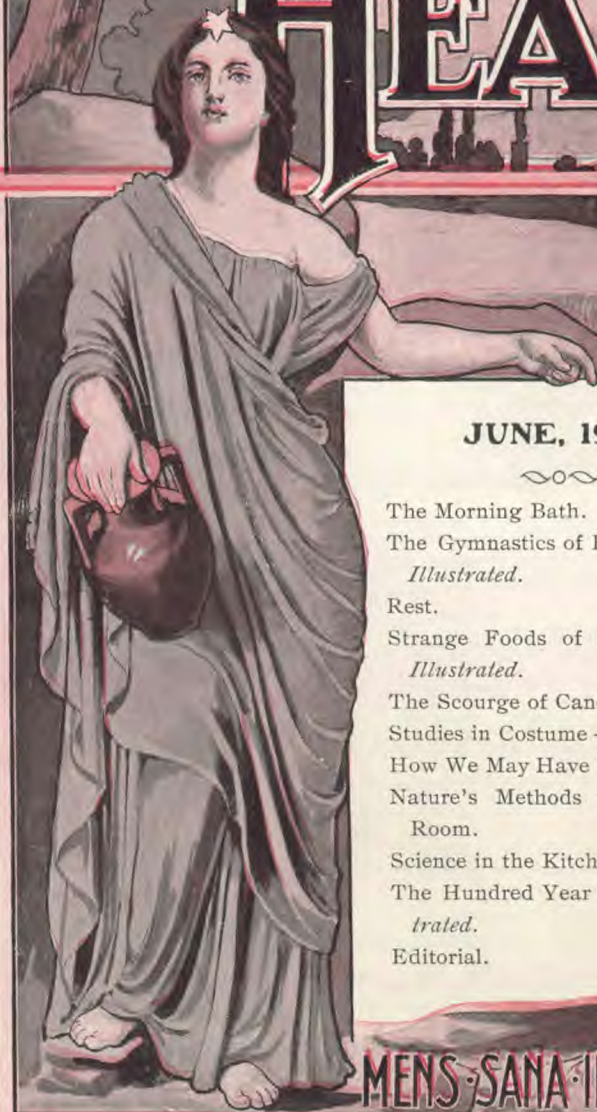


GOOD HEALTH



JUNE, 1903



- The Morning Bath.
- The Gymnastics of Housework —
Illustrated.
- Rest.
- Strange Foods of the Moros —
Illustrated.
- The Scourge of Cancer.
- Studies in Costume — *Illustrated.*
- How We May Have Good Health
- Nature's Methods in the Sick
Room.
- Science in the Kitchen.
- The Hundred Year Club — *Illustrated.*
- Editorial.

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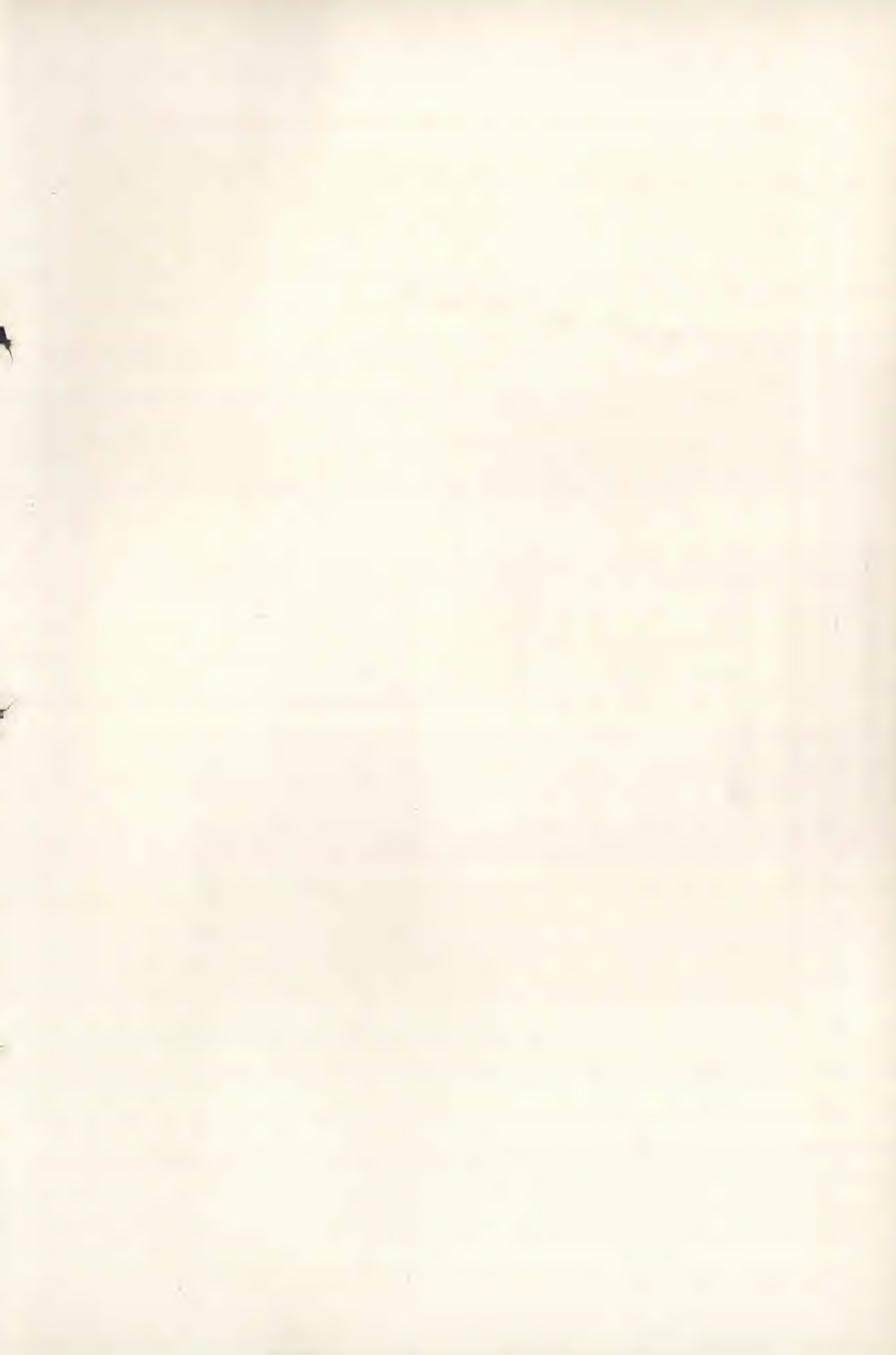
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THE MORNING BATH

BY J. H. KELLOGG, M. D.

A DAILY bath should be taken regularly on rising. The temperature of the water should be cold, or at least cool, so that a strong reaction will be produced. The application should be brief, not more than half a minute to one or two minutes at the longest, and should be followed by quick drying and vigorous rubbing with a towel. The lower the temperature of the water the shorter should be the duration of the bath. The purpose of the morning bath is not cleanliness, although it aids in keeping the skin clean, but is skin gymnastics, or training. When very cold water is applied to the skin, there is a sudden contraction of the blood vessels. This is quickly followed, after the application, especially when the skin is thoroughly rubbed, by a dilatation of the vessels of the skin, which causes reddening of the surface and a feeling of warmth, though the skin may still be cool, and a general sensation of buoyancy, exhilaration, and vigor.

This sort of bath is a real exercise or vasomotor gymnastics for the skin. When taken daily, the nerves and vessels of the skin are maintained in so healthy and vigorous a state they are able quickly to react when exposed to the cold, thus avoiding the injurious effects which follow slight exposure, and in most persons give rise to what is commonly known as "a cold," a condition which not infrequently serves as

an introduction to pneumonia, consumption, chronic catarrh of the nose, throat, or chest, rheumatism, and various other maladies. Persons who practice daily cold bathing are little subject to colds.

The idea that the daily bath is debilitating and injurious, and especially that cold baths are weakening and dangerous and lead to consumption, etc., is entirely an error. It is only the abuse of the bath that is to be condemned. A short cold bath taken in a warm room, followed by vigorous rubbing and exercise until a good circulation is established, has never been known to injure any person; but care must be taken to secure prompt and thorough reaction. If the hands and feet continue cold for some time, or the head aches, the bath should be shorter, the rubbing more vigorous, or perhaps the exercise should be continued for a longer time. By degrees the ability to react improves, so that colder water and longer applications may be advantageously employed.

The benefits of the cold bath are not experienced in the skin alone; the whole body partakes in the reaction. The contact of the cold water with the skin arouses the brain and the spinal cord, the heart, lungs, liver, and every internal organ to renewed activity. The heart pumps with renewed vigor, blood is forced into every nook and corner of the system, the sluggish brain is

aroused, the slow stomach is awakened to action, its glands are stimulated to produce gastric juice, a craving for food follows, and with the improved appetite comes improved digestion. The whole body is excited to increased activity. With the dilatation of the surface vessels and the filling of the skin with blood, the congested brain and other organs which have been over-filled with blood are relieved; their burdens are lightened, and the wheels

of life run more swiftly and with lessened friction. The cold morning bath is the most powerful of all tonics known, and its daily employment is a duty which every civilized being owes to himself. It is not simply cleansing or polishing the outside of the body temple, but through the association of the inside with the outside its effect is a brightening and polishing of all the temple furniture and of every inner apartment.

THE PREVENTION AND CURE OF DRUNKENNESS.¹

BY DAVID PAULSON, M. D.

(Concluded.)

THE fundamental idea in treating a case of drunkenness is to cure the man rather than his habit. He must be physiologically restored and rebuilt rather than have his nerves benumbed by the use of drugs. He must be persuaded to sever every link which binds him to the enjoyment of such unearned felicity.

For this reason it is imperative that he should be led to discard the use of tobacco, for he uses it for precisely the same reason that he uses liquor, and if the habit is not broken there will come a dark hour in his experience when he will not secure all the good feeling his nervous system demands from the tobacco, and he will again resort to alcohol or morphine to fill the demand for an artificial felicity.

Physiologically it is just as safe to give up several poison habits at the same time as it would be to draw several fingers out of the fire at once, instead of one at a time.

What is true of tobacco in this particular is true in a less degree of tea and coffee. A cup of strong tea or coffee contains about the same amount of caffeine that is administered as a nerve sedative. The free dispensaries in our large cities are crowded with women who are just as really victims of tea intoxication as the men who are filling up the hospitals are victims of alcoholic intoxication. There are thousands of women who are just as much slaves to tea and coffee as their husbands are to liquor, and they suffer from the same symptoms, only in a milder degree.

As long as a man is a slave to any of these artificial sedatives, just so long he is not a perfectly free man and must constantly run the risk of again being ensnared into his old bondage. Personally I have found it advantageous to do all in my power to inspire a man's confidence in the blessing that there is in coming into perfect harmony with the laws of nature and in an honest endeavor to live in obedience to nature's God.

¹ Extracts from a paper read before the Anthropological Society, Masonic Temple, Chicago.

As before indicated, a wholesome, nutritious, and palatable diet is an essential part of the drunkard's cure. I should resort to hydiatic applications in preference to sedative drugs, for it may be stated as a general principle, that these drugs harass the same set of nerves that the alcohol has already affected. As to the efficacy of the hydiatic remedies, I need give only one illustration, although I might tell of many other cases. A man was brought to us with delirium tremens, who, in spite of large doses of bromides and the like, had not slept for five days and nights. We wrapped him in a wet-sheet pack. The sheet was wrung out of cold water, and when applied to the body produced a reaction which brought the blood to the surface and away from the congested brain and internal organs. As a result the man was asleep within three minutes. He slept for nine hours, and when he awoke, he could ask for food and gave evidence of returning reason in several other ways. Now I could have given him enough morphine to have absolutely deadened him but then we would have had the morphine to eliminate later.

The patient in giving up the use of alcohol often suffers with heart difficulties. We find that cold applications over the region of the heart are more helpful, and certainly more advisable, in these cases than the ordinary heart tonics.

Dr. Winternitz, of the University of Vienna, has made the interesting discovery that after a cold bath when a good reaction had been secured, twenty-five per cent more white blood cells float in the circulation than before. That is just what the anemic victim of the drink habit needs. So he should have short hot applications, followed by brief cold applications. These tone

up his nervous system far more acceptably than his accustomed drink. In this way he can be cured, and at the same time saved from the yearning after his accustomed cup.

Drunkenness is always to a certain degree a disease, and this is true in a special sense in the form known as periodical inebriety. This class of persons do not desire liquor between their attacks; in fact, they loath it. When this nervous condition seizes them they are no more responsible for becoming drunk when the liquor is in sight than the epileptic is for having fits when he has a seizure or the child is for coughing when it has the whooping cough.

Such patients need to have the advantages of a well-regulated institution which is provided with facilities for giving electric-light baths in various forms, massage, and in fact, for the administration of the various physiological remedies, so that his normal equilibrium may be restored, and even then he will find it advantageous for some time to put himself, at the time when he knows he will be subjected to these attacks, under the supervision of some one who can help to steer him safely through them.

In addition to these methods, I most heartily agree with the statement recently made by M. Allen Starr, the brilliant New York nerve specialist: "Without exception, the only reformed drunkards of whom I have had any knowledge are those who have been saved, not by medical, but by religious influences." It has been my privilege to see, not only exceptional cases, but hosts of men who have been safely and successfully restored to society and a life of usefulness by a rational combination of moral influence and scientific physical efforts.

I admit that my plans and methods are inconvenient, and that they are impractical in the cases of many of the victims of the liquor habit, but they are no more so than are the successful methods now in vogue in the medical and educational worlds.

Real things and real success cannot be secured by short-cut methods. It takes time to build up a permanent business interest. It takes time and effort to train up a boy or girl for a life

of usefulness. It takes time and intelligence and persevering effort to bring a typhoid-fever patient from the brink of the grave back to the enjoyment of normal health and activity. It requires no less effort to restore the man who has ruined his nerve cells and induced pathological change in every organ of his body, to such a condition that he will not crave the artificial felicity which he formerly secured through liquor.

THE GYMNASTICS OF HOUSEWORK

BY MRS. E. E. KELLOGG

CARE and culture of the body are matters which should concern everyone in all walks and conditions of life. Physical integrity, approaching as closely as possible to that perfect wholeness of being which characterized woman fresh from the hand of her Creator, ought to be the aim of each individual daughter of the race.

Health is the strong ally of success in every sphere of action in life. But health is not retained without a faithful observance of Nature's laws, neither can it be obtained by desultory and spasmodic efforts. Nothing but the daily living up to the ideal, the constant and continuous obedience to physical requirements, will insure a sound body and vigorous intellect.

God's health decalogue ought to be considered just as binding as the moral commandments given on Sinai, and no one should mistake the need of understanding these laws, nor of applying them to one's daily life and duties.

Housework is such an ordinary procedure one is likely to overlook the fact that there may be ways of doing common tasks which are more in accord

with health than those customarily employed for the purpose. The very fact that housework is the chief occupation of the majority of women for at least three fourths of their waking hours makes it apparent that the manner of doing it, and the surroundings and conditions under which it is done, must have a greater or less effect upon the health of the worker.

Exercise being a vital principle of health, and housework being mostly exercise in some form, it is generally conceded that housework is a health-giving occupation, and so it may be if rightly conducted. The various differing procedures necessitated in the routine of one day's housekeeping, — the sweeping, bed-making, scrubbing, dish-washing, bread-kneading, — each in their turn brings into play the various muscles of the body, insomuch that housework may serve an excellent purpose as a gymnastic drill if performed in harmony with physiological requirements. It must be owned, however, that in too many instances the worker gives little or no heed to aught save to get through with each particular task as speedily and



SWEEPING.

thoroughly as possible; in other words, the work is the chief consideration, and such being the case, it is often accomplished with real detriment rather than benefit to the worker.

The results to be sought in exercise should be the promotion of vital activity and perfection of the bodily symmetry. In order to do its work properly, every muscle needs regular and thorough exercise. Portions of the body not exercised soon become weakened and useless. Again, the overuse of a part is detrimental to physical integrity, attracting to that portion more than its share of nutriment, thus causing a congested or diseased condition.

It very frequently occurs that the unequal use of muscles in the performance of certain household duties results in unsymmetrical development and one-sidedness. In ironing and sweeping, two of the most common functions of the household, most women call into

action chiefly the muscles of the right side of the body. The house broom, worn obliquely across the bottom, is a silent witness that it has been continuously wielded in the same direction from day to day. It takes but the continued falling of single drops of water to wear away a flinty stone. Seemingly insignificant habits in the posture, in the exercise of muscles, in the pressure brought to bear upon the vital organs, kept up from day to day, soon alter bodily symmetry or even cause serious deformity. There are perhaps very few persons whose daily business necessitates much sweeping, who do not have one shoulder higher than the other from having exercised one side of the body more than the other. This is not a necessity. It is not difficult to learn to sweep equally well using either arm, changing at frequent intervals so as to avoid throwing the entire stress of the work upon one set of

muscles. The same is true of ironing and other lines of housework usually done with the right hand only. Housekeepers should understand the principles which underlie the proper culture of the body, and should know how, when the daily work is particularly fatiguing to one set of muscles, to counteract the effect by relaxation and by exercises suited to "even up" the column of physical requirements.

Housework ought to be so regulated that health shall be the first consideration: the health of the worker, and also the health of all for whom the work is done. For the worker, one of the first requisites is a working garb, permitting of perfect freedom of action and so short and light in weight as not to restrict any movement. To attempt to work in the long skirt of the



DISH-WASHING.

prevailing fashion is to make every task more toilsome. Tight collars, corsets, and bands should find no place in the worker's uniform.

In nearly all departments of house-keeping, thought and planning will make possible the saving of labor and energy to a greater or less extent.

Housework as ordinarily performed involves much standing at a table, range, or sink, with consequent weariness of body. Most of such tasks may be done as well and with far more ease when sitting, and a chair or stool with back of proper height, with foot rest if needed, should form a part of the equipment of every kitchen, for use when washing dishes and preparing food. Hundreds of women suffer with aching backs because



BREAD-KNEADING.

their workbench, table, or range is fitted so low that in dish-washing there must be a constant stooping or bending of the body, of greater or less degree during the entire task. This should be obviated by having the necessary furnishings of such height as will admit of standing erect and maintaining a proper poise while doing the work. Every housekeeper should plan to have her work table of such height as to meet her own individual needs. The regulation height at which tables are ordinarily manufactured is very commonly

standing or sitting during the task, to maintain a correct poise. On this maintenance of correct poise depends very largely the ease with which the household work can be accomplished. Correct poise is nature's plan for the conservation of energy, for making lighter the strain of physical exertion. With the body in the natural poise, the chest uplifted, and with firmly held abdominal muscles, each of the internal organs maintains its proper adjustment; but when an incorrect position is assumed, there results at once pressure



CORRECT AND INCORRECT POSITIONS IN SEWING.

too low for women above medium stature. Blocks of wool placed under the table legs makes a convenient way to so adjust its height as to adapt it to the worker's stature and make it possible for the worker, whether

and strain, so that the body must act under a disadvantage and mechanically.

If one has gotten into the habit of standing, walking, or sitting incorrectly, it may require considerable effort to correct the poise, and at first it may

seem more fatiguing to keep the proper position than to do the work in the old way. But one should persevere until the correct posture becomes a habit; not only because the work can be done with greater ease, but because it should be every woman's aim to attain as near to physical perfection as possible.

The correct standing poise should be such that a straight line will pass upward from the ball of the foot directly in front of the shoulders, dividing the head just in front of the ear.

The following is a simple rule for getting a good standing position: Place the back against the wall (a door is best, as there is no baseboard in the way), press the heels against the wall, then the hips, shoulders, and finally the



CORRECT POSITION.



INCORRECT POSITION.

head, taking care not to bend the head backwards. This will straighten the body and in part correct flatness of the chest. But one step further is necessary to acquire the correct standing attitude. Keeping the heels and the hips against the wall, bend the head backward, allowing the chest in the meantime to be pushed forward. Holding the chest and trunk in position, raise the head forward to the natural erect attitude, and the body will be in a correct standing poise. Now, while holding the trunk rigid, step forward from the wall, swinging the arms slightly, and one will thus find himself in correct walking poise. If this position seems a little awkward and stiff at first, it will with practice become easy and natural, and

the erect vigorous carriage will give dignity to the physical bearing which may contribute not a little to one's influence and usefulness, as well as add immensely to one's vigor and endurance.

With the body in proper poise, the movements necessitated in the sweeping of a room affords excellent exercise for the development of the arms and chest, provided, as has been previously stated, both sides of the body are given an equal chance. Keep the chest elevated and make the arms and not the back do the work.

In performing any tasks which require bending of the body it should be remembered that the hinge of the body is at the hips and not at the waist.

In bed-making, as in sweeping, the correct poise should be maintained, depending upon the arm movements for the real labor, bending when necessary at the hips, and making of the throwing of each of the covers an opportunity for deep breathing, drawing in the breath as the arms are raised.

With a working-table of such height that one can stand erect while at work, dish-washing and bread-kneading afford an opportunity for splendid arm and wrist movements.

The area which must be traversed in performing the multiplicity of duties devolving upon the housekeeper, is likely to afford ample opportunity for exercise of the leg muscles, and within reasonable limits is a means of health preservation. Too much exercise at housework is of course detrimental, as is overexertion in any line. Even the stairs which in some houses must be ascended so many times

a day, are not the unmitigated evil they appear if one learns to maintain the correct poise while ascending and descending steps. To climb stairs without fatigue, one must avoid stooping. Incline the body slightly forward and keep the chest erect, as it were lifting one's self with the chest. The work is thus done with the legs and not the back. Plant the whole foot firmly upon the step. Breathe through the nose, taking deep inhalations. If one has a burden to carry, it is well to stop once or twice during the ascent for rest and deep breathing. Never run upstairs.

In going down the stairs, keep the body perfectly erect, touching the steps with the ball of the foot, and yielding at the knee.

It is a matter of consequence to every housekeeper to understand the principles which underlie physical culture, not only that she may know how to carry herself while performing her daily tasks, but also to know how to relax and rest the fatigued muscles between tasks.



BACKWARD BENDING.

After chest-contracting or long bending efforts much relief will be experienced by a five-minute course of breathing exercises, as for example,—

EXERCISES TO COUNTERACT ONE-SIDED
DEVELOPMENT

Exercise 1. Sitting in a chair, grasp the seat of the chair with one hand and extend the other arm above the head as high as possible. Pull down with the hand grasping the seat while reaching upward with the other arm. (See page 267.) The tendency will be to bend the spine toward the side of the raised arm. In general the seat should be grasped with the left hand, the right arm being raised above the head, for the reason that the overuse of the right arm has a tendency to curve the spine toward the left. It is for this reason that the right shoulder is usually lower than the left.

Exercise 2. Lying upon the face, bend the head and spine backward as far as possible. Repeat as many times as possible without unduly tiring the muscles involved. This is an excellent exercise to strengthen the muscles of the back.

EXERCISES TO RELIEVE FATIGUED
MUSCLES

Exercise 3. Passive exercise, by rubbing the parts or having the overused parts rubbed by another person, is the best of all means for affording relief from muscular overwork. Five minutes' rubbing will sometimes restore a fatigued muscle or group of muscles to full power, when the work has been confined to a small number of muscles. Bathing the affected parts with cold water in connection with the rubbing is also beneficial.

Exercise 4. Local weariness may be relieved by exercise of the muscles of some other part of the body. Tired arms may be rested by walking or other exercises of the legs. If the muscles of the back are tired from long-continued strain and bending forward, relief may be afforded by backward-bending exercises, of which the following is a good one:—



WASHING.

Sit on the floor with the legs extended so that the feet are under the edge of a sofa. Placing the hands at the side, bend slowly backward. (See page 265.) Returning to position, take a deep breath and then repeat the exercise, doing this eight or ten times.

Exercise 5. Sitting on a stool with the arms falling relaxed at the side, relax the muscles of the neck so that the head will fall forward, and allow it to slowly roll about in a circle, using slightly directing efforts as follows: Roll first in one direction and then in the other, keeping the eyes closed.

Exercise 6. Still sitting on the stool, place the hands at the side, relax the muscles of the trunk, and allow the body to drop forward. Slowly describe a circle with the trunk, allowing the head to drop back as the trunk falls backward. After completing the circle, reverse it.

RESISTIVE MOVEMENTS

Exercise 7. Lying flat on the back with the eyes closed, alternately contract and relax in succession every group of muscles in the body. Thus, slowly close and open the right hand, contracting and extending the muscles as forcibly as possible. Repeat the exercises with the left hand. Slowly bend and extend the right arm. Repeat with the left arm. Raise the right arm sideways, extending it as far as possible. Then the left. Raise the right arm over the head, reaching as far as possible. Repeat with the left. Extend and flex the one foot, then the other. So continue with all the leg muscles. First flex and then extend the leg. Then draw the leg sideways. Draw up the knee and raise the leg. Close the eyes, contract them, then open them as wide as possible. Shut the jaws closely, and open the mouth widely. Twist the

head to the right and then to the left. Raise the head forward and roll the head backward.



TO COUNTERACT ONE-SIDED DEVELOPMENT.

BREATHING EXERCISES

The best breathing movements are those simple exercises which create a thirst for air, such as rapid walking or any other rapid exercise which increases the rate and depth of respiration. The following exercises are useful, however, as a means of stretching and exciting the respiratory muscles: —

Exercise 9. Extend the arms in front of the body and swing them sideways with a vigorous movement, breathing in at the same time. Slowly return the

arms to position while breathing out. Repeat ten to twenty times.

Exercise 10. Extending the arms sideways, describe large circles with the arms, sweeping well to the front and to the back, making the circles as large as possible, breathing in while the

arms are moving backward and upward, and breathing out while the arms are moving downward and forward. Numerous other excellent breathing movements may be executed with the arms. All vigorous arm movements may be regarded as breathing movements.

REST

BY MARY HEATH

FEW people really know how to rest. Exercise is very necessary to health and many do not take enough of it; but on the other hand, perhaps even more people rest too little, or what amounts to the same thing, do not rest properly. No matter how well developed the muscles are, if they are rigid and stiff they will not do the best work. They must be readily relaxed when not in use. Even athletes, if they really understand the laws of exercise, strive for relaxation as well as for well-developed muscles.

Rest means relaxation — not only of the body, but of the mind also. In America, particularly, we are apt to forget this. That is why "nervous prostration" is such a popular phrase just now. The Germans, as a nation, go more slowly than we do in all things; the English and even the French take life more easily. Perhaps our atmosphere conduces to energy and hurry. At any rate the popularity of such words as "strenuous," "hustle," and the like, in this country, show our attitude as a nation.

Of course we cannot immediately change all this. We do not wish to. Enthusiasm and energy, hard work and hard thinking, have brought us to our present state of prosperity, and we cannot afford to fall back now. Nor do we need to. Hard work, whether of

hand or brain, does not kill, but continual work and worry do. If we would rescue the future generations from nervous degeneration, we must learn how and when to relax.

This is very hard for some temperaments. Some people must have their hands constantly occupied in some way, and it is difficult, of course, to remember that haste is often slower than deliberation. We say that we have no time to go slowly.

Take, for instance, the busy housewife, perhaps the mother of a large family which needs constant attention. Possibly she does her own housework besides. Such a woman can of necessity have little leisure,— but some she must take, for her family's sake as well as her own, and use it judiciously. She declares she has not a minute to spare all day. She is, indeed, wasting her vitality at an extravagant rate. I do not mean to say that the actual housework will hurt her. If she does it properly, it will probably benefit her rather; but it is the constant thinking and planning, together with unceasing strain on the muscles, that does the harm.

Did you ever stop to notice, when you are very busy washing the dishes, for instance, hurrying to get at the next duty and perhaps at the same time planning to-morrow's dinner, whether you are not unconsciously straining some

particular muscle which does not help you in the least with your work? For instance, I know one woman who confesses that when she is very busy with her hands and thinking hard at the same time, she often shuts [her mouth so tightly that when] she finishes her task and remembers herself, her jaws ache with the strain. This, of course, is a waste of energy,— here is one leakage we must stop,— a physical one. There are many ways in which a necessarily hard-worked brain can be saved, too. For instance, if instead of trying to remember all the little details which are to make up the housewife's day, they were to be jotted down as they were thought of, the mind might be spared to devote to the bigger problems. Make a note of the articles needed at the store as you remember them; of the little "odd jobs" to be done tomorrow morning; of the things you must remind Anna to do. This will not weaken the memory, but will save it for larger and more important duties.

Every housewife should take a little time each day for rest and relaxation, if it be only ten minutes. Slip away from cares and duties, and throw yourself down on lounge or bed for a time. Consciously relax every muscle until your body feels heavy, and you realize the force of gravitation. Then stop thinking, relax your mind. Don't let a worry or even an apparently harmless thought creep into it. Of course the clothing should be loosened so that it will not constrain the body in any way. If you can fall asleep, so much the better; if not, close the eyes, thus resting these organs, and lie still. At first it may be necessary to persist consciously in keeping the mind free from thoughts, but gradually this will become easier.

The business woman, too, is on a constant strain. She starts out in the morning, joining the pushing, hurrying crowd of workers who seem to breathe forth nervous energy. All day she is busy, often obliged to think or act quickly, and frequently she does not take any time for rest — not even, unfortunately, sufficient time to eat her meals comfortably in some cases. This is a great mistake. Lunch hour is often her only chance to relax all day, and should be made the most of. She should sit down comfortably to the meal, no matter how simple a one it may be, relaxing the strained nerves and putting all worries out of the mind. She should eat deliberately and slowly, and in short, take all the time that is due her — too little, alas! in many cases. If she has a few moments after the meal is finished, a short, pleasant walk in the fresh air may prove a beneficial relaxation.

The woman who shops is another victim to the "hustling" system. If she must ride to the shops, for instance, she frequently wastes much energy in mentally "pushing along" the car. She wishes it would go faster, allows her mind to dwell on the end of her journey, notes every stop and pause. She bites her lip or taps her foot or "fusses" generally. Instead, she should take the ride as a rest and preparation for her task of shopping. She should sit comfortably, occupy her mind with pleasant thoughts, and reserve all nervous energy for later use. Then after her day or half day of shopping,— nervous, worrying work at best,— she should rest for half an hour at least, in loosened clothes, on a comfortable bed.

Another great fault in busy people is their failure to relax thoroughly at night. Many go to bed and sleep, after a fashion, but with tense nerves. The mind

should be as divested of worries and cares at bedtime as the body is of clothes. The muscles must be relaxed. If exercises are taken at night, they should end in a few especially for relaxation. Some of the most helpful of these relaxing exercises may be mentioned:—

1. Stand easily erect, chest raised and abdomen in, and let the head fall gently forward, then arms and trunk above the waist. All this must be done without effort, the breath being gently ex-

pelled at the same time. After a little pause, raise the body slowly.

2. Stand erect, raise the arms above the head and let them fall,—first the fingers, then the wrists, then the arms.

3. Let the arms hang at the sides, then slowly and gently swing them from side to side, gradually letting the head and then the body swing with them.

Remember that your object is to relax the muscles, and do all these exercises easily and with as little exertion as possible.

STRANGE FOODS OF THE MOROS

BY A SOLDIER

I AM convinced that the lowest type of eating and living, from the standpoint of health, is illustrated in the life of the Moros occupying the new territory of the United States in the southern portion of the archipelago of the Philippines. This land is interesting to students of sanitation and the general laws of health because of the very crude, seemingly unnatural, and reckless methods employed by the native housewife in preparing foods, and by the men in their neglect of home and neatness. In order to illustrate their system of eating, sleeping, and living, I will ask the reader to visit with me some of the towns and hamlets in the island of Mindanao, where the Moro nation of the Mohammedans in the Philippines are concentrated. Here there are some hundreds of thousands living in the seashore towns, another colony on the rivers, known as the river tribes, and another in the interior of the island, known as the Lake Moros. Zamboanago is the important town of the island, and here one finds Moro restaurants and Moro houses of all kinds, but

not of the lowest order, because the American soldiery is stationed there, and the inspectors require the natives to live up to certain sanitary rules. In Cottobatto are Parang, Malabang, Seeasi, and a dozen other barrios, towns, and hamlets in which many of the observations upon which this article is based were made.

I inspected some of the cabins of the River Moros, and found a very low state of affairs, considered from a health point. The little shacks of bamboo and nipa occupied by whole families, contain only one or two rooms, often with no floor or window, the only opening being the entrance at the front. Here they cook, eat, and sleep. They lie about on the ground floor constantly, day and night, spitting the juice of the betel nut everywhere, until the earth is saturated, and the burning sun causes an odor to rise that is very disgusting. Refuse of all kinds is simply tossed to the ground near by, and the stenches in the vicinity of the cooking are terrible. The lowest types of Moro do not cultivate the soil extensively enough to have potatoes,



A NATIVE VILLAGE.

corn, and rice to last the whole year. They have an abundance in season, then eat grass or anything to tide over until another crop. I have seen them boiling grass, which is made up into palatable dishes by adding sugar and the like.

The fish cakes eaten by the people are of themselves enough to wreck health. The Moro of all classes prefers decayed fish. At all the fish markets I noticed the buyers constantly smelling the fish before buying. I thought, "How careful the Moro is not to buy tainted fish." But I soon found that he tested the fish simply to make sure of getting those which were partly decomposed. These rank fish are cooked in various fashions, and worked over into fish cakes, so called by the soldiers. The sultans, the datos, the rajahs, and others of the digni-

tary of the Moro nation are just as bad. They, too, want rotten fish. The higher order of Moros live but little better than the common classes. They have their casas and forts, and observe the laws of health very little better than the lowest order of natives in the little huts.

At times of the year this island is overrun with locusts, a type of grasshopper which the natives catch by the hundreds in nets and trenches. These hoppers are killed and sunbaked. Then they are pulverized by grinding and pounding, and mixed with corn or rice flour which is made by a process of pounding the grain in hollowed stones or logs. Numerous mixtures of locusts and flour are made, often with dyes from barks and herbs added to stain the stuff a rich red, yellow, or green.

The combination often produces illness of a severe nature, and I have many times seen the victims rolling on the ground with cramps and pains due to these curious mixtures.

Vendors of foods of all tropical descriptions are found in the native markets, and dattos are not above selling the products of their fields; usually, however, there are several slaves accompanying the datto, and they handle the goods. I saw some of these fellows selling hot cakes decorated with ants, which overrun all things in these islands. One soon gets used to swallowing an ant or two in almost everything he

drinks and one or more of the pests in his food; but the natives consider the ant as an edible, and prepare it by sun-baking with sugar coating. The heat of the sun absorbs all moisture, and the sugar sweetens the remnants, so that if one closes his eyes and eats, he gets a really sweet article. These sweetened ants are spread in a layer on what we would term hot cakes. The hot cakes are a dirty, greasy composition of flour, fats, and dirt, and are enough to produce indigestion, but they sell rapidly.

When a chicken is to be cooked, the native grasps it by the leg or wing, and proceeds to remove the feathers while



A RIVER SCENE ON MARKET DAY.



A NATIVE STREET SCENE.

it is still alive. This process they claim makes better eating than when the chicken is first killed — no further dressing is thought necessary, all portions of the chicken being cooked and eaten. Hogs root about the shacks, but fail to find much to eat because the people eat everything themselves.

Now and then one sees a store in a Moro town occupied by Chinamen, and these stores seem like palaces as compared with the inferior little Moro habitation. The Chinese are the money-makers of the island. They keep the lines of goods required by the people, and have rich profits on all articles.

The Moro hamlets can scarcely be described, for the Moro knows nothing of sanitary laws, and there is no drainage notwithstanding the compact condition of houses.

Heaps of rubbish are everywhere. Naked children run in and out of the

little huts constantly. It is pleasing to state, however, that the Americans alter these conditions quite promptly as soon as they assume control. The natives are compelled to build new and improved shacks, to dig drains, and to wash themselves. I lived on Luzon and Panay islands for a year or more, and am convinced that the Filipino observes the laws of health best. He is careful of his person and clothes, and bathes daily. I think that some of the Moros never wash, for the soil seems baked or crusted on them. What clothes they wear are seldom if ever removed.

The Moro thinks nothing of drinking the vilest of water. He will drink slime from near-by ditches rather than seek clear waters from the springs a mile off. He bathes in stagnant pools if at all. This perhaps accounts, in a measure at least, for the skin diseases so prevalent among them. They do not use soap.



A NATIVE HUT.

Moro restaurants are not infrequently seen, though the Chinese have the monopoly of this business, and Americans requiring foods generally patronize the Chinese eating-house. A look into the Moro establishment is enough. He is too lazy to make utensils with which to work, so he uses one thing for a dozen purposes. He mixes all foods in one bowl, all liquids in one dish, and so on.

All foods are soaked with grease. The ripe, wholesome banana is drenched with foul grease and fried before being placed on the table.

It is interesting to watch the Moros gamble. They gamble away every dollar and penny they possess. They come to town market days from the hills, mounted on native ponies, and bringing products of the soil with them which they exchange for coin with which to gamble. They smoke incessantly and are addicted to the use of the native liquors which are made from the fermented sap of the cocoanut tree, the juices of berries, herbs, and the like. Fortunately these do not produce intoxication as readily as gin and rum and the other liquors generally used in the United States.

THE SCOURGE OF CANCER

BY J. H. KELLOGG, M. D.

AN eminent New York surgeon recently announced that if cancer continues to increase in the State of New York as rapidly within the next ten years as in the past, it will become the cause of more deaths than any other known malady. At the present time consumption and pneumonia carry off about one seventh of all who die. It thus appears that within a very short time three maladies — consumption, pneumonia, and cancer will surely — be responsible for about one half the total of human mortality. What is true in this State is doubtless equally true in other parts of the United States.

“Dr. S. G. Burkholder, V. S., inspector of meat in the Veterinary College of Chicago, in an exceedingly valuable paper on the subject of meat inspection, called attention to the frequency with which cancer occurs in the lower animals, and pointed to the probability that this is one of the sources of the growing frequency of the disease among men.

“It has been proved that cancer is an infectious disease and caused by a parasite. Certain persons seem by heredity to be subject to infection by this disease, while others become vulnerable through erroneous habits of life. It has long been recognized that cancer seldom appears in persons who abstain from the

use of flesh food. It is very rare among the vegetarian natives of India. A physician who practiced for many years among the natives of the Tierras Calientes, or the coast region of Mexico, who subsist almost wholly upon tropical fruits and other vegetable products, said he never saw a case of cancer in his whole experience among these people. In England the frequency of cancer has increased parallel with the increase of flesh-eating.

"Cancer is one of the most incurable, malignant, and fatal of diseases. Its rapid increase renders highly important a recognition of the danger of infection from the use of infected animals. It is not simply the cancer itself that concerns us in this matter, but all the flesh of the animal afflicted with this disease, as it has been shown that in this, as well as other parasitic maladies, the whole body is affected with the poison produced by the parasite which prepares the way for the further extension of the disease. A healthy man will not contract cancer even if inoculated, but in a man who already has a cancer in some portion of his body, other foci of disease may be produced by inoculation, thus demonstrating that the tissues have lost their power to defend themselves against the encroachments of this much-to-be-dreaded parasite.

"Dr. Burkholder calls attention to the fact that American cattle are subject to angry-looking tumors growing about the eye, and says: 'These tumors grow very rapidly, involving the surrounding tissues, filling the orbit, and finally destroying the eye. This growth presents the histological picture of a true epithelioma [cancer], and presents the usual disseminating characteristics. The neighboring lymphatics are invariably involved, showing its progressive and metastatic nature.'

"W. Roger Williams, an eminent English physician, and a recognized authority on cancer, makes the following statement in the 'Twentieth Century Practice of Medicine.'"

"From returns collected . . . it appears that of one hundred and ninety-four cancer patients, one hundred and twenty-three had been moderate eaters, fifty-nine small eaters, and twelve large eaters. With regard to meat, ninety-nine had been moderate, seventy-eight small, and sixteen large eaters. There was not a single strict vegetarian among them, and only a few had been great eaters of vegetables.

"That cancer is less prevalent in vegetarian than in flesh-eating communities is generally believed, and the following considerations are favorable to this belief:—

"In Ireland, where a large proportion live chiefly on vegetable diet, the prevalence of cancer . . . is much less than in either of the sister countries, a fact which is worthy of notice.

"Beneke's statistics show that cancer is rare in prisons, where but little animal food is allowed and hard work exacted. The experience of those engaged in workhouses, lunatic asylums, and similar institutions where very little meat is allowed, is of like import. The comparative rarity of the disease among the intemperate is also noteworthy in this connection, for persons of drunken and dissolute habits are seldom affected.

"The remarkable fact that in New Zealand and New South Wales men are more liable to cancer than women, is probably due, as MacDonald believes, to their gluttonous habits in respect to meat-eating,—meat for breakfast, lunch, dinner, tea, and supper, just like the porridge pot in Scotland.

"The greater prevalence of cancer in rural than in urban districts, and in

the latter its greater incidence in those localities where the well-to-do and easy-going reside, rather than among the poor and working classes, points to the same conclusion.

“Leblanc and others believe that carnivorous animals are more prone to develop malignant disease than are the herbivora.”

“Williams speaks again as follows:—

“Probably no single factor is more potent in determining the outbreak of cancer in the predisposed than high feeding. There can be no doubt that the greed for food manifested by modern communities is altogether out of proportion to their present requirements. Many indications point to the gluttonous consumption of meat, which is such a characteristic feature of the age, as likely to be specially harmful in this respect.

“Statistics show that the consumption of meat has for many years been increasing by leaps and bounds, and it has now reached the total of one hundred and thirty-one pounds per head per year, which is more than double what it was half a century ago, when the conditions of life were more compatible with high feeding.”

“The author adds in a footnote that in the Middle Ages, when cancer was almost unknown, a man was considered in easy circumstances who could procure fresh meat once a week. In the British workhouses, in which cancer seldom appears *de novo*, the meat allowance is not very much greater.

“Rayer states that ‘carnivorous animals are more prone to malignant disease [cancer] than herbivorous.’ ‘Dogs are far more frequently affected than any others,’ while the monkey, which sticks to the original bill of fare of the human family, rarely suffers from this disease. Cadiot and Rogers report

thirty-nine cases of malignant tumor in dogs. Malignant disease has also been reported in the kangaroo (Eve), in a plover, in a sheep (Sharp), in a cow (Cooper), in a rat (Shattock).

“Malignant growths also affect the vegetable kingdom, — trees and other plants, — but these growths are probably of different character from those which affect human beings. That carnivorous animals are more subject to cancer than the herbivorous is the natural result of the infection to which they are subjected by the use of vegetable-eating animals as food. Human beings who eat flesh are in precisely the same position. It is probable, also, that the use of flesh food, by contaminating the body with waste animal matters and by lowering the vital resistance, increases the liability to cancer as well as other forms of disease.

“Dr. Johnson, Government Meat Inspector, and Dr. Loeb, Professor of Pathology in the Chicago Polyclinic, in a recent article in the *Journal of Comparative Medicine and Veterinary Archives*, report forty-nine cases of cancer observed in one year in the Chicago stockyards. These authors state that one or two cases of cancer were found every year in cattle of a certain ranch in Wyoming.

“Cancer has been shown by Davidson, in his ‘Geographical Pathology,’ to be distinctly a disease of civilization. Davidson affirms that it is entirely absent in East Central Africa, the Färöe Islands, the Gold Coast, Guiana, Iceland, Jamaica, Mauritius, New Caledonia, and Persia. Its presence in Abyssinia is doubtful.

“Carefully collected statistics in different civilized countries, quoted by G. Betton Massey, M. D., of Philadelphia, in a paper published in the *American Journal of Medical Sciences* for Feb-

ruary, 1900, show that the number of deaths from cancer has in thirty-one years doubled in Wales; in twenty years, cancer increased more than fifty per cent in Scotland and Ireland. In America the ratio of deaths from cancer has doubled in New York within twenty-eight years. In Boston, from 1863 to 1887, the cancer mortality nearly tripled, while in San Francisco the number of deaths from cancer increased in thirty-two years prior to 1898 from 16.5 in 100,000 to 103.6, or more than 600 per cent. These are facts which challenge the attention of every intelligent man.

"As bearing upon this subject, Williams points to the fact that cancer hardly ever occurs in animals in a state of nature. It is only in domesticated animals that this disease is found, and then chiefly when they are kept in confinement under artificial conditions.

"G. Betton Massey concludes from carefully prepared statistics that there are to be found in the United States at the present time no fewer than one hundred thousand persons suffering from cancer. Of these half die every year, and an equal number take their place, as the average duration of the disease is two years.

"Dr. Park has shown that the number of persons who die of cancer annually in the State of New York has doubled within the last ten years.

"According to Dr. Snow, an eminent English physician, cancer is often confounded with actinomycosis, a parasitic disease which frequently occurs in cattle, and which, like cancer, may be communicated to man under favorable conditions.

"MM. Verneuil, of Paris, and Roux, of Lausanne, a few years ago announced the view that the free use of pork is, if not the direct cause of cancer, at least a very important factor in the causation

of this disease. M. Verneuil has long been convinced that the free use of meat is a cause of cancer, and he has more recently observed that orthodox Jews, who adhere closely to the laws of Moses, rarely, if ever, suffer from this disease. M. Roux has confirmed these observations."

From the above it is evident that a dietary consisting of natural foods,—is one of the best precautions that can be taken against this formidable disease. Dr. Smith, an eminent English surgeon, contended more than one hundred years ago that the adoption of such a dietary will in many cases effect a cure of cancer, and in failure all cases produced marked improvement. The writer has had an opportunity to test the truth of this claim in the treatment of a large number of cases of this disease, and is able to verify the statement that a natural dietary may often suffice to effect a cure of this formidable malady.

In a case under observation, a patient who had suffered from a form of cancer known as epithelioma has made a complete and perfect recovery from the disease practically without surgical or medical treatment of any sort. A small portion of the cancer was removed and submitted to an eminent New York City authority in matters of this sort, and the case was pronounced to be one of undoubted cancer. The diseased portion, however, entirely separated from the healthy, and the tissues healed, leaving behind almost no other evidence of previous disease than a very slight scar. That the free use of flesh food is a predisposing cause of cancer, and in many cases a direct cause of infection, cannot be doubted. It may also be said to be apparent that the natural and non-flesh dietary is one of the most effective measures that can be adopted for its prevention and cure.



STUDIES IN COSTUME

The Corset

BY ETHEL REEDER FARNSWORTH

THE corset has been so long with us that few have ever stopped to inquire concerning the place and time of its first appearance in the world of dress; yet beginning it must have had, though we are glad that the name of its originator has not been handed down to posterity, and that time kindly drew the veil of oblivion about him or her before a realization of the mischief he had caused overwhelmed him. But since this sin against humanity, grievous as it is, was no doubt committed without malice aforethought, we will concern ourselves with the instrument itself rather than its originator.

In the British Museum there is a manuscript of the time of Edward the

Confessor which contains a picture of "The Fiend of Fashion." This figure is clad in a corset tightly laced and stiffened by two busks in front. Planché tells us that the injurious practice of lacing, "a custom fertile in disease and death," was introduced among the Normans as early as the twelfth century. Perhaps the earliest instance of the use of the word corset is in the household register of Eleanor, Countess of Leicester, which bears the date of May 24, 1265. The item reads, "for nine ells, Paris measure, for summer robes, corsets, and cloakes for the same." We also find the word in connection with the wardrobes of Richard, king of the Normans, and Edward his son, who died in the year 1308. From



VENUS DE MILO.

this we must conclude that slender waists, and therefore corsets, were not alone feminine accessories. Indeed the slender waist became a synonym for nobility and rank during this time, and this idea seems to persist in our own time to a large extent.

The romances of the Middle Ages teem with allusions to and praises of the slender waists of the maids and matrons of the time. Chaucer, who was always minute in his observations and descriptions, tells of a carpenter's wife whose body was "gentyll and small as a weasel." Dunbar tells us in

his "Thistle and Rose" of the Scottish belles that "their middles were as small as wands." In the fifteenth century we hear of "a pair of bodies," and in the sixteenth century we meet with what John Bulwer aptly terms "the whalebone prison." Stephen Gosson in his "Pleasant Quippes" attacks the corset in the following lines:—



THE CORSET GIRL.

"These privie coates by art made strong
 With bones, with paste, and such
 like ware,
 Whereby their backs and sides grew long
 And now they harness gallants are.

Were they for use against the foe
 Our Dames for Amazons might go ;
 But seeing they do only stay
 The course that nature doth intend,
 And mothers often by them stay
 Their daughters young and work
 their end :
 What else are they but armour stout,
 Wherein like giants Jove they flout."

In the fourteenth century Emperor Joseph of Austria became so much alarmed over the practices of the fashionable world that he issued an edict upon the weighty subject of stays. He caused a law to be formulated forbidding the use of the corset in all nunneries and other places where girls were educated, and called upon the church to aid him in his crusade, with a threat of excommunication against those who insisted upon unduly compressing their waists. This royal anxiety aroused "the physicians of the time, and learned dissertations upon the crying sin of tight lacing were scattered broadcast among the people."

Catharine de Medici, whom we have every reason to believe took as deep an interest in dress as in poison, considered a large waist an abomination, and we are assured that while she reigned over the French court a thirteen-inch waist measure was the accepted standard which must be attained by the socially ambitious at any cost of health or comfort. The means of attaining this result already in existence did not appear sufficient to the royal lady, so "she even went so far as to invent a corset herself, which looks like some implement of torture employed by the Holy Inquisition. It was made of steel, inflexible as a suit of armor, cut out and wrought into an openwork pattern, through which a needle and thread were passed and repassed accurately covering the sur-

face with velvet. It consisted of two pieces (like a warrior's breast- and back-plates) opening longitudinally by hinges, secured by a hasp and pin, much like an ordinary box-fastening. At front and back a rod or bar of steel projected in a curved direction downward, and on these bars depended the adjustment of the long-peaked body of the dress and the set of the skirt behind." Is it to be wondered at that the artists of this period depict their subjects in stiff, unnatural attitudes, or that their faces are solemn and expressionless?

"Probably one of the most harrowing of all the modish forms of screw-torture was the corset of George II which we see so often represented in Hogarth's pictures, for the front part was made of wood." We can scarcely



From "Fashion's Slaves."

NORMAL AND CORSET-COMPRESSED THORAX.

understand the use of wood in the construction of an article of wearing apparel, for while the use of whalebone was yet unknown, steel was in common use and why the makers of stays should resort to the use of so bulky a substance as wood when a substance as

flexible and durable as steel was at hand, it is hard to understand.

"Tailors of the time of George III advertised 'Codrington Corsets' and 'Petersham stiffners' for the benefit of gentlemen of fashion; and it is related of the Prince de Legne, and Prince Kaunitz that they were invariably incased in satin stays of expensive make, the former wearing black and the latter white. The doughty warriors of Gustavus Adolphus were stayed almost to a man."

Such is a brief history of an article of wearing apparel which is beyond a doubt responsible for more suffering and lasting harm to the human race

than many if not all other unphysiological customs in dress combined. As we have seen, it had its beginning at a time when the structure of the human body was little understood, and when the laity had within their reach small means of education. Is it not a sad commentary upon modern enlightenment that the corset, with all its evils for the present and future generations, still holds so many bright and enlightened women among its devotees.

But we see hope both in the general diffusion of sanitary and physiological knowledge and in the revival of art which at every turn idealizes the beauty of the natural human form.

HOW WE MAY HAVE GOOD HEALTH

BY FLORENCE LOUISE HOAG

WE may have good health by building our bodies of good material and keeping them in good repair. How many of us give our bodies our best thoughts? We think about fashionable clothes to put upon them, about the houses in which they are to dwell, but the body itself, "the temple of God," is the last thing to claim our attention. "Know ye not that ye are the temple of God, and that the spirit of God dwelleth in you? If any man defile the temple of God him shall God destroy, for the temple of God is holy, which temple ye are."

Six thousand years ago, God said, Let us make man in our image and after our likeness; and let them have dominion over all the land and sea; so God created man in his own image, male and female created he them. "And God said, Behold, I have given you every herb bearing seed, which is upon the face of the earth, and every tree, in

the which is the fruit of a tree yielding seed; to you it shall be for meat." In other words, he gave man grains, fruits, and nuts with which to build his body, and the herbs were to be meat for the beast. But after man sinned, God cursed the ground and told man that he would go to eating herbs, also. Man kept sinning more and more till God repented him that he had ever made man. He destroyed all save eight, and then said that he would no more curse the ground for man's sake, for the imagination of man's heart is evil from his youth, and that the fear of him would be upon every beast and fowl and fish, for every moving thing that hath life would be meat for him, as was also the herb. So Noah ate not only the herbs and flesh but took a step still further downward, — he planted a vineyard and got drunk; and many of his descendants have followed in his footsteps. But is it not written,

"No drunkard shall inherit the kingdom of God"? Is it not written in regard to flesh-eating, "Surely your blood of your lives will I require, at the hand of every beast will I require it?"

Man's days have been shortened; shortened from nearly a thousand years in those early days down to the time of Abraham, when one hundred and forty-five years were considered a good old age; shortened from Abraham's time down, down, down to our own time, when we find the average age less than thirty years, and the threescore years and ten a ripe old age.

We know we cannot build a house of poor material and have that house stand. Why not use the same common sense in building our bodies! The best material is none too good to build the temple. Surely grains and fruits, which God gave man before the curse and which science proves are the best, are the cheapest food as well as the best in these days of meat trusts.

These trusts are likely to prove a boomerang to the meat dealers, in opening the eyes of those of us who are consumers of meat, to the merits of some other diet. When our eyes have been open to the fact that grains, fruits, and nuts will build brighter minds and cleaner, purer bodies, we will realize what a bloody and carnivorous past stretches out behind us. True, we have not eaten mice and rats, nor have we eaten our ancestors; but we have eaten dead cows, and calves, and pigs, and sheep, to say nothing of the innumerable fowls and fish that have been buried in our interiors.

Look at the powerful muscles of the ox and of the horse. Do they have to eat meat to build their muscles? We know that it is the grains that build them, grains as the Lord has given them to us, not with the nitrates and phos-

phates eliminated as man prepares the fine white flour for himself, but the whole kernel of the grain proportioned as the Creator had intended it. Do we know that the tiny grain of wheat is in a sense a miniature of the human body, containing all the elements of the body in its right proportions? Do we know that the juices of ripe fruits are distilled by nature, and that they eliminate the collections of filth from the body?

We fill our bodies with nauseating drugs, and wander from one mineral spring to another seeking health and the fountain of youth, when if we would but open our eyes and use the good sense the Lord has given us we could find what we seek right at our doors.

Do we realize that not a tissue of the body can be built without the material is first floated to it in the blood stream; that not an unused piece of this material or any of the old rubbish can be carried away but for this stream? Do we know that nearly all diseases, save those caused by accident, are due to collections of effete matter within the body? Had there been a good circulation of pure blood this filth would have been cast out of the system. Civilized society is awakened to the necessity for the daily bath in water; a filthy skin is a disgrace, but the necessity for the inward bath in the blood stream is not yet realized. Through the thin walls of the distal extremities of the arteries oozes this inward bath water; all the tissues of the body are fed by it, and bathed in it; then it is drained into the venous stream. But if these streams are sluggish, — and they will be if we are not active, — this washwater of the system will become poisonous through stagnation. Exercise is necessary to this internal cleansing bath, to force the heart to beat with strong pulsations, and send the blood leaping out into the

arteries and on to the tiny capillaries where the assimilation of the new material and the giving up of the old takes place; to force the veins and lymphatics to take up this old material and pass it to and through the various organs of elimination that this effete matter may be separated and cast out.

Let us not say that we have no time to attend to this exercise; we must take time, else we may be forced to take time to attend our own funerals much sooner than nature intended. If we are not able to exercise ourselves or if we do not know how, then it would be wise to get some one who understands the business to do this for us. Exercise we must have if we would have health.

Shakespeare but told an old truth when he said, "Our remedies oft in ourselves do lie." Nature ever tends to heal if we but stop breaking her laws. Give her an opportunity, and she will

build the body strong, symmetrical, beautiful; but how many of us are giving her this privilege? How many of us are keeping her out by building round about us a great wall of sluggishness, selfishness, pessimism, worry, scolding, and fear.

Oh let us tear down this wall and get out of its dark, gloomy shadows, out into the bright sunshine of obedience and faith and hope as well as the real physical sunshine. Pure, fresh, outdoor air is the very essence of life. Do we know that it is impossible for one who breathes deeply the fresh air and basks in the sunshine to have the blues? The fervent heat of the sunshine [without will melt this wall we have built about us, and the ugly shadows in which we have been hiding will chase each other from our presence like renegade deserters fleeing from the light.

ONLY A SONG

ONLY a song that mother sang,
 Only a melody sweet and low;
 Yet oft its music brings to me
 Visions bright of long ago.
 Mother sits in her old armchair,
 Oft in my dreams I see her there,
 Unto my ears floats the sweet refrain,
 Her cherished song sung o'er again,
 "Sweet Hour of Prayer!"

"Sweet Hour of Prayer
 That calls me from this world of care."
 She sang that song thro' weal and woe,
 No greater comfort could she know,
 Than to firmly believe that God was nigh
 To guide her footsteps to Him on high.
 It "bids me at my Father's throne
 Make all my wants and wishes known,
 Sweet Hour of Prayer!"

Only a song! Yet its measures sweet
 Oft to the tired heart repeat
 The depth of mother's love.
 Dear mother! In thy home above,
 Thy earthly tasks are o'er,
 Thy work is done.
 Sweetly echo's from thy home "up there"
 "Sweet Hour of Prayer!"

— *Martha Elizabeth Gammons.*

Nature's Methods in the Sick Room

HOME CARE OF FEVER CASES

The Diet. — The diet in fevers is a matter of paramount importance. The patient can digest but little and can appropriate but little. On this account it is useless to crowd large quantities of food upon him. Such a course only loads the stomach and bowels with undigested food-stuffs, the fermentation of which gives rise to gases and causes distention of the bowels, while decompositions result in the increase of disease germs and their poisons, and so increase the work required of the liver and kidneys.

The milk diet in typhoid is most inappropriate. Milk is one of the substances in which the typhoid germs flourish best. Many of the worst symptoms of this disease may often be attributed to this absurd method of feeding which was never supported by any sound scientific facts. A far better diet is that of the famous old Greek physician, Hippocrates, who fed his fever patients on thin barley gruel. A still better diet is that of Niemeyer, the famous German physician, who always fed his patients on fruit soups, which are widely used in Germany, and should be better known everywhere, not only as a fever diet, but as a part of the everyday bill of fare.

Fruit juices, fruit purées, with a small amount of bread crust baked until brown, rice, granola, malted nuts, mel-tose, and malted and dextrinized cereals, are the most suitable diet. If milk is to be used, it is better to take it in

the form of buttermilk or fresh kumyss, being more readily digestible in this form and less likely to encourage the growth of intestinal germs.

When the patient is convalescent, the appetite often returns with very great cravings for food. At this period great care must be exercised to avoid over-eating, and the eating of unwholesome things. Meats of all sorts must be avoided during convalescence as well as during the fever. Meat requires a strong stomach for its digestion. In typhoid fever the stomach is almost wholly inactive, and it often becomes dilated during an attack of this disease. In the writer's opinion this not due to the disease, however, but to the bad feeding, whereby the stomach is loaded with indigestible and gas-forming food-stuffs, of which milk is one of the most harmful.

Beef tea, broths, and all sorts of meat preparations are always to be avoided in fevers, for the reason that they consist largely of excrementitious, or waste, substances, and increase the fever while burdening the liver and kidneys in their destruction and elimination. The popular notion that meat broths and extracts are especially nourishing or strengthening is an error wholly without foundation in science. It has been shown by eminent investigators that the deadly poisons produced by the germs causing diphtheria and scarlet fever are formed from these very tissue wastes. It is probable that the same is

true of the poisons of other infectious fevers.

It should be further remarked that in the early stages of a continued fever, especially during the first week, little food is required. It is just as well to let the patient fast for a day or two, or at least to give him only fruit juices, fruit soups, and very thin cereal preparations. This liquid food taxes the stomach very little and introduces an abundance of fluid into the system. Later, especially when there is appetite for food, such foods as have been named may be given in small quantities two or three times daily. When only fluid food is taken, it should be administered at intervals of three or four hours, when the patient is awake.

The Bowels.—In nearly all fevers there is a marked tendency to constipation. The moist abdominal bandage, worn night and day and often changed, is a good means of combating this symptom as well as the fever and local irritation which exists in certain forms of fever; but in most cases, the daily use of the enema is required to secure complete emptying of the colon. The high temperature and the lowered bodily resistance encourage the decompositions which are always taking place in the colon, thus increasing the amount of poisons with which the system has to deal. Hence the importance of keeping the colon empty.

When diarrhea exists, as is often the case in severe forms of fever, this is an evidence of unusual germ activity in the intestines, and an enema of hot soap-suds should be given twice daily, not only to thoroughly empty the colon but to disinfect the diseased surfaces so far as they can be reached, soap being now recognized as an excellent disinfectant.

The Sick Room.—The invalid's room must be large, airy, and always well

ventilated. Light must be admitted freely, but in such a way as not to disturb the patient. The temperature must be as low as possible in the warm season, and not above 60° in the cold season. A temperature of 50° is better than a temperature above 70°. When the temperature of the room rises, the temperature of the patient goes up because of increased heat production. A fever patient is exceedingly sensitive to slight changes in temperature by which a well person is not at all affected.

All unnecessary furniture is removed from the sick room, all hangings and pictures and whatever articles are likely to be injured by thorough disinfection. Carpets are objectionable. Their place should be supplied by rugs and strips of oilcloth. If possible, two beds should be provided so that the patient may be changed to a freshly made bed night and morning. The bedding should consist of a good, elastic mattress of hair or wool, covered by two or three folded blankets. The covers should be woolen blankets, never quilts or comfortables. The pillow should be of hair or wool. Feathers should not be tolerated.

It is well to have the beds placed in adjacent rooms, if possible, so that the patient can be moved from one room to another morning and night, thus allowing opportunity for thorough cleansing and ventilation of the vacated room.

There are no air disinfectants which can be safely used while a patient occupies a room, but the greatest care must be taken to disinfect or destroy the bowel discharges and all infectious material. This may be done by keeping in the vessel a half pint of a one-percent solution of formalin. A teaspoonful of formalin to the half pint of water is amply sufficient for efficient disinfection.

J. H. K.

Science in the Kitchen

THE KITCHEN FURNITURE

THE furniture for a kitchen should not be cumbersome, and should be so made and dressed as to be easily cleaned. There should be plenty of cupboards, and each for the sake of order should be devoted to a special purpose. Cupboards with sliding doors are much superior to closets. They should be placed upon casters so as to be easily moved, as they are thus not only more convenient, but admit of more thorough cleanliness.

Cupboards used for the storage of food should be well ventilated; otherwise, they furnish choice conditions for the development of mold and germs. Movable cupboards may be ventilated by means of openings in the top, and doors covered with very fine wire gauze which will admit the air but keep out flies and dust. All stationary cupboards and closets should have a ventilating flue connected with the main shaft by which the house is ventilated, or directly communicating with the outer air.

No kitchen can be regarded as well furnished without a good timepiece as an aid to punctuality and economy of time. An eight-day clock with large dial and plain case is the most suitable.

Every kitchen should also be provided with a slate, with sponge and pencil attached, on one side of which the market orders and other memoranda may be jotted down, and on the other the bills of fare for the day or week. In households where servants are kept, the slate will save many a vexatious

blunder and unnecessary call to the kitchen, while if one is herself mistress, cook, and housekeeper, it may prove an invaluable aid and time-saver if thus used.

Lack of sufficient table room is often a great source of inconvenience to the housekeeper. To avoid this, arrange swinging tables or shelves at convenient points upon the wall, which may be put up or let down as occasion demands. For ordinary kitchen uses, small tables of suitable height on easy-rolling casters, and with zinc tops, are the most convenient and most easily kept clean. It is quite as well that they be made without drawers, which are too apt to become receptacles for a heterogenous mass of rubbish. If desirable to have some handy place for keeping articles which are frequently required for use, they may be hung above the table. It may be also an advantage to arrange small shelves about and above the range, on which may be kept various articles necessary for cooking purposes.

One of the most indispensable articles of furnishing for a well-appointed kitchen is a sink; however, a sink must be properly constructed and well cared for, or it is likely to become a source of great danger to the health of the inmates of the household. Earthenware is the best material for kitchen sinks. Iron is very serviceable, but corrodes, and if painted or enameled this soon wears off. Wood is objectionable from a sanitary standpoint. A

sink made of wood lined with copper answers well for a long time if properly cared for.

The sink should if possible stand out from the wall, so as to allow free access to all sides of it for the sake of cleanliness, and under no circumstance should there be any inclosure of woodwork or cupboards underneath to serve as a storage place for pots and kettles and all kinds of rubbish, dust, and germs. It should be supported on legs, and the space below should be open for inspection at all times. The pipes and fixtures should be selected and placed by a competent plumber.

Great pains should be taken to keep the pipes clean and well disinfected. Refuse of all kinds should be kept out. Thoughtless housekeepers and careless domestics often allow greasy water and bits of table waste to find their way into the pipes. Drain pipes usually have a bend, or trap, through which water containing no sediment flows freely; but the melted grease which often passes into the pipes mixed with hot water, becomes cooled and solid as it descends, adhering to the pipes and gradually accumulating until the drain is blocked, or the water passes through very slowly. A grease-lined pipe is a hotbed for disease germs.

Water containing much grease should be cooled and the grease removed before being turned into the kitchen sink, while bits of refuse should be disposed of elsewhere, since prevention of mischief is in this case, as in most others, far easier than cure. It is customary for housekeepers to pour a hot solution of soda or potash down the sink pipes occasionally, to dissolve any grease which may tend to obstruct the passage; but this is only a partial safeguard, as there is no certainty that all the grease will be dissolved, and any

particles adhering to the pipes very soon undergo putrefaction.

A frequent flushing with hot water is important; besides which the pipes should be disinfected two or three times a week by pouring down a gallon of water holding in solution a pound of good chloride of lime.

Stoves and Ranges.—The furnishing of a modern kitchen would be quite incomplete without some form of stove or range. The multiplicity of these articles manufactured, each with some especial merit of its own, renders it a somewhat difficult task to make a choice among them. Much must, however, depend upon the kind of fuel to be used, the size of the household, and various other circumstances which make it necessary for each individual housekeeper to decide for herself what is best adapted to her wants. It may be said, in brief, that economy of fuel, simplicity of construction, and efficiency in use are the chief points to be considered in the selection of stoves and ranges.

A stove or range of plain finish is to be preferred, because it is much easier to keep clean, and will be likely to present a better appearance after a few months' wear than one of more elaborate pattern. But whatever stove or range is selected, its mechanism should be thoroughly understood in every particular, and it should be tested with dampers open, with dampers closed, and in every possible way, until one is perfectly sure she understands its action under all conditions.

Oil and Gas Stoves.—In many households, oil, gas, and gasoline stoves have largely taken the place of the kitchen range, especially during the hot weather of summer. They can be used for nearly every purpose for which a wood or a coal range is used; they

require much less labor and litter, and can be instantly started into full force and as quickly turned out when no longer required, while the fact that the heat can be regulated with exactness, makes them superior for certain processes of cooking to any other stove. But while these stoves are convenient and economical, especially in small families, they should be used with much care. Aside from the danger from explosion, which is by no means inconsiderable in the use of gasoline and oil stoves, they are not, unless well

cared for, altogether healthful. Unless the precaution is taken to use them in well-ventilated rooms or to connect them with a chimney, they vitiate the atmosphere to a considerable extent with the products of combustion. Oil stoves, unless the wicks are kept well trimmed, are apt to smoke, and this smoke is not only disagreeable, but extremely irritating to the mucous membrane of the nose and throat. Oil stoves are constructed on the same principle as ordinary oil lamps, and require the same care and attention.

RECIPES

Egg Timbales.

A dish for the sick or well: Four eggs, two cups milk, a little salt. Beat the eggs (whites and yolks together), add the milk and salt, and pour it into timbale cups or a baking dish. Set the cups (or dish) into a pan of warm water and bake until the eggs "set" — but not longer.

Farina Croquettes.

Add a teaspoonful of salt to three and one-half cups of boiling water, and stir while sprinkling in a cup of farina. Let boil vigorously, then cook from one to three hours over hot water. Let cool slightly, and with the hands wet in cold water, shape into croquettes, or when thoroughly cold, cut into cubes. Egg-and-bread crumb, and brown in hot oven. Serve with grated maple sugar.—*Hygienic Caterer.*

Lemon Bread Pudding.

Cut stale bread into small pieces, or crumb it; using about one pint, pour over the crumbs one quart of milk. Add four eggs, beaten lightly, with one-

half cup of sugar, and if desired a little butter or nut butter. Pour the whole into a pudding dish which has been carefully oiled, and set in a moderate oven to bake.

As soon as the pudding is set, grate the rind of one large or two small lemons over it, and serve either hot or cold with a good jelly. More sugar may be used in the pudding if desired.

Orange Cake.

Make a layer cake from some sponge-cake dough and spread the following jelly between the layers:—

Orange Jelly—Add to the juice of two oranges and the juice of one half a lemon enough water to make one good cupful. Beat one egg and add to the water and fruit juices. Pour this slowly over one cupful of sugar to which has been added two tablespoonfuls of flour. Be sure that the sugar and flour are thoroughly mixed or the flour will form lumps when the liquid is added. Cook in a double boiler until thickened and spread between the layers of the cake when cool. Lulu T. Burden.

The Hundred Year Club

Adna Adams Treat, Aged One Hundred and Three Years, Denver, Colo.

Mr. Treat was born in Hartford, Conn., April 8, 1797, and died in Denver, Colo., Dec. 9, 1900, making him 103 years and 8 months old.

Mr. Treat's was a life of unusual interest. When a boy he joined in the celebration of the naval victory in Lake Erie. Later on when he had attained manhood, and while he was residing at Newburgh, N. Y., he helped to celebrate the success of Fulton's first steamboat on the Hudson.

When the Erie canal was opened, he was a member of the party invited to join Governor DeWitt Clinton in the famous voyage inland from Troy to Buffalo.

He took great interest in the Spanish war, and read the newspapers every day, enthusing greatly over the American victories. His birthday anniversaries were religiously kept by the aged man's friends during his last ten years. A dinner party and reception were always held, and Mr. Treat invariably took an active part in the functions.

Mr. Treat's son-in-law, Dr. N. G. Burnham of Denver, ascribes his unusual age to his regular temperate habits and active life. He always insisted upon perfect regularity in the serving of his meals, and up to two years before his death, when he met with an accident which left him a cripple, he always spent part of each day in exercise in the open air.

The following ode to the twentieth century was written by him only a few weeks before his death:—

A century has passed and gone,
The shining sun pursues his way,
The winter frost is on the lawn,
And nature seems both bright and gay.

The mind reverts to youthful days
When happy in parental home,
And oft in memory's fondest lays,
We dwell with those who far did roam.

The vital spark from life divine
That lives unseen by mortal eyes,
It has a place in hearts like mine,
A heavenly flame that never dies.

This earthly life is running long.
But kindred spirits hover near,
My faith and hope are true and strong
That peace will crown the newborn year.

—Adna Adams Treat.



ADNA ADAMS TREAT.

THE MORAL BASIS OF VEGETARIANISM

THE arguments in favour of a vegetarian diet are very numerous and cannot all be dealt with adequately in a short article. I might take up the question from the hygienic standpoint and show the superiority of a fleshless diet to one into which meat enters. I might point out the dangers from cancer, tuberculosis, liver diseases, intestinal parasites, and numberless other complaints due in great part to the eating of meat. I might turn to the structural argument and quote Broca, Pouchet, Owen, Linnæus, Gassendi, Cuvier, and many others in proof of the fact that man is akin to the frugivorous apes, and that by nature he is not a flesh-eater but has become such only through perverted habits. I might argue the greater economy of a vegetarian diet, its superiority from an esthetic point of view, and its value as a means of combating the drink evil. All these and many more reasons weigh in favor of a nonflesh diet; but I prefer to confine myself to one argument alone, for this is or ought to be the foundation stone upon which vegetarianism stands. This fundamental principle is justice — justice to animals and justice to one's fellow-men, justice to one's self.

It is impossible in the space at my disposal to mention, excepting in a general way, the cruelties connected with the eating of animal food. In the shooting of game, in the cramming of poultry, in the transport and slaughter of sheep, pigs, oxen, and other animals, in fact, in every branch of every trade connected with the furnishing of flesh-food the cruelty is never-ceasing. The greatest amount of suffering is no doubt found among the sheep, pigs, and larger animals, because the difficul-

ties of transport and slaughter are naturally greater. Bad as is the transportation of poultry, the transportation of cattle is infinitely worse. Packed tightly into narrow cars they are obliged to travel often for forty-eight hours or more without food or water, exposed to the cold of winter or the heat of summer. Many of them fall from sheer exhaustion, are trampled upon and killed by their companions, or arrive bleeding and mangled. When the end of the journey is reached they must generally travel long distances on foot, again deprived of food and water, for food costs money without adding to the selling qualities of the meat, and water costs time and trouble.

Nor are the evils of transport confined to journeys by railway. Every year hundreds of thousands of cattle are obliged to make long voyages by sea, and to endure sufferings in the loading and unloading and in the voyage itself that one can scarcely bring his mind to imagine. In bad weather they are thrown about from side to side and with broken bones or bleeding wounds are forced to lie where they are until the storm is over before relief can come to them, and then those that have sustained the worst injuries are thrown into the sea to end their sufferings by drowning. When in rough weather the partitions break, as is frequently the case, and the cattle, tossed from one side of the ship to the other, are left to struggle in a helpless mass together sometimes for days at a time, the horrors of an ocean voyage reach their climax.

At all stages of the journeys the animals are prodded and beaten with sticks, and the tails of the cattle are twisted unmercifully in order to force

them to do what is required of them. This tail-twisting alone would cause suffering enough even if other ways of torture were wanting. Let any one imagine his arm twisted until the bones break, and he can form some idea of what thousands upon thousands of cattle the world over are enduring every day at the hands of brutal drovers.

And when the horrors of transport are at an end, the slaughterhouse is reached — a place which under the very best conditions is a hell of torment. The cattle bewildered, terrified, struggling to get free, are kicked and beaten by the herdsmen whose duty it is to force them into the enclosure where the slaughtering takes place; and in the case of the larger animals, when kicks and blows prove insufficient, tail-twisting is again resorted to.

After this preliminary struggle comes the slaughtering itself, in which the agonies are as great as, although generally less prolonged, than those before the actual killing; and as a fit ending to all the previous torture, many animals are actually skinned before the life has left their bodies.

People who wish to ease their consciences will often say that the remedy for all this is a humane method of slaughtering. But a method of slaughtering that has any real claim to humaneness has never been invented and probably never will be, and even if it were we should still have to deal with the other cruelties connected with the slaughterhouse and with transport — cruelties that can never be remedied because the men employed in the business are necessarily brutes, having been made such by the very nature of their trade.

This brings me to the second point in my argument — the injustice committed against *men* by the practice of

flesh-eating. How many people when they sit down to their tables to eat their chops and steaks stop to think of the thousands of men and women who are engaged in the degrading trade of producing these same chops and steaks for their enjoyment? Yes, men and women, for women too are employed in even the filthiest parts of the business — in cleaning and preparing the intestines, for example. The very name "butcher" is a term of reproach, and yet the butcher is less brutal and less degraded than many of the other classes employed from first to last in the furnishing of meat for the market. Degraded they are, and degraded they must be, all these drovers, dealers, slaughtermen, and others engaged in this terrible trade; for the nature of their business is such as to make them sink lower and lower in the scale of humanity.

And what is the reason for all this? Why is it necessary that human beings should be engaged in such work? Simply that people may have their beef and mutton and lamb on their tables. How many of you who eat your meat every day would go into a slaughterhouse and kill and skin and afterwards cut in pieces the bloody carcasses? And if you would not do these things yourselves what right have you to force others to do them for you? Is it just to your fellow-men because they are in need of work that you should take advantage of their condition to make them do for you what you would not do for yourselves, and that you should despise them for having done your dirty work for you? Sometimes we are at a loss to place the responsibility for great wrongs, or having placed the responsibility we cannot find a remedy; but here is a clear case reflecting directly upon each individual who eats animal

food. Every meat-eater who becomes a vegetarian relieves himself of personal responsibility for the evil, and in fact diminishes it in direct proportion to the amount of meat he was accustomed to consume. There is no other remedy and there never will be or can be another. Let the eater of animal food talk as he may, let him devise what schemes he will in order to relieve his own conscience, the fact will always remain that he is personally responsible for the cruelty to animals and the degradation of human beings that take place in order to supply him with a quite unnecessary article of food. Millions of people the world over are living upon a vegetarian diet — a great part of them on account of their religion, an equal number perhaps because of necessity. From Russia to India and from Japan to France the agricultural laborers live almost entirely without animal food, and how in the face of this can any one contend that meat is necessary for bodily strength to say nothing of human existence, for these number among them some of the hardest people known.

If, however, any individual thinks animal food indispensable, let him face the situation honestly and commit his own cruelties. Let him not delegate to others the responsibility he will not assume himself. The truth is, that this "necessity" argument is a mere pretext. The real reason behind it is the dislike of people to forego their own pleasures or to deprive themselves of anything to which they have been accustomed. If every one were obliged to do his own slaughtering, his own skinning, his own cleaning of entrails and other filthy parts of the animal, we should hear very little talk of the necessity of meat as an article of human diet.—*Atherton Curtis.*

Municipal Quarantine.

The following paper which was read by Dr. James A. King, health officer of Manistee, Mich., before the conference of Michigan Health Officials held at Ann Arbor, November, 1901, and published in the *Teachers' Sanitary Bulletin*, deals with a subject upon which there is great need of education and reform, and we therefore publish a large portion of it:—

"This paper will be devoted to a short consideration of municipal quarantine in our smaller cities. There can be no question, I think, that cities of less than fifty thousand inhabitants do not properly isolate ordinary cases of contagious disease. Most of the smaller cities do not really isolate them at all. They put up a placard and allow family and friends to run in and out as they choose. If a case of smallpox occurs, that is carefully quarantined, but for scarlet fever, diphtheria, and measles there is nothing done besides putting up the aforesaid sign, and it remains entirely with the neighbors whether they keep out or not. In my town, where there is a large foreign population, they usually ignore the directions of the health officer entirely. It is more necessary to perfectly quarantine against diphtheria and scarlet fever than against smallpox. People are afraid of smallpox. Publish the fact that smallpox is present in a house, and the neighbors will keep up a very effective quarantine themselves.

"Nothing is more common than to have all my warnings in a case of diphtheria met by the bland assurance, 'O, I am not afraid of it.' Tell the neighbors that they have a case of smallpox next door, and they will usually keep away. Tell them they have measles next door, and very often they will im-

mediately rush over, ostensibly to offer sympathy, but really to show how brave they are.

“Besides direct communication the next most potent factor in the spread of contagion in our smaller cities is, perhaps, the kitchen garbage. I have seen children greedily eating the refuse cake, pickles, and such trash, that they sorted from the garbage box as they filled their swill carts. The possible results of toting the refuse food of sick rooms in open carts through two or three miles of streets is obvious, and in cities where this method of disposal is allowed at all, it is almost entirely performed by children. Disease contracted in this way is liable to run through a whole foreign quarter.

“The next great difficulty in effective municipal quarantine I consider to be the unlawful suppression of cases. This is common enough with the laity, but is not confined to them. I have strong reasons for believing that a doctor and all his children once had scarlet fever which was [not reported. The law is ample in these cases, the problem being simply that of the salt and the bird,—first catch your bird.

“There are a thousand reasons for this reluctance to report cases. The parent works in a store, the daughter is a domestic, the mother a dressmaker, the son is a barber, or the oldest child is about to finish school. To report, means loss of income or schooling, and it is usually where the danger of spreading the disease is greatest that the reports are suppressed. Among other minor difficulties which confront the health officer in small municipalities, is the quarantine and disinfection of domestic animals. The cats, dogs, and other pets of the family are allowed indoors to solace the convalescents, and then are turned out to play with

the neighbors' children, loaded with germs of diphtheria or the scales of scarlet fever or measles. Quite another problem in municipal quarantine is the establishment of pesthouses. The laws of this State are so framed that it is a misdemeanor to take an infected patient into another township for detention and quarantine. Often there is not within the city limits a suitable site for a pesthouse. The supervisors of Manistee County last spring erected a pesthouse on the county farm, in an isolated place. The site and surroundings are excellent. It is entirely removed from public travel and public gaze. The city of Manistee contributed fifty per cent of the cost, in the shape of taxes. One key to the building was left with the county poor superintendent, another with the city poor superintendent. The expressed aim of the supervisors was to make a common pesthouse for the use of the whole county. The county farm is situated four miles from the city of Manistee, in the township of Manistee. We put a smallpox patient in that pesthouse with the consent of the city poor superintendent, who gave us the key. We kept our patient there six weeks or more. The matter first came to the notice of Manistee town when the patient was discharged. Their officers immediately threatened us with arrest and prosecution for invading their township with a patient suffering from contagious disease. It appears that they have absolute control of that pesthouse, built with county funds, to which they contributed but a small part. If they choose they can keep the pesthouse for their exclusive use, and oblige the city of Manistee and every township in Manistee County to build and maintain a pesthouse of their own or do without one, which no community can afford to do.

"I have suggested some of the difficulties of municipal quarantine met with in small cities. Now as to the remedy: The only way to make quarantine anything but a farce is to have a policeman stationed at the house of every infected family; if necessary there should be more than one. There should be sufficient surveillance to insure efficient quarantine in all cases. This quarantine should, of course, include all household pets. Shotgun disinfection, if not shotgun quarantine, has its advocates in this direction.

"Garbage boxes emptied at the city's expense should be established in every incorporated municipality. For delinquents who do not report cases of contagious disease, the State laws are sufficient if enforced, and that brings us logically to the question, Why not have one set of State laws, to govern this whole matter of municipal quarantine?

"A few State laws governing all chartered municipalities, seem to me to be 'a consummation devoutly to be wished.' A law requiring all municipalities to police every case of communicable disease; a law requiring each county to build and maintain a suitable pesthouse, to be used in common, and providing for its proper police quarantine; a law requiring each city to dispose of its garbage according to scientific principles at public expense.

"A law abolishing vault earth closets throughout the State, in county or city. A law requiring the employment of a health officer by every municipality, he to devote his whole time to the city's sanitation, and to furnish him with one or more sanitary inspectors according to population. The old story of inefficiency on the part of the health officer because of his meager salary, would then be solved. There would be uniformity of action throughout the State, and the

loss of the State by sickness and death would be greatly reduced."

Humanity and Diet.

Many persons are shocked at the cruelties involved in the fattening and slaughtering of cattle, pigs, and poultry for the production of meat, and would like to be vegetarians, at any rate in as far as abstinence from butchers' meat is concerned, but they do not know how to begin. They have grown up in the belief that meat is necessary to health, and foresee great difficulties where in fact none exist. The chief difficulty in becoming a vegetarian is in reality one of mind rather than body. The first essential is to have the wish. If there is a real wish all supposed obstacles can easily be overcome, while on the other hand, if there is only a passing fancy a score of reasons for giving up the experiment will soon be found.

Let us assume that some of our readers really wish to live without meat, and are willing to make some slight sacrifice in order to do so; the second important part is that they should have the belief that they can do so. In this, as in other matters, those who have no doubt have also no difficulty, while those who are timid and nervous see and feel difficulties at every turn and never succeed.

A great step is gained if you can only realize that in giving up meat you are not doing anything at all extraordinary. Most of us must have known cases of cats and dogs, animals purely carnivorous by nature, who have learned to live in perfect health on a diet with no meat in it. How much more then should we, who have never been wholly carnivorous, be able to live healthfully without meat. The greatest meat-eater is after all already more than half a vegetarian. It is not really a question of changing

the diet, as in the case of a carnivorous creature, but only of eating more of one recognized kind of food and less of another.

Many millions of people — some say more than half the population of the world — are at the present time living without meat in their diet, no less healthfully and happily than others. Until a few years ago, both in England and on the Continent, the classes who have done the hard work for the community have lived almost without flesh food except perhaps once a week at the Sunday dinner. All the animals which supply mankind with sustained power, the elephant, camel, reindeer, ox, and horse, are purely vegetarians. Some of the greatest intellects the world has seen have, at any rate for part of their lives, been vegetarians, as Plato, Newton, Shelley. The victims of the sweaters' den, with sixteen hours' work a day and not much more than half that number of shillings a week, can afford no meat, but carry on their grinding work for years before they succumb. In face of these facts it is simply ridiculous to assert that our bodies cannot be nourished without the sacrifice of animal life. Looking at the workers of the world we might almost say that the necessity for animal food and the amount consumed is in direct proportion — not to the work done but to the leisure and idleness of those who suffer from this supposed necessity. When we are told, as we often are, that "it may suit some people, but I am sure it would not suit me," we know that unfortunately this is quite true; but it is not the body that presents any difficulty, but the mind that is at fault — often, it is to be feared, hopelessly so.

If, then, the reader really wishes to abstain from meat and also realizes that he can perfectly well do so if he likes,

a very few practical hints will suffice to start him on his way. If his faith is strong he will merely give up the meat and eat the other things.

A good deal of nonsense is talked about people being unable to change after they have attained middle age. There might be truth in this in the case of purely carnivorous animals, but with creatures frugivorous by nature, and always more or less vegetarian by habit, the change can be made at any time if the mind is in it.

That some people cannot digest or assimilate some vegetarian foods is obvious, but if that is an argument against the bloodless diet, then the fact that some meat-eaters can take mutton but cannot digest beef or pork is also an argument against all meat-eating. There is ample variety in the vegetable world to suit all constitutions and all well-trained palates.

It may be well to bear in mind,—

1. That most people eat more than is necessary for or conducive to health and strength.

2. That in their fear lest they should starve, many would-be vegetarians make themselves ill by taking too much of the more stimulating foods, such as peas, beans, lentils, nuts, and grains.

3. That fruits are not merely adjuncts to substantial food but are themselves substantial articles of diet. It is quite possible to sustain healthy life solely on some fruits.

4. That the "craving" for meat, like the craving for drink, is not an indication of the necessity for it. It is a morbid condition of mind and body, mainly the former, and will pass off under healthier conditions if the will is exercised as it should be in the matter. — Ernest Bell, in *The Animals' Friend*, London.

Practical Treatment of Tick Fever.

I found that an animal can have a high temperature (104 to 107½° F.) for three or four days before he stops eating and looks or acts sick, and that is the time to go to work on him if you want to save him.

When my cattle were first taken sick, I got a veterinary surgeon to come to my place; we got the sick ones in the barn in daytime, out of the sun, and he gave them five or six different kinds of medicines; stayed there a week, but had poor luck, as fifty per cent of those sick died. Then I went to a business man in Stuttgart, who has been in this country thirty years, and formerly raised a great many cattle. I asked him what he did for the fever. He said there was no use to do anything, it had to run its course; if they were going to die they would die, and if not, they would get well; that medicine would not do a particle of good.

We were having it dry at the time, and he said: "But if it would only rain your cattle would get well."

"Well?"

"Well, I have had them dying three and four a day and come rainy weather the sick ones would get well, and I have noticed it several times that a good long rain would cure them up."

That put me to thinking, so when I got home I carried water to a cow that was down with high fever; could not get up; could not stand when helped up. I washed her off, and soaked gunnysacks in cold water and covered her, and then threw cold water on her every five or ten minutes. In half an hour she got up and came to the gate; I got her in the barn, and took her temperature; and found it had fallen two degrees in less than an hour. Well, I kept the sacks on the cow, wet, the rest of the day; at night I let her out and she went to eat-

ing. The next day she still had some fever, so I kept her wet all day again, and the next day she was entirely free from fever and has been since.

I also gave her a quart of strong brine — salt and water — once a day. It helps to cool the system and create thirst, so that they drink large quantities of water, which helps keep them from drying up inside. Of those examined after death the contents of the manifold was found dry and hard, the spleen was greatly enlarged and congested, and kidneys and bladder full of blood.

Of the last eight head taken sick and treated in the above manner, six were saved. It is strange, but a fact, that when they have such high fever, very few will drink water, unless given brine; have known them to go forty-eight hours without a drop, and then only a few sips until they died. — *Southern Farm Gazette.*

FOOD FROM HEAVEN'S TABLE

The rich banana, food divine,
Of charm untold —
The orange, with its amber wine
In flasks of gold —
The princely flavored, gorgeous pine,
Of aspect bold,
The toothsome plum, and fig, and date,
The peach so fair —
The kingly apple, and his mate
The queenly pear —
And, best of all, the gorgeous grape
With flavors rare.

— *H. G. Buckle.*

Leprosy.

Sauton (*Presse Medicale*) concludes, as the result of an extensive investigation, that while leprosy is contagious, contagion rarely occurs; that by cleanliness and proper hygiene, the danger of contagion may be almost entirely abolished; and a complete protection against the disease is afforded by proper hygienic measures.

EDITORIAL

DANGERS OF A MEAT DIET IN RHEUMATISM

THE meat-diet fad, started a score or more years ago by Dr. Salisbury of Cleveland, entered upon its decline long ago, but there are to be found in the profession a few belated brethren who still cling to the long-since exploded fallacy that consumption, Bright's disease, rheumatism, and most other human maladies are due to the ravages of the yeast plant, which Dr. Salisbury supposed to be roaming up and down the blood channels of the body, making havoc, like a wild bull in a china shop.

Some years ago the writer had a favorable opportunity for investigating the facts upon which this delusion is based. Having been called to the city of Cleveland to see a gentleman who was sick with Bright's disease, we learned that he was a neighbor and personal friend of the great Dr. Salisbury, and had been under his care for a number of years and following his method of treatment most assiduously. He was at this time under the immediate supervision of a nephew of Dr. Salisbury, who had been the doctor's special assistant for many years and acted as his specialist in the examination of the blood and feces.

Having a curiosity to see the wonderful yeast cells in the blood, of which Dr. Salisbury and his disciples gave such soul-harrowing accounts, we asked the patient to send for the doctor to come, and bring along his microscope and everything necessary for making an examination of the blood and feces. He was accordingly telephoned for, and in the course of half an hour, appeared. A specimen of blood was at once obtained and examined. The mode of procedure was this: A drop of blood was placed upon a slide, a glass cover was placed over it, and the doctor then took the slide

and cover-glass between his thumb and finger and rubbed them together with a firm pressure for several minutes. At the end of this time the slide was placed under a microscope and the doctor at once exclaimed, "Yes, here are yeast cells, plenty of them, gathered together in great masses!" When allowed to place an eye at the eye-piece it was discovered that the so-called "yeast cells" were not yeast cells at all, but simply an aggregation of crushed white blood cells which had been broken up by the manipulation referred to. We explained to the doctor that the objects in the field were not yeast cells, but the nuclei and fragments of dead leucocytes. He took another look, revised his diagnosis and hunted up another agglomeration of broken leucocytes which he assured us were true yeast cells, but a single glance was sufficient to show that they were of the same nature as the other. The doctor then concluded that "yeast cells were not so abundant as usual this morning," and that "the patient must be better."

It occurred to us to inquire of the doctor whether he had ever taken pains to plant a drop of blood in a culture medium and watch the yeast cells grow. He hadn't done this, and we did not think we would run any risk in suggesting to him that we would be glad to give him twenty-five dollars each for every specimen of yeast which he would cultivate from yeast cells found in the blood. We never heard from him. Any physician who still clings to the ridiculous theories advanced by Dr. Salisbury, and upon which he bases his practice of meat-eating, is too far beyond the march of medical progress to be considered a scientific medical man.

Patients whose stomachs are full of yeast and acid-forming germs are often

temporarily relieved by the use of a diet of toast and steak. Meat is an easily digestible food, and does not ferment, but the temporary relief afforded by an exclusive diet of meat is certain to be followed later by a whole series of nutritive disorders resulting from the overstimulation of metabolic activity resulting from an excess of nitrogen alimentation, and from the accumulation within the body of uric acid, purin bases and various toxic waste substances necessarily present in flesh meats of all description.

A glance at the following table which we quote from an article by A. Robin in the *International Medical Magazine*, ought to be sufficient to persuade any one of the folly of a meat diet for one suffering from rheumatism:—

URIC ACID IN FOODS

Substance	Uric Acid and Xanthins	
	Per cent	Grains per lb.
Lamb (cold roast leg) .....	.0500	3.50
Soup (made from bones) .....	.0068	.48
Soup (made from meat) .....	.0202	1.40
Hospital beef tea (cooked 8 hrs.) .....	.0980	7.00
Saddle of mutton .....	.0200	1.40
Mutton (cold roast leg) .....	.0160	1.10
Veal (cutlet) .....	.0490	3.50
Beef (cold sirloin) .....	.0160	1.10
Kidney of sheep .....	.0490	3.50
Liver of sheep .....	.0910	6.50
Fowl (breast) .....	.0240	1.70
Rabbit .....	.0150	1.00
Mackeral .....	.0320	2.00
Mackeral (boiled 15 min.) .....	.0150	1.00
Plaice .....	.0039	.20
Herring (fresh) .....	.0040	.20
Herring Loch Erne (kippered) .....	.0900	6.40
Herring (bloater) .....	.0310	2.20
Beefsteak (treated raw) .....	.0190	1.30
Meat juice .....	.6970	49.70
Meat extract .....	.8830	63.00
Tea	2.5000	175.00
Coffee	1.0000	70.00
Cocoa .....	.8400	59.00

A case which recently came under the writer's observation is illustrative of the mischief which may arise from the so-called Salisbury method: For two or three years we had under occasional observation a case in which the uric-acid diathesis was distinctly developed. The patient was not under the writer's care, but was

seen a few times in consultation. Among other symptoms, joint pains and enlargements were present. Two years ago, this patient was induced to place herself under the care of a physician who placed her on the so-called Salisbury diet. "Salisbury steaks" constituted her principal food for nearly a year. The patient steadily got worse until she finally became bed-fast, and in this condition the writer was again called to see the case in consultation. A warning had been given at first of the probable consequences of this regimen, but we were quite unprepared to see such extensive damage as was found. Physical examination showed that the disease in the joints had made rapid progress, but the worst consequences of the exclusive meat diet were to be found in the liver and the spleen. The spleen had recently taken on a very decided enlargement, having increased to about four times the normal size. It was slightly displaced downward by its weight and was sensitive to pressure. The liver, on the other hand, was contracted to nearly one-half its proper size, evidently the result of changes set up by the extractives of meat with which the system had been so completely saturated. By request, the patient was at once taken in charge and placed on a diet free from uric acid. The joints were wrapped in cotton and wool, and covered with mackintosh. Copious water-drinking was resorted to, and tonic hydiatic measures administered. Cold applications consisting of cold mitten friction and wet-hand rubbing were applied two or three times daily; light massage was also administered. Within two days the improvement was very decided. Although the patient had for months been unable to sleep without the use of hypnotics the second night she slept soundly. The expression of pain and extreme depression constantly worn upon the face disappeared; though the weather was decidedly unfavorable for a rheumatic, the case improved in every particular.

This case is not an isolated one. The writer has met scores of similar ones, not

always so decidedly marked, but others even more marked in some particulars. This case also illustrates the disastrous effects resulting from compelling a patient to subsist upon a meat diet, which is as unnatural for man as for a horse or a sheep. By his structure and his biological classification, man's natural dietary is identical with that of the chimpanzee and the orang-outang which subsist upon fruits, nuts, and soft grain. It is the testimony of every physiologist that man cannot possibly subsist upon an ex-

clusively carnivorous diet. That a person is able to tolerate the so-called Salisbury diet for any considerable length of time is wholly due to the large quantities of water which are administered in connection with it. This fad has been tolerated long enough, and it seems to be high time that it was set aside along with the other medical delusions which have temporarily reigned in the medical profession but which have proved only worthy to be relegated to the category of obsolete and pernicious practices.

THE NON-NUTRITIVE VALUE OF MEAT EXTRACTS

THE late Dr. Austin Flint remarked on one occasion that thousands of patients have been starved to death while being fed on animal broths, such as beef tea. No error could be greater than the notion very commonly held by the laity, and still quite too largely entertained by the members of the medical profession, that beef extracts — beef tea, bouillon, and animal broths — are peculiarly nourishing in character. We can adduce no better evidence to the contrary than is afforded by the following paragraphs from "Bunge's Physiological and Pathological Chemistry," one of our latest and most reliable authorities:—

"We must guard against supposing that meat bouillon possesses a strengthening and nourishing influence. In regard to this, the most delusive notions are entertained not only by the general public, but also by medical men.

"Until quite recently the opinion was held that bouillon contained the most nutritive part of meat. There was a confused idea that a minute quantity of material—a plateful of bouillon can be made from a teaspoonful of meat extract—could yield an effectual source of nourishment, that the extractives of meat were synonymous with concentrated food.

"Let us inquire what substances could render bouillon nutritious. The only article of food which meat yields to boil-

ing water is gelatin. It is well known that albumen is coagulated on boiling, the glycogen of meat is rapidly converted into sugar, and this again into lactic acid. The quantity of gelatin is, moreover, very small; for a watery solution which contains only one per cent of gelatin coagulates on cooling. Such coagulation may occur in very strong soups and gravies, but never in bouillon. Bouillon, therefore, contains much less than one per cent of gelatin. In preparing extract of meat, the quantity of gelatin is reduced as much as possible, because it is in a high degree liable to putrefactive changes, and therefore likely to interfere with the preservation of the preparation. The other constituents of bouillon are *decomposition products of food-stuffs*—products of the oxidations and decompositions which take place in the animal organism. They cannot be regarded as nutritious, because they are no longer capable of yielding any kinetic energy, or at most such a small amount that it is of no importance whatever.

"Nevertheless, until the most recent times, creatin and creatinin, which are among the chief constituents of meat extract, were regarded as the source of energy in muscle. This assertion was shown to be untrue by the researches of Meissner and of Voit, who proved conclusively that creatin and creatinin are

excreted in the urine twenty-four hours after their absorption, without loss. A material which is neither oxidized nor decomposed cannot form a source of energy, apart from the fact that the quantity of creatin and creatinin which is absorbed in bouillon is so small that it could not possibly be seriously regarded as the source of muscular energy.

"It has further been asserted that the addition of extract of meat increases the nutritive value of vegetable food, and gives the latter the same value as fresh meat. This assertion has also been refuted by Voit and his pupils, who have shown by experiments made on man and on animals, that the unfavorable conditions of assimilation which characterize vegetable food are not improved by the addition of extract of meat.

"Finally, the attempt has been made to attach a value as a food to extract of meat in consequence of the considerable quantity of salts, 'nutritive salts,' which it contains. But as I have already explained, there is no lack of salts in our food, but always an excess. Even for the growing organism there is only one inorganic constituent which could be deficient; i. e., carbonate of lime. But there is very little lime in meat extract; the ash contains only .23 per cent CO. No one would be likely to eat more than thirty grams of meat extract, which represents the amount obtained from 1 kilogram of meat, and contains only .015 gram of lime — that is the same quantity as is contained in ten c.cms. of cow's milk.

"It has only to be borne in mind how large a quantity is constantly consumed with vegetable food. I have already noticed the fact that a man who lives chiefly on potatoes absorbs over forty grams of potash salts in the course of a day.

"The potash salts, therefore, which occur in bouillon cannot produce any

effect on the heart, neither small doses stimulating it nor large ones paralyzing it. But even if we could admit the exciting action of potassium salts, it would be difficult to see why we should take bouillon on account of the potash it contains, since we could get much more with almost any other form of food. Five grams of extract of meat will make a plateful of bouillon, and they contain only .5 gram of potassium, the same quantity as in a small potato.

"It has frequently been asserted that the organic constituents of meat extract exert an influence on the muscular nervous system, but never on sufficient ground. As regards creatin and creatinin in particular, Voit has given details; he found that 6.3 grams creatin and 8.6 grams creatinin given to a dog produced no symptoms whatever. More recently, Kobert has endeavored to demonstrate an action of creatin on muscle. The experiments were conducted on frogs, and excessive doses of creatin used; but the result was ambiguous. Human muscle could hardly be influenced by the minute quantity (about .2 gram) of creatin contained in an ordinary plateful of soup. This can be deduced *a priori*, quite apart from the observations of Voit. Our muscles contain about three per thousand creatin. The whole muscular system of an adult man, which amounts to about thirty kilograms, contains consequently about ninety grms. It is also found in the nervous system and in the blood. With regard to the small quantity of creatin which is taken in bouillon, absorbed, and at the same time rapidly excreted by the kidneys, we are uncertain whether it ever reaches the muscles at all. And even if a small quantity should do so, it can hardly be of any importance, when we know that the muscles already contain ninety grams of creatin."

In view of these facts, so lucidly stated, it is evident that no greater mistake could be made than to undertake to nourish a patient upon animal extracts.

ANSWERS TO CORRESPONDENTS

Bunions.—M. W., Denver, wants to know the cause of and remedy for bunions.

Ans.—The cause is pressure. The remedy is relieving the pressure. When the parts have become the seat of inflammation, rest is necessary, with fomentations and heating compress. Sometimes an operation is required.

Cough.—S. A. M., Manitoba, asks the remedy for a cough resulting from a cold caught in November.

Ans.—Chronic cough requires both local and general treatment. The inhalation of steam with the Battle Creek Sanitarium steam inhaler will be found highly beneficial. The pocket vaporizer is also helpful. The most important means, however, is an out-of-door life, natural dietary, and simple hydratic measures. A short cold bath should be administered twice daily, followed by vigorous rubbing and exercise. A heating compress should be applied to the chest or throat. This may consist of a towel wrung out of cold water, covered with mackintosh, and well protected with flannel.

Chronic Diarrhea.—Mrs. F. B. F., Battle Creek, would like to know the best treatment and diet for chronic diarrhea.

Ans.—This disease does not always yield to either treatment or diet. Long and persevering effort is required. Coarse vegetables must be avoided, also meats. The diet may consist of rice, potato, gluten biscuit, purées of peas and beans, fresh ripe juicy fruits, stewed fruits, especially apples, pears, and peaches, sweet and subacid fruit juices. A fomentation followed by a heating compress to the abdomen should be employed twice a day. General tonic baths are necessary.

Predigested Food—Hypopepsia—Protose—Pain in Back.—L. E. W., Connecticut:

"1. Kindly explain why so much predigested food is used. Should not the stomach digest its food? 2. Should persons afflicted with hypopepsia eat malted nuts or meltose? If so, how much daily with other foods? 3. What may be eaten with protose? 4. What causes a stinging, burning pain across the small of the back and the whole length of the spine in severe cold weather? What remedy can you suggest, and what foods should be taken?"

Ans.—1. The natural food of man consists of fruits and nuts. These contain little or no starch, the starch having been predigested by the action of the sun's rays in the process of ripening. Cereal foods contain large quantities of starch. By a process of predigestion this starch is brought into a condition closely resembling that in which it is found in the sweet juices of fruits. The stomach is not able to digest raw starch, and the amount of saliva provided for gastric digestion is not sufficient to digest the enormous quantities of half-cooked starch swallowed in the form of mushes, so-called breakfast foods, etc. The principal duty of the stomach is to digest proteids or albuminous food-stuffs rather than starch.

2. Yes. Two to six ounces daily may be taken with benefit.

3. Bread, potatoes, fruits, peas, beans, in fact, all wholesome foods.

4. The symptoms indicate a possible spinal congestion, perhaps from chilling of the surface. These spinal pains are sometimes due to disorders of digestion. The remedy will be found in improving the general health by cold bathing, out-of-door exercise, warm clothing of the extremities in cold weather, and the exercise of great care in diet. It is especially important to avoid the use of sweets, mustard, tea, coffee, and other unwholesome articles.

Food Combinations—Gastric Examinations.—Mrs. F. M., Virginia: "1. Would vegetables, such as boiled potatoes, apple sauce, cottage cheese, and buttermilk be a good combination of foods? 2. Will a person sending stomach fluid to the B. C. Sanitarium for analysis also receive direction for proper diet?"

Ans.—1. An excellent combination for producing indigestion.

2. Yes.

Blackheads and Pimples.—K. E. W., Philadelphia, wishes to know the cause of and remedy for blackheads and pimples on the face of a young man seventeen years old.

Ans.—Probably indigestion. Avoid the use of animal foods, meats, and all irritating and unwholesome foods. Send five dollars to the Battle Creek Sanitarium Company for a

box of health foods. Bathe the face in very hot water two or three times daily.

Stomach Trouble.—R. J. S., Texas, is troubled with soreness in pit of stomach and right side, sour stomach with burning sensation, and severe backache especially during the night. Is very nervous and despondent. 1. What is trouble? 2. Give treatment and prescribe diet.

Ans.—1. Probably hyperpepsia or excessive acidity of the gastric secretion.

2. Drink a glass of hot water half an hour before eating. When the stomach is sour, drink a glass of cold water. The electric-light bath or some other sweating bath once or twice a week would be useful.

Neurasthenia.—W. J. H., Indian Territory, desires knowledge of some publication dealing particularly with neurasthenia.

Ans.—Dr. George M. Baird has written the most exhaustive work on the subject of neurasthenia and his description of the disease is accurate; but the methods of treatment have greatly improved since his day.

Pain in Eyeball—Hoarseness.—S. M. A., Pennsylvania: "1. Give cause of severe pain in eyeball, felt mostly at night, even during sleep. Prescribe treatment. 2. Is hoarseness a symptom of catarrh? If so, in first stage of disease, or when it has become more serious?"

Ans.—1. The eyes should be examined.

2. Yes. This symptom may exist in any stage of catarrh of the throat. Chronic hoarseness is always a serious symptom.

Rheumatism—Exercise—Hay Fever.—J. W. F., Detroit: "1. Should a person troubled with rheumatism, use the cold sponge bath morning and evening? Baths do not seem to have any noticeable ill effect, but the physician forbids them. 2. Outside of drugs, what can one do to promote better circulation and build and tone up one's system in the spring? 3. Is it advisable to take from one- to two-mile walks before breakfast, or would it be better to eat before exercising vigorously? 4. How may one avoid a recurrence of hay fever without going north or leaving home? A severe attack of this disease was suffered for the first time last summer."

Ans.—1. Yes, but great care must be taken to avoid a general chill. Cold water should be applied to small surfaces in succession, an arm, the chest, a leg, or some other small area. It is a good plan to employ a hot bath first

for a few minutes, long enough to induce sweating. This helps to burn up the uric acid. Then a cold bath may be employed as a tonic.

2. Drugs are of no use for this purpose. Out-of-door life, vigorous exercise such as walking six to ten miles daily, bicycle-riding, boating, horseback-riding, and best of all working in the soil.

3. Yes, if strong enough. A little fruit may be taken first if there is very decided hunger or faintness.

4. Building up the general health and relieving nasal irritation by proper treatment will nearly always mitigate hay fever, and sometimes enable one to avoid it altogether.

Blurring of the Eye—Olives.—Mrs. E. S. G., New York: "1. What is the cause of and remedy for blurring of the eyes, followed by numbness of the left hand and sometimes pain in the heart? 2. Are olives, bottled as we get them in the groceries, healthful? In what other way can they be obtained?"

Ans.—1. The symptoms are peculiar. You should consult a physician for physical examination.

2. Pickled olives are not wholesome. The ripe black olive which can now be obtained from California, is entirely wholesome but must be carefully masticated. For further information address, Sanitas Food Company, Battle Creek, Mich.

Dietary in Catarrh of Stomach—Salt—Baby's Food—Cold Bath.—M. P., Wisconsin: "1. Prescribe diet for one who has a slightly catarrhal condition of stomach. What foods should be avoided? 2. Is the constant use of salt on vegetables and grains advisable? 3. Should a baby be given milk from one cow alone or from a herd? 4. Is a cold bath in the morning beneficial? Why?"

Ans.—1. Avoid mustard, pepper, and all condiments, also tea and coffee. Very acid fruits must also be avoided. The diet must be very simple. Liquid foods as potato purée, peas and beans purées, fruit soup, and sweet fruit juices are wholesome. Granose, toasted wheat flakes, corn flakes, and Sanitarium gluten biscuit are also to be recommended.

2. A little salt probably does no appreciable harm.

3. Mixed milk is better than the milk from a single cow.

4. The cold morning bath is the best of all known tonics.

LITERARY NOTES

Miss Adeline Knapp, so well known to the readers of **The Household** and the reading world through her writings, is now of *The Household's* staff. Miss Knapp's articles and stories of things at home and abroad in the Orient, the Philippines, Hawaii, and elsewhere (all places she has visited as a historian and writer), have given her a world-wide name.

Among other notable articles to be found in the May number of this magazine is one by Hezekiah Butterworth, entitled "In the Pilgrim Cemetery." This article contains several fine paragraphs picturing the places and events mentioned. The departments are of a high order and the editorials timely and pertinent.

A leading feature of **Good Housekeeping** for May is a sketch of John Borroughs, the naturalist who accompanied President Roosevelt on his tour of the Yellowstone National Park, by Clifton Johnson.

This number also contains a sketch of Marconi, inventor of the wireless telegraph; and the first of a series of illustrated sketches of the home life of governors, as well as articles devoted particularly to health, cookery, etc.; all of which contribute to the making of a first-class number of this valuable monthly.

A comparison of the English and Russian novel, particularly from the standpoint of the types presented is a new subject. In the May **Chautauquan** Adeline E. Gross points out the difference, holding that in general, the fundamental distinction between the two is that English novels are primarily didactic, while Russian novels are first of all realistic.

There is a fine series of "Practical Studies in English," and a good explanation of mechanics in poetry, also an exhaustive discussion of the important subject of sanitation. Two of the leading articles are on the pro-

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duction of household stuffs, as regards the desirability of a revival of the old joy in handicraft for its own sake.

Among the new things in the May **Scribner's** is a novel series of "Kitchen Sketches" by Elizabeth Hall Gilman, illustrated by Viola Roseboro. This number contains even more than its usual quota of fiction and fact. John Fox contributes to the former in his usual happy style, and General John B. Gordon and Captain A. T. Mahan to the latter. The illustrations are many and fine, and the literary productions of a high order. **Scribner's** is always good, but this month they seem to have outdone themselves.

"Pittsburg: A City Ashamed," Lincoln Steffen's exposure of another type of municipal grafting, stands at the head of the line in **McClure's** this month, but has a close follower in Professor Newcomb's "The End of the World," which they define as "a powerful story, yet a scientific prediction." It surely holds the reader to the last word, and leaves him with the thought, "I wonder how near this comes to what will be." Henry Lanos contributes the pictures to this article. Ida M. Tarbell writes on "The History of the Standard Oil Company." Among the short stories we notice, "Taps," "Sister Esperance," "Where the Ways Crossed," etc.; in fact, the pages are filled with good things.

The opening article in the May **Arena** is a very interesting discussion by the president of the Mormon Church, the president of the "Reorganized" Church, and the general secretary of the National Anti-Mormon Missionary Association upon the subject, "Mormanism and Polygamy." Other articles of interest follow, among which we notice a lengthy report of the municipal ownership convention, recently held in New York, an article by Edwin Maxey, LL. D., on the "Aftermath of the Venezuelan Affair," and another by Col. Wm. Hemstreet on "The Problem of the Blacks." The magazine is full of interesting and valuable articles, worthy of close study.

"What Shall We Eat?" is the title of a new work to be issued soon by the **Health-Culture** Co. After showing how food is digested, it gives the constituent elements of over three hundred food products, with time of digestion, and twenty-five different tables showing the results of nearly one thousand five hundred food analyses.

LIFE

LET me but live my life from year to year
 With forward face and unreluctant soul,
 Not hastening to, nor turning from, the goal;
 Not mourning for the things that disappear
 In the dim past, nor holding back in fear
 From what the future veils; but with a whole
 And happy heart that pays its toil
 To youth and age, and travels on with cheer.

So let the way wind up the hill or down,
 Through rough or smooth, the journey will
 be joy;
 Still seeking what I sought when but a boy,
 New friendship, high adventure, and a crown,
 I shall grow old, but never lose life's zest,
 Because the road's last turn will be the best.
 — *Henry Van Dyke, in The Outlook.*

NOTICE.

The Single Tax Information Bureau, 1467 Bedford Avenue, Brooklyn, N. Y., offers to send free literature explaining the Single Tax to any one who writes for it.

NOON

BENEATH the stingy shadows of the trees,
 The lazy herds now slowly wend their way,
 To find retreat from noonday's scorching ray.
 Their tinkling bells and hum of busy bees,
 Rustling of boughs stirred by fevered breeze,
 Breaks softly on the stillness. And the glow
 Of imprisoned waters, where once did flow
 A sparkling river rushing to the sea;
 Silent mirror in parched bed of sand.
 The sunflower nodding low its brazen head,
 All nature bending to the great command,
 Submissive to the law by which she's led.
 The noonday sun now rules o'er sea and land
 And toilers seek their humble home and bread.
 — *J. H. Harding, in American Homes.*

PUBLISHERS' DEPARTMENT

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A Journal of Hygiene

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

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SIR: I would suggest the following local treatment for diphtheria: The application to the membrane of Marchand's solution of Peroxide of Hydrogen, fifteen volumes, with an equal bulk of water, then scraping the membrane off with a curette and applying the Peroxide of Hydrogen, one-third dilution, every hour for six or seven hours, then every two hours. If there is no reappearance of membrane after two days, spray the throat occasionally with an antiseptic spray. In this way the membrane is removed at once. The operation is done at a period of the disease when there is no danger of heart failure, so that the struggles of a child need not be minded.

¹Extract from the *New York Medical Journal*, Dec. 6, 1890.

I am aware that the removal of the membrane in former years was regarded as somewhat dangerous, but at that time nothing was known of disinfectants and germicides.

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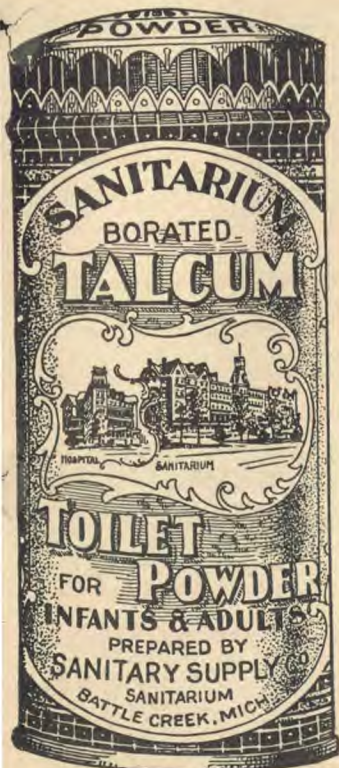
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- ST. HELENA SANITARIUM, Sanitarium, Napa Co., Cal.
- NEBRASKA SANITARIUM, College View, (Lincoln, Neb.)
- PORTLAND SANITARIUM, 1st and Montgomery Sts., Portland, Ore.
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Address GOOD HEALTH PUB. CO., Battle Creek, Michigan.

We offer liberal terms to agents. You can profitably use your spare time working for us. Write for terms.

\$3.62 for \$2.50

If you have never tried Battle Creek Sanitarium foods, here is an excellent opportunity. We are offering a package, each of nineteen foods, \$3.62 worth in all, for only \$2.50. And besides,

WE PAY THE EXPRESS

To all States listed below under Class 1. We pay the larger share of express charges to States listed under Class 2. If you live in any of the eleven States or Territories listed under Class 3, or outside of the United States, write us before sending in your order.

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If your health is apparently sound there is nothing you can eat that is more nourishing, nothing that will enable you to do clearer thinking or a harder day's work than the foods which we manufacture. Have you ever tried them? If not, why not?

IMITATIONS.

The fact that the name Battle Creek is found on a package of food does not prove that it contains a genuine Health Food. Those who would secure the original Sanitarium foods, and not imi-

tations, should look for the name of the manufacturer—THE BATTLE CREEK SANITARIUM FOOD CO., or THE SANITARIUM NUT FOOD CO., Ltd., on the package.

These two companies are the only ones whose products are used and endorsed by the Battle Creek Sanitarium.

WHY HAVE YOU NEVER TRIED THE ORIGINAL HEALTH FOODS?

Perhaps you are waiting for your grocer to stock our products. Possibly he does carry some of the imitations and you are satisfied with them. Well, just let us say that until you get the genuine Sanitarium foods, and get them direct from the manufacturers, you don't know what the term "health foods" stands for.

IS THE GROCER A NECESSITY?

We've tried selling our foods through the grocer, but the plan hasn't worked. The average grocer is a success handling flour, potatoes, sugar, molasses and canned goods,—stock which requires practically no care and for which there is a universal demand; but if he undertakes to carry prepared foods he often

allows them to remain on his shelves for months, to become stale, and to absorb the taints of surrounding merchandise. SOAP, CODFISH and KEROSENE are all good enough in their place, but their flavors hardly combine well with those of delicate food products. We have replaced thousands of cases of old goods, and thousands of people have concluded that they do not like Sanitarium foods simply because those they buy are stale. There is a sure way to get good foods—fresh foods—buy direct from the manufacturer.

If you write to us and tell us to send you some of our foods it's a simple proposition of...

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You get the goods fresh, and in the best possible condition. You are not bothered by finding us "just out" of what you order as grocer Green or Gray so often is.

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Offers which appear on the page below.

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We acknowledge orders the same day they are received and ship the same day or the next. Your trade means something to us, and you may be sure that you will not be annoyed by "pigeon-holed orders," or, "we regret our delay."

AGENCIES.

In several cities, first-class grocers are carrying full lines of Sanitarium foods. In other cities Sanitarium Food Stores have been established. If you have one of these agencies in your town, patronize it. If you do not know whether we are well represented in your city, write us and we will tell you.

This SPECIAL OFFER

of \$3.62 worth of Sanitarium Foods for only \$2.50 is made to all those who have never bought Sanitarium Foods direct from the manufacturers, or from any of the Sanitarium Food Stores. It IS open to those who

have been buying from grocers, as in most cases they have never really had a good opportunity to test our products. We make these prices in order to have you try a number of our foods. While the list does not include everything we manufacture, it gives the best idea of Sanitarium foods of any list of equal value which could be made up, therefore **WE CANNOT SUBSTITUTE.**

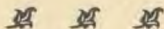
Before sending in your order **PLEASE READ** the list of States given below. If you live in any of the States in Class 1, send us \$2.50 for a trial order. If you live in any of the States or Territories in Class 2, add 40 cents to help pay the express charges, and send us \$2.90 for the foods. If you live outside of the United States or west of Kansas, please write to us before sending in your order.

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CUT OUT THIS COUPON AND MAIL IT TO-DAY.

(CUT HERE.)

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**Battle Creek Sanitarium Co., Ltd.,
Battle Creek, Mich.**

We prepay express on orders amounting to \$5 to all points in these States.

- | | | |
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| 8. Maine. | 16. New York. | |

CLASS 2.

Add to your remittance one-sixth the value of the foods ordered, and we will prepay express charges on \$5 orders to all points in these States and Territories.

- | | | |
|----------------------|------------------|------------------|
| 1. Alabama. | 7. Louisiana. | 13. S. Carolina. |
| 2. Arkansas. | 8. Mississippi. | 14. Oklahoma. |
| 3. Florida. | 9. Nebraska. | 15. Tennessee. |
| 4. Georgia. | 10. N. Dakota. | 16. Texas. |
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CLASS 3.

Write us before ordering if you live in these States or Territories or outside the Union.

- | | | |
|----------------|----------------|-----------------|
| 1. Arizona. | 5. Montana. | 9. Utah. |
| 2. California. | 6. Nevada. | 10. Washington. |
| 3. Colorado. | 7. New Mexico. | 11. Wyoming. |
| 4. Idaho. | 8. Oregon. | |

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1 jar Meltose.....	.30	1 pkg. Graham Crackers.....	.15
1 can Protose.....	.25	1 pkg. Oatmeal Wafers.....	.15
1 can Nut Butter.....	.25	1 pkg. Whole Wheat Wafers..	.15
1 can Nuttolene.....	.15	1 pkg. W.W. Cream Sticks....	.15
1 pkg. Granose Biscuits.....	.15	1 pkg. Gluten Meal, 20 per cent	.20
1 pkg. Toasted Corn Flakes...	.10	1 pkg. Caramel Cereal.....	.15
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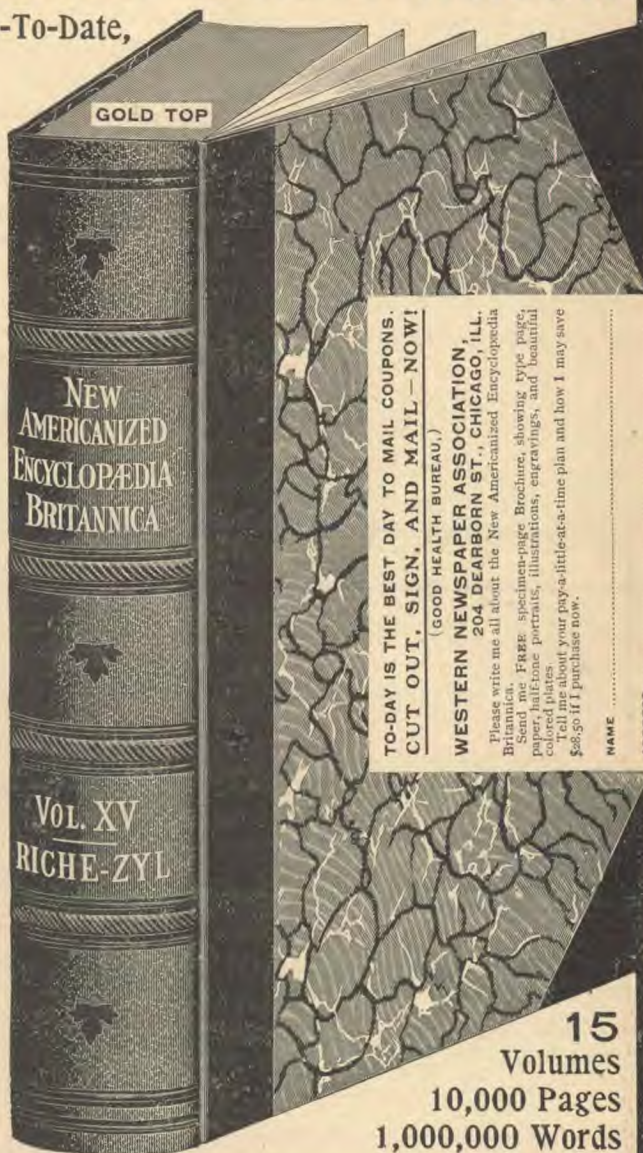
300 FAMOUS MEN

assisted in the revision, of whom we name the following to illustrate their character:

SUBJECT.	CONTRIBUTOR.
CONGRESS - - - - -	Thos. B. Reed.
POLITICAL PARTIES - - -	John Bach McMaster.
ASTRONOMY -	Simon Newcomb, LL.D.
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