and warmed each time before being slept in during cold and inclement weather.

Clothing that has been worn should be thoroughly aired outside the sleeping room, and soiled garments, especially underclothing saturated with perspiration, should not be allowed to remain in the room to taint the air that is to be breathed by the inmates. A dressing room adjoining or near the sleeping room is a great desideratum. If this is out of the question, let at least the clothing worn during the day be aired at night in some other room. This is especially important as regards such outside garments as skirts, dresses, coats, etc., which cannot be laundered. The hose and shoes, which are generally left in a heap on the floor, should be aired at night. Turn the stockings and hang them over a chair. This will divest them of the perspiration that makes the hose so clammy after being worn a short time. If the hose or underclothing be of wool, care must be taken that it is not hung so near a window in damp or foggy weather as to absorb moisture from the atmosphere.

The special purpose of a bed is to secure an easy, relaxed condition for the body. It is a debatable question whether the soft, cushioned resting places common in our homes are not a hindrance to refreshing sleep. The custom in many other lands is to sleep upon a rug placed upon the ground or floor. We once visited a large Mexican hospital where for the sick and helpless a blanket spread upon boards was the bed in use. It is affirmed that the hard bed is a wooer of sleep. Not all may be due to the hardness alone. It is undoubtedly a fact that the thick, soft mattress with which our beds are in general supplied has the effect to overheat the side of the body lying next to it, resulting in disturbance of the circulation and nerve activity. The most healthful bed is undoubtedly some arrangement permitting of comfort and affording a balanced protection for the entire body. A fine mesh or canvas hammock so hung as to admit of ease and a horizontal position, with the same thickness of blanket or blankets, as the season might require, to spread underneath and to cover the sleeper, might well serve the purpose.

Most people, however, desire a stationary bed. Of bedsteads, those of iron or brass are considered the most sanitary. They are less cumbersome than most wooden ones, less liable to harbor vermin, more easily kept free from dust, and in case of infectious dis-

eases, more easily disinfected. The last few decades have witnessed many changes for the better in the appointments of the sleeping room. The four-poster of our grandmothers, with canopy above, curtains around, and valances below, has been gradually discarded, and it may be hoped that its accompaniments, the feather bed, the quilted covers, and stuffed bolsters, will soon become wholly relegated to the past. Feathers, while soft and warm, are particularly unhealthful to sleep on or under, as is the custom in some foreign countries. Being of animal origin, they undergo a continuous, slow decomposition, evolving foul and poisonous gases. They are also possessed of more or less remarkably hygroscopic properties, on account of which they absorb the exhalations from the body which are thrown off from the skin during sleep, retaining them from month to month, and even year to year, until the feather bed becomes a most unsanitary resting place.

A well-filled mattress of hair or elastic felt, or of fine excelsior, moss, or straw, these being the materials least absorbent of water and absorbable to organic matter, accompanied by woven-wire springs, is considered the most wholesome. It should be daily aired, frequently turned, and once each week or at least once in two weeks, taken out of doors to be sunned and well beaten. The dust, if any has collected about the tuftings, may be brushed away with a whisk broom. A cover of double-faced canton flannel or heavy, unbleached cloth, which can be aired daily and laundered frequently, should protect the mattress underneath the sheet.

Pillows, if used, may be made of hair, moss, or cotton. If they can be afforded, air pillows and mattresses are excellent. Feather and down pillows are objectionable for reasons already stated. Besides, they are too soft and yielding, thus inducing too much heat about the head. A pillow should be firm and not large, just high enough to bring the head on a level with the body, never high enough to elevate the shoulders. The real use of a pillow, if indeed there be a use for one, which is a somewhat mooted question, is to support the head. Certain Oriental and semicivilized nations seem to have attained this purpose far better than we, in the notched block of wood or rod of bamboo with its tiny cushion placed under the neck at night as a pillow.

To cover the sleeper, the bed should be provided with plenty of soft, fleecy blankets, of a quality which will be at the same time light in weight, yet warm, and of such a nature as to allow the air to pass through readily. These can and should be frequently laundered. Heavy blankets are depressing; quilts and comfortables stuffed with cotton or other impermeable material, while they provide warmth, are objectionable from a sanitary standpoint, because, not being porous, the waste matter given off from the skin during sleep is retained under the covers, to be reabsorbed again by the body during the period of time it is thus protected.

The scientist puts cotton into his culture tube to keep the germs from entering and contaminating his cultures; the cook covers her glasses of jelly and preserves with a layer of cotton to exclude air and germs from their contents; and if it were intended to keep out all the fresh air and to keep all the poisonous matter exhaled during the night in the stratum of air surrounding the body, scarcely anything could serve the purpose better than the common bedquilt or tufted cotton comfortable. These impermeable covers are often the cause

of restless sleep and the tired feeling with which one awakes in the morning.

In very cold weather, in lieu of many covers, it is better that one wear warm bed stockings and a blanket robe outside the ordinary night garment. One good double blanket will supply the warmth, minus the weight, of three under other conditions, with far more comfort to the sleeper. Particularly is this a desirable arrangement for young children who, in their restless tossing, are apt to throw off the covering, and expose themselves to chill and its attending dangers.

"IT MICHT HA' BEEN WAUR."

When failures becloud the blue of your sky,
And troubles begin in torrents to pour,
Just think of the floods that others have whelmed,
And say to yourself, "It micht ha' been waur,"
You're drenched, but no droon'd; it micht ha' been waur!

When out on life's sea your vessel is wrecked,
Beyond the relief of a humanly shore,
Cling fast to the spar God's put in your hand,
And say to yourself, "It micht ha' been waur,"
Some haven't the spar; it micht ha' been waur!

When Death, blanching Death, stalks into your street
And knocks with appalling hand at your door,
Hold fast to the hope God's put in your heart,
And say to yourself, "It micht ha' been waur,"
What if you'd nae hope! It micht ha' been waur!

* * * *

And when you shall stand before the Great Judge,
Who'll open the book and scan your life o'er,
May he in his love forgive where you've tried,
And say to your soul, "It micht ha' been waur,"
Gang ye wi' the sheep; it micht ha' been waur!"

— John H. Finley, in the Interior.

SIMPLE DIET.

BY MARY HEATH.

THE human body is such a wonderful machine, does its work so easily and simply, and requires, comparatively so little repairing, that we are prone to neglect it. Fortunately, hygiene is our latest national fad — and it was high time our fads took a healthful direction! — so that just now we are, as a people, giving more thought to that marvelous mechanism. Everybody ought to know something of physiology, of the needs of the body, and the workings of its various parts. Certainly every mother and housekeeper should study the subject, since she holds, as it were, the key to the health of the family.

For of all the various divisions of the human mechanism, the digestive system is the most important, in that it is the base of supplies for all the others. The

food we eat is there transformed into blood, to feed heart, nerves, etc., and furnishes the fuel for all the other systems. And the housekeeper plans the meals which are helpful or harmful as they are or are not what the body needs. There is no one law which can be applied to all cases, in the matter of diet. The laborer who works all day in the field requires more food than the man who sits at a desk; the growing child needs more in proportion than the adult. Probably many of us eat too much; but in remedying this fault we must not go too far in the other direction and eat too little. Extremes are to be avoided, even in reform. Because we are told that it is not wise to overwork the digestive organs, we must not rush to the other extreme, and give them nothing to do. There are some falsely called "health foods" on the market (not to be confused with the true "health foods") which are offered to the unwary as entirely "predigested," and so hygienic. They are to be avoided by those in good health, at any rate. The stomach was made to do its own digesting; doubtless it needs a moderate amount of exercise, just as the other parts of our bodies do.

The meat question is a much-discussed one. Certainly we do eat entirely too much of it; but the meat trust is helping us to more sensible living (a pie trust would be a blessing!). The food we eat over and above what the system actually requires, is worse than useless — it is absolutely harmful.

The average business man who has steak or chops as the basis of a hearty breakfast, lunches at a restaurant "down town," where, it must be confessed, he will find it difficult not to eat meat in some form, and comes home to an elaborate meat dinner at night, is undoubtedly breaking the laws of hygiene, and will, in time, have to suffer for his indiscretions. Very few people need more than one hearty meal a day. A light breakfast without meat; a simple lunch of salads, nuts, fruits, and the like; and a good hearty dinner are sufficient. For the business man or woman, dinner in the late afternoon is preferable, since the stomach requires time and repose of body to work best. If he dines at noon, rushing through the meal and hurrying directly back to work with brain or body, he cannot digest his food properly. For children, on the other hand, the midday meal should be the heartiest, and only a very light supper should be eaten at night. And just here let me add a word in reference to the indiscretions, to speak mildly, that mothers commit in the way of feeding their children. When the child is old enough to begin to take solid food, they commence by giving him, say, potatoes and beef juice, or fresh white bread and butter. Nothing could be more injudicious. Starchy food cannot be digested by young children, nor does it contain the elements they require. As for the meat juice, it is worse than superfluous. Frequently children will decide this fact for themselves by refusing to take animal food. Several mothers have said to me of late, "I am so worried about baby. It is time he began to eat meat, but I can't get him to touch it." Don't try! Baby knows better than his mother what he needs. Start him on cereals, with good, pure milk, a little whole-wheat bread or zwieback, a baked apple or an orange, and don't force meat and potatoes on him.

Variety in food is necessary and wholesome. For absolutely good digestion a good appetite is necessary, and variety stimulates appetite. But foods must be combined with caution. Vegetables do not combine well with fruit

acids. With many people tomatoes disagree when eaten at the same meal with acid fruits. Cereals combine well with almost everything. Milk never combines with any acids.

Again, the meal must be well balanced. Foods may be divided into two principal classes, nitrogenous, or tissue building, and non-nitrogenous, or heat-making. It will be readily understood that a well-balanced dietary must contain food of both classes in proper proportion. A meal consisting altogether of albuminous food and no fats or starch would not be a well-planned meal. The combination of foods is another branch of the study of diet to be mastered by the housekeeper.

Vegetables and fruit in season are very wholesome, and should be used freely, but each variety should not be on the family bill of fare more than once each day. Fruit should be used freely at all seasons, as it is a tonic to the digestion, and a mild disinfectant, provided it is fresh and sound. Nuts are rich in fats, and nourishing, and are digestible in most cases if well masticated. But this might be said of every food, particularly starchy foods. Thorough mastication is a great factor in good digestion, which, indeed, begins in the mouth, with the action of the saliva on the starches.

There are some things not fit for the human stomach. Of course the old saying, "One man's food is another man's poison," has much truth in it, but in general we may say that much pie, rich pastry, heavy sweets, and fried foods are unwholesome for all. To eat rich mince pie at the end of a hearty, elaborate dinner is to overwork the digestive organs, and in time they are bound to punish the offender. And was it Jacob Riis who said that the frying pan is the curse of the poor? A truer word was never spoken. To fry food is the worst possible way to prepare it for the human stomach. It is not hard surely, in most cases, to find another and better way of cooking it. White bread should not be exclusively used, and very fresh bread is indigestible.

So many "don'ts"! The housekeeper despairingly wonders what she can safely give her family. If she will take the bull by the horns, however, and study the subject carefully, she will find it not so difficult a problem after all. There are far more wholesome than unwholesome foods, and once started, reform is easy. Her family will soon learn to relish light, simple desserts or seasonable fruits, attractively served, as well as pies and rich puddings. She will find that whole-wheat bread and gems, corn muffins, etc., and the crustier, crisper loaves of bread will be enjoyed. She must understand cooking, and see that her wholesomely prepared meals are appetizing — there is no reason why wholesome should be considered a synonym for tasteless. And she will have her reward in the improved general health of her family.

A few suggestive menus may be of service. They are simple, since simplicity is the keynote of the new diet. Breakfasts need only a general word. A light breakfast is far preferable to an elaborate one. All night the body has been resting, the digestive system has worked slowly, and is not in need of much fresh fuel. Crisp toast or cereals with fruit or milk or cream make a sufficiently nourishing breakfast for most; and for those who must have it, cereal coffee and a poached or boiled egg. Vary the fruit and cereals by serving rolls or whole-wheat muffins.

To the luncheons in the following menus, may be added any left-overs from the dinner of the day before: —

Sunday Luncheon

Broiled Nuttolene Caramel-Cereal
French Bread
Lettuce-and-Nut Sandwiches
Fruit Salad

Dinner

Rice Soup
Roast Protose Baked Potatoes
Boiled Corn
Lettuce-and-Tomato Salad Apple Tapioca

❦ ❦ ❦

Monday Luncheon

Granose Biscuit with Drawn-Butter Sauce
Stewed Tomatoes Apple Sauce
Wafers

Dinner

Pea Timbales Chestnut Purée
Sweet Potatoes Boiled Rice
Fruit

Tuesday Luncheon

Protose Croquettes Whole-Wheat Muffins
Fruit

Dinner

Tomato Soup Baked Macaroni
Sliced Beets Creamed Potatoes
Sago Pudding

❦ ❦ ❦

Wednesday Luncheon

Corn Mush Omelet
Graham Muffins Hot Milk

Dinner

Baked Tomatoes
Mashed Potato Stewed Corn
Indian Pudding

❦ ❦ ❦

Thursday Luncheon

Corn Muffins Caramel-Cereal
Stewed Fruit

Dinner

Baked Beans Creamed Potatoes
Vegetable Oysters (salsify) Lettuce Salad
Rice Pudding

Friday Luncheon

Rice Cakes Malt Honey
Stewed Potatoes

Dinner

Vegetable Oyster Soup or Purée of Peas
Nut Loaf Baked Macaroni
Tomato Salad Blancmange

❦ ❦ ❦

Saturday Luncheon

Rice Omelet Creamed Potatoes
Stewed Fruit

Dinner

Vegetable Chowder
Asparagus on Toast Potato Cakes
Farina Pudding

THE DISINFECTING POWER OF SUNLIGHT.

BY J. H. KELLOGG, M. D.

NATURE'S great disinfectant is sunlight. It is a most interesting fact that this wonderful light, which promotes the growth of useful plants and sustains animal life, at the same time destroys by its very brightness all sorts of germs which are brought in contact with it. It is this fact alone which renders the earth habitable. Germs develop with such marvelous rapidity that they would quickly overwhelm us by their very numbers if not constantly destroyed by the sun. A little computation will readily show this. Some germs are capable of such rapid multiplication that they may double every fifteen minutes under favorable conditions of temperature and food supply. Estimate the number of germs which might be produced in a single day of twenty-four hours, or ninety-six doublings. The number would be more than thirty-two thousand billion billions, or sufficient to cover eighty thousand square miles a foot deep, or fill a space of more than fifteen cubic miles. The increase of a minute organism occupying a cubic space of not more than one twenty-thousandth of an inch to such prodigious magnitude is beyond comprehension, and practically cannot occur; for while the germ may grow at this immense rapidity for a short time, the poisons which it produces become destructive to itself. The material upon which it feeds is also exhausted, so that its growth ceases.

Doubtless all have noticed the fact that mold grows during the night and in dark, damp cellars. Bright sunlight quickly destroys germs, mold, and other parasitic organisms. Diffused daylight does not act nearly so rapidly, but accomplishes in the course of a few hours what bright sunlight is capable of doing in a few minutes. It is clearly evident, then, that in order that our houses should be kept free from germs, they, like our bodies, should be made full of life. The shutters should be opened, the curtains raised, and the light admitted to every room in the house, closets included, so that the disinfecting power of light may be exercised in every nook and corner of the dwelling.

Although these minute organisms are growing about us in great numbers they are for the most part so mingled with other grosser matters that they are hidden from sight. Powerful microscopes are necessary to see the individual germs, but we may easily produce growths or cultures of them in various suitable ways, one or two of which we will indicate.

Select two or three very smooth, round potatoes of medium size. Scrub them with strong soapsuds made from soft soap or good laundry soap, without removing the skin. After they are thoroughly washed, steam them for half an hour in an ordinary steam cooker. At the end of half an hour remove the cooker from the stove, but do not open it. The purpose of the cooking is to destroy the germs on the outside of the potato. There are, of course, none on the inside. If the cover is opened, the potatoes are likely to become contaminated. While the cooker is cooling off, prepare a large, deep pie plate and an ordinary good-sized glass fruit dish that has a smooth edge. A large glass bowl would answer the same purpose. This should be thoroughly scrubbed with hot soapsuds so as to be as clean as pos-

sible, and finally should be immersed in boiling water for a few minutes. The glass bowl should be of such size that when it is inverted on the plate the edge will lie in contact with the bottom of the plate at its lowest part. When the dish is ready, put the plate on the table without touching the center of it with the fingers. Invert the glass bowl over it, taking care also not to touch it inside with the fingers. Add a tumblerful of water which has been boiled for ten or fifteen minutes; prepare also a sharp metal knife by first cleansing it thoroughly and then boiling it for ten minutes. The cleansing of the hands by thoroughly washing with strong soapsuds should not be omitted.

Take one of the potatoes from the cooker, and carefully cut it in halves, protecting it as much as possible from the air. Don't bring the potato in contact with the table or any other object. Avoid turning the cut surface upward. Raise the glass bowl, place the two halves upon the plate, with the cut surfaces upward, turn the glass bowl over them, and pour boiling water to the depth of a quarter of an inch on the plate. Cover all with a black cloth, and keep in a moderately warm place. After two or three days make a careful inspection. If the work has been carefully done, no change will be noticed in the potato. The cut surfaces will remain perfectly white and clear. If the cleansing has not been thoroughly done, or if sufficient pains has not been taken to avoid infection, a white, green, yellow, bluish, or reddish growth will be found spread over the cut surface of the potato. The color of the growth will depend upon the particular variety of mold or yeast which happens to have come into contact with the potato. If the surface of the potato remains white and clear, germs may be planted by collecting dust from a window sill, the pantry, and from various other places by means of a knitting needle, and transferring the dust to the center of the potato. The knitting needle should be first boiled, then the end should be dipped in boiling water to moisten it. When this is brought in contact with the dust which it is desired to plant, a portion will adhere. The adhering particles may be rubbed upon the center of the potato. A mere touch is all that is required. Sometimes several different kinds of germs may be planted at once in this way, and the growth will be mixed; at other times a pure culture will be obtained.

The potato may be inoculated with saliva germs by first touching the tip of the tongue with the end of the knitting needle after it has been dipped in boiling water or passed through a flame. A great variety of growths may be obtained in this way, some of which are very curious and interesting. A remarkable growth which sometimes appears is bright red in color, and it grows very rapidly. The same germ sometimes is found in milk which has been set overnight. There may be little red patches scattered here and there over the surface of the milk, or the whole may have acquired a red color. One variety of red germs grows upon bread, rice, and other farinaceous substances. In Germany there is a church where these germs abound. Bread exposed in the church is next morning found to be colored red as though smeared with blood. This fact has been taken advantage of, and the appearance is claimed to be supernatural, and is called "the miracle of the bleeding bread." Thousands visit this musty old church annually to witness a miracle which can at any time be reproduced in the laboratory. Some years ago the writer re-

ceived from a gentleman residing in the West a specimen of rice which was covered with these germs, which appeared overnight, greatly to the astonishment of the household.

Another method of cultivating germs is the following: Take an ordinary wide-mouth bottle. Put into it a tablespoonful of white of egg. Put a cork in the mouth of the bottle. Put the whole in the oven, and bake for half an hour. The white of egg should be coagulated, but should not be browned or burned. To avoid overbaking, it is a good plan to bake the bottle for an hour before adding the white of egg, then return to the oven until the egg is coagulated. Material from different sources may now be transferred to the surface of the egg in the bottle by means of the sterilized knitting needle, as before directed. In passing the needle into the bottle, the mouth of the bottle should be held down to prevent the entrance of germs. On withdrawing the needle, the cork should be introduced while the bottle is still held mouth downward, and the bottle should then be put in a warm place. Ointment bottles holding two or three ounces are convenient for this purpose. They can be easily carried in the pocket, thereby keeping them warm by means of the body heat. During the night warmth may be maintained by binding the bottles to some part of the body, or wrapping them up with a jug filled with water at about 100 degrees F. It will be found very interesting to notice the different modes of growth of the different varieties of germs, and the differences in color and odor which characterize them. Care must be taken, however, not to become infected, as it is possible to come into contact in this way with some very active and virulent germs.

DON'T TAKE YOUR TROUBLES TO BED.

You may labor your fill, friend of mine, if you will;
You may worry a bit, if you must;
You may treat your affairs as a series of cares,
You may live on a scrap and a crust;
But when the day's done, put it out of your head;
Don't take your troubles to bed.

You may batter your way through the thick of the fray,
You may sweat, you may swear, you may grunt;
You may be a jack-fool if you must, but this rule
Should ever be kept at the front:
Don't fight with your pillow, but lay down your head
And kick every worriment out of the bed.

That friend or that foe (which he is, I don't know),
Whose name we have spoken as Death,
Hovers close to your side, while you run or you ride,
And he envies the warmth of your breath;
But he turns him away, with a shake of his head,
When he finds that you don't take your troubles to bed.

— Edmond Vance Cooke, in The Saturday Evening Post.

Two January Dinners

By O. P. Grant

Chicago [1]

Cream-of-Celery Soup, Sticks

Olives — Chili Sauce

Spaghetti, Italian Style — Candied Sweet Potatoes

Creamed Cauliflower — Green Peas

Steamed Potatoes

Cream Protose with Chestnut Purée

Protose Salad — Rice-and-Apple Custard

Assorted Fruits — Oatmeal Wafers

Nuts — Caramel-Cereal

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Purée-of-Tomato Soup

Celery — Ripe Olives

Sweet-Potato Cutlets — Sugar Peas

Stuffed Protose with Dressing

Baked Beans — Potatoes Lyonnaise — Turnips Stewed in Cream

Fruit Salad — Date Sandwiches

Nut Sponge Cake — Baked Bananas, Orange Sauce

Fruit — Nuts

Orange Nectar — Caramel-Cereal

[1] "Two Xmas Dinners," which appeared last month, should have been credited to Mr. Grant.

RECIPES.

Cream-of-Celery Soup.

Ingredients.— Celery tops, use outside stalks (save hearts for protose salad), 1 quart cream or rich milk.

Method.— Put tops in saucepan, cover with water, simmer one hour. Drain, return water to pan, add milk and stalks, simmer one-half hour longer, season to taste, remove celery, thicken to consistency of cream. Serve hot.

Chili Sauce.

Ingredients.— 1 quart strained tomato, 4 tablespoonfuls minced celery, 3 tablespoonfuls minced onion, sugar.

Method.— Put all together in saucepan, let come to boil, set on back of range, and simmer two hours. A small piece of lemon peel and a cup of chopped tart apple will greatly improve the flavor. Cook till apples are done, remove lemon peel, cool, serve.

Spaghetti — Italian Style.

Ingredients.— One-half pound spaghetti, 2 pounds protose, 3 quarts water, 1 can tomatoes, sprig of celery.

Method.— Cut protose into three-quarter-inch cubes, put into saucepan, add water, salt to taste, add the sprig of celery crushed. Simmer two or three hours, or until broth is reduced one half. Drain (save protose and one-half pint broth for creamed protose). Break spaghetti into six-inch lengths. Drop into boiling water. Boil five minutes, drain. Add the protose broth. Simmer till tender, when it should be nearly dry. Put tomatoes in saucepan, chopping up the large pieces. Season as for stewed tomatoes, simmer five minutes, add spaghetti. Cook ten minutes, tossing occasionally to keep from burning. Do not stir.

Candied Sweet Potatoes.

Boil potatoes till tender, remove jackets, arrange in oiled baking pan, sprinkle with powdered sugar, brown in slow oven.

Creamed Protose with Chestnut Puree.

Ingredients.— Protose (left from spaghetti), one-half pint protose broth, chestnuts prepared as in Menu No. 2 (December), one-half pint cream, sprig of celery.

Method.— Put cream and the protose broth, saved from spaghetti, into saucepan. Add the crushed sprig of celery, and simmer ten minutes; remove celery. Thicken as for cream sauce; pour over protose. Make a ring or border of the chestnut puree on individual dishes, and fill the center with the creamed protose. Or if preferred, drop a spoonful of the puree in center of dish, surrounding with the protose.

Protose Salad.

Ingredients.— 1 part celery, prepared as for celery salad, Menu No. 2 (December), 2 parts protose, diced, salad dressing as in Menu No. 2.

Method.— Cut protose into half-inch cubes, mix with celery, sprinkle with salt, put into granite pan, set on ice. Finish as for celery salad. Serve on crisp lettuce leaf, garnish with quarters or eighths of hard-boiled egg.

Rice-and-Apple Custard.

Core Jonathan apples. Sprinkle with sugar, and bake. Stir well-cooked rice into a custard prepared as in Menu No. 1 (December). Orange may be substituted for the lemon if desired. Pour over apples when done. Serve cold.

Puree-of-Tomato Soup.

Prepare as for tomato soup in Menu No. 1 (December), the only difference being that the puree should be thicker. This soup will be much improved by adding a pound of diced protose, cooking with the soup, and removing before serving.

Sweet-Potato Cutlets.

Pare potatoes, cover with boiling water, boil twenty minutes, drain off half the water, and cook till soft. They should be almost dry when done. Mash or put through ricer. Form in shape of chops, sprinkle with powdered sugar, and brown in medium oven. Serve with sugar peas.

Stuffed Protose with Dressing.

Ingredients.— 1 large-sized can protose (two and one-fourth pounds), 1 box zwieback (12 or 14 slices), 1 tablespoonful pulverized sage, 1 tablespoonful olive oil, 1 medium-sized onion.

Method.— Cover broken zwieback with cold water. Drain immediately, and set aside for two hours. Pick zwieback to pieces, rejecting hard lumps. Add sage, minced onion, olive oil. Salt to taste. Mix or toss with spoon. Do not mix with hands. Open protose can by cutting off top, beginning at seam. Pass knife under top, remove, and run knife around sides of can to loosen protose, and remove carefully to avoid breaking. Cut in half lengthwise. Remove a half cylinder or core from each half, 1 and one-half inches in diameter, saving core to add to dressing. Mark protose into the number of slices desired, as it is difficult to cut after baking. Mince scraps cut from center of protose, add to the dressing. Stuff each piece with dressing, place in oiled pan. Place remainder of dressing in another pan. Bake in moderate oven twenty or thirty minutes.

To serve, place a spoonful of dressing on each platter, placing a slice of protose beside it. Serve with gravy, jelly, or green or creamed peas.

Baked Beans.

Wash beans, place in heavy pot, and boil five minutes. Salt to taste. Bake twenty-four hours in slow oven, keeping barely covered with water. If a sweet taste is desired, malt honey dissolved in water, may be added to the beans while baking. When done, the beans should be of a uniform dark brown. Longer cooking will improve.

Potatoes Lyonnaise.

Chop cold boiled or baked potatoes. Season with salt while chopping. Stir in onions and parsley minced. If too stiff, thin with nut cream to consistency desired. Turn into oiled baking pan, smooth, brush with cream, brown. Serve in squares.

Turnips Stewed in Cream.

Pare young turnips, cut in dice. Simmer till nearly done. Drain off nearly all the water. Add enough cream to barely cover. Salt to taste. Simmer till tender (don't boil). Thicken slightly. Serve.

Fruit Salad.

Ingredients.— 3 bananas, 5 apples, dressing prepared as for orange sauce, except whites of eggs.

Method.— Cut bananas and apples into small dice. Place in granite or enameled pan, and set on ice. Thin dressing to consistency desired with orange or lemon juice. Pour over diced fruit, serve on crisp lettuce leaf, garnish with malaga grapes or stuffed dates.

Date Sandwiches.

Ingredients (for making six sandwiches).— 6 thin slices entire wheat or white bread, 6 thin slices graham bread,

1 tablespoonful almond butter, 3 tablespoonfuls malted nuts, 1 pound dates.

Method.— Simmer dates for three quarters of an hour in just enough water to cover. Remove from fire, and rub through colander. Rub almond butter to a smooth paste with a little water. Spread on bread, sprinkle with malted nuts, spread with the date marmalade. Place slices together and trim edges. Cut into four strips. Serve two strips each of the graham and white arranged in layers or laid crosswise.

Nut Sponge Cake.

Ingredients.— 6 eggs, 1 cup flour, 1 cup sugar, 2 tablespoonfuls lemon juice, three-fourths cup chopped walnuts.

Method.—Separate yolks from whites of eggs, set whites on ice. Sift flour five times. Beat sugar and yolks of eggs together till frothy, adding lemon juice. Add a pinch of salt to whites, beat till stiff. Fold (do not beat or stir) the yolks into the whites, adding any flavor desired. Then carefully fold in the flour, sprinkling slowly through sifter. Lastly fold in the chopped nuts.

Trim crinkled Japanese napkin to fit bottom of cake pan. It will not be necessary to oil tin. Pour cake batter into tin, and bake forty minutes in moderate oven in shallow pan. To remove, loosen sides with knife or spatula, invert on bread board. Serve plain, iced, or cut into ornamental shapes spread with jelly.

Baked Bananas.

Beat two eggs and a cup and a half of water together. Peel one dozen bananas, dip in egg batter, roll in granola or bread crumbs; repeat. Place in oiled pan, bake twenty minutes in hot oven. Serve with —

Orange Sauce.— Mix thoroughly half a cup of sugar and a rounded tablespoonful of cornstarch. Then add, in the following order, a tablespoonful of lemon juice, the juice of one orange, a little of the rind, three quarters of a cup of boiling water. Cook ten minutes in double boiler, stirring constantly. Remove from fire, whip in the whites of two eggs beaten stiff.

Orange Nectar.

Extract the juice of six oranges and two lemons, being careful not to get the flavor of rind. Add enough water to make six glasses of nectar. Sweeten.

ANOTHER YEAR.

Another year of joy and sorrow,
Another year of care and pain,
Has passed away, and on the morrow,
A bright New Year begins again.

A year untried, and yet we're standing,
With eager hearts the year to greet,
Willing, dear Lord, at thy commanding,
Still greater care and pain to meet.

God grant that in this untried year,
Each day may prove some duty done,
The way made bright: the path made clear,
Some battle fought and victory won.

— Carrie E. Farr.

The Hundred Year Club

BIOLOGISTS tell us that the natural limit of human life as shown by members of the animal kingdom is one hundred and twenty years. Experience proves the same; for many persons have reached this advanced age, even in modern times. For several years the Good Health has been collecting facts in relation to modern centenarians. The editorial drawer contains at the present time biological sketches of about thirteen hundred centenarians, with scores of photographs and statements of these aged persons who have died within the last few years, or are still living.

It is the purpose to devote this department to the study of the habits of these individuals and others who have attained great age. All the readers of the Good Health are invited to send items and information which may be of interest to this department. Letters addressed to the editor will receive due attention.

ONE HUNDRED YEARS OLD.

❦ ❦

Betsy Morley Lewis, Aged One Hundred Years, Harrisburg, Pa.

Mother Lewis was a tailoress, and worked at her trade in her native city for many years, her life always being an active one.

Her diet is very simple, consisting largely of rice, oatmeal, and potatoes, of which she is especially fond. She eats no meat of any kind, and drinks coffee very moderately. She has never used tobacco or alcoholic liquors in any form.

The accompanying cut is from a photograph taken on her one hundredth birthday. At this time she was given a public reception, at which she greeted five hundred people, and without a great deal of fatigue.

Her eyesight is still so good that she is able to read both print and plain script readily. She sleeps well, and it has long been her custom to retire at seven o'clock.

❦ ❦

Thompson S. Barnes, Aged One Hundred and Two Years, Olmsteadville, N. Y.

Father Barnes was born on Dec. 17, 1797, and died Oct. 17, 1902, making him nearly one hundred and two years old. He was always a hard-working and energetic man, superintending in person a 250-acre stock farm, a large sawmill and gristmill, and extensive lumbering

interests. This, of course, necessitated an active, out-of-door life. This, together with the fact that Mr. Barnes never used tobacco or alcoholic liquors in any form, no doubt gives us the secret of his unusual term of years.

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George W. Blakeman, Aged One Hundred Years, Derby, Conn.

Mr. Blakeman's life was simple and sunny, as well as broad and active. He kept well up with the times, living as though he expected to live always. He invariably saw the bright, even the laughable, side of things, and made it his rule to live at peace with all.

His diet was very simple, consisting largely of bread and milk. He ate very little meat, and believed it wrong to use liquor or medicine of any kind.

THOMPSON S. BARNES.

GEORGE W. BLAKEMAN.

❦ ❦

Lived to One Hundred or More.

The vital statistics for 1901, issued by the New York Board of Health, show that during the year the deaths of fourteen centenarians were reported to the Health Department. In the following list the ages are given in round numbers, the months and days being omitted: —

Died.	*Name.*	*Age.*	*Nativity.*	*Cause.*
Jan. 2.	Anne Slote,	100.	Ireland.	Old age.
Jan. 3.	Susan Gusner,	100.	United States.	Old age.
Jan. 6.	Lydia B. Coleman,	100.	United States.	Old age
Jan. 9.	John Mc Gee,	101.	Ireland.	Old age.
Jan. 23.	Bridget Grimes,	104.	Ireland.	Bronchitis.
Jan. 23.	Isaac Landy,	105.	Russia.	Old age.
Feb. 22.	Leah Abrahams,	114.	Russia.	Apoplexy.
Mar. 12.	Martha Lockett,	102.	United States.	Old age.
April 14.	Mary Pendergast,	105.	Ireland.	Old age.
May 3.	Louis Levy,	102.	Russia.	Old age.
May 8.	Ascher Schloss,	102.	Germany.	Pneumonia.
Aug. 26.	Catherine Howe,	103.	United States.	Old age.
Oct. 21.	Catherine Brown.	100.	United States.	Old age.
Dec. 24.	Amelia Carle,	100.	United States.	Fall.

—*New York Sun.*

GENERAL TOPICS.

The Mission of Cookery.

The true purpose of cooking should be such a preparation of food materials as will so change their constituent elements as to make them more digestible than they would be in the raw state. Indeed, good cookery is a partial preliminary digestion of the food elements; at the same time it breaks up the food by dissolving the soluble portions so that it is the more readily acted upon by the digestive fluids.

Cookery is one of the oldest of household arts. In primitive days it is probable that the processes by which food was prepared were very simple, but with the later ages of luxurious tendencies and voluptuous living, such a multitude of the cook's devices was called into requisition to provide new and pleasing dishes, that the primal purpose of the art was largely overlooked, and the whole aim centered upon producing something to cater to the sense of taste. There was much rivalry among cooks, and even those of different nations vied with one another in efforts to concoct marvelous and unheard-of dainties.

With such a gastronomic heredity, it is not difficult to understand why so many of the recipes in common use at the present day are simply a mixture of ingredients to please the palate without regard to dietetic value.

When taste alone is made the criterion, it is so easy to disguise the results of careless and improper preparation of food by the use of flavors and condiments, that poor cookery has come to be quite as frequently the rule as the exception. The resulting evils are almost innumerable. No one thing over which we have control exerts so marked an influence upon physical prosperity as the food we eat. Improperly prepared food makes poor blood, poor brains, poor muscles, and vitiates the integrity of the entire system. Much of the disease, many of the sins and misdeeds, and much of the unhappiness of the world may be rightfully attributed to poor food and bad cookery.

Phillips Brooks used to say that "health is salvation," and Bishop Foster declares that "to care for men's souls most effectively, we must care for their bodies also." To care for their bodies necessitates a first care for the building material from which these bodies are made, in the provision of proper food and its healthful preparation. The proper preparation of food for digestion is not merely a matter of having at "one's fingers' ends" the composition of numberless dishes.

The following of recipes and the mechanical mixture of ingredients have largely constituted the cook's art in times past, but in these days of progress it is becoming evident that success in cookery, as in other arts, depends upon attention to the scientific principles involved, and that a knowledge of the composition of foods, their digestibility, their nutritive values, their adaptation to individual use under varying conditions, the results of certain combinations, the action of heat upon different materials, the why and the wherefore of each operation employed in cooking, is indispensable for the successful production of wholesome articles of food.— E. E. K.

Tall Buildings and Nervous People.

When it comes to facilities for increasing the army of nervous people, it is a mistake to give the palm to the electric trolley car, the automobile, or the elevated trains. The tall sky-scraper building of the big cities is a close competitor of all these in the manufacture of nervous wrecks. Not one woman in a hundred can step into a swift-flying elevator and be "shot" up to the tenth story of a scraper without a feeling of "goneness" in the region of the heart, which, in the case of many delicately organized women, approaches very closely to a nervous collapse. It must not be imagined either that the shooting up and down in these steel cages day after day has no effect upon the nerves of men. They become accustomed to the sensation of being dropped from the fifteenth story to the basement. The heart action is proof against its wear and tear, but their nerves are not. There is a gradual, unconscious breaking down of the nervous system. It is not the elevator alone that is responsible for this process of nerve impairment, although many of them will alone suffice to shatter the most robust organization. That careworn aspect of the countenance which we sometimes humorously refer to as the "elevator face," is the result of the constant hammering of the nervous system by the daily trips up to the office and down again, waiting for the elevator to get filled before it starts, trying to stop it on its downward flight at your floor. If you are in a hurry to keep an appointment, the elevator is certain to pass your floor without stopping.

This is the daily experience that gradually shatters or exhausts the nerve force. It is the struggle to reach the office after a man has ridden an hour on the trolley car or steam car to get to the sky-scraper in which the office is located, that saps the nerve vitality. It is easy to predict the increasing popularity of the low office building. The sky-scraper will have its day. It will always be populated for the reason that the steady stream of newcomers will always replenish the supply for the towering eyries, but the demand for the lower and more accessible offices will grow stronger, and the premium they command over the offices in the tall structures will increase as men grow in knowledge and experience.—Exchange.

An Extra Good Appetite.

A good appetite is a symptom of good health. An extra good appetite is sometimes a symptom of constitutional disturbance somewhere. A sample letter sent to the "Questions and Answers" column of a prominent health journal was something like this:—

"I am troubled with pimples, not to a great extent, but still very annoying. They appear principally on the forehead, but occasionally on other places. I often feel languid, and tire easily, and cannot gain flesh, although I have an extra good appetite. Still, I am not sick, and have not been in bed for a day in my life. Age, nineteen years. Will you kindly advise me what you think would remove these pimples?"

There is little doubt but that the "extra good appetite" alluded to affords the key to the situation. The digestive organs have more than they can take care of, and consequently do not properly take care of anything furnished. There will be frequent headaches, skin disorders, and alternate constipation and diarrhea with such persons. Pimples are a natural result of such depraved blood conditions.

With many people the habit of hearty eating is continued when the warm

spring days come. Food which was appropriate when the thermometer was at zero is continued in the same quality and quantity when the thermometer rises to ninety degrees in the sun, and averages above sixty all day and night. The person who loses his appetite under such a condition is on safer ground. The person with an extra good appetite will have to exercise self-control, or be placed on the retired list to learn wisdom by experience.— Selected.

Let your food be plain and wholesome,
From all stimulants abstain.
Keep the body that you live in
Clean and pure from every stain.
— Character Building.

Housecleaning by Machinery.

The suggestion made by this magazine some years ago, to the effect that the compressed-air system offered a practical solution of the housecleaning problem, has been successfully worked out here in St. Louis. Two different companies are making a business of it. We engaged one of them to clean our house of thirteen rooms. The van arrived at seven a. m., and by noon the entire house was absolutely cleaned of dust and dirt, including floors, carpets, ceilings, furniture, rugs, and mattresses, and all for twenty dollars.

This work is all done by compressed air, which is brought into the house through a hose from the compressor in the van outside. For cleaning carpets, a nozzle something like a flat-iron is used, which is drawn back and forth across the carpet, blowing in the air with such great pressure as to blow out every particle of dust in the carpet and on the floor underneath. The machine is covered with a bag connected with a suction pump in the van outside, which sucks up the dust. Not a particle of dust is left in the room as the work goes on, and all is done with astonishing celerity and thoroughness. A different device on the nozzle is used for blowing an air jet upon pictures, curtains, ceilings, walls, etc. The effect is almost magical. All dust and adhering dirt disappear and even the wall paper looks like new. Corners, crevices, and all nooks and crannies are cleaned out. Bacteria and disease germs, as well as "ordinary filth," are removed by the compressed air, and drawn out through the suction bag. Draperies and curtains are perfectly cleaned without being removed, and the same is true of rugs and carpets, also ordinary furniture. Upholstered furniture and leather-covered furnishings, mattresses, etc., are usually cleaned outside. The cloud of dust that will be drawn out of a mattress by compressed air is a revelation to any housekeeper.

The men who did the work were agreeable and accommodating, nor could we have had the work done as cheaply by ordinary methods of scrubbing and cleaning, which are not nearly so thorough and sanitary. The compressed-air method of course does not wash woodwork nor clean the windows. That part of housecleaning must still be done in the usual way. But all the rest of housecleaning is done most perfectly and economically by this method, which ought to come into universal use.— Verona Wirebeck, in Good Housekeeping.

What is the drunkard's life? — A life of pain,
Of sin, of sorrow, self reproach, and shame;
Of home affliction, evil wants; the drain
Of home resources, leave a filthy stain
On its sacred ties, dishonored name!
Friends, estimate the loss, and count the gain;
Shun as a plague the drink; a glimpse of light
It may be, heralding a dismal night.
— S. C. Hall.

Medical Lore of John Wesley.

In these days of hygienic reform, and "methods" of treating disease, it is interesting to read of the heroic treatment of 150 years ago. A volume printed by Perry Hall, Philadelphia, in 1747, and compiled by John Wesley, is a curious mixture of old-time remedies. There are few copies of the book in existence, but one unearthed recently was the occasion of much amusement at a recent convention of physicans. The book, substantially bound in leather, contains a few illustrations as primitive as the remedies. The preface deals with the raison d'etre of the work, incidentally recalling how —

"Man was sent perfect from the hands of his Creator, but rebelling against the Sovereign of all, the seeds of pain and sickness were lodged in the body, and a thousand disorders increased by everything around us."

"The sun and moon shed unwholesome influences from above, the earth exhales poisonous damps from below; the air itself that surrounds us is replete with the shafts of death; yea, the food we eat saps the foundations of life."

The preface further states: —

"As to the manner of using the remedies here set down, I should advise as soon as you know your disorder to use the medicine prescribed for that disease; the second, if that is of no effect; the third, and so on."

The work proper is entitled, "A Collection of Receipts," and recites in alphabetical order the disorders of that time and their remedies.

In the "A's" is a list of panaceas against ague. To "go into a cold bath just before a fit" is added the wholesome advice: "Nothing tends more to prolong ague than a lazy disposition."

Another remedy for ague is to "apply to the stomach a large onion split." Still another is: "Make six middling pills of cobwebs. Take one before the cold fit, two a little before the next, and the other three, if need be, before the other fit."

Parenthetically are introduced some gentle hints for "tender persons" and "the studious." Tender persons should constantly go to bed at nine, and rise at four.

For St. Anthony's: "Put a gallon of water (cold) on a quart of Norway tar, stir them together with a flat stick for five minutes. After it has stood for three days pour the water off clear; bottle, and cork. Dose: One wineglassful every hour."

For baldness: "Rub the head night and morning with a raw onion until red; then apply honey."

For chapped hands: "Wash the hands with flour of mustard."

For lung disease: "Take no food but new buttermilk churned in a bottle, and white bread. On each morning cut up a little turf of fresh earth, and lying down, breathe into the hole for a quarter of an hour."

For a dry cough: "Chew a small piece of Peruvian bark, as often as the coughing spell comes on. Swallow the piece as long as it tastes bitter."

For weak eyes: "Drop in two or three drops of the juice of a rotten apple."

For hoarseness: "Rub the soles of the feet before the fire with garlic and lard, well beaten together."

For colic: "Hold a live puppy constantly on the breast. Or take, ounce by ounce, a pound or a pound and a half of quicksilver."

For a stitch in the side: "Apply treacle on toast (hot)."

What to Feed the Growing Child.

According to reliable statistics, only three out of every five infants live to reach the age of five years. Half of these premature deaths could certainly be prevented if parents knew how to properly care for their children. Why should the child be fed upon such contents of a drug store as patent medicines and soothing syrups, many of which contain liquors or opium in some form, when a simple dietary of good, wholesome food, together with careful nursing, in most cases, is all that is necessary to restore health?

Because of the pernicious habit of allowing the child to eat anything it wants, and at any time during the twenty-four hours, the mother is obliged to give it some kind of soothing syrup or sedative to quiet its irritated nerves. In many cases this simply permits the child to die comfortably.

During the infant's first year the digestive organs are rapidly developing. Not until the cutting of the teeth is the infant able to digest anything but milk or its equivalent. Great care should be used in selecting the foods when the teeth begin to appear. As a general thing solid foods should be avoided until in the second year, when the teeth for mastication appear. Oftentimes the child is allowed to eat solid foods which it is not able to masticate thoroughly, and so large masses remain in the stomach to ferment and decay.

It is not only not necessary, but very injurious to the child's stomach, to allow it to eat such foods as pastries, pickles, confections, and fried foods. A simple, nourishing diet should be selected, consisting of such foods as granola and cream, and well-toasted bread, as zwieback, broken up and served in milk. If gruels are used, they should be made of grains which have been cooked and then strained. Pasty mushes, which have been cooked for only ten minutes or one-half hour, are a poor article of diet for a child. Malted nuts make a most excellent substitute for milk, and even infants can subsist on it alone.

A great mistake is made in allowing the child to have a great variety at one meal. Two or three kinds of food are sufficient, and all that a normal child cares for, unless it has been otherwise trained.— Mamie Wild Paulson, M. D.

TELL HIM SO.

If you have a word of cheer
That may light the pathway drear
Of a brother pilgrim here,
Let him know.

Show him you appreciate
What he does; and do not wait
Till the heavy hand of Fate
Lays him low.

If your heart contains a thought
That will brighter make his lot,
Then in mercy, hide it not;
Tell him so.

Wait not till your friend is dead
Ere your compliments are said;
For the spirit that has fled,
If it know,

Does not need to speed it on
Our poor praise; where it has gone
Love's eternal, golden dawn
Is aglow.

But unto our brother here
That poor praise is very dear;
If you've any word of cheer
Tell him so.

—Human Nature.

The Housekeeper's Afternoon.

The housekeeper who is without help is especially in need of rest and recreation, says a writer in Good Housekeeping. She should set apart an afternoon, preferably in the middle of the week, and on the same day each week, for if not definitely fixed, it will too often be postponed. This leisure time should be spent in rest or recreation, duty for the moment laid aside. Of course, when

possible, these afternoons should be literally "out" in the fresh air and sunshine. On stormy days, or when she is very tired, a long nap or an interesting novel may refresh or amuse the weary worker. A good story, read before an open fire, is always enjoyable. But when possible, get away from home, for usually change is the best rest. Believe me, you will find this a wise plan. And make your "afternoon out" as long as you can.

How sweet and gracious, even in common speech,
Is that fine sense which men call courtesy!
Wholesome as air and genial as the light,
Welcome in every clime as breath of flowers.
It transmits aliens into trusting friends,
And gives its owner passport round the globe.
— The Household.

Pneumonia in the Light of Modern Research.

S. S. Burk, New York, in his discussion of this subject, refers especially to the cause of the fatality, the prevalence of the disease, and the measures best adapted for its prevention. During the last ten years, while there has been a decline of nearly ten per cent in the number of deaths in the domain of accurate observation, known as the area of registration, the death rate from pneumonia has increased from 189.9 to 191.9 per 100,000 of the population, while under the same relative circumstances the deaths from consumption have decreased from 245.4 to 190.5 during the same period. Pneumonia is undoubtedly an infectious disease, and chiefly by means of sputum, in the same manner as pulmonary tuberculosis, though the expectoration of pneumonia is not likely to be so widely scattered as that of consumption. The importance of recognizing the ubiquity of the neumococci and their genetic relation to lobar pneumonia rests primarily upon the manifest necessity of destroying these pneumococci during a seizure of the disease when expectorated. It is fortunate that something more than the mere presence of the germ is required for the development of pneumonia. The personal measures for its prevention, aside from the disinfection of the pneumonia expectoration, are the avoidance of undue exposure during inclement weather and of all crowded, ill-ventilated gatherings, reasonable attention to the questions of sanitation, temperance in eating, in drinking, daily bathing, regular exercise in the open air, with special reference to complete respiration. While the disease is one that cannot be eradicated, it can be lessened in frequency and lowered in mortality, both of which can be accomplished by incessant sanitary propaganda.— Exchange.

Cigarettes.

Tobacco injures men, and kills children. The Chicago school board has been having a medical examination of certain pupils before allowing them to take part in certain athletic sports. Boys and girls were subjected to the same examination. Not one girl was found unable to pass, while a large number of the boys, in almost every case smokers, were found to be in a physical condition which made violent exercise of any kind very dangerous. Twenty-one out of a hundred were found unfit, and all but three suffered from some form of heart trouble. Almost without exception, the unfit ones were cigarette smokers.— J. H. K.

Let it be our happiness this day to add to the happiness of those around us, to comfort some sorrow, to relieve some want, to add some strength to our neighbor's virtue.— Channing.

Athletics Versus Scholarship.

It does not stand to reason that a student in intercollegiate athletics can do as much work as one who devotes all his time to study. The athletic season of football, for example, lasts six weeks in the fall, and as far as classroom work is concerned, the time is practically thrown away. The members of the team attend lectures regularly; they are obliged to; but their minds are on signals and plays for the next game or practice. As a consequence, one fifth of the year is lost, and the players have to do as much work in the remaining four fifths as others do in the five fifths. With average students it will not be done. The physical training which the football men have gone through cannot under favorable circumstances increase their efficiency enough to make good the difference. Then, as a rule, their participation in athletics has made them natural leaders in the social life of the college, and so they lose still more time. The only point that may be regarded as established by the records is that few students admitted to the teams are subsequently thrown off for poor scholarship. This proves that most athletes can usually do enough work to remain satisfactory in their studies. Of late years a good player has lost caste if he permits himself to be disqualified through any fault of his own.— Professor Ira N. Hollis, in the Atlantic.

The Child's Judgment.

A child of five to eight years of age has a certain amount of judgment of his own. Sometimes his judgment of what is good for him may be better than the parent's. To deny him some experience that he craves and that may do him good, simply because of the habit of saying "No," pains him, both because it goes against his common sense and his pleasure. There are times to say "No," to say it firmly and stick to it, but they are fewer than most parents are aware of. Nothing destroys parental authority more than to exercise it with undue frequency. We fathers need to realize this even more than the mother.

Yet do not infer that I favor going to the other extreme of allowing children to have their own way about everything, and to grow up without parental restraint. The one extreme is as bad as the other. Both are to be avoided. Above all, let us observe that each child has its own individuality. Each one may require different treatment for its best culture and development. One boy's meat may be another boy's poison, to alter the old saying. To a less degree, because of their more passive nature sexually, the same is true of girls. — Good Housekeeping.

"It is not birth, nor rank, nor state,
'Tis the get-up-and-get that makes men great.

Meat Inspection.

In the Bulletin of the Health Department for the week ending November 15, 1902, Dr. Arthur R. Reynolds, Commissioner of Health, quotes the condemnation of meat at the Union Stock Yards, Chicago, during one week as follows: —

Total, 47,763 lbs.; beef, 21,600 lbs.; pork, 25,250 lbs.; lamb, 782 lbs.; veal, 131 lbs.

The report for Thanksgiving week stands thus: —

Total, 75,948 lbs.; beef, 31,434 lbs.; pork, 32,000 lbs., lamb, 940 lbs.; veal, 260 lbs.

The best means by which to control and avoid disease is to avoid even the

appearance of danger, and the leaving alone of those things which tend toward the deterioration of the physical man will do much in securing a sound body.

Sanitary Rules for Barber Shops.

We learn through the Minneapolis Homeopathic Magazine that the Health Board of San Francisco has taken an important and commendable step toward the sanitary regulation of barber shops. The rules formulated by the board, and given herewith, have been submitted to the supervisors with the view to their adoption as an ordinance. This action, it is believed, will receive the indorsement of the State Barbers' Examiners. All barber shops should be required to observe the rules of aseptic cleanliness as a public safeguard. It is remarkable that so few of the many thousands who patronize these places become infected. Epidemics of barber's itch, however, are more frequent than they should be, and, no doubt, other contagious diseases are disseminated through the disregard of sanitary measures by barbers. The rules referred to above are: —

Mugs and shaving brushes shall be sterilized by immersions in boiling water, after separate use thereof.

Razors should be wiped with alcohol both before and after they have been used.

Hair brushes that are known as "sanitary brushes" must be used after first being sterilized.

Razor strops must be kept clean, and never wiped off with the hand or blown upon with the breath.

A separate clean towel shall be used for each person.

Barbers shall not blow away with the breath any hairs after cutting, but use a towel or bulb or hair brush.

Barbers shall keep their finger-nails clean and cut short.

Alum or other material used to stop the flow of blood shall be so used only in powder form, and applied on a towel.

The use of powder puff, finger bowls, and sponges is prohibited.

No person shall be allowed to use a barber shop as a dormitory.

All barbers' instruments must be disinfected after using.

These rules shall be placed in a conspicuous place in the shops.

KEEP HOEING AND PRAYING.

"Faith without works is dead."

Said Farmer Jones, in a whining tone,
To his good old neighbor Gray,
"I've worn my knees through to the bone,
But it ain't no use to pray.

"I've prayed to the Lord a thousand times
For to make that 'ere corn grow;
An' why your'n beats it so and climbs,
I'd give a deal to know."

Said Farmer Gray to his neighbor Jones,
In his easy, quiet way:
"When prayers get mixed with lazy bones,
They don't make farmin' pay.

"Your weeds, I notice, are good an' tall,
In spite of all your prayers;
You may pray for corn till the heavens fall
If you don't dig up the tares.

"I mix my prayers with a little toil
Along in every row;
An' I work this mixture into the soil
Quite vig'rous with a hoe.

"So, while I'm praying, I use my hoe,
An' do my level best
To keep down the weeds along each row,
An' the Lord he does the rest.

"It's well for to pray, both night an' morn,
As every farmer knows;
But the place to pray for thrifty corn
Is right between the rows.

"You must use your hands while praying, though,
If an answer you would get,
For prayer-worn knees, an' a rusty hoe,
Never raised a big crop yet.

"An' so I believe, my good old friend,
If you mean to win the day,
From plowing, clean to the harvest's end,
You must hoe as well as pray."

— The Lutheran World.

EDITORIAL.

LESSON FROM THE DIETARY OF SCOTCH PRISONERS.

Pavy, in his excellent work on dietetics, presents the following interesting facts in defense of the view that the use of flesh as an article of food is by no means as essential as is generally supposed: —

"Indeed, the prevailing tendency of the present day, certainly in England, is to give an undue weight to the value of animal food, and this has been encouraged by the teachings of Liebig regarding the origin of muscular power—which, during the last few years, have been shown to be untenable.

"Many people seem to look upon meat almost as though it formed the only food that really nourished and supplied what is wanted for work. The physician is constantly coming across an expression of this view. Undoubtedly a greater feeling of satiety is produced by meat than by other food. It forms a greater stay to the stomach, but the stomach constitutes the seat of its digestion, and a longer time is occupied before the food passes on and leaves the organ in an empty condition.

"Against those who think that a large consumption of meat is a sine qua non for the maintenance of health and strength, the experience of vegetarians may be adduced. In the effects of the Scotch prison dietaries corroborative testimony is afforded. Dr. J. B. Thomson, for instance, resident surgeon to the General Prison for Scotland, writing in the Medical Times and Gazette, Vol. I., 1868, speaks in favor, from ten years' experience, of a diet into which meat entered very sparingly, and which contained instead a moderate amount of milk. He says, since the employment of the improved dietaries sanctioned by the Secretary of State in 1854, the dietary in the General Prison for Scotland for all adult male prisoners under sentence of nine, and not exceeding twenty-four months, had consisted of bread, oatmeal, barley, one ounce of meat per diem, made into soup, with succulent vegetables, and twenty ounces of skimmed milk or buttermilk. One day in the week fish had been substituted for soup. The health of the prisoners had been uniformly good. Weighing on admission and liberation had been carried out, and eighty-eight per cent were found to have gained or maintained their weight. Again, as shown by one of Dr. E. Smith's reports, it is not uncommon to find, among the agricultural laborers of Scotland, that no meat is consumed, oatmeal and milk forming the staple articles of diet. Further, Dr. Guy, from his observations in the case of English prisons, gives as one of his deductions, 'that we possess conclusive evidence of the sufficiency of a diet from which meat is wholly excluded, and even of a diet consisting wholly of vegetable matter.'"

GETTING DRUNK ON BEEFSTEAK.

Johnson, the great African traveler, gives a graphic account of a remarkable scene witnessed by him, in which a score of savages became wildly intoxicated as the result of eating large quantities of meat. A recent writer remarks that among sedentary persons, many get drunk on beefsteak.

There are many ways of getting drunk. Some become intoxicated by means of alcoholic beverages, by opium, cocaine, or some other intoxicating drug, and by various other means. To be drunk or intoxicated is simply to be poisoned. Intoxication literally means poisoning. A person who eats freely of flesh meats finally becomes intoxicated by taking into his system large quantities of uric acid and allied poisons. Such a person manifests symptoms which are commonly called rheumatic. He acquires the uric acid, or rheumatic, diathesis. A person whose occupation is active and out of doors can indulge in flesh meats for some time without apparent injury, but a person whose habits are sedentary soon begins to suffer because of the accumulation of uric acid. Every pound of beefsteak contains sixteen

grains of uric acid, or more than the body is normally required to deal with in twenty-four hours; hence, the eating of a pound of flesh must double the amount of uric acid to be eliminated. With these facts in mind, one finds a ready explanation of the fact that so large a proportion of business and professional men,— merchants, bankers, and lawyers,— are so liable to rheumatism, and suffer from various nervous disorders which doubtless have their root in the same tissue poisons which prepare the system for rheumatic affections and for various degeneracies.

Doubtless a large proportion of the business men of the country are more or less drunk on beefsteak a greater part of their lives. To be drunk on beefsteak means not only the development of the rheumatic diathesis, but also lessened clearness of the mind, lessened powers of endurance, mental and physical, lessened clearness of perception, and diminished power to form quick and accurate judgments.

When the earth affords an abundance of brain and muscle-building substances in the shape of nuts, fruits, and grains which are not only toothsome and easily digestible, but capable of supplying all the nutritive needs of the body, there is neither justification nor excuse for the practice of flesh eating. Flesh eating belongs to a savage age, and in the light of modern scientific knowledge, can be regarded not only as unnecessary, but pernicious and promotive of disease and race degeneration, the known cause of many distressing maladies and the suspected cause of many other maladies.

THE VALUE OF UNCOOKED FOOD.

There can be no doubt that fresh fruits, nuts, and other fresh and uncooked vegetable food contain something which is absent from food which has been dried, salted, or otherwise preserved. Sailors whose bodies have been reduced to a most pitiable state by scurvy, recover with most astonishing rapidity when fresh fruits and green vegetables are added to their dietary. No investigator has yet shown just what this necessary element is, but that it exists has been clearly shown by illustrations.

Careful experiments conducted in the laboratory of hygiene of the American Medical Missionary College have shown that fresh fruit juices possess the power of destroying germs, especially those which are capable of growing in the alimentary canal. Cooked fruit juices possess this property also to some extent, but by no means to so great an extent as do uncooked fruit juices. Persons suffering from biliousness are wonderfully benefited by omitting the evening meal, eating nothing later than four o'clock, and taking the juice of two or three oranges, apple juice, or unsweetened lemonade before retiring. If there is an apparent demand for food, this may be satisified by eating some ripe apples or other fresh fruits, or a little stewed fruit may be eaten, but care should be taken to avoid the free use of cane sugar.

CONSTIPATION.

This condition is usually the result of indigestion, errors in diet, sedentary habits, or neglect to attend properly to the call of nature for evacuation of the bowels. A too concentrated diet, especially the use of condiments, mushes, and sweets, are frequent causes of constipation. It is necessary that the food should have a certain bulk in order that intestinal activity may be normally stimulated. Fruits, wholemeal bread, spinach, green peas, nuts, and nut preparations, granose cakes and flakes, malted nuts, and similar preparations, are highly conducive to intestinal activity. It is also necessary that the diet should contain a sufficient amount of fat. Deficiency of fat is a frequent cause of intestinal inactivity. Two or three apples eaten before breakfast or the juice of an equal number of oranges will often induce a normal evacuation of the bowels half an hour after breakfast. A glass or two of cold water taken before breakfast is sometimes equally effective.

When the abdominal muscles are weakened as the result of sedentary habits and a stooped position in sitting, and when the colon is dilated by the retention of fecal matters, the abdomen should be well kneaded once or twice daily, especially before and after breakfast, and measures must be adopted to strengthen the abdominal muscles. Special exercises may be taken for this purpose, and the sinusoidal current may be applied.

When the patient has become dependent upon laxatives, the warm-water enema or the cold enema may be employed, beginning with three pints of water at 80 degrees, the temperature is lowered two or three degrees daily, and the quantity is gradually lessened until the bowels are made to move with a pint or half pint of water at sixty degrees administered half an hour after breakfast. It is sometimes necessary to introduce a slight quantity of cold water at night to be retained over night. The effect of the cold water at night is to stimulate the bowel so that the fecal mass is moved along from the upper to the lower portion of the colon, and is thus by the following morning prepared for evacuation.

When the bowel has lost its normal sensibility, this may sometimes be restored by alternate rectal irrigation. Spasm of the sphincter muscle may sometimes be relieved by the shallow hot sitz bath for five or ten minutes just before the effort is made to move the bowels, or hot rectal irrigation may be used for the same purpose. In extreme cases the patient may evacuate the bowels in a vessel containing a quantity of hot water, the steam rising from which may serve as a laxative. The wet girdle is also recommended, and should be worn constantly, changing three times daily.

In cases in which the stools are black and very foul smelling, complete evacuation of the colon may be obtained by employing the coloclyster every other day. When the colon is completely empty, movement of the bowels is required only every other day, as forty-eight hours is required for the filling of the colon with the food residues, only the lower half of the colon being emptied by the normal daily evacuation. When a small cool enema is used to stimulate movement of the bowels, it should be employed daily as a means of training the bowels to normal and regular action.

THE SIGNIFICANCE OF DENTAL DECAY.

The significance of dental caries, which is coming to be well-nigh universal among the people of the United States, is little appreciated. Premature decay of the teeth indicates feebleness of constitution in the individual, and when this condition becomes so general as to be a race characteristic, it is a handwriting on the wall, pointing unmistakably to race extinction.

Biologists are familiar with the fact that among animals of all classes, race decay begins with the hard structures of the body. It is true that dentists teach that decay of the teeth encourages indigestion, but of far greater importance is the fact that indigestion lessens the body resistance, inducing decay of the teeth.

Ulceration of the teeth, like ulceration of other parts, is due to the corrosive action of germs and microbes; that is, germs cannot live in the saliva of healthy persons. Note the glistening teeth of the healthy cat and dog. The coated tongue, the yellow, tartar-covered teeth, indicate a deteriorated state of the whole body. The fluids of the body have lost their germicidal power; that is, they are no longer able to destroy germs. These parasites obtain a foothold in the mouth and attack the teeth for the reason that these parts are hardest in structure and have the least resistance. Dentists may repair the teeth mechanically, but they cannot mend the weak constitution to which the decay is due. This must be done by excluding flesh meats, condiments, sloppy foods, cane sugar, and indigestibles, daily outdoor exercise, the daily cold bath, and other methods of health culture.

Early decay of the teeth means a short life and an increase of low vital resistance. There must be a rigid self-examination, the result of which should be a putting away of every practice which tends to weaken the vitality, and the cultivation of health by every known means.

A DISASTROUS FIRE.

THE delay in appearance of this number of GOOD HEALTH has been occasioned by a disastrous fire which destroyed the main building of the Review and Herald Publishing Company, the extensive printing house in which the work of printing and mailing this journal has been performed from its first issue to the present time, which is now more than thirty-six years. When the fire occurred, the January number was just ready for mailing. The entire edition was destroyed. Through the courtesy of the publishers of the *Battle Creek Moon*, who have kindly accommodated us with the use of their type-setting machine, we have been able to rapidly reproduce the number from the proof-sheets which were fortunately saved. It has also been necessary to reproduce the plates for the printing of the cover, department heads, and in fact everything pertaining to the journal, as the fire made a clean sweep of the building in which the work was done, and its contents.

The loss to the journal is, of course, very great, but this is insignificant compared with the loss sustained by the Review and Herald Publishing House. This great publishing house, established in Battle Creek nearly fifty years ago, has acquired a world-wide reputation through the numerous important publications which it has issued, which have been carried through its various agencies to every part of the civilized world. There is probably no publishing house in the United States which is more widely known or which enjoys a more enviable reputation for fair dealing, for the high character of the books it has issued, and for the excellent workmanship shown by the books and magazines which for many years have been going out of its doors in quantities amounting to many tons a week. The Review and Herald Publishing House was one of the largest and most complete establishments in the United States. Its presses were capable of printing each day an edition of eight thousand copies of a 500-page book, while its other departments were capable of

folding and binding and boxing ready for shipping nearly half as many. However, the institution was heavily insured, so that its credit will not suffer.

The enterprising managers, even before the flames of the burning building were quenched, began making temporary arrangements for the carrying on of their work, and will doubtless within a short time be able to organize and set in operation several of their most important departments. Fortunately they had stored in another building a very large stock of publications ready for shipment, so that they will be able to supply orders for most of their publications with their usual promptness.

The Good Health Publishing Company has during its thirty-six years of connection with the Review and Herald Publishing Company, been the constant recipient of favors and courtesies from managers and employees, and in this hour of mutual loss and perplexity extends its sincere sympathy and assurance of appreciation of the friendly consideration which it has received during the many years of business association.

Fortunately for our readers our subscription list was not lost in the disastrous fire above referred to, an extra copy being kept in our own office in another building; so each subscriber will receive a copy as usual, though a little late. The February number, which was nearly ready for printing, was also consumed, but copy was saved, and we hope to be able to get the number out nearly on time.

He that, to his prejudice, will do
A noble action, and a gen'rous, too,
Deserves to wear a more resplendent crown
Than he that hath a thousand battles won.
— Pomfret.

ANSWERS TO CORRESPONDENTS.

Electricity.— G. S., Ontario: "Can chronic indigestion be cured or helped by a thirty-days' electrical treatment?"

Ans.— We know of no method of curing chronic indigestion in so short a time.

Catarrh of Liver — Deafness — Pain and Fullness in Right Side — Cracked Tongue. — A. C. G., Wisconsin: "1. Is there such a disease as catarrh of the liver? 2. If so, what are the symptoms? 3. What causes deafness in the left ear? 4. What is the cause of pain and fullness in the right side? Sometimes the pain is under the right shoulder blade and sometimes under the short ribs. 5. What is the cause of a cracked tongue? 6. What treatment would you prescribe? 7. Would a rough tongue give rise to difficult articulation?"

Ans.— 1. Yes.

2. Attacks of pain in the pit of the stomach and in the region of the right side, with chills, fever, and jaundice.

3. The most common cause of deafness is catarrh of the middle ear, as the result of taking cold, or the extension of chronic catarrh from the nose to the ear.

4. The pain is probably due to indigestion.

5. A fissured tongue is a common indication of disorder of the digestion.

6. A careful hygienic dietary, especially dry food, and great care in thorough mastication of the food. Every mouthful should be chewed until it is a pulp before it is swallowed.

7. Yes; possibly through clumsiness of the tongue.

Skin Eruption.— J. M., Maryland, suffers from skin eruption which dates from childhood; it disappears in hot weather, and is accompanied by intense itching and burning. Give remedy.

Ans.— The affection is very likely eczema. This disease is generally dependent upon a disordered state of digestion. Many persons have recovered by discarding meat and adopting a simple dietary. A sweating bath should be taken two or three times a week. After the sweating bath, the body should be cooled off by a prolonged tepid shower at 80 degrees F. The irritated parts may be dusted with starch, or boracic acid may be applied with advantage.

Catarrh of Throat.— A Subscriber, Washington, desires outline for treatment of throat catarrh. White spots appear in back and sides of mouth, and throat feels constantly as if it were filling up with phlegm.

Ans.— Gargle mouth with hot water three or four times a day for five minutes. At night apply a wet towel wrung out of cold water, and cover with mackintosh and flannel. Take a cold bath every morning. A warm bath may be taken at night with advantage two or three times a week.

Fruit Acids — Cold Baths.— J. F., South Carolina: "1. If 'fruit acids are alkaline when entering the blood,' why does fruit cause the urine to become extremely high colored and acid? 2. Please explain why cold baths, even with good reaction, cause great depression later, often with heaviness in the legs. 3. Water of higher temperature causes no reaction. 4. Is there in the latter case, no tonic effect?"

Ans.— 1. Fruit encourages the diminution of uric acid.

2. The description indicates too vigorous or too long a cold application.

3. The reaction may be encouraged, when higher temperature is used, by using more force, as a horizontal percussion douche.

4. There must be some tonic effect, but the effect is not sufficiently intense to accomplish the purpose desired.

Germs — Table Salt.— W. F., ——: "1. Is the accumulation of germs along the alimentary canal one of the chief causes of dysentery and diarrhea? 2. Will cow's butter propagate germs? 3. Do jellies, fruit jams, and fresh yeast bread stimulate the growth of germs? 4. Is a boil sometimes caused by germs? 5. Is it harmful to use a little table salt in boiled drinking-water, to remove the 'flat' taste?"

Ans.— 1. Yes.

2. Yes.

3. Jellies and other preparations which contain large quantities of cane sugar are objectionable. Fruit acids, however, discourage the growth of germs. Yeast bread is also objectionable in cases in which the power of the body to destroy germs is greatly lessened.

4. A boil is always due to infection. There are always present on the surface of

the skin, germs which are capable of producing boils. When the resistance of the skin is weak, they penetrate it, and by development cause the inflammation.

5. This practice must be condemned. A little fruit juice answers the purpose perfectly, and is beneficial rather than injurious.

Hulled Beans.— J. B., Kansas, wishes to know the best method for hulling beans.

Ans.— 1. Beans may be hulled by thorough boiling and rubbing through a colander. To hull beans before cooking requires special machinery for the purpose.

Loss of Sight.— C. W., California: "When the sight is impaired by age, do you recommend placing cups over the eyes and sucking the air from the cups. Is this treatment effectual?"

Ans.— This method of treatment has not acquired scientific indorsement. It is certainly of very doubtful value.

Cramps.— C. R. E., Indiana, desires remedy for painful cramping of leg muscles in old people. Cramping is generally worse when person is in bed.

Ans.— A hot leg bath just before retiring, to be followed by a heating compress to be worn during the night, will afford relief. For the heating compress, a cotton stocking wrung quite dry out of cold water, and worn with a woolen stocking over it will answer the purpose; or a towel wrung dry out of very cold water, applied to the leg, and covered with mackintosh and flannel.

Dietary — Loosened Teeth — Olive Oil.— A. N. de V., Lisbon: "1. What diet would you recommend for one living in a hot, damp climate, as in northern Brazil? 2. How can one live so as to avoid catching the malarial and yellow fevers so prevalent there? 3. What is the cause of and remedy for recession of the gums; teeth having become loose and painful? 4. Is tooth powder of finely ground vegetable coal, mixed with sugar of milk in the proportion of one to ten, of benefit in this case? 5. Is the internal use of olive oil wholesome? 6. Does Good Health take any decided stand on the use of drugs and the practice of vaccination?"

Ans.—1. A diet of fruits and grains with a moderate allowance of nuts or nut products.

2. Avoid drinking water which has not been boiled. Be careful to avoid mosquito bites; this is quite essential. Parasites are often found on the surface of melons and other fruits. To avoid infection in the use of fruits, the fruit should be thoroughly washed or dipped in hot water.

3. The difficulty is due to an ulcerative process between the tooth and the gum. The mouth must be thoroughly cleansed before and after each meal. The treatments must be applied between the teeth and the gum by a competent dentist.

4. Not especially. A brush carefully used is as good as anything. A little cinnamon added to the water is beneficial.

5. Olive oil is a laxative; it is also food, when taken in moderate quantities. It is better to use ripe olives than to take olive oil, however.

6. Drugs should be used as sparingly as possible. They are only useful when necessary. Vaccination is not an ideal method of preventing smallpox, but if one must have either vaccine disease or smallpox, vaccine disease is certainly preferable.

Starch Indigestion — Blisters on Eyeball — Decayed Teeth.— Mrs. E. M. H., Missouri, "1. Is there any danger of the stomach's never being able to secrete those fluids necessary to starch digestion, if one lives too long on predigested foods? 2. What causes blisters on the eyeball, and what is the remedy? 3. What will prevent or delay the wearing away of the enamel of the teeth, near the gums?"

Ans.—1. The stomach does not secrete the fluids which digest starch. The digestion of starch which takes place in the stomach is carried on by the saliva which is swallowed with the food. The predigestion of food by dextrinizing does not lessen the work either of the stomach or the saliva, as there still remains more digestive work than can be performed by the stomach. The only advantage is the shortened stay of the food in the stomach, thus lessening its liability to fermentation.

2. Low vitality or a generally disordered state of the body is a very common cause. An oculist should be consulted, and the general health should be improved by abun-

dance of outdoor exercise and a nourishing diet.

3. The mouth is infected; a good dentist should be consulted.

Liver Complaint.— C. E. C., Massachusetts, although in seeming good health, is unable to prevent his underclothing, especially his night clothes, from becoming very yellow. Is liver complaint the cause? Prescribe treatment and diet.

Ans.— Take a sweating bath three times a week at night. Follow this by a short cool bath, and take a thorough cold bath every morning.

Third Tonsil.— W. P. S., Kentucky: "Our little girl, ten years old, has what is called a third tonsil. 1. Is it likely to cause serious trouble? 2. Should it be cut out? 3. What treatment should be given?"

Ans.— 1. Yes.

2. It should be removed with a curette, by means of which it will be scraped out.

3. The general health should be built up by abundance of outdoor exercise and cold bathing.

PUBLISHERS' DEPARTMENT.

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A Journal of Hygiene

J. H. KELLOGG, M. D., EDITOR

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Grains, when properly prepared by thorough dextrinization of the starch, are the most easily digestible of all foods with the exception of fruits, which usually require no digestion at all. By the aid of the methods devised and employed by the Battle Creek (Mich.) Sanitarium Health Food Co., grains are rendered almost as easily digestible as fruits, undergoing in the stomach and intestines with marvelous rapidity the transformation into nutrient material which, when properly circulated in the blood, builds up brain, bone, muscle, and nerves, and replenishes in the most marvelous manner the daily wasting of the stores of nerve and muscular energy.

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Books Received.

"The Mattison Method in Morphinism; a Modern and Humane Treatment of the Morphine Disease," by J. B. Mattison, M. D., Medical Director, Brooklyn Home for Narcotic Inebriates. New York: E. B. Treat & Co., 1902. Price, $1.

"The Boy, How to Help Him Succeed," by Nathaniel C. Fowler, Jr., assisted by three hundred and nineteen American men of marked accomplishments. Published by the Oakwood Pub. Co., Boston, Mass.

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Chicago	11.05AM	3.02PM	8.15PM	.....	† 9.00AM	.....
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South Bend	1.57	5.59	11.31	.....	1.04PM	7.30AM
Battle Creek	4.00	8.00	2.03AM	† 7.00AM	3.40	5.30PM
Lansing	5.29	9.21	3.31	8.30	5.29	.....
Durand	6.00	10.06	4.25	9.30	6.30	.....
Saginaw	† 8.10	.....	6.20	†11.05	8.10	.....
Bay City	† 8.45	.....	7.04	†11.40	8.45	.....
Detroit	8.00	.....	7.15	11.50	9.20	.....
Flint	.....	10.30	4.53	10.21	7.28	.....
Port Huron	9.40	12.30AM	7.00	12.20PM	9.30	.....
London	.....	.....	.....	.....	.....	.....
Hamilton	.....	.....	.....	.....	.....	.....
Suspension Bridge	3.40AM	7.05	1.55PM	8.35PM	3.40AM	.....
Buffalo	.....	8.20	3.05	9.50	.....	.....
Philadelphia	3.47PM	7.34PM	7.28AM	8.56AM	3.47PM	.....
New York	4.45	8.40	8.30	9.45	4.45	.....
Toronto	.....	7.40AM	.....	7.40PM	.....	.....
Montreal	.....	6.00PM	7.30	7.30AM	.....	.....
Boston	.....	8.10AM	† 7.05PM	† 7.05PM	.....	.....
Portland	.....	7.30AM	† 6.15PM	6.15PM	.....	.....

WEST.	3	5	7	9	11	75
Portland	† 8.15AM	7.00AM	7.00AM	.....	.....	.....
Boston	†11.30	7.30	7.30	.....	.....	.....
Montreal	10.30PM	9.00	9.00	.....	.....	.....
Toronto	7.35AM	4.50PM	11.20PM	.....	.....	.....
New York	5.40PM	8.55	9.25AM	.....	.....	.....
Philadelphia	6.30	8.45	.....	.....	.....	.....
Buffalo	5.55AM	1.00	10.05PM	.....	.....	.....
Suspension Bridge	7.05	2.00	11.15	.....	.....	.....
Hamilton	.....	.....	.....	.....	.....	.....
London	.....	.....	.....	.....	.....	.....
Port Huron	12.00PM	9.00	4.05AM	† 6.50AM	† 3.50PM	.....
Flint	1.25	11.07	5.31	8.54	5.54	.....
Bay City	.....	9.00	.....	.....	.....	.....
Saginaw	†12.15	9.35	.....	.....	.....	.....
Detroit	†11.30AM	10.00	.....	7.00	4.00	.....
Durand	1.52PM	12.05AM	6.00	9.30	6.30	.....
Lansing	2.33	12.54	6.44	10.50	7.53	.....
Battle Creek	3.55	2.18	8.10	12.30PM	9.30	† 7.15AM
South Bend	5.40	4.12	10.03	3.01	.....	4.45PM
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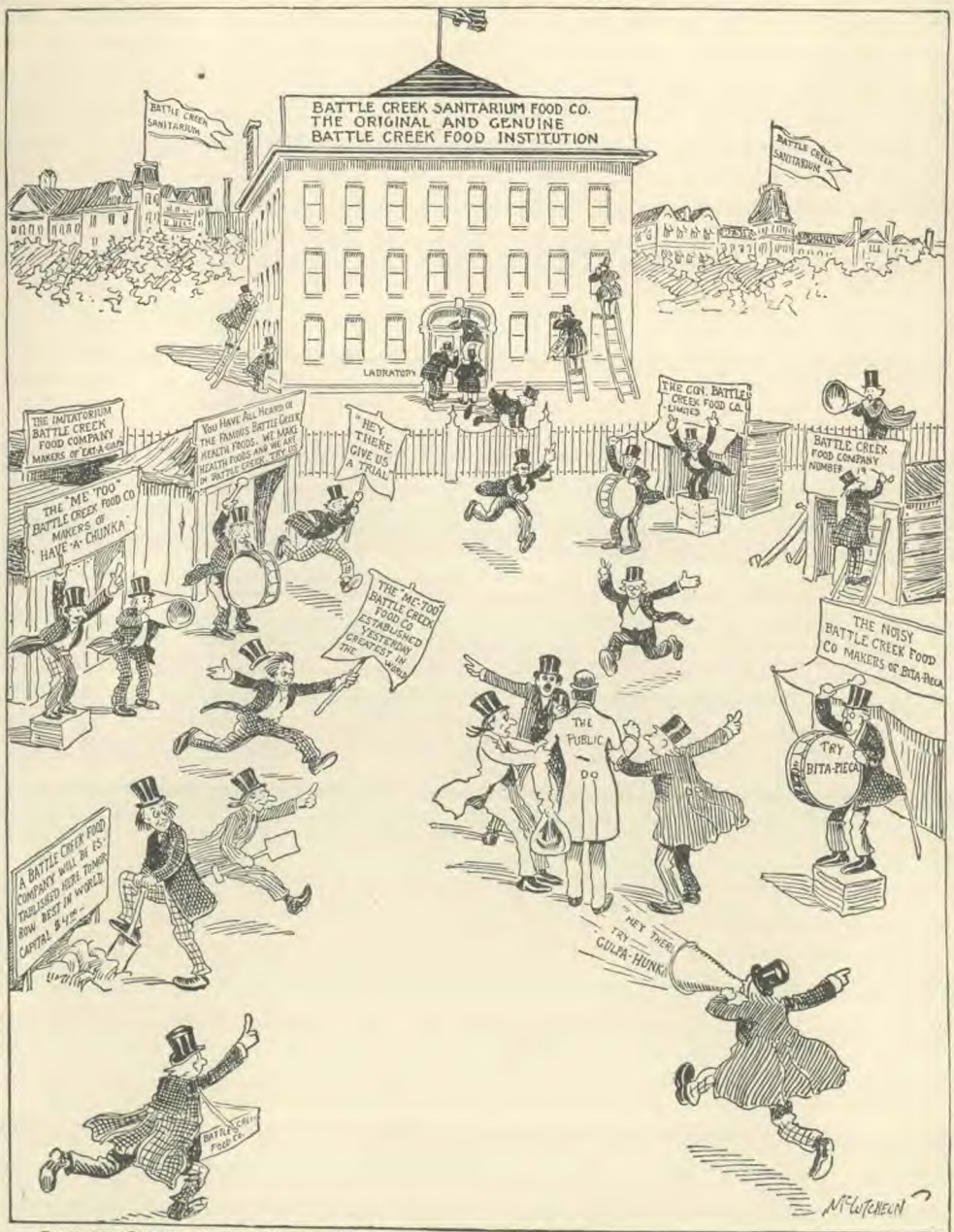

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