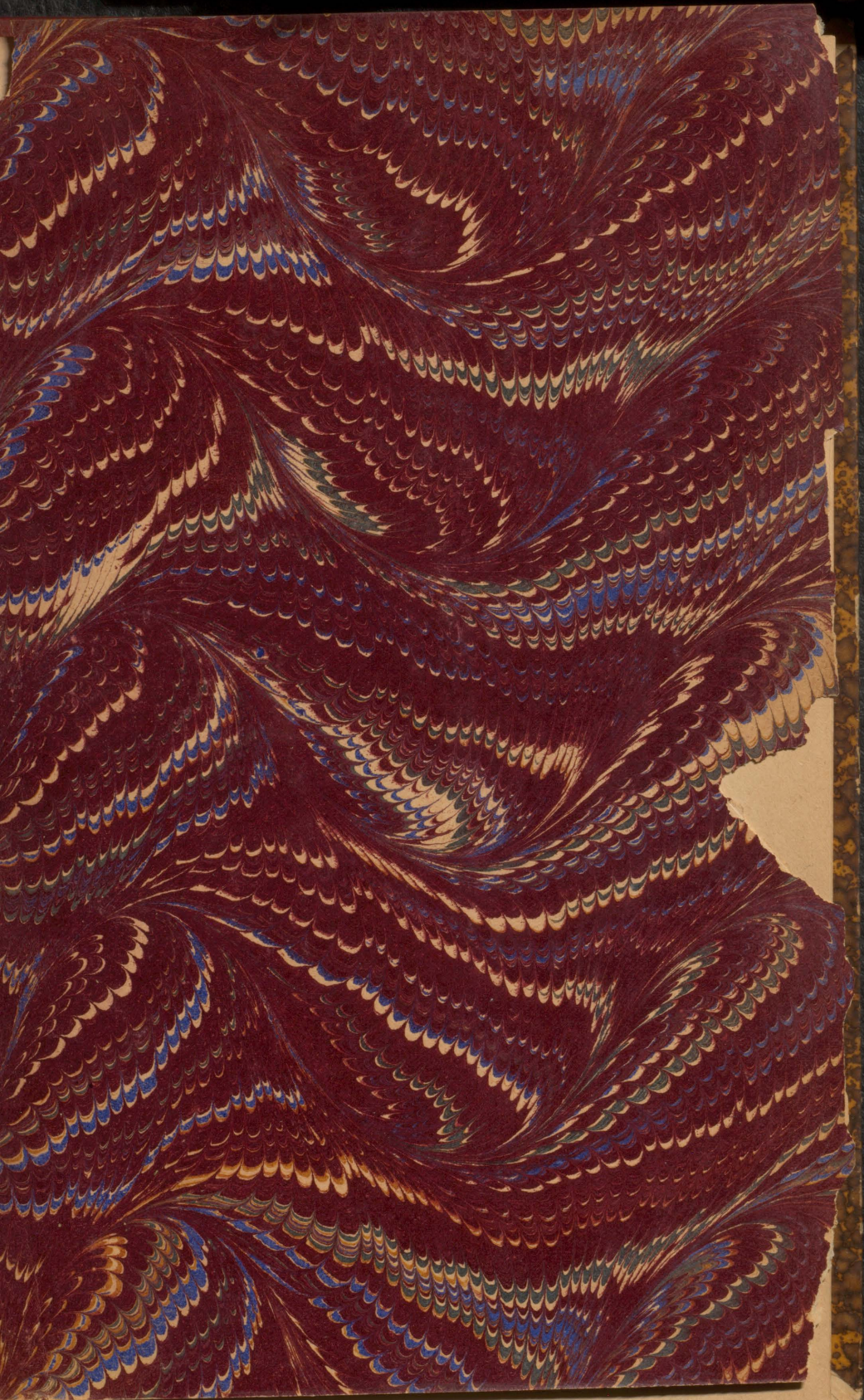


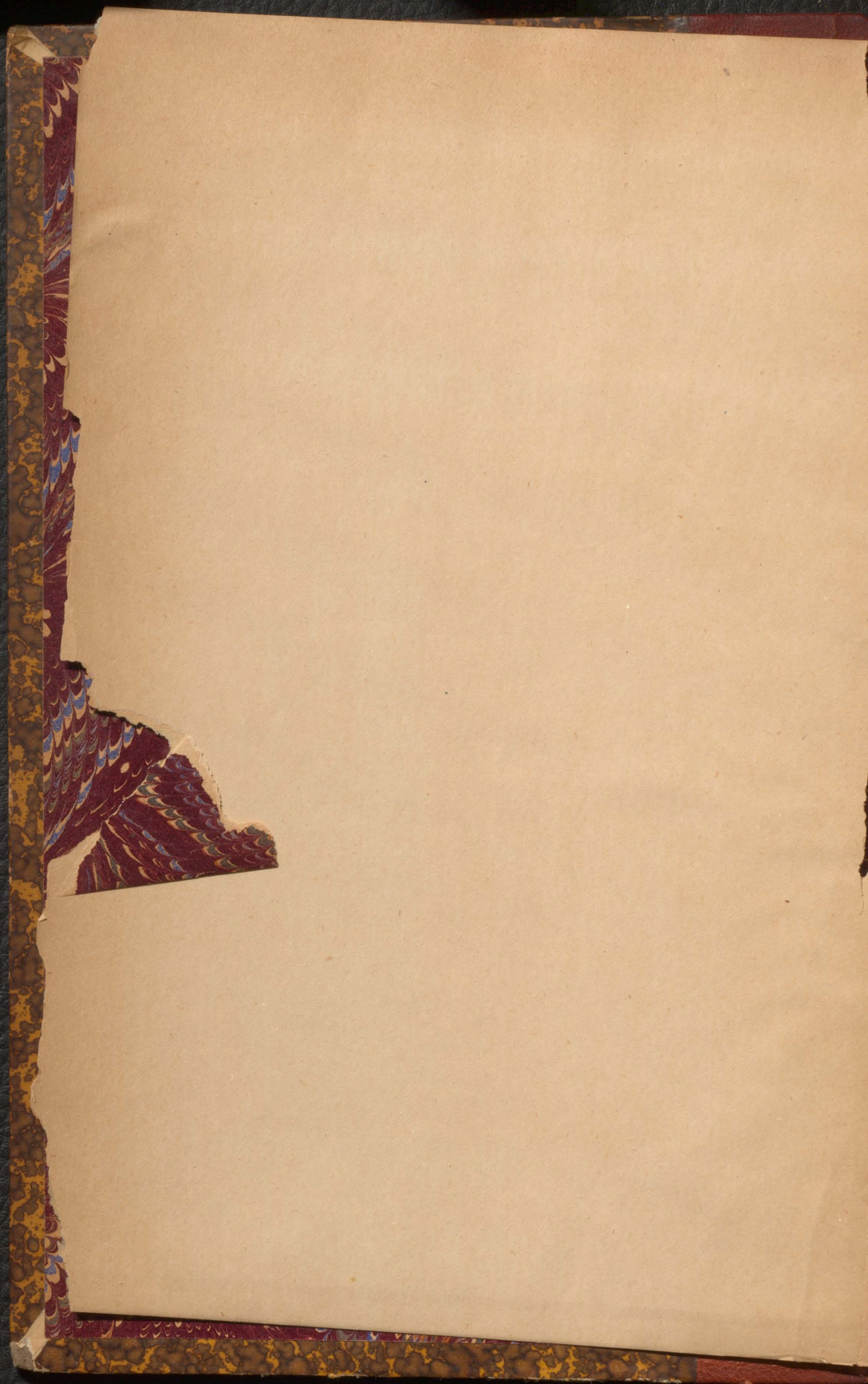


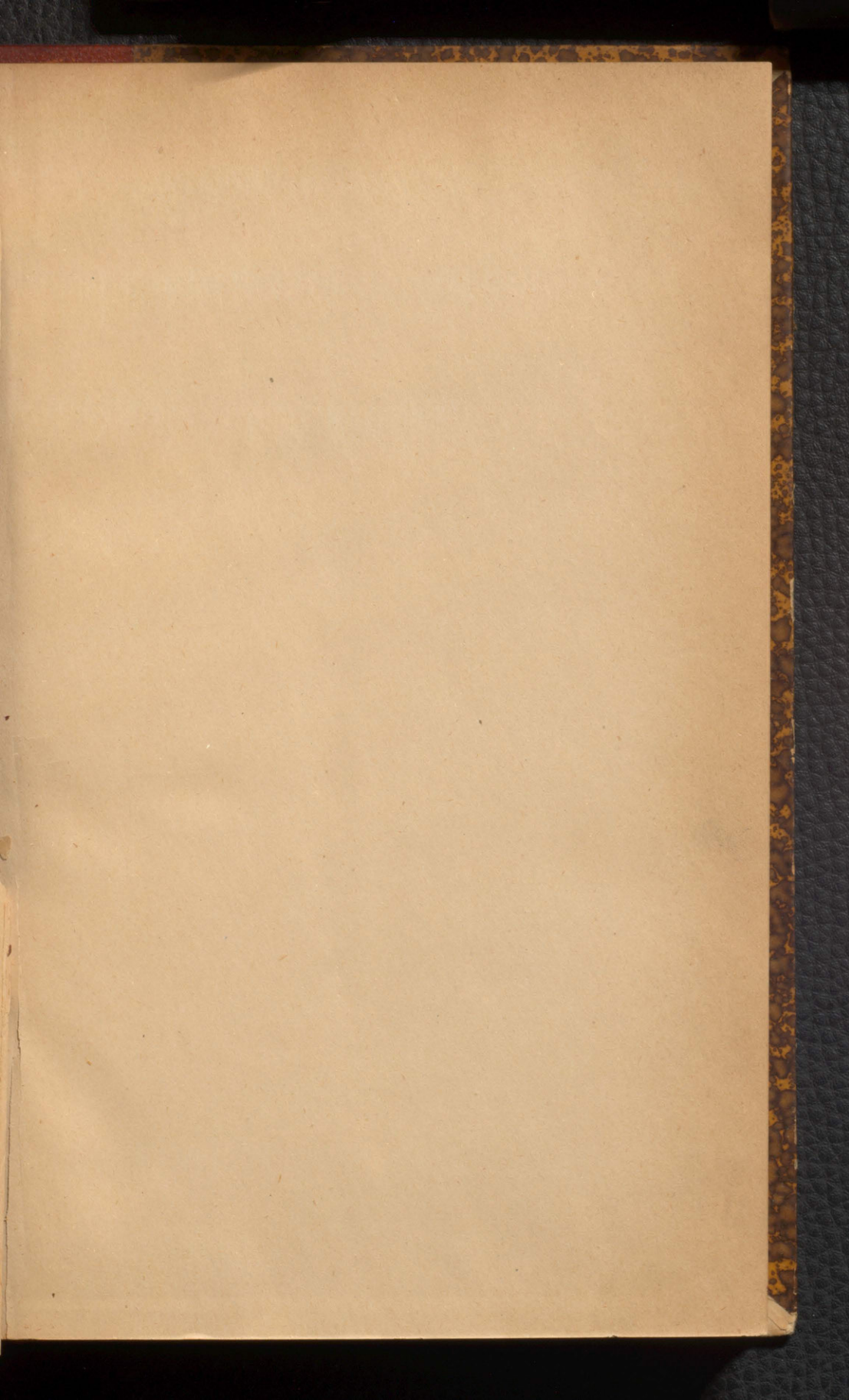
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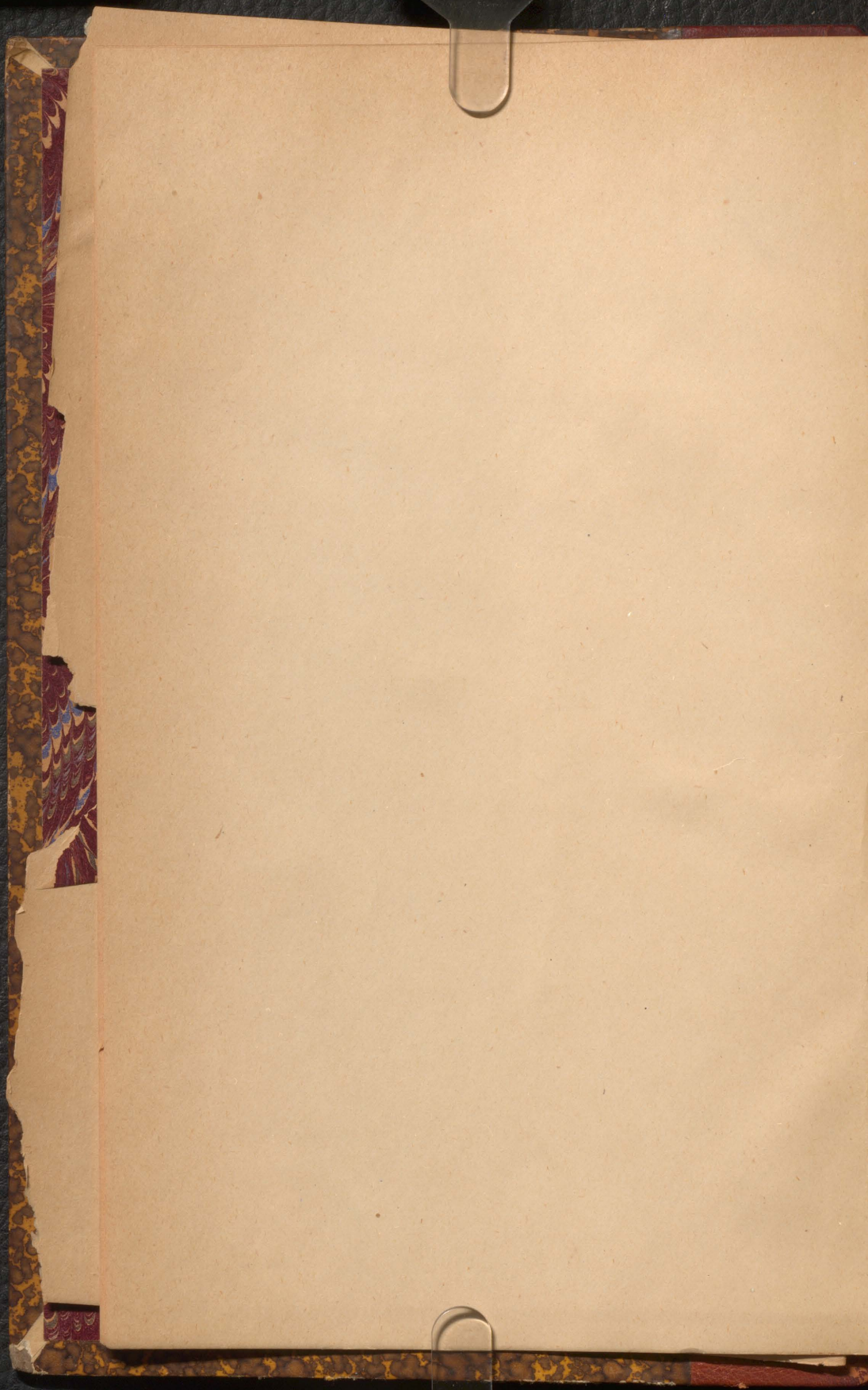


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THE
HERALD OF HEALTH,

DEVOTED TO

THE CULTURE OF MIND AND BODY.

ADVOCATING

A HIGHER TYPE OF MANHOOD, PHYSICAL, IN-
TELLECTUAL AND MORAL.

FORTIETH YEAR OF PUBLICATION.

GEORGE HENRY BASSETT,
Editor.

M. L. HOLBROOK, M. D.,
Consulting Editor.

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1890.

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No. 1.

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NOTES CONCERN NG HEALTH.

BY M. L. HOLBROOK, M.D.

VENTILATION.

An old writer says :—“ When men lived in houses of reeds, they had constitutions of oak ; when they lived in houses of oak, they have constitutions of reeds.”

This is a very picturesque description of the injury which may come to us from fine houses too closely sealed to keep out the fresh air, and too heavily curtained preventing the entrance of sunshine, which is almost or quite as important as air. But it is not at all necessary to have our fine houses unhealthful, and it only requires intelligence and thoughtfulness to render a house of oak as promotent of health as a cabin. Fresh air will come into a well-ventilated oaken house as well as through the open cracks in a house of reeds, and sunlight through a window in a palace as well as a hovel.

ARTIFICIAL BUTTER.

The laws of some of the States are quite severe on those who manufacture and sell oleomargarine ; but an artificial butter, says Mr. H. Jephson in the *Dublin Reformer*, is made to my utmost satisfaction as follows :—

“ Take four ounces of Brazilian nuts, as free as possible from skin, pound these finely in a mortar ; then add four ounces by weight of pure olive (salad) oil ; rub the nut and the oil to a smooth jelly, to which add eight ounces of fine wheaten flour and a quarter of an ounce of common salt ; rub the whole into a smooth paste, and use as butter. By way of

variety the nut may be omitted, or two-and-a-half ounces of raw sugar rubbed to a fine powder may be substituted ; or nine ounces of fine flour and a quarter of an ounce of salt may be rubbed into a paste with four ounces of cotton oil."

TEMPERANCE EDUCATION.

The School Board of Glasgow, Scotland, have copied our method of teaching temperance and hygiene to the pupils of the schools of that city. Thus the contagion for good is spreading. We have sometimes thought, however, that in our country the work is not done as well as it should be. In some of the schools we know the teachers are not qualified for it, or are not themselves abstainers, and this vitiates their teaching ; in others the pupils are children of liquor dealers, and they and the parents both object to being accused of engaging in a disreputable business, and the teachers from policy must be careful not to offend them ; and, in a majority of cases, the text-books are flimsy and contain poor materials. Notwithstanding all these and other difficulties, no doubt some good is being done.

MENTAL CONTAGION.

Mental contagion is quite as contagious as that from contagious diseases. We can see this at every change of fashion, when one person after another follows the leader. It is quite probable that if there were no tendency in the mind to follow in the footsteps of others to a certain extent, there could be no uniformity of action in any thing. It is only when their tendency becomes excessive that harm is done. One of these marvellous outbreaks of mental contagious disease, not to name many others, was the dancing mania of the fourteenth century, during which assemblages of men and women who had come out of Germany to Aix-la-Chapelle, united by one common delusion, formed circles, hand in hand, and, appearing to have lost all control over their senses, continued dancing, regardless of the bystanders, for hours together, in wild delirium, until at length they fell to the ground in a state of utter exhaustion, panting, senseless, and laboring for breath, yet not infrequently rising, after a rest, and continuing the motion until, in many instances, they died from the effort. Similar instances have been observed by others. The cure for such diseases is only to be found in the cultivating what may be called brain tension, or the power to resist evil mental influences. This sort of training must be begun in early life, and kept up as long as life lasts.

WHAT AN IRISHMAN SAYS.

An Irish historian is responsible for the following concerning the importance of fresh air. Describing events in the life of Dr. Lyne, who died at the ripe age of eighty-five, he says that "it was remarkable that for fifty years together nobody died at his house, though he always had a numerous family. His house was built in an odd manner, every window had another opposite to it, none of which he ever suffered to be shut or glazed, but were continually left open without any defence against the weather. The room the doctor slept in had four windows, two open on each side of his bed. Upon his death his sons glazed all the windows, since which time several were buried out of the house." He was of opinion that "more Europeans have died from impure air than from all the wars that have been waged within the last twenty-four years."

A CURIOUS EXPERIMENT.

Dr. Galton tells us of an experiment he made in an aquarium with two fish. It was divided into two parts by a plate of glass perfectly transparent, and therefore invisible to the fish. In one division there was a pike, in the other a gudgeon. Every time the pike saw the gudgeon he rushed to seize him, but every time he was stopped by the plate of glass. He did not learn soon, but for several months made this rush, and bruised his nose against the glass. Finally he came to understand that for some reason inscrutable to his intelligence he could not seize the gudgeon, and then he gave it up. He now swam about, seeing the gudgeon constantly, but paying no attention to it. Then the plate of glass was removed. This made no difference, the pike did not attempt to take the gudgeon. He had acquired the habit of leaving the gudgeon alone. The conundrum was, would his descendants inherit that habit, or possess the original impulse of their kind? Illustrations of this kind, or showing the operation of the principle of acquired inheritance, are what Mr. Galton wants.

BODILY ENERGY.

Dr. Clarke, in a paper on Education, tells us that "we have at our disposal only a certain amount of bodily energy. It is transferable to some extent, and if used in one organ, it cannot be used in another. This law is seen in operation in animal life as well as in mental phenomena. Exhausted muscular force means to some extent mental loss; violent emotion or sudden physical shock means in some degree muscular and organic enfeeblement. This being the case, it is evident that undue

forcing in any one direction weakens in other directions. The harmony of nature is disturbed by an unnatural distribution of energy. Another physiological axiom is, that all bodily and mental energy needs a natural time to be utilized most effectively. Forcing always means great waste. To run a mile is more exhausting than to walk five miles. To do in an hour what should take hours, if continued, would produce bankruptcy of the body. To do in five years what should take ten years is equally disastrous to bodily and mental health."

The *Lancet* says:—"Life is played out before its meridian is reached, or the burden of responsibility is thrust upon the consciousness at a period when the mind cannot, in the nature of things, be competent to cope with its weight and attendant difficulties. There is not a new word or a new thought in this, and yet it is a very terrible and pressing subject. We cannot give it the go-by. 'Forced' education commenced too early in life and pressed on too fast, is helping to make existence increasingly difficult. We are running the two-year colts in a crippling race, and ruining the stock. The underlying cause is *impatience—social, domestic and personal*—of the period of preparation, which nature has ordained to stand on the threshold of life, but which the haste of 'progress' treats as delay. It is not delay but development, albeit this is a lesson which rash energy has yet to learn from sober science."

IS PINEAPPLE JUICE A REMEDY FOR DIPHTHERIA?

And now comes another cure for that dread scourge, diphtheria! The discovery—if it is a discovery—is gravely announced in the columns of the *Chicago Tribune*, and the remedy itself is nothing more nor less than the pure juice of the pineapple. Knowledge of the pineapple cure was first brought to Chicago by a native of Louisiana who has been established in business on Dearborn street for years. Though he has recommended the cure to hundreds of friends, he does not desire publicity in this connection for reasons of his own. When questioned in regard to the matter the gentleman said: "The remedy is not mine—it has been used by negroes in the swamps down South for years. One of my children was down with diphtheria and was in a critical condition. An old colored man who heard of the case, asked if we had tried pineapple juice. We tried it, and the child got well. I have known it tried in hundreds of cases. I have told my friends about it whenever I heard of a case, and never

knew it to fail. You get a ripe pineapple, squeeze out the juice, and let the patient swallow it. The juice is of so corrosive a nature that it will eat out the diphtheritic mucous, and, if you take the fruit before it is ripe and give the juice to a person whose throat is well, it will make the mucous membrane of his throat sore. Among those who have tried the cure on my recommendation I may mention Francis J. Kennett, the Board of Trade man, whose children were all down with diphtheria. He'll tell you what it did for them."

MR. KENNETT'S EXPERIENCE.

Mr. Kennett, when seen at his office in the Board of Trade building, was quite willing to tell of his experience with the cure. "A year ago last July," said he, "my youngest boy, now 6 years old, had an extremely bad type of the disease. He had been down a week, and the case was so desperate that the doctors, after a consultation, told me that the case was hopeless. The diphtheria membrane was black and protruded from the nose, his jaw was paralyzed and set, his tongue was black, and every breath could be heard downstairs. So malignant was the case that, when the membrane came away, bleeding followed, and there were all the worst symptoms in such cases. His tongue was drawn up, and he could not swallow. Then Mr.——" mentioning the name of the Dearborn street business man, told me

ABOUT THE PINEAPPLE JUICE.

As the boy was so dangerously sick, I was afraid to try it at first. You know there is danger of heart failure in bad cases if the patient is gagged. I asked the doctors about it, and they had never heard of the remedy. They said, however, that it was so harmless that it couldn't hurt him, and we gave it a trial. I procured some ripe pineapples, peeled off the outer skin, and squeezed out the juice with a lemon-squeezer. As the little fellow could not swallow anything, we had to rub the juice on his tongue with our fingers at first. Then we got a tube, filled it with the juice, and by fixing a rubber nipple on one end injected it into his mouth. After a little, some of it got down his throat, and within four or five hours at the most after the first doze had been administered, there were evidences of its beneficial effects. He continued to improve from that time, but it was six weeks before we were able to move him. His neck and spine were paralyzed, and he was almost blind for six months from the effects of blood poisoning ensuing from his sickness, but now he is as bright and hearty a boy as you will find anywhere. His recovery is complete.

SUCCESSFUL IN EVERY CASE.

“ My four other children had been sent to the Hotel Richelieu as soon as the boy was taken down. In two weeks two of them, a boy of 13 and a girl of 11 years, caught it, but before it reached an advanced stage we gave them pineapple juice, and they were out in ten days. When they were seized with the disease, I sent the other two children away to Manitou, Colo., where within a fortnight one of them had an attack of the common complaint. We administered the usual remedy, and she was brought out all right in a few days. By a timely application of the juice a threatened attack was warded off, and the other child sent to Manitou.

THE DOCTORS WHO HAD NEVER HEARD

of this cure now all use it in their practice, I understand, and have never known of a death where it was taken in time. The patient ought to gargle the juice and then swallow it, and the dose ought to be repeated frequently, so as to saturate the system with it. To keep the stuff fresh and prevent fermentation, I used to keep it on ice constantly. Of course, it is always easy to obtain fresh pineapples here. In the South I have heard that they keep it bottled, when the pineapple is out of season, and it answers the purpose just as well, provided it is not sweetened.

“ WHEN THE CHILDREN WERE SICK,

the servants who waited on them showed symptoms of diphtheria. We dosed them with the juice, and they came around all right. The trouble with this cure is that it is so simple. People like to be humbugged by some quack medicine or other, and have been so accustomed to it that, when you mention as simple a remedy as this, they just laugh at you. I wont say that pineapple juice is a sovereign remedy—a specific for diphtheria—but I have the greatest faith in it, and should certainly try it in any such case. I would not, however, advise anybody to dispense with the services of a physician in any case of diphtheria.

MR. RAYMOND INDORSES IT.

Mr. C. L. Raymond, also a Board of Trade man, said : “ My daughter, who is 11 years old, had a severe attack last spring. I heard of the pineapple juice cure, and tried it. She began to improve within five hours after we gave her the first dose, and recovered in about ten days. She was weak though, and has not yet fully regained her strength, so that she is still out of school. I ascribe her cure to pineapple juice, but the doctor didn't like to admit that all the credit was due to it. He after-

wards wrote to a friend—a physician in the South—asking whether it was a common remedy there. He was informed that creole physicians in the swamps down there generally employed it, regarding it as a specific.”

THE HERALD OF HEALTH gives the above for what it is worth. The so-called remedy is certainly well vouched for, and if it does no good, it certainly can do little harm.

NIGHTMARE AND ITS CAUSES.

Sleeplessness would seem to be a growing malady amongst us, judging from the frequency with which, under its new name of insomnia, it is set down as the disorder from which certain persons suffer. Its frequency, too, is in some quarters ascribed to our increasing intellectual development, and strain of the mental system, while the truth is our forefathers suffered much more than we do from sleeplessness; and savages, under certain conditions, are especially subject to it. Insomnia, like nightmare, is often occasioned by the default of the victim. Sleeping on the back will not only lead to wakefulness, but will also cause bad dreams and nightmare, especially when there is also derangement of the biliary or digestive organs.

OF THE LAST-NAMED COMPLAINT

an old physician, Sir J. Floyer, said, “incubus or nightmare is an inflation of the membranes of the stomach, which hinders the motion of the diaphragm, lungs, and pulse with a sense of weight oppressing the breast.” Interruptions of sleep and nightmare may arise from asthma or heart affection, when the cause will be sufficiently obvious; but as a general rule frightful dreams and incubus are the result in children of flatus, and in adults of derangements of the liver or biliary functions. An attack of nightmare may, no doubt, be occasioned by indigestion, but, when it recurs, there is nearly always some existing liver derangement, resulting probably in the elements of the bile circulating in the blood and acting on the brain. Why dreams from such a cause should usually be of an unpleasant nature is one of the problems which neither physiologists nor psychologists have yet been able to solve.

PLEASANT DREAMS ARE THE PERQUISITES

of a healthy condition of the system, and, though many people believe they never dream at all, we have very high authority for the assertion that our thoughts are busy at all times in our sleep, even though we may

not be conscious of the fact. Against the assertion that insomnia and nightmare are the product of a high state of civilization may be brought the fact—very well authenticated by numerous observers—that savages and semi-civilized people dream much more than those who are civilized and refined. And the reason is very obvious. Savages fill their stomachs to repletion whenever they have an opportunity, and, like animals, sleep directly afterwards. This practice brings upon them attacks of incubus, which they regard as demons, and frequently the medicine man of a tribe, with a faint glimmering of the physical truth, is able to work miracles by exorcising the evil spirits—the most potent part of his exorcism being his prohibition against feeding to repletion immediately before sleeping. Those who are visited by the demon of incubus, instead of ascribing it to mental worry and anxiety, will do well to institute an inquiry into their dietary.

THE EPIDEMIC INFLUENZA.

The *Medical Record*, in speaking about the epidemic influenza, says that this disease travels rapidly, and has been known to make all Europe sneeze within six weeks. It used to be thought that this disease moved in cycles of 100 years. Although such an idea has long been abandoned, it is a curious fact that the influenza prevailed in America 100 years ago, and Dr. John Warren, in a letter to Dr. Lettsom, says that “our beloved President is now recovering from a severe and dangerous attack.” In 1830 an epidemic started in China. It reached Russia in January, 1831, and by May it had spread to Western Europe, but it only reached this country in January, 1832, and then prevailed but slightly. A severe epidemic started in Russia in December, 1836, and rapidly spread over Europe, but America was not affected. About ten years ago an epidemic prevailed in the United States. North America, however, does not seem to be very favorable to the development of epidemic influenza in its worst forms, and it is not likely that we shall have a severe visitation. The disease is not dangerous except sometimes to children or the aged. It is believed to be due to some micro-organism that floats in the air and infects the human system, but is generally killed in so doing, for the disease is very slightly, if at all, contagious. No fears need be entertained that this epidemic may be a precursor to cholera, as there have been plenty of cholera epidemics without a preceding influenza and a great many influenza epidemics without any associate cholera. The cholera germ lives in water and soil, the influenza germ in the air.

THE GYMNASIUM A LIFE ELIXIR.

THE human system demands regularity in eating, sleeping, exercise and recreation, and the individual who disregards these laws of nature must suffer more or less and not live out his days. Half a century ago Yale and Harvard colleges ran their students all to brains, and had a dyspeptic short-lived set of "brainless" fellows. But they found this would not work, so they went to the other extreme and turned out muscle à la Sullivan, and every fellow went around with a chip on his shoulder; and as this extreme proved a failure they, about twenty years ago, put the two extremes together, and educated both brains and muscle, and to day no finer specimens of men can be found in any country than the graduates from these colleges. The gymnastics perfected by these colleges are being adopted all over the United States, and athletic clubs and gymnasiums are springing up everywhere, and the people are taking far more interest in physical training than ever before. They see our young men growing up with flat chests and thin abdomens, spindle-legged and effeminate arms; or, the other extreme—obese and puffy, and no vigor or endurance. It is high time we are aroused to benefit the present generation, and be prepared to give the world a better coming generation. But, to do this, we must have well-developed women as well as men, and, to have such we must have private and public gymnasiums for them, and every girl taught how to grow up physically well-developed. I hope to live to see gymnasiums for both sexes as numerous as schoolhouses now are all over the United States. When we compare mankind with an ideal physiological man and woman we find very great imperfections, and then see the necessity more than ever for higher physical and mental culture. Of course, not everyone can join an athletic club or gymnasium, but almost everyone can get a set of dumb-bells, Indian-clubs, wands and the chest movement apparatus, books on gymnastics and hygiene, and take exercise at home. It will save doctor bills, loss of time from occupation, and prevent many aches and pains and drive away the "blues." The ancient Romans had the right idea of physical perfection. Their maxim was: *Mens sana in corpore sano*, a sound mind in a sound body.—T. H. Callahan, M. D.

HEALTH METHODS.

A **FLOURISHING VEGETARIAN SOCIETY.**—Chicago has a flourishing Vegetarian Society. The originator of the society is Mrs. La Favre, who is a

member of the American Vegetarian Society. She claims that vegetable food is the solution of the temperance problem, adding: "I used to be fond of wine. Since I have stopped eating meats, a bottle of choice wine might stand on my table forever, and I would not have the least desire to taste it. That's what I told Miss Willard and many of the W. C. T. U. delegates who are attending the convention. They only laughed at me. They are all so set in their opinion that you can't tell them anything."

ALL MEATS CONTAIN THE ELEMENT

which develops the lower faculties in man. It excites, and the excitement wears off and leaves exhaustion. If you want to make a fierce soldier of a man, feed him on meat. People have said to me, 'Why, if I didn't eat meat, I wouldn't have the strength to do the work I do.' The truth of the matter is, meat is not strengthening. I work eighteen hours a day and never touch meat. Then, what animal is stronger than the horse, and the horse does not eat meat. Oats are good for horses and equally good for us. It is just so with animals that do eat meat. Take a cat, for instance, and feed it on oatmeal instead of meat, and you will be surprised what a beautiful animal you will make him. I have

EXPERIMENTED

in children and noted the wonderful effect. We have perfect control over the body, if taken when young. I intend making a journalist of my little girl, and feed her entirely on cereals and fruits. She does not realize it, but she is more thoughtful and spiritual than other children. The delicate aroma of fruits is highly spiritualizing. Take a bunch of grapes and inhale the aroma and see what a wonderful effect it will have over you. In the morning I eat whole wheat crackers, cereal foods, graham gems, and drink cocoa. For dinner all kinds of fruit, vegetables, nuts, and for drink boiled milk. At supper I eat crackers and fruits, and, if I can get it, drink apple or quince tea. Before I began, I was sick and unable to do anything. Now there is not a healthier woman living than myself.

PASTEURISM AND HYDROPHOBIA.

PASTEUR'S method of treating hydrophobia has been so ungrudgingly accepted by many eminent scientists as a veritable cure for rabies that it seems to be flat heterodoxy to criticise it or to doubt its efficacy. Sir Henry Roscoe, however, in his recent address to the students at the Mid-

land Institute, made an admission which should cause the more effusive supporters of M. Pasteur to reflect a little. The main point of the Pasteur treatment, as explained by Sir Henry Roscoe, consists in the fact that after Pasteur's inoculation of a person bitten by a rabid animal, there is a race between the powerful virus of the rabid dog and the attenuated virus of the inoculator. If the dog's virus acts more powerfully and promptly than the patient will become hydrophobic, and probably die; but if the attenuated virus acts with so much more rapidity than the rapid virus as to overtake and pass it by, then it will reach the vital centres first, and, by its exhausting action, render them incapable of being dangerously affected by the powerful poison. If there were anything peculiar in the attenuated virus to make its action more rapid than the stronger virus, then much might be said for Pasteur's treatment, but this would be a physical anomaly. It is a well established and thoroughly demonstrated fact, of two viruses of the same genus, the one that is the more intense in character will act both more quickly and powerfully than the weaker, and until it is shown why the Pasteur virus acts differently from any other, if it does act differently, Pasteurism cannot be accepted as a truly scientific method of treating hydrophobia. This has long been the view of Professors Virchow and Billroth, and now Sir Henry Roscoe has joined the ranks of the doubters.

THE CHEMISTRY OF LIFE AND DEATH.

BRIEFLY stated, the germ theory of animal life and death is that it is a fermentation and a putrefaction. Expressed in terms of mineral or inorganic chemistry, this fermentation is in its different degrees an oxydization, or rusting, or burning. In inorganic chemistry the slow combination of a substance with oxygen is rusting or oxydization; the rapid combination is combustion or burning. By analogy, it may be loosely said that putrefaction is to fermentation what burning is to rusting. Human life is sustained by a process which may be called oxydization, or, speaking very broadly, fermentation. To arrest this process or to hasten it too much is to cause death. To live at all, we must burn, oxydize or ferment slowly by the combination of the substances of our bodies with the oxygen of the air. Certain substances tend to arrest this process; others to hasten it. Some chemists believe that certain vegetables, such as mace or Paraguay tea, contain substances that have this effect of temporarily checking oxydization in the body; that is, that they enable men to use their muscles for a time without wasting them. This is not proven,

but it has been demonstrated that the continued use of those alkaloids which seem to check the fermentation or oxydization or slow burning going on in the body tend to produce death. On the other hand, nothing is better known than that whatever hastens the process hastens death. The poison of a rattlesnake has this effect in a high degree. Chemically, it is closely allied to the substance composing the eggs of fowls.—*St. Louis Republic.*

HOW LONG TO SLEEP.—Up to the 15th year most young people require ten hours, and until the 20th year nine hours. After that age every one finds out how much he or she requires, though, as a general rule, at least six or eight hours is necessary. Eight hours' sleep will prevent more nervous derangements in women than any medicine can cure. During growth, there must be ample sleep, if the brain is to develop to its full extent; and the more nervous, excitable, or precocious a child is, the longer sleep should it get, if its intellectual progress is not to come to a premature standstill, or its life cut short at an early age.

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

EDITOR'S STUDY.

TEA WITHOUT TANNIN.—Since India and Ceylon have come so actively into competition with China as tea producers we have not only had tea much cheaper but of a vastly superior quality. There are, however, many who use this beverage with reserve because of the injurious effects which it has, or is supposed to have, upon their system, and to overcome this objection an extract of tea called "Santha" has been prepared. The chief constituents of tea are tannin or tannic acid—a substance with a very astringent taste—a volatile oil to which it owes its aroma, and a special substance known as theine. If in preparing the tea it is allowed to stand too long on the hob, as many poor people let it, it loses the volatile oil which gives it its agreeable flavor, and takes up more of the tannin matter. Its physiological effects are that it stimulates the brain, dispels drowsiness, and is not followed by torpor as after the use of alcohol. It also lessens tissue waste, and consequently overcomes the desire for food and the sense of fatigue from overwork. These qualities lead to its excessive use in many instances, and its excessive use is followed by indigestion and other disorders occasioned by the injurious action of tannin on the coats of the stomach. The new preparation "Santha" is made on scientific principles, the tannin being rendered inert by being so combined as to make it insoluble, and, if the expectations of the inventor are realized, lovers of this refreshing beverage will be able to indulge themselves without any fear of evil consequences.

PREVENTION OF RHEUMATISM.—The "busy season" for rheumatism commences in September. Why is it? That we do not know; but it is quite safe to infer that owing to a certain combination of influences people are then in a condition specially favorable to it. After several months of hot weather the systems of many to evade the heat, in shady places at summer resorts, are relaxed, weakened, and more or less choked up with waste material. Exercise, the great eliminator of such waste, is quite naturally neglected during hot weather. And, moreover, those who exercise too little, are sure to eat too much. So autumn finds them in a sluggish state, as we have said, with all the waste avenues clogged up. That is a condition of things very favorable to rheumatism. It naturally follows that those in that condition, and especially those who are subject to the disease in question, should live abstemiously, exercise freely, keep the skin active by frequent bathing, the bowels open with fruits, and drink water in large quantities. Water dissolves and washes

waste matters out of the system ; it is, therefore, an absolute essential where there is any impairment in the actions of the kidneys, bowels or skin. Even if these few simple rules are observed, there will be ordinarily but little danger of rheumatism. For those who have a decided tendency to the disease, and have already suffered from one or more attacks of it, there are much more rigid rules which it is necessary to observe to secure immunity.—*Albany Press.*

LONG HEADS AND ROUND HEADS.—Long heads are usually associated with the possession of great intellectual strength and mental capacity, but not before have they been regarded as indicative of any physical peculiarity. Herr D. Ammon, however, has been making observations on 5,000 soldiers at Baden, and the result of these, which were communicated to the recent congress of German men of science at Heidelberg, show that the proportions of the body almost invariably conform to the size of the skull. Tall men, Herr Ammon found, had generally long skulls, or skulls of medium length, whereas the short men had round heads. Most of the round headed men came from the Black Forest; those with long heads usually belonged to the valley of the Rhine, and were especially numerous in towns and in the neighborhood of the castles of ancient families. From this fact Herr Ammon concluded that the round headed men had been the original inhabitants of the Rhine valley, that they had been driven from it by long-headed invaders, and that the latter had established themselves near their victorious leaders. Not only does the German anthropologists find a certain relation between the height of the figure and the shape of the skull, but his observations show that no fewer than 80 per cent. of the men examined who had blue eyes had fair hair; and that physical growth is generally quicker in the case of the brown-eyed than in that of the blue-eyed type.

INJURIOUS EFFECTS OF ANGER UPON THE HEALTH.—Instances where anger has proved fatal are many. According to one writer, says the *Boston Herald*, the Emperor Nerva died of a violent excess of anger against a senator who had offended him. Valentinian, the first Roman emperor of that name, while reproaching with great passion the deputies from the Quadi, a people of Germany, burst a blood-vessel, and suddenly fell lifeless to the ground. "I have seen," says a French medical writer, "two women perish, the one in convulsions at the end of six hours, and the other suffocated in two days, from giving themselves up to the transports of fury." It is well known that John Hunter, the great English surgeon,

fell a sudden victim to a paroxysm of anger. He had a bad temper, and not only often got angry, but very angry indeed. During the later years of his life he suffered from heart trouble, and "was in constant jeopardy from his ungovernable temper," in fact, he once made the remark that "his life was in the hands of any rascal who chose to annoy and tease him." One day he got into an altercation with one of his colleagues, who contradicted him point blank. Hunter hurried into an adjoining room, and when barely across the threshold, fell lifeless to the floor. It is said that Dr. Bogdanovski, a well-known surgeon in St. Petersburg, died recently while engaged in an operation. He was about to amputate the arm of a patient, and had already begun the operation, when he was angered at the awkwardness of a student who was assisting him. He spoke to him sharply, and suddenly fell fainting to the floor. He soon recovered consciousness, and was about to proceed with the operation, when he fell again and died in a few minutes. If an outburst of anger of any considerable intensity does not prove fatal, it at least generally upsets the system. Its effects upon the appetite are well known; let a person get into a quarrel at the table and he at once loses all relish for the food before him. A choleric person is almost always subject to attacks of indigestion, which are the direct consequences of his getting angry. Pain, cramps and diarrhoea are likely to follow a severe fit of anger if it occurs soon after a meal is eaten, because digestion stops without the outburst, and is slow in starting up again. The liver, of course, shares in the disturbance, and a bilious attack may be expected after a "tantrum." As for the effects of anger upon the different secretions, there is an old theory that the saliva may become poisonous through rage; that most animals when goaded to intense anger, inflict a wound which is more irritable and heals less readily than one administered when they are not excited. That seems very reasonable; it is all speculation however. But the effects of anger on the mother's milk we know positively is exceedingly hurtful. There is reason for believing that convulsions in nursing children are quite often the consequence of the mothers being greatly disturbed either by anger or by fear or grief, all of which passions have the same effect upon her milk. And so it is clear that, if one expects to live to good old age, he must learn to govern his temper, and avoid as much as possible those influences likely to excite anger. As for those who have been generous livers, and those who suffer from heart trouble of any sort, let them live as wisely as they may, and yet if they be irritable and prone to give way to anger, they are, as it were, over a mine which is liable to explode at any time and destroy them.

HIRSUTE VS. BALD HEADS.—It is a curious circumstance that whereas some men pass anxious hours in endeavoring to find out what hair restorer is the best, and spend large sums of money in obtaining, and considerable time in using the decoctions that are recommended to them, other men lament that their hair is thick, and ascribe their misfortunes in life to their liberal head-covering. A correspondent writes to the *Medical Press and Circular* declaring that he has failed in the profession of medicine for two reasons—he has not enough money in his pocket, and he has too much hair on his head. All his medical friends who are getting on have bald heads; he is the unhappy victim of a luxurious growth, and hence his sorrow. Perhaps it is an evil which time will redress; but meanwhile the butcher and baker want to be paid, and might not accept as an excuse for inability the fact that his forehead does not extend back into “a white expanse of intellectual integument.” The journal that is made the confidant of this practitioner’s sad case seems to think that there is something in it. “It is, no doubt, very much to the advantage of a young practitioner to exhibit a modern antique appearance,” it says, “and nothing contributes so greatly to this end as a head which is innocent of hair. There is a real commercial value in a bald head, but this value is by no means confined to the medical profession. Whatever advantages, however, it may confer on a ‘business young man,’ to a medical man, a fair estimate under favorable circumstances would be, at the lowest, five hundred a year.” If the resources of science, however, can make hair grow on the head whose tendency is to be bald—a question upon which experts differ, though barbers who invent washes make fortunes—a successful process of tonsure might surely be devised, and a very good imitation bald head obtained.

INSECTS IN THE EARS.—It is popularly supposed that for an insect of any kind to find its way into the ear means death, if not instantly removed, and physicians are aroused at all hours by applicants who beg them to come quickly. “a bug has gotten in somebody’s ear.” Unless it is an insect with very keen nippers, there is no possible danger, although often unpleasantness, if the bug has capacity to bite sharply. Of course, there is fear of its working its way to the brain, but as a rule this belief causes a great deal of nervousness, which has a bad effect upon the subject. Of course, the ear should be examined as soon as possible, and the insect removed, but the popular idea that death will result is quite wrong.—*St. Louis Globe Democrat.*

INFLUENCE OF THE EYES UPON THE GENERAL HEALTH.—Quite recently the influence of the eyes upon the general health, says a writer in the N. Y. *Sun*, has been attracting the attention of specialists, and general practitioners are recognizing the manifold serious effects upon the whole system of faulty eyes, either from born malformations, acquired weakness, or any deviation from the normal standard or disturbance of muscular harmony or balance. It is being established beyond a doubt that many cases of sick headache, periodical headaches, a large number of hysterical or otherwise nervous unbalancings, many cases of epilepsy, and other serious functional disorders may be traced to eye disorder as the predisposing cause, needing but some species of over exertion—sight-seeing, concentrated attention upon a speaker, intent gazing at music, or close study—to precipitate the onset, and produce an invalid in whom the eye is the last factor to be accused of the mischief. Often the innocent stomach has to bear the consequences of this sly mischief maker, when in reality it bears the same relation as effect to cause. Cases of nervous wrecks, of worn-out, tired-backed men and women and dyspeptics owe their suffering to eye strain, and the time is coming when many cases of cataract will be attributed to malformed eyes. Seven persons out of ten are born with some malformation or fault of the eye absolutely hidden from the ordinary observer, but the source of great future disturbance. Some are born near-sighted, some far-sighted; with some the tendency is to see “out,” with some to see “in;” sometimes the eyes see different ways; one muscle is with one too weak, with another too strong; all of which may be absolutely invisible. Under the present light of science on this subject, it should be made the duty of all persons having charge of children to have the visual state determined as close to birth as possible. Position of the eye, expression of the face, and mentality go hand in hand, and to the specialist indicate eye formation. In general, far apart eyes are far-sighted, and give a broad, round, frank expression of the face that goes far to induce confidence in the owner. Malformed eyes largely account for the “general cussedness,” weakness, and warped condition of the “crank” and “freak,” in whom the malady is lack of response to the brain directions. Such persons will be found to go through life on the bias. Their almost universal slyness, treachery, and deception are the results of faulty development of the eye, which an early examination and adjustment would positively have averted. Frowning, squinting, and lines about the eyes indicate something faulty in the direction of the visual lines. Blue and gray eyes in general are found to be more durable and

strong than dark ones. As great care should be taken in selecting glasses that the frame should fit the face as that the glass should fit the eye. Frames may be too high or too low, too narrow or too wide. Those which do not fit accurately, may be as great a source of injury as the original fault. One of the most unfortunate heirlooms one can have is a pair of gold spectacles. It is poor economy to try to use old and badly fitting frames selected by some ancestor. The expense of having as many glasses as faults of course stands in the way of the poor. The use of one for all occasions must, of course, work badly. Specialists suffer much interference from the false pride of wearing glasses, people generally finding them either unbecoming or a sign of age. Many cases of temporary deflection, which could be entirely cured in a comparatively short time, are made chronic and incurable disorders by a lack of compliance with the glass prescription, through desire not to offend the falsely fastidious taste of some "dear one."

HOUSES IN THE COUNTRY.—Your true countryman is seldom a "temperance man" in the matter of sunlight and shade. He is either a "teetotaler" or a confirmed tippler. His house is exposed, in the one case, to all the fervor of the summer sun (and all the fury of the summer thunder-storm) or, in the other, it is hedged about and arched over by a plantation of trees so dense as to exclude even the vertical rays of the noon-sun. Of the two extremes I prefer the former. The mercilessly exposed walls appeal less agreeably to the eye, but they better please the sense of what is right and wrong from a hygienic point of view. Nothing is less picturesque than a house in the country without a tree beside it, but nothing is less healthful than one that cannot be seen for the density of the grove that surrounds it. But there is a happy medium between the wall that is warped by the direct rays of the summer sun and one that presents a mildewed face to the level beams of sunset, and it is the happy medium of temperance that one should try to strike in this as in other matters.—*The Critic*.

TO MAKE KOUMIS.—Fill a quart champagne bottle up to the neck with pure, fresh milk; add two tablepoonfuls of white sugar, after dissolving the same in a little water over a hot fire; add also a quarter of a two-cent cake of fresh compressed yeast; then tie the cork on the bottle securely, and shake the mixture well. Place in a room of the temperature of 50° to 95° Fahrenheit for six hours, and finally in the ice-box over night. Drink in such quantities as the stomach may require. This, as will be

seen, is very inexpensive. Care should be taken not to allow it to be used if it contains curds, which indicate too much fermentation. Precaution should be observed in opening the bottle, on account of the effervescent quality of the product. Probably koumiss has no essential virtues other than those which resided in the original milk, and which are preserved by the processes to which it is submitted. It is a drink easily borne on delicate stomachs, and it is a very agreeable change to some invalids long confined to a fluid diet.

WOMEN AND THE HOUSEHOLD.

CONDUCTED BY HELEN FLETCHER.

HOME—WOMAN'S REALM.—Home is the habitat of woman. In the home, all that is characteristically feminine in woman unfolds and flourishes. Home without woman is a misnomer, for woman makes the home, and home is what she makes it. If she is illiterate, her home partakes of this quality; if she is immoral, her home cannot be the abode of virtue; if she is coarse, refinement does not dwell where she resides. If she is cultured, pure, refined, these qualities will characterize the home which she creates. The higher the degree of her culture, her purity, her refinement, the more will these qualities characterize the home of which she is the centre. The self that a woman takes with her in her marriage is her real dower. If her dower can be reckoned in numerals only, no matter how many they may be, wrecked indeed will be her husband, impoverished her children. But if she possesses industry, gentleness, self-abnegation, purity, intelligence, combined with capability, she is in herself a treasure of treasures.—*Exchange.*

THE WIFE'S CO-OPERATION.—No man ever prospered in the world without the co-operation of his wife. If she unites in mental endeavors, or rewards his labors with an endearing smile, with what confidence will he resort to his merchandise or his farm, fly over the land, sail over the seas, meet difficulty and encounter danger, if he knows he is not spending strength in vain—that his labors will be rewarded by the sweets of home!

HOW ONE WOMAN WITH OVER-FED NERVES WAS TREATED.—Mona Caird, who suddenly awoke to find herself famous by having asked a very silly question, as to whether matrimony was a failure, was dragged into so much notice that she was quite upset by it all, and promptly had an attack of the fashionable nervous prostration. She went to one sturdy,

crusty old doctor, who asked her what she had been doing. She said she had been studying and working. "What do you do in the mornings, madame?" he demanded. "Oh, I am too nervous and feeble to get up before twelve," she replied. "And how do you spend your evenings?" Mrs. Caird had been entertained at countless dinners by all the sympathetic matrimonial Adullamites, and she confessed she usually went out to dine. "And there you eat turtle soup, patties, timbals and the rest of that stuff, I suppose?" suggested the doctor. She admitted that she did, and also took three or four kinds of wine. "Madame," said the old man, "you have the fashionable nervous prostration that comes from eating too much and doing too little. Go home and live for three months on oatmeal, fruit and milk; walk five miles every morning before eleven o'clock, and be in bed before twelve at night. You don't need any other medicine or treatment. Five guineas, please. Good morning." The great questioner of the success of matrimony simply rose and stalked away without a word, too outraged to speak. Another more tactful physician sent her to his colleague in Germany, who gives him a commission on all the patients he sends him. Here Mrs. Caird is taking the "sun cure," and doesn't realize that she is simply following the first doctor's prescription, only with more ceremony. The German doctor makes his patients rise at seven. He gives each one a loaf of black bread, a pot of fresh butter and a little pot of honey, sees that they are clothed in one loose, light garment of white wool, and then turns them out like so many sheep into an enclosure where the grass is soft and fine under foot and with a sunny southern exposure. There are a few tables but no chairs, and upon entrance they must take off their shoes and walk about barefooted. There has been a tent-like cover spread over the enclosure during the night, so the grass is absolutely dry. They can eat their breakfast on the table, but must eat it standing and walking about, and they must walk about here in the sun, or play rackets barefooted all the time, the entire morning. They are then allowed to dress and amuse themselves until 2.30, when they are sent to the bath-house by the lake to bathe, or later go on the flat roof and sit in the sun till five. At ten they are all in bed. And Mrs. Mona Caird finds that she is slowly but surely recovering under this treatment.

LADIES, READ THIS.—A lady who has for some time past suffered from sleeplessness, languor, and want of appetite, called upon one of our leading specialists for nervous complaints. The latter, after a careful examination of the patient, wrote a few words down on a sheet of paper and

gave it to her, saying: "You will follow this prescription to the letter." As she went down stairs the lady unfolded the paper and read, "Call at the first bootshop you pass, buy six pairs of boots, and wear them out in two months." Ah! if all our doctors were equally plain spoken.

THE PROFESSIONAL EASY-CHAIR A DELUSION.—"About the most disappointing thing in this world," said a heavily molded citizen, "is what might be called the professional easy-chair. My wife, having a due regard for my bulk and general ponderousness, has always had a keen desire to get me an easy chair that would sustain every portion of my body at once and lull me to repose the instant I sat down in it. She has experimented with a great deal of enthusiasm, and with a very marked effect on my bank account. I have three chairs in the attic now, and I will sell them for junk whenever a man comes along who is willing to purchase them. I have never yet seen an easy chair that was not more or less of an engine of torment. The last one she bought looked like a combination of a typesetting machine, an upright piano, a folding bed and a dentist's chair. It had rests for the neck, the arms, the legs and heels, branches to hold dictionaries, student lamps, book rests, a portable table, match safes, cigar stands, ash receivers and about 300 wheels and cogs of various degrees of uselessness. After a man had firmly climbed into the thing there was no hope of deliverance except by the hand of a good Samaritan. I do not know who buys these things unless it is fat men's wives. It is certain that they are a mechanical delusion."

TO KEEP PLANTS FROM SULPHUROUS GAS.—Sulphurous gas, thrown off in the combustion of coal, is ruinous to the prettiest house plants. The following is recommended as a means of counteracting its effects: Take a long, shallow trough, put pieces of quick-lime in it, then fill it with water. The lime has strong chemical affinity for sulphurous acid and the acid is absorbed by it. This trough may be kept in the room near the plants, or a rag dripping into the dish may be hung up, being kept moist by capillary attraction. Pieces of lime put into the water cells in the hot air box of a furnace would help in a measure to neutralize the acid. A rag, kept moistened with limewater, placed in front of a register in a sick room, would render the air more pure and much healthier. Bits of effete matter are often sucked in through the cold air shaft. These would often be intercepted by the cloth, thus keeping out germs, dust and dirt. The cloth would be more efficient if a little glycerine or molasses were added to the water, making the cloth sticky.

MOTHERS AND THE NURSERY.

(CONDUCTED BY MRS. F. C. PRESSLER).

PETTING A SICK CHILD.—The mother at the sick-bed of her young child is a being quite often as difficult to manage as her child. All the instinctive maternity is up in arms. Deep in the heart of many mothers there is an unconfessed and half-smothered sense of wrath at the attack which sickness has made on her dear one. Then nothing is too much to give; no sacrifice of herself or others too great to grant or demand. The irritability and feebleness of convalescence make claims upon her love of self-sacrifice, and her prodigality of tenderness as positive, and yet more baneful. That in most cases she may and does go too far, and loses for her child what is hard to recover in health, is a thing likely enough, yet to talk to her at such a time of the wrong she does the child, is almost to insult her. Nevertheless, the unwisdom of a course of reckless yielding to a child's whims is plain enough, for if the little one be long ill or weak it learns with sad swiftness to exact more and more, and to yield less and less, so that it becomes increasingly hard to do for it the many little unpleasant things which sickness demands. Character comes strongly out in the maladies of the child, as it does even less distinctly in the sickness of the adult. The spoiled, overindulged child is a doubly unmanageable invalid, and when in illness the foolish petting of the mother continues, the doctor, at least, is to be pitied.—*From "Doctor and Patient."*

GOOD ADVICE TO MOTHERS.—It requires no great art to teach a child to be a hypocrite. Let him see his mother impatient, irritable, morose, when nobody but the family are present, and then see her face dressed in smiles when company are present, and she has taught her child a lesson which he will not forget. He unconsciously draws the inference that if a mild and pleasant character may be assumed whenever his mother chooses to assume it, all your character is artificial, except your poor every-day character. Let your patience be exhausted, and your spirit fretful and impatient as you put your weary child to bed at night, and the next moment call on him to join you in acts of devotion, and he knows, without the power of reasoning, that such religion can have but a slight hold on the heart. Above all things, do not live so that your child shall feel that all your character is artificial—except the poorest part of that character; for this will not only teach him to be a hypocrite, but will shortly give him the heart of a little infidel. Therefore, it is to be greatly avoided that

you do not let your children see that you have two characters.—*Farm and Home.*

BABIES IN MOURNING.—The wearing of black fabrics, especially of that particularly somber black fabric known as crape, as emblematic of mourning, has long been a much mooted question. Even those who have taken a decided stand against such as would abolish the custom, on the ground that in too many cases it savored of mawkish sentiment, have agreed that its excessive use is revolting. Perhaps a more aggravated case of revolting excess in this direction was never witnessed than that which was observed by a writer in the *N. Y. Times* on a Sixth avenue L train recently. A woman whose face was lit up with more than ordinary intelligence, got on the car at Forty-ninth street with two children, a girl about four years of age and a baby in arms. Under different circumstances the hearts of those who saw this mother must have gone out in kindly sympathy, for she was young and a widow, as was evidenced by the fact that her dress was of the deepest black and her headgear a long crape veil, reaching far below her waist. The three should have formed a most attractive group, for the children were unusually bright and pretty, but it is doubtful if the passengers, judging from the expressions of their faces, ever looked upon a picture that filled them with greater disgust. The mother's "weeds" should and would have commanded respect, in spite of their superabundance, had it not been for the fact that she advertised her bereavement by arraying her little ones in costumes which, because of the contrast, were even more somber than her own. The little girl, whose hair was so golden that it seemed as though the sun was streaming through it, had not a touch of color about her, except that which came from her hair and bright blue eyes. Her dress was of black cashmere, with a heavy drapery of crape, and she wore a black hat, also trimmed with crape. Even the little pin that fastened her somber dress at the throat was of jet, and she carried a black-bordered handkerchief. The climax was reached, however, in the clothing of the baby in arms, a swaddling robe of unrelieved black crape, the little head covered with a baby's cap of the same material. The effect was positively ghastly, and there was a sigh of relief when the widow and her two little ones left the car.

PROTECT THE BABY'S EARS.—Baby's ears, as well as his eyes, should be zealously cared for. Never allow them to be exposed to any sudden or

sharp sound. When the little fellow is taken out for his daily ride, if in winter, be carefull that the ears are well protected from the cold wind. In bathing them, be extremely careful not to injure their delicate structure, and see that they are not bent over when the baby is laid upon his side. The ears of many children are deformed by the careless putting on of the little cap, and every mother should see that the nurse is particular in this duty. A prettily shaped, well-set ear is a rare beauty, which may, to a certain extent, be acquired if mothers exercise a due amount of care in this particular while their children are little.

IGNORANT MOTHERS.—There is no doubt that many of the diseases and ailments from which infants suffer are caused by improper feeding, and that many of the sad sights with which we are constantly confronted in the streets of our large cities are the result of ignorance and neglect on the part of those who have had the care of these unhappy objects in their early years. And when one considers how much pain and trouble might be saved by a little attention to those things which every woman, at least, ought to know, it cannot but appear a crime when those who have the charge of children willingly pass by the means of knowledge which are brought before their notice. Many women know little or nothing about children before they marry, and, when they become mothers, they are simply obliged to experiment upon their children in order to discover how they ought to be treated; and, of course, the unfortunate little creatures suffer from their mother's ignorance.

NOTICEABLE PUBLICATIONS.

WE HAVE RECEIVED FROM G. H. TIMMERMAN, M. D., of the Valley Park Sanitarium, St. Louis, an excellent treatise on "Diphtheria, Its Origin, Prevention and Natural Cure Without the Use of Drugs," a prize essay by Gustav Voight, M. D., and a small pamphlet, "The Doctor in the Vest Pocket," which contains many valuable hints upon the preservation of health upon correct hygienic principles. Both are well worth reading and studying.

PUBLISHERS' DEPARTMENT.

OUR FORTIETH YEAR.—Is not the present number of the *HERALD OF HEALTH*—the first issue of the fortieth year—an unusually good one? If our readers think it is, will they not commend it to their friends and urge

them to subscribe? We promise in return that every number of the coming year will equal if not surpass the present one.

TO SUBSCRIBERS IN ARREARS FOR 1889.—Many of our subscribers are in arrears for the year 1889, their subscriptions being due in advance. We have sent the magazines in all cases where no notice to discontinue has been given. We do not like to drop subscribers, for its like parting from old friends, so we make the following offer to all who have forgotten to send in their subscriptions for 1889: Send us one dollar and fifty cents, which will pay arrearages up to December, 1889, and we will retain your name upon our lists until December, 1890. In other words, we let you have the magazine for TWO YEARS FOR ONE DOLLAR AND A HALF instead of TWO DOLLARS, the regular price for that period. We make this liberal offer for the benefit of the old subscribers, many of whom have taken the magazine for years. It applies solely to those who are in arrears for 1889, and will be good only until the first of January, 1890.

WE AGAIN CALL ATTENTION to our extraordinary premium offer. For only TWO DOLLARS we will send the HERALD OF HEALTH for one year and a complete set of either Dickens' Works or Walter Scott's Waverley Novels. The works of Dickens are in fifteen volumes, and the Waverley series in twelve, comprising twenty-five novels. All these books are well printed from clear cut type. The binding is paper and substantial. By all odds, this is the most liberal offer ever made by any publisher in the United States. An opportunity has been afforded us to obtain these standard works at a low price, and we are anxious to give our friends the benefit. Remember, Two Dollars secures the HERALD OF HEALTH for one year and a complete set of either Dickens or Walter Scott, delivered free of postage or express charges. Old subscribers can have the benefit of this same liberal offer upon renewal, and to these we appeal to secure us new friends. Send us names on postal cards of friends who may desire to subscribe, and we will mail them sample copies free.

WANTED.—HERALD OF HEALTH for September, 1883, June, 1884, and November, 1886. Can any of our subscribers who may have them on hand spare these numbers?

QUESTIONS AND ANSWERS.

CHRONIC DIARRHOEA.—*F. L., Brooklyn.*—Diet yourself properly. You should know pretty well what kind of food agrees with you. Improper food or drink are often the cause, and safety or cure in a great measure

lies in their avoidance. Try a flannel bandage around the abdomen. Soak the bandage in a solution of salt morning and evening and wrap it well. This is highly recommended as an auxiliary in some cases.

CONSTIPATION, THE TEETH AND BATHING — *G. W. W., Independence, Mo.*—Constipation in persons otherwise healthy is due to either improper diet or neglect. The call of nature should never be neglected, as the indication may then pass off for hours, thus causing trouble. As an aid there is nothing better than cold water. Swallow half a glass of cold water upon rising. This will wash out the stomach and upper intestines, and compel a movement. Eat plenty of fruit and at meals cracked wheat, oatmeal or rice. Plenty of exercise (not enough to weary, however.) is recommended. In severe cases try enema of tepid water.—For the proper care of the teeth there is nothing like cleanliness. The teeth should be cleaned morning and evening, and well brushed. After meals, use modern toothpicks and remove every particle of food from between the teeth. A hard brush is the best for use. Sprinkle thereat a little borax, and wash the mouth frequently with borax water, the effect of which is to prevent soreness. Do not use any dentrifice containing gritty or detersive substance. Roll the brush up and down lengthwise of the teeth. By so doing, you will not injure the gums and necks of the teeth.—As to bathing, rules depend on the individual constitution. Men who are fat and vigorous, derive great benefit from the cold bath, but for the weak, aged, or infirm the warm bath is the best. In the morning it provides against fatigue, and at night soothes and is productive of refreshing sleep. It is far more cleansing, and should be indulged in at least once or twice a week. Brisk rubbing with coarse towel should follow all bathing.

BACK ACHE.—*J. C.*—Your symptoms would indicate kidney troubles, but, of course, it is impossible to say so definitely, even from the excellent statement you present of your case. We have no faith in diagnosis by letter, and the concern you mention cannot properly treat you. You will only throw your money away. Place yourself under the care of a good physician, if there is one in your vicinity. Do not, however, trust a doctor that will dose with drugs, but call upon one who uses common sense, hygienic treatment. Such a physician will soon understand and properly treat your complaint.

D. L. C. Syracuse.—Try warm water, a glass after rising and at evening, and let us know the effect, keep your bowels open, and avoid drugs and tonics.

BLEEDING OF THE NOSE.—*M. A. K., Binghamton, N. Y.*—Bleeding from the nose is often an effort of nature to relieve itself. If it be necessary to restrain the bleeding, press firmly, for a few minutes, the nose between the finger and thumb, this will often stop the bleeding. If it should not, then try cold water on the nose, forehead and nape of the neck. The old-fashioned remedy of putting a cold door-key down the neck is a good one. If these plans fail try the effect of powdered alum or burnt cork sniffed or blown up the nostril. Children often cause the nose to bleed by picking. This is a bad habit and should be stopped.

DANGER TO FAINTING PERSONS.—*Subscriber, New Orleans.*—The Medical Journal says: "The common practice of raising fainting persons to a sitting or an upright position is often sufficient to destroy the spark of life which remains. The death of an eminent English statesman a short time ago gave opportunity to the coroner for emphasizing this fact and pointing out how much more reasonable and sound it is to keep such persons in the prone position while restorative and local means are adopted to enable them, if possible, to regain consciousness.

TO CHECK HEMORRHAGE.—*Mrs. C. W. M.*—Hemorrhages of the lungs or stomach are promptly checked by small doses of salt. The patient should be kept as quiet as possible.

FOR BURNS AND SCALDS.—*Victim, Louisville.*—Nothing is more soothing for burns or scalds than to pour the white of egg over the injured place. It is easily procured, and is more cooling than sweet oil and cotton.

DANGER IN DECOLETTE DRESS.—"*Farbion,*" *New York.*—An exchange, commenting upon the terrible risks to which women expose themselves by removing underwear for evening parties, notices that it is surprising how seldom colds are taken. A prominent physician accounts for it with the theory that the excitement attendant upon anticipation of a social event accelerates the circulation. He furthermore states that if the flannel, silk, or whatever is usually worn, is kept about the lower part of the body instead of being removed entirely, the chances for taking cold are reduced to a minimum. This can easily be done by turning the undervest upside down and drawing it to the upper edge of the corsage. Do this, keep a pretty light wrap near you to throw about your shoulders when not dancing, if the rooms are chilly, and wrap up warmly going to and fro, and you will never suffer any inconvenience from what is termed "imprudent exposure."

CAUSE AND CURE OF NAUSEA.—*Sufferer, Birmingham, N. Y.*—Prof. Stewart, after telling us that the seat of nausea is not in the stomach, but in the brain, informs us that relief from this distressing sensation may be obtained by cooling the base of the brain. He has tested this often and thoroughly in the case of sick headache, bilious colic, cholera morbus and other ills in which the nausea is a distressing symptom, without a single failure, and once relieved the nausea resulting from cancer of the stomach by the application of ice to the back of the neck and occipital bone. The ice is to be broken and the bits placed between the folds of a towel. Relief may be obtained by holding the head over a sink or tub and pouring a small stream of water on the back of the neck. This is worth remembering as a relief for sick headache, to which so many women are subject.

A GOOD GARGLE.—*H. W. C., Utica, N. Y.*—Take four large spoonful of good cider vinegar, four of water, a teaspoonful of common salt, and a very small portion of red or black pepper; gargle every hour. It is worth more than all the chloride of potash in the country, and it cannot harm you.

THE HERALD OF HEALTH.

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T H E

H E R A L D O F H E A L T H .

Fortieth Year.

FEBRUARY, 1890.

No. 2.

[Special to the HERALD of HEALTH.]

NOTES CONCERNING HEALTH.

BY M. L. HOLBROOK, M. D.

LA GRIPPE.

The epidemic of influenza, which at this writing is sweeping over the world, requires a notice, though there is little doubt but by the time this reaches our readers it will have spent its force.

One curious fact about it is, that a majority of the cases of epidemics of the last century have come from the East and the West. At the present time we are not able to trace them to their source as we have traced cholera, in India, but there are indications that it may originate somewhere in Asia and make its way westward in atmospheric currents rather than by the ordinary routes of travel. That it occurs at sea is known, as the sailors on ships have been attacked by it in different parts of the ocean at different times.

The nature of the disease is a subject of interest. Is it anything more than a cold? No doubt it is and has a different cause. The very fact that a ship load of people will have the disease and another ship load a hundred miles away, with no communication between them, except the great ocean of air, is pretty good proof of a common cause, and, being epidemic in its nature, pretty good evidence that it is some great undiscovered micro organism. Certainly it is evident that it is not caused by temperature or moisture in the air, or, as was once believed, by ozone.

The disease is not serious or dangerous to the strong and those in the prime of life unless they are imprudent and careless. They generally

recover quickly. With the old and infirm and feeble its progress is more slow, and death or chronic troubles of the air passages may result. I do not doubt at all but in the tracks of this epidemic we shall see weakened lungs and bronchial tubes and a larger number of deaths from consumption and bronchitis.

The lesson which it teaches the readers of the *HERALD OF HEALTH* is, that while they are liable to it as others are, yet as they maintain a higher degree of health its effects will be less severe and recovery more quick and sure.

WASTING OUR RESOURCES.

Frances E. Willard has sent me a brief letter which contains some important suggestions and I print them here for the benefit of a larger audience.

Two wholesale methods of squandering money and wasting power have long amazed and grieved me—the first is shutting up the churches six days in the week as one turns out a light, the second is making no use of the roofs of houses—not even nowadays, to catch rain water. Moral and spiritual health ought constantly to radiate from the always gleaming windows and through the perpetually open doors of God's house—the central home and health fire of common brotherhood; and God's sweet air and sunshine to be sought in the open gardens, pleasure grounds, gymnasia that might be on the roofs of all our city dwellings.

FRANCES E. WILLARD.

To all of this I agree, and as an instance of a church, which sheds its light all the week long, I will mention that of Rev. T. K. Beecher, of Elmira, N. Y.

Another is that of Heber Newton's, of New York City, and this brings me to a point where I would like to quote a passage from his sermon of yesterday (Jan. 5th):

“For every life there is a pattern in the heavens.

“The young divinity student beholds the heavenly patterns of the preacher, the man who is to use his pulpit not merely as a place to advertise himself in, but a place whereto he shall bring the results of his careful, painstaking study. He comes down from the Mount and enters upon his work. To be a true prophet calls upon him to risk his property, to incur disfavor in ecclesiastical circles, and the yet worse disfavor of the vested interests represented—the pews. Hosts of parishes do not care for such a spiritual priesthood. As said a vestryman in a parish not a hun-

dred miles hence concerning one of the most worthy of men whom it is my privilege to know—his own pastor—‘We do not care for such a man. We want some one who will be hail fellow with us all.’

“To come under the suspicion of heresy is to find vestries turning away from him. To speak out plainly concerning the problems of righteousness will be to insure that gentle hint whereby vestries ease a man’s retiring by cutting down his salary step by step. He sees the success of the prophet who manages quietly to dodge every disagreeable issue, maintaining a judicious reticence concerning all points of doctrine that are in dispute. We hear the remark that one of the most distinguished rectors of our city at one time passed upon his experience in our own city:—

“‘To be successful in the ministry in New York requires somewhat of the grace of God, but also a little spice of the devil.’

MOTHER FORSAKING CHILD.

“How quickly the young mother descends from the Mount, the vision fading away behind her. She goes to one of those wonderful agencies for finding consecrated abilities and unselfish devotion to other women’s children, and brings home with her one whom she dignifies with the noble name of ‘nurse,’ who for so many dollars a month is to take entire charge of her little one; attend to its health, knowing herself nothing whatever of the laws of health; be an example to it of manners, herself being only an awful example of what manners should not be; nurture it in morals, herself being tricky and deceitful, having no sense of the value of truth and only concerned to keep a smooth face upon the surface of things. The patterns shown her on the Mount are not the working models for the mother who is to keep her position in society, denying herself in the world.”

SKIN DEBILITY.

From a notice of Mr. Newton’s sermons we go to a less dignified subject, that of skin debility. The skin is a very important organ, as important as almost any in the body. When it is healthy and performs its functions well we feel well, when it is weak and lazy we feel ill. The makers of fancy and medicated soaps understand this. Before me lies an advertisement of a soap which says it will cure all skin debility. But the use of soap is not the way to cure skin debility. What makes the skin feeble? In general the skin is weak when the body is weak and

strong when the body is strong, but it is often weakened by our clothing and by cold, and it is strengthened by friction, exercise, suitable bathing, light and air. There is one advantage we have over the skin that we have not over the liver, we can get at it and keep it clean and well exercised, when the liver, being out of sight and reach, has to be treated by other means. The cold bath or the Turkish bath, for those who can bear them, are excellent means of strengthening the skin. To those who cannot bear them a pair of flesh gloves used daily answers nearly as well. In the Summer sun baths act well.

LIGHT IN THE SICK ROOM.

Dr. Richardson comes to our aid in demanding more light for the sick room. Hear his words :

Still a custom prevails that the occupant of the sick-room in the private house should be kept at all hours in a darkened room. Not one time in ten do we enter a sick-room in the day-time to find it blessed with the light of the sun. Almost invariably, before we can get a look at the face of the patient, we are obliged to request that the blinds may be drawn up, in order that the rays of a much greater healer than the most able physician can ever hope to be may be admitted. Too often the compliance with this request reveals a condition of room which, in a state of darkness, is almost inevitably one of disorder everywhere; foods, medicines, furniture, bedding misplaced; dust and stray leavings in all directions. In brief, there is nothing so bad as a dark sick-room; it is as if the attendants were anticipating the death of the patient; and, if the reason for it be asked, the answer is as inconsistent as the act. The reason usually offered is that the patient cannot bear the light; as though the light could not be cut off from the patient by a curtain or screen, and as though to darken one part of the room it were necessary to darken the whole of it. The real reason is an old superstitious practice, which once prevailed so intensely that the sick suffering from the most terrible diseases, small-pox for instance, were shut up in darkness, their beds surrounded with red curtains, during the whole of their illness. The red curtains are pretty nearly given up, but the darkness is still accredited with some mysterious curative virtue. A more injurious practice really could not be maintained than that of darkness in the sick-room. It is not only that dirt and disorder are results of darkness, a great remedy is lost. Sunlight is the remedy lost, and the loss is momentous. Sunlight diffused through a room warms and clarifies the air. It has a direct influence on the minute

organic poisons, a distinctive influence which is most precious, and it has a cheerful effect upon the mind. The sick should never be gloomy, and in the presence of the light the shadows of gloom fly away. Happily the hospital ward, notwithstanding its many defects, and it has many, is so far favored that it is blessed with the light of the sun, whenever the sun shines. In private practice the same remedy ought to be extended to the patients of the household, and the first words of a physician or surgeon on entering the dark sick room should be the dying words of Goethe, "More light, more light!"

These are wise words, and in this connection I may mention that Dr. Bobbit, of New York, is perhaps now the most earnest apostle of sunshine for the cure of disease and the preservation of health. His sun baths seem to be excellent. The only trouble is, we have had so little sunshine of late that we can't take them.

FOOD AND WORK.

Good Housekeeping thus kindly notices the new and complete edition of *Food and Work*, now ready:

"This book is a manual of great usefulness to any one who will read it and profit by it. 'Eating for Strength; or Food and Diet in Relation to Health and Work,' is its full title and it indicates its scope and purpose. Dr. M. L. Holbrook, the author, is impartial in his analysis of foods and their values, and includes meat in some of his prescribed dietaries. The extended tables of analysis of the nature and cost of foods is a most valuable feature of the book, and Dr. Holbrook's comments and precepts are strongly sensible and intelligent. Advice is furnished for the selection of foods for all conditions of body and all kinds of pursuits. As a supplement over 500 carefully prepared recipes for the preparation of various dishes and drinks are given, all of which seem to be practical and good. The book merits the attention of every one desirous of learning the way to hygienic living."

REV. DR. COLLYER ON THE GRIPPE.

Rev. Dr. Robert Collyer preached a discourse on the Grippe from the text, "A cheerful heart doeth good like a medicine." Among other good things he said:

"So our thought has run counter to the courses of the heavens this long time now, and toward a certain distemper of the spirit which no doubt has had its own influences in no small number in opening the way

for this distemper of the body. I have a friend who is utterly unable to understand what we mean by 'bad weather,' and who says he never saw or felt any in his life. He turns out in storm or shine, while the east wind is as welcome to him as the south and the storm as the stillness. I know very well how he has borne himself through all these trying months. There has been no distemper of the spirit, and so I shall be greatly surprised to hear that he has been stricken with this distemper of the body we find it so hard to bear. He wears vestures of cheerfulness about his sunny heart woven of sweetness and light. This cheerful heart is a good medicine both for the prevention and cure of these troubles—the strong and cheerful heart which rests on God. There is no more potent influence to restore the vital energies when they flag and drift toward death than a strong and sustained effort of the will, a well-known authority has said, and this no doubt is true. But the power to will and to do does not dwell in a sinking heart. We do not need to find the darker side because it has found us. Cheerfulness in such a case is health, while disheartenment and the disposition to look on the darker side is in itself disease. We are responsible in the truth I have tried to touch for a cheerful heart and a strong, or shall I say a waterproof will, and in the power to ask and answer the question as the strong and cheerful heart always does where God is who giveth songs in the night."

SOME VIEWS ON DISEASE GERMS AND DISINFECTANTS.

The paper read by Dr. John C. Johnson before the Kings County Medical Society, upon "Germs and Disinfectants," has already been quoted in these pages, but the following, in addition, will be found of much practical interest:

In treating of consumption Dr. Johnson stated that one-third of all our people, who died between the ages of 15 and 25, are carried off by consumption: "Formerly it was taught that consumption was a hereditary disease. To-day all intelligent persons know that it is produced by disease germs known as the bacillus tuberculosis, and that it is a malady common to the cow and the ox. When we cook meat rare, the blood gravy from these roasts still have the germs of disease in them, and are not destroyed. We then take this bacillus alive into our system. People

on this account need not, however, be afraid of eating their meat rare, provided they are in a sound condition of health. Prize fighters may devour their raw meat and have digestions sufficiently strong to kill the bacillus, but this is not the case with those

HAVING WEAKER DIGESTIVE POWERS.

In Berlin, every animal slaughtered at the public abattoir has to be described, with the name of its owner. Portions of the animal, as of the viscera and muscles, are taken to an inspector's office and subjected to microscopic observations. Should there be any indications of a tubercular character, of trichinae or cancer, the meat is declared unfit for food, and is destroyed. Careful inspection of the cows of Dutchess and Westchester counties kept for their milk shows that there are very few cows over nine years of age that do not show consumptive tendencies. On farms where milch cows are fed on distillery swill and brewers' grains, in a year and a half they are found to be far gone with consumption, and are then killed for the New York market. It is horrible to think that those parts of the animal which are evidently unfit for food as fresh meat are converted into Bologna sausages.

TYPHOID FEVER IS KNOWN

to be a disease produced by a germ that gains access into the body through the human intestines. It is impossible to imagine a case of typhoid fever unless the germs from one typhoid fever patient have been swallowed by another. The germs travel, are absorbed, then they break down the mesenteric glands, and invade the various organs, particularly the spleen. They appear to live, as it were, in the spleen. Dr. Johnson stated that he had thrust a needle a dozen times into a spleen at random and had never failed to obtain typhoid germs. The danger from water contaminated with the excreta of typhoid fever patients was shown on the Ohio river in 1887. The distance from Bellaire to the mouth of the Ohio river is nearly 800 miles, and from Bellaire down the people in the towns on the river drinking the water were more or less affected with typhoid fever. The epidemic at Plymouth, Pa., showed that freezing does not kill the typhoidal germs, yet, with these facts before us, here are our people who eat their meat rare, with blood gravy, feed babies on un-boiled milk, take their summer drinks made out of water rendered poisonous by sick patients at Albany and Troy, "and then wonder at the mys-

terious dispensations of providence in carrying off their beloved ones with

CONSUMPTION AND TYPHOID FEVER."

We are beginning to better understand, as Dr. Johnson stated, the probable beginning of cause of cancer. Cancer is a disease common to the sheep, horse and dog. If we eat the ox and the sheep having cancerous germs we are likely to reproduce cancer in our own systems. A very curious fact is shown by the mortality maps of Scotland. On certain rivers on the eastern side of Scotland those dwelling there are more inclined to cancer than those in the upland sections. The belief is entertained that where the soil is scoured by the floods there grows up a rank vegetation, which, eaten by the oxen and sheep, is productive of cancer germs. The germs thus propagated bring about death from cancer. It has been shown that an animal having cancerous germs may be killed, and that the cancer lives in the

JUICES OF THE ANIMAL AFTER DEATH.

IN TREATING SCARLET FEVER,

Dr. Johnson believes in the rediscovery of the germ of a disease which he thinks was first isolated a number of years ago in Scotland. He speaks of a marked success in treating patients externally with a weak solution of corrosive sublimate, which destroys the germs at the surface. As to fumigating of rooms with sulphuric acid, Dr. Johnson believes that such treatment is of no possible use. The germs of disease are not killed. He has himself taken diphtheretic germs, placed them under a woollen cover in a bed, burned sulphur there, then taken out these germs and propagated them. He thinks that nothing can take the place of boiling water. He advises that all the bedlinen in a room where there has been a contagious disease be thoroughly boiled before being used again.

"EDUCATE YOUR PEOPLE

to the fact," was Dr. Johnson's conclusion, "that woollens are the great holders and carriers of diseased germs. Then we could understand why contagious diseases cling to the homes of the rich much more than to the homes of the poor."

COMFORT YOURSELF WITH A LOUD "BOO HOO."

Dr. Edward Smith, a writer on various physiological subjects, in considering individual inclination or dislike for special articles of diet, says: "It

is known that whilst there is a general correspondence among men in the food they desire, there are many exceptions, both in the healthy and diseased system. In my inquiries I found that with a disrelish for an article of food there was less influence from it than under ordinary circumstances; so that in reference to milk, the effect of every element of it was less on another gentleman who took part in my experiments than on myself, and neither he nor any member of his family can take milk or cheese. Hence, appetite for food is the expression not only of desire, but of fitness.

Moreover, it was found that in the same person the various substances which were disliked had a common mode of action; also that with this disrelish there was an unusual enjoyment of some other article having a similar mode of action. Thus, one disliking milk and sugar was very fond of tea. It is, therefore, very questionable how far it is proper to induce a person to take that which he disrelishes. An important meaning is shown to exist in that which is commonly regarded as irrational or capricious.

A French physician views the habit of groaning and crying in much the same light. He says: Groaning and crying are too grand operations by which nature allays anguish; that those patients who give way to their natural feelings more speedily recover from accidents and operations than those who suppose it unworthy in a man to betray such symptoms of cowardice as either to groan or cry. He tells of a man who reduced his pulse from 126 to 60 in the course of a few hours by giving full vent to his emotion. If people are at all unhappy about anything, let them go into their rooms and comfort themselves with a loud boo-hoo, and they will feel a hundred per cent. better afterward. In accordance with this the crying of children should not be too greatly discouraged. What is natural is nearly always useful.

THE HOUR OF DEATH.

A variety of superstitions or curious ideas exist in regard to the hour of death. There is quite a prevalent notion that the largest proportion of deaths occur in the early hours of the morning, while dwellers by the sea are pretty generally credited with the belief that the majority of lives "go out with the tide;" other impressions, perhaps less widespread, might be mentioned. It has, however, been recently stated that from time to time careful observations have been made in hospitals which have resulted in showing that the act of death takes place with fairly equal frequency dur-

ing the whole twenty-four hours of the day. Very recently an investigation has been made in Paris, which showed that there was a certain falling off of the number of deaths between seven and eleven o'clock in the evening, but that, with this exception, the proportion of deaths is about even.

HOW TO STOP BLEEDING.

Some persons have a tendency to bleed, no matter how slight the cause. A small cut, scratch or the extraction of a tooth will cause profuse bleeding, and sometimes endanger life. When from the latter cause, take a little powdered chalk, roll it up in lint in the form of a cork or plug. dip it in spirits of turpentine and press it firmly into the cavity. Change it every ten or fifteen minutes until the bleeding is stopped. Let the last plug remain over night, and then do not pull it out, but wash the mouth in tepid water until it is loosened, using cold water after the first few mouthfuls. Bleeding from the nose is seldom serious, except in old persons. It is often good for children, if not too copious. If symptoms of faintness ensue let the person sit right up, bathe the face and neck with cold water; or dash cold water on the face, or better still, take a cloth or towel, dip in cold water and bandage the forehead and raise the arms as high as possible over the head or cross them firmly behind the back. This action has the effect of contracting the muscles of the neck and diminishing the rush of blood to the head. In very obstinate cases pinches of very finely powdered alum may be inhaled, or alum water snuffed up the nostrils. Plugging the nostrils should not be resorted to unless by a physician, for if not properly done the blood, instead of being stopped, finds its way to the top of the throat and is swallowed.—*Boston Transcript*.

DISINFECTATION OF BOOKS.—The Boston Board of Health have ordered the Public Library card in each family to be stamped, so as to indicate the presence of such a disease there. The library will thereafter decline to allow other books to be taken out on this card until there is no longer danger of contagion. When books are returned from such a locality they will be disinfected.

THE TREATMENT OF DIPHTHERIA.

G. H. TIMMERMAN, M. D., of the Valley Park Sanitarium, St. Louis, writes us concerning remarkable cures made in cases of Diphtheria by Dr.

Fairchild of Quincy, Ill., and also tells of a simple treatment given successfully by himself by which the lives of three children in one family were saved. This treatment, the Doctor writes, consisted of washing the whole body with fresh water every two or three hours, the patient then being put back in a comfortable warm bed. A pack of the whole body would have been better; but the mother, like so many others, was afraid of a cold water pack. I also give fine broken ice to swallow slowly to keep down the inflammation and swelling in the throat and to dissolve the slime therein, and also give fresh water to drink as often as wanted. Dr. Kuhne of Leipzig, Germany, says of Diphtheria, its cause and cure, that the disease can be compared with a bottle wherein we put all kinds of eatables, say milk, butter, lard or fat meats, candies, molasses, meats and vegetables and fruits. Would not this mixture get into fermentation soon? So with the diphtheretic child. It is full up to the throat or mouth of the bottle. What is therefore the best to do—make an opening at the bottom to let the stuff flow out. The best way is by fresh water injections, not too cold. Wash and rub the whole body with water to dissolve the decaying matter. Give fresh water often to wash out the throat. I think any sensible person can understand the foregoing and make up his mind if this system is not correct.

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

EDITOR'S STUDY.

HOW THE DOCTORS FAILED TO CONQUER THE GRIP.—“The influenza plague has bestowed,” says a cynical writer in the *Boston Gazette*, “an additional goose feather upon the mediæval plume that decks the cocked hat of medicine. I don't know what would have happened if it had not been for the doctors. It is true that they did not cure the disease; that they had not the slightest idea what the disease was;—in fact, they did not seem to know whether it was itself or something else; but they were prodigal in argument, advice and warning, things for which an intelligent public can never be too grateful. The college professors of the curing art had the most to say. With curious unanimity, they gave the symptoms of a typical case of influenza; symptoms that have done service in text books for the last fifty years, and then insisted that a puzzled public should govern itself accordingly. I say “puzzled public” advisedly, for the symptoms of the typical case were just the symptoms that were generally lacking. Blindly believing in college professors, the sick man compared his own symptoms with those of the typical case, and discovered that the typical case had the advantage of him every time. When it came to a question of treatment the victim was in a still worse condition. Each professor had his own method, and each method was destructive to every other method. The best method was the method that was no method at all. It was agreed that influenza is a germ disease; it was also agreed that by destroying the germ the disease was cured. The only trouble was to find and to destroy the germ. One college professor had blind faith in the powers of sulphurous acid. Another professor believed in chlorine, which has the merit to be fatal to all forms of life, bacterial or human. Among other equally harmless remedies recommended by professors, were aconite, prussic acid, arsenic, and a long series of strange things with complicated unspellable names and potencies mysterious, wonderful, and undiscoverable. But the typical remedies, like the typical symptoms, would not fit the practical case. People grew sick and recovered, but it was without the aid of doctors and their remedies. The doctors, of course, are not to blame. They gave all they had to give, and if it was only wind, we must, nevertheless, refrain from looking a gift horse in the mouth, though we may lament that medicine still remains an unscientific science. Its general powerlessness to grapple with disease becomes startlingly evident at a time of epidemic, whether it be diphtheria, measles, cholera, or

influenza. If I were the doctors, I should wrap myself more deeply in professional mystery, and think twice before I permitted the public to penetrate behind the professional curtain. Doctors should argue among themselves, and thus avoid the unfavorable criticism that greets them when they argue with unprofessionals. They are generally convicted out of their own mouths, for they are certain to contradict each other, even on the very fundamental principles of medicine. While they are silent the public mistakes taciturnity for wisdom in reflection; when they speak the quality of the voice is only too apparent. I have had influenza, and the doctors have not cured me. I have studied their typical case, and have scorned it. I have got well without them. This is my revenge.

STATISTICS OF OLD AGE.—Prof. Murray Humphry has just brought together a remarkable book on "Old Age." It is based upon the results of an inquiry conducted by the Collective Investigation Committee of the British Medical Association. In a portion of it the analysis of the returns respecting 52 centenarians are given: Of these 16 were males and 36 females. Eleven of these were single (10 being females), 5 were married and 36 were widowed. Out of 50 returns 3 only were in affluent circumstances, 28 were comfortable, and 19 poor; of these 9 were fat (8 being females), 20 were spare, and 18 of average condition. Twenty-five were erect in figure and 25 were bent. Out of 35 returns 28 used glasses, 7 did not; but of these 4 were poor, 6 had used glasses for 40-50 years, 5 for 30-35, 4 for 10-20, 2 for 4-6 years, 5 for "many years," 2 for a few years. From among these one had used spectacles for many years, but for the last twelve years had been able to read without them; another had not used them for twelve years, another "not for many years," but one cannot now get them strong enough. Out of 47 returns 40 had a good digestion. Out of 48, 36 had good appetites, 2 bad, and 10 moderate. Of 46, 25 were moderate eaters, 9 small and 12 large. In regard to alcohol, 15 took none, 24 a little, 6 were moderates, and one was used to a good deal of beer. Of animal food, 3 took none, 10 moderate, 26 little, 2 very little, and one much. Of aperients, 22 took them rarely, 14 rarely, and 5 frequently. Out of 39, 26 could say that their memory was good, 6 bad and 7 moderate. Of 45, 7 smoked much (4 being women), 2 little (one a woman), 3 moderately (one a woman). Out of 40, 37 did not take snuff. As to sleep, out of 40, 32 were good sleepers, 5 bad, and 7 moderate. From 35 returns the average time of going to bed was 9 o'clock; but 1 retires at 12 and 1 at 11,

5 at 7; 7 are bedridden. The average time of rising was about 8 o'clock, but 6 rose at 6 o'clock, 1 at 5, 9 at 10, 1 at 11, and 1 at 4 P. M. Out of 42 returns 24 had no teeth, and from 38 returns but 4 had artificial teeth; yet in men about 80 the average number of teeth is only 6 and in women 3. In 12 returns the average age when married among the males were 23, and the females 25; the average number of children is, from the returns received, 6-7.

MIND DESTROYING DRUGS.—An insanity specialist, in a recent conversation as to the number of young men and women at present in asylums from the use of opium, morphine, cocaine and kindred narcotics, stated that the subject had given him more trouble than all other forms of insanity combined. He said that among his patients were those whose minds had become unbalanced through drink, family afflictions, business losses and from other causes; but the worst cases were those whose minds were destroyed through the use of narcotics. The number of patients from this cause is rapidly increasing, and there have been more men and women committed during the past six months suffering from dementia occasioned by drugs than there were from the same cause during the ten previous years. It is beyond question that narcotics are a more prolific source of insanity than all other causes combined.

PROGRESS OF CREMATION.—There are now thirty-nine crematories in various parts of the world. Italy has twenty-three, America has ten, while England, Germany, France, Switzerland, Denmark and Sweden have one apiece. In Italy there were two cremations in 1876; the number rose to fifteen in 1877, and in 1888 the number was 226. Since 1876, 1,177 cremations have taken place in Italy, while the combined numbers from all other countries brings the total only to 1,269.

THE IMPORTANCE OF OCCUPATION.—There is nothing that adds more to the zest of life than an interesting occupation; even if it means hard work, there is a recompense in the enjoyment of well-earned rest. No work ought, however, to be overpowering, or so exhaustive that one's energies fall below their aspirations. On the other hand, no life is so thoroughly wretched as one where the necessity and desire for work is entirely wanting; and this is particularly true of persons of education and intelligence who allow themselves to fall into that unsettled condition of mind where nothing is of interest. It is difficult at first to force an interest, but when the first step is made, the habit of regular occupation, if only for one or two hours a day, becomes valuable. Active minds, if not

supplied with some subject for solid thought, will finally prey upon themselves. and end by breaking down the physical health.

There are so many studies that people of leisure could take up, so many worthy philanthropic enterprises in which they could interest themselves, that it seems strange to hear of a new industry for young ladies, which consists in walking rapidly past store windows, and trying to remember as many of the goods displayed in the windows as possible. Yet there are clubs formed for this purpose. Six young ladies will agree to walk quickly past a leading dry goods store, and write down every article each has noticed for a week. At the end of that time they have a little social reunion, to which six young gentlemen are invited. In the hands of one of these the lists are placed, and he announces the victor, to whom a prize is awarded. The company then vote on the store to be selected for the next week's exercise of memory, and wind up the evening with a dance.

VENTILATION OF PUBLIC BUILDINGS.—A very common mistake in the ventilation of churches and schoolhouses, and public buildings generally, is made when those in charge fail to open all the windows immediately after the buildings have been vacated, says *Annals of Hygiene*. The exhalations from the lungs and the emanations from the body, being light, will float for a while in the atmosphere before falling to the floor, and if the windows be opened at once, so that a current of air crosses the hall, many of them will be carried out. If, however, as is usually the case, the windows are not opened for some hours, may be not until the next day, these particles, settling upon the floor, are not carried away, but when the hall is again occupied they are disturbed by the feet, thrown up into the atmosphere and inhaled by the lungs from which they have been exhaled the day before.

DRUG CLERK.—“I filled a prescription for a stranger last night for a dollar and ten cents, and this morning I find the dollar is a counterfeit.” Proprietor.—“That's highway robbery again. Well, never mind; if the ten cent piece is good, we will make four cents on the sale.”—*American Pharmacist*.

ABOUT HAIR RESTORERS.—I suppose every barber, at some time in his life, tries his hand on a remedy for baldness. I have, and I've made a failure of all my tonics. I don't believe that there is anything in the world that will put back lost hair on a man's head. But I can tell the man who is anxious about the hair he has how to keep it on his head. He must stop eating greasy food and confine himself to a diet with very little

fat in it. If he does that his hair will not only not fall out, but it will return if he loses it by illness. A different rule seems to apply to the hair of the beard and mustache. If the constitution is in good order the hair roots of the face are very vigorous. The hair of the mustache may be pulled out, but it will return again in a short time, and the same thing is true of the beard.—*Interview in St. Louis Globe-Democrat.*

THEY TRIED IT ON THE DOG.—By a medical student: Do you know Dr. Moyer? He is one of the lecturers at our school. One day last week he had been talking on the effects of anæsthetics on people and animals. In the course of his lecture he told us if we would get a dog and try the effect upon it, and bring it in, he would explain more fully. That night a committee on dogs was appointed, and it succeeded in bringing in a fine one. We proceeded to do up the dog, and the following day we dragged the animal into the lecture room and laid it on the table. A few minutes later the professor came in, and as soon as he saw the dog he threw up his hands. We had killed his dog, and it was a favorite with him, too. But he proceeded with the lecture. Somehow I don't think that lecture was quite up to his usual standard. But we couldn't blame him. We offered to buy him another dog, but he declined.

WHY FRIENDS LIVE LONG.—It is quite true that many "Friends" live long. The reason, we are convinced, is to be found in their quiet habits and disciplined life. An ordinary doctor, or even layman, would probably have felt much more interest in the subject at this point if we had been able to affirm that the Friends owed their success and long life to certain drugs, as, for example, to arsenic, phosphorous, strychnia, and the like; or to certain methods of feeding, as vegetarianism, or meat eating, or fruit eating, or wine drinking, or teetotalism, or smoking, and so on. But we submit that that shows a want of real mental capacity. For what, after all, is the true importance of the subject? Does it not consist in the undoubted character of the results? The results are really the things to be considered. As a matter of fact, the Friends are successful in life. As a matter of fact, they do live long. Then surely true science will not curl the lip of scorn because these results are obtained by what may be called "natural and simple" processes, instead of by elaborate preparations and out-of-the-way methods.—*The Hospital.*

WOMEN AND THE HOUSEHOLD.

[CONDUCTED BY HELEN FLETCHER.]

HOW TO BE HAPPY THOUGH MARRIED.—I shall be happy with my husband, for I will not neglect myself. I will adorn myself to please him, as I adorned myself when I wished to please him for the first time. Besides, I cannot understand how a man and a woman can love each other tenderly, and endeavor to please each other unceasingly, and then neglect themselves after marriage. Why believe that with the word marriage love must pass away, and that only cold and reserved friendship remains; why profane marriage by representing the wife in curl-papers and a wrapper, with cold cream on her nose, trying to get money from her husband for dresses; why should a woman be careless of her appearance before the man for whom she should adorn herself the most? I do not see why one should treat one's husband like a domestic animal, and yet so long as one is not married, why one should wish to please this man. Why not always retain something of coquetry with one's husband, and treat him as a stranger whom one desires to please? Is it because one need not conceal one's love, because it is not a crime to love, and because marriage has received God's benediction? Is it because that which is not forbidden possesses no value in our eyes, and that one can find pleasure only in secret and forbidden things? This ought not to be.—*Marie Bashkirtseff.*

HOW SOME GIRLS WALK.—Why is it our young ladies do not know how to walk? Look! here comes one with her head pitched forward, her hands swinging ungracefully by her side, her feet shuffling the walk, and altogether presenting an appearance quite unbecoming one of America's lovely daughters, charming in all else, perhaps, but oh, such a gait! The next one walks with a jerk, her feet and lower part of her body having started on a race with her head to see which would get there first. The consequence is for every step forward she comes part way back with a jerk. Her sister follows, twitching ungracefully from side to side, rolling from one foot to the other like a sailor in mid-ocean, only he has some excuse, and she has not. The arms usually follow, but in opposite directions. The body of the next one makes a perfect bow, back bent, head forward, and feet trying to catch up. Not one with the firm,

graceful step, erect head, straight shoulders, easy arms and hands to be acquired by sufficient determination to present a dignified carriage. When will deportment be taught in our schools?—*Kingson Freeman.*

THE LOVE OF WOMAN.—Virtue, unfortunately, does not fascinate. The veriest scoundrel that ever drew breath is apt to be a thousand-fold more magnetic than he who, having marked out an ethical path for himself, proceeds religiously to follow it. All women like insinuating manners. They represent, as it were, what a garniture of truffles represent on an entree. They give flavor as well as artistic beauty. The fascinating man is always a skilled artist. He must assume, if he have it not, a tenderness that never loses sight of itself, and he must continually show an appreciation that presents him always in the light of a suppliant on knee, and never as one who demands or expects anything. Nearly all the women are vain, and the man who would fascinate must begin by flattering a woman's vanity. But he must likewise take care that his modus operandi is never discovered or its existence ever suspected. Otherwise he is lost. The courage and independence born of possession unfortunately excite to the reckless expression of absolute truth, and a man who desires to please a woman should never tell the whole truth. Suggest it, play with it, ignore it entirely, but reveal it, never! The Latin race are adepts in the art of fascination. Why? Because they are always lovers or pretend to be lovers, which in the end amounts to the same thing. Emerson expressed an unalterable truth when he said: "All the world loves a lover." But in order to be a lover it is not necessary to rush into vulgar protestations of affection. A glance of the eye, a pressure of the hand, the particular curl of the lip in a smile, the hundred trivial courtesies that appeal to the feminine sympathies are embodied in the man who fascinates. And when he has once mastered the secret of feminine inclination and the special qualifications of feminine taste, his way is clearly marked. Be he ugly as Satan, he will not fail in personal magnetism.—*Once a Week.*

SHOW THIS TO YOUR HUSBANDS.—When your wife has been busy at home all day, do not immediately on your return spy out some omissions, but glance around and recognize her efforts by some such expressions as, "This is comfort." 2. Do not refuse to pay her some pleasant little courtesies. 3. Chat with her at table, and do not be always buried in your newspaper. 4. Do not take the children's part against her, but let them realize that you and she are one in your joint care of them. 5.

Take her into your confidence, and do not try to bear burdens alone. 6. If she is in trouble do not pooh-pooh, but let her feel your sympathy. 7. Do not criticize her before strangers. 8. Be always polite to her. 9. Go sometimes for a walk or shopping with her, and as you go, arm in arm, now and then give her arm a squeeze.

GUIDING THE HOME.—Housework, in moderation, is healthy and pleasant. It is the want of just such an unemotional vent for their restless energy that produces many victims of nervous prostration. It is also wholly compatible, if brought under any proper system, with good intellectual work. Moreover, the creating and guiding of a home is the best gift the world has to offer. When one thinks of the flood of bad art and second rate literature of the present day, is it not melancholy to reflect upon the wasted energy that might have gone into beautiful and helpful lives? The education is costly, indeed, whose price is the woman's joy in the superintendence of her home. If she, with all the incentives of love and pride, despises the daily cares that make the comfort of the household, how can she expect them to be rightly met by a hired house-keeper, whose only interest is money getting?

“No man can serve two masters;” and, therefore, it seems to me self-evident that any woman who accepts the gift of a home thereby pledges herself to devote to it her best service. The neglect of her first duty and highest privilege cannot lead to any true work in other directions. There are women whose God-given talents require to tread a lonely path. There are many others to whom the supreme treasure of a home is denied. But the best work of artist or poet or physician will ever spring from the hidden, passionate womanliness that appreciates to the full the greatness of the sacrifice or loss.—*Christian Register*.

A TRUE WIFE.—It is not to sweep the house, make the beds, darn the socks and cook the meals chiefly that a man wants a wife. If this is all he needs, a servant can do it cheaper than a wife, says a writer in *The Lady*. If this is all, when a young man calls to see a lady, send him into the pantry to taste the bread and cake she has made; send him to inspect the needlework and bed-making; or put a broom in her hand and send him to witness its use. Such things are important, and the wise young man will quickly look after them. But what the true young man wants with a wife is her companionship, sympathy and love. The way of life has many dreary places in it, and a man needs a wife to go with him. A man is sometimes overtaken by misfortunes; he meets with

failures and defeat; trials and temptations beset him, and he needs one to stand by and sympathize. He has some hard battles to fight with poverty, enemies and sin, and he needs a woman that when he puts his arm around her, he feels that he has something to fight for; she will help him to fight; she will put her lips to his ear and whisper words of counsel, her hand to his heart and impart inspiration. All through life, through storm and through sunshine, conflict and victory, through adverse and through favoring winds, man needs a woman's love.

THE POWER OF FASCINATION.—The power of fascination inherent in women may, moreover, be divided into two kinds. We all have seen the old lady, generally white-haired, with kindly, pleasant features, on which time has set no unfriendly mark, who still retains all her attractiveness. Note how the boys and girls adore her; they will go to her and confide their sorrows, their hopes, their ambitions, and when they would not breathe a word to their mothers. The kindly, loving interest evinced in a lad's affairs by such a one has time and again first implanted the impulses in the heart which eventually led him on to an honorable career. Quickly, almost by stealth, the good is done by such, and the good seed sown which will ripen in after time into a rich and abundant crop. On the other hand, we have most of us seen, perhaps in real life, certainly.

THE MOST BEAUTIFUL FOOT.—The most beautiful foot is the slender one. The stylish girl recognizes this fact. Her shoes are always large enough to avoid cramping the foot, and yet are snug and wonderfully neat and delicate. This is the reason why some girls can dance all night without rest, while others have to retire early from a brilliant ball, leaving their hearts behind—in case they do not dance and suffer so much with their feet as to preclude the possibility of real enjoyment. If a girl wears a proper shoe, when the foot is bare and she stands upon it in the privacy of her bedroom, it will be as pretty and delicate as a baby's. The instep would be high, the heel delicately formed, the skin as white as alabaster, with possibly blue veins showing through. The general form of the foot will be slender, the toes tapering, parallel and separated by about the thickness of a sheet of paper and adorned with pink-tinted nails. A girl who has such feet as these—and there are many who have them—well may take pride and pleasure in contemplating them.

MOTHERS AND THE NURSERY.

[CONDUCTED BY MRS. F. C. PRESSLER.]

MISTAKES IN DRESSING SCHOOL GIRLS.—When I see, remarks an observer, young girls on their way to school, I in my coupe looking out quite dry and comfortable on the poor dragging things; when I see the long silken waterproofs wet and muddy nearly up to their knees, and the clinging drip of their cloth skirts about their ankles, I will say that if I had a daughter, instead of only boys, I would put her into clothes on a rainy day that would be two inches above her ankles. I wouldn't send that girl to school to sit in damp skirts and absolutely filthy stockings, wet above her boot-tops, carrying quantities of the city mud over the schoolhouse. Why should the schoolboy have such immense advantage over the schoolgirl in his clothes for rainy weather? Fancy "our boys," indeed, in wet, dragging skirts and tightly laced waists, doing their lessons for a professor. When will women learn for themselves and their daughters some common sense? I suppose when the doctors get sufficient courage to advise or to order that for the usual "walks in life," to say nothing of its races and struggles for a livelihood, women ought to be dressed for comfort and strength and preservation from common ills.

DANGER TO CHILDREN IN OVER-HEATED ROOMS.—The serious consequences which often follow from living in over-heated rooms, especially to young children, is pointed out as follows in a little book called "Health of Our Children": In the management of young children, of the greatest importance is a proper regulation of the temperature of the rooms occupied by them. There is no disputing the fact that, as a rule, they are kept much too warm, and serious consequences invariably result if this fault is persisted in. Nothing, says Eberle, tends more directly to enfeeble and relax the human body, and to predispose it to the injurious influence of cold and atmospheric vicissitudes, than habitual confinement in heated rooms. Stuve, like all other writers, emphasizes this danger. Warm rooms, he says, principally contribute to the extraordinary mortality of children who are carried off by convulsions in the first months of their lives. As they daily become weaker from the constant action of heat, every draught of air occasioned by opening the windows and doors is dangerous to their organs. It is an established fact that, in the proportion as we habituate ourselves to warm dress and heated apartments, so do

we render the body more liable to be injured by exposing it to the influence of fresh and cold air. Mothers of children who are peculiarly susceptible to cold, and are constantly suffering from coughs and catarrhal affections, should understand that the remedy is with them. By far too often they fail to appreciate this fact, and dose the little ones with medicines, when all that is needed is the application of a little common sense. Let them provide for their children sufficient pure air, and accustom them while in the house to a temperature between 66 and 70 degrees, never higher than the latter in the winter, and they will no longer have reason to complain that the little ones are "constantly catching cold." Confinement in over-heated rooms has a destructive influence at all periods of life; it is even greater during childhood, and the danger from it is intensified in the teething period. At that time there is naturally an increased flow of blood to the brain, and infants, as all know, are then more irritable, and are especially liable to be attacked with inflammatory affections. The brain, so delicate and susceptible to injury during childhood, is, while an infant is cutting its teeth, peculiarly liable to disease; hence the need of even greater caution in its management, and a careful protection from excessive heat, which certainly conduces to congestion of that very vital organ.

A MOTHER'S EYES.—Mrs. Plunkett, the superintendent of the House of Mercy, a hospital on the English cottage plan, in fashionable Pittsfield, Mass., has given an example of a mother's devotion too complete to pass unnoticed. Her son, a promising young man, just ready to enter a medical school, was stricken with a disease which left him blind. He was unwilling to resign himself to idleness, and his mother went into the class room with him, making herself his eyes. The text books on anatomy, physiology, chemistry, and materia medica she went through with him, reading each day's portion over four times aloud, to be sure it was thoroughly comprehended. The young doctor graduated with honors, and will devote himself to heart and lung diseases, specialties in which sight has comparatively little play. Mrs. Plunkett is a serene faced woman of 60, who is an intimate friend of Miss Dawes, the daughter of the Senator.

OBSTINATE CHILDREN.—A friend once told me how, when a child, she was one day kept without food, and sent to bed hungry and exhausted, for not reciting some lines by heart, the punishment being inflicted on the supposition that she was wilfully obstinate. She said that she does

not now think herself to have been naturally obstinate, speaking generally; and, in this particular instance, she added: "But what no one knew then, and what I know as the fact, was that after refusing to do what was required, and bearing anger and threats in consequence, I lost the power to do it. I became stone. The will was petrified, and I absolutely could not comply." She expressed the conviction that the obstinacy was not in the mind, but on the nerves, and that what we call obstinacy in children, and in grown people, too, is often something of this kind, and that it may be increased by mismanagement or persistence, or what is called firmness in the controlling power, into disease or something near to it.—*Dorothea in Ladies' Home Journal.*

DON'T BOX A CHILD'S EARS.—The world has learned a great deal of physiology of later years, and that is why no sensible parent will box a child's ear. The human ear is a wonderful piece of mechanism, and so sensitive and delicate that it is almost as dangerous to strike the brain as the ear. No father or mother would think of hitting a child in the eye, and yet it would be a safer experiment. But few people thoroughly realize what a delicate structure the human ear really is. That which we ordinarily designate so is, after all, only the mere outer porch of a series of winding passages which, like the lobbies of a great building, lead from the world without to the world within. Certain of these passages are full of liquid and their membranes are stretched like parchment curtains across the corridor at different places, and can be thrown into vibration or made to tremble like the head of a drum or the surface of a tambourine does when struck with a stick or with the fingers. Between two of these parchment-like curtains a chain of very small bones extends, which serves to tighten or relax these membranes and to communicate vibrations to them. In the innermost place of all a row of white threads, called nerves, stretch like the strings of a piano from the last point to which the tremblings or thrillings reach and pass inward to the brain.

THE PARADISE OF BABIES.—Whatever Japan may be to the adults, it is certain that to the children it is the "country between Heaven and earth." Alcock first called it the paradise of babies. The coppery little shaven-heads seem at once dolls and live children. Petted, fondled and indulged as they are, obedience is yet the first law, and etiquette is constantly taught them. Probably no other country in Asia is so full of toys, toy-shops and people who make a living by amusing the youngsters.

A CURIOUS THEORY.—The following novel statements in regard to pulmonary consumption are attributed to Dr. P. H. Kretzschmar, of Brooklyn. First, if there are many children in a family, those born after the sixth or after the seventh are apt to develop pulmonary consumption; second, if the children in a large family are born at short intervals, say one year, the younger ones are apt to develop pulmonary consumption; third, if the offspring of healthy parents, born under conditions named above, escape the disease, their children are apt to develop pulmonary consumption.

HEALTH INVENTIONS AND APPLIANCES.

THE SANITARY LAMP, A VALUABLE INVENTION.

As is well known, the HERALD OF HEALTH is keenly alive to the progress of Hygienic and Sanitary inventions—noticing as their merits deserve the latest useful novelties in health appliances, but never endorsing claims set forth in their behalf until after careful and impartial experiments. Such experiments have been made with a sanitary lamp, the invention of Mr. H. Alber, of Corning, New York, and the result fully maintains the claims made by the inventor. The lamp is simplicity itself, and can be safely handled by the most inexperienced person. The reservoir is filled with pure alcohol and the wick rejusted. Upon the top, sustained by three uprights, is a platinum cone. Within a minute after the match is applied to the wick the platinum cone glows intensely. An extinguisher is applied to the flame, and then instantly renewed but the cone continues glowing, purifying the air thoroughly from all disagreeable odors, smoke or gases. It is not necessary to operate the lamp in a room of ordinary size longer than about five minutes, after which time the air will be found thoroughly purified. From experiments made by other parties it seems certain that no odor nor gaseous substance can withstand the power of the lamp. As a foetid has been sprinkled on a paper in a room, so that nobody could stand it, and the lamp had purified the air *perfectly* in seven minutes. The lamp will condense and neutralize as much smoke as two persons are able to produce by smoking tobacco. Stale tobacco odor, which had settled down in a room and pervaded everything, disappeared after the lamp had been used a few times. The platinum cones will last at least one year. The lamp was kept in use for 4½ hours in

order to see how much alcohol it would evaporate, and it was found by actual weight that only two ounces was consumed, which makes each appliance of the lamp (it is never needed for more than 5-8 minutes) very cheap, only about 1-6-1-3 of one cent. The effect of the lamp is based on the property of porous bodies, like charcoal to condensed gases on their surfaces this process being combined in the lamp with the oxidizing effect of the alcohol upon the gases.

Professor P. M. Wise, of the Willard Asylum for the Insane, has also experimented with Mr. Alber's lamp and says: "It is a perfect deodorizer, and seems to have the property of neutralizing any quality or degree of odor, when it is confined so that the gaseous products can reach it. Its convenience, cleanliness and cheapness would seem to commend it particularly for the sick room and hospital ward." Other scientists speak in similar terms of its merits. The lamp has not been put upon the market yet, but we hope that Mr. Alber will soon find time to give the medical profession, hospitals, nurses, and the public generally, the benefit of his valuable invention.

PUBLISHER'S DEPARTMENT.

STILL ANOTHER VALUABLE PREMIUM.—We call special attention to the announcement in this month of another valuable premium for new subscribers to the *HERALD OF HEALTH*. For One Dollar and Sixty Cents we will send the magazine for One Year, from January to December, and in addition a complete set, in five volumes, of the "Leather Stocking" series of Cooper's famous novels. These books are printed in large type from new plates, bound in paper, and are a marvel of cheapness even in these days of cheap literature. Sixty cents is no price for them, and we make no profit on the list, but offer them merely as an inducement for new subscribers. They are sent postage free. We are desirous that our old subscribers should also share the benefit of this liberal offer, and we will mail the books to them for sixty cents, the same price, provided they will show them to their friends and thus enable us to obtain additions to our subscription list. The *HERALD OF HEALTH* needs no premiums to keep up, or increase, its already large list of readers, but having an opportunity to procure these books from the publishers, at the price named, we are willing to offer them to our friends without profit. The Dickens and Scott

books will also be offered for a short time longer. See announcement elsewhere.

SOME ENCOURAGING WORDS.—C. E. Mentser, of Leitersburg, Md., writes to the publishers: "The December number of last year, 1889, *alone*, contains information, worth to me, as much as the subscription price for the whole year." Another valued subscriber in New York City says: "The HERALD OF HEALTH is the most practical and sensible publication of the kind that I know of, and I would not be without it for any consideration. I wish you forty years more of prosperity."

AMONG OUR VALUED FRIENDS is Elder Evans, at the head of the Shaker Community at Mt. Lebanon. A writer in the *Albany Press* says that the venerable Elder is a few years older than Mr. Gladstone, and he believes that rational care of the health pays. If I remember correctly he has been a rigid vegetarian for nearly or quite fifty years. Some friends who were visiting him recently found him high up on a ladder trimming apple trees. This he has done every year for many years. He does much work, both physical and mental, every day, and does not know what it is to lose a day from ill health.

QUESTIONS AND ANSWERS.

IN REPLY TO A CORRESPONDENT'S REQUEST for Dr. Richardson's "Rules for Old Age," we republish them as follows, although we don't endorse all of them: When old age has really commenced, its march toward final decay is best delayed by attention to those rules of conservation by which life is sustained with the least friction and the least waste. The prime rules for this purpose are: To subsist on light but nutritious diet, with milk as the standard food, but varied according to season. To take food, in moderate quantity, four times in the day, including a light meal before going to bed. To clothe warmly but lightly, so that the body may, in all seasons, maintain its equal temperature. To keep the body in fair exercise, and the mind active and cheerful. To maintain an interest in what is going on in the world, and to take part in reasonable labors and pleasures, as though old age were not present. To take plenty of sleep during sleeping hours. To spend nine hours in bed at the least, and to take care during cold weather that the temperature of the bedroom is maintained at 60° Fah. To avoid passion, excitement and luxury.

REMOVAL OF MOLES.—*H. W. F., Syracuse, N. Y.*—In a recent number of the *Practitioner*, Dr. Jamison writes on the use of sodium ethylate in removing hairy moles on the face. He operated in this way. The hairs were cut off as closely as possible with a very fine pair of scissors, and the mole was then painted over with sodium ethylate, a fine glass rod being used. When the mole had a varnished look the ethylate was gently rubbed in with the glass rod, to make it penetrate more deeply into the hair follicles. The mole had quite a black look when the operation was over. A hard crust formed over it, which was nearly three weeks in becoming detached. When it came off the hairs were seen to be destroyed, and the surface of the mole had a smooth, somewhat cicatricial appearance, of a much lighter color than before; and this favorable condition continued until the mark was scarcely noticeable.

HYPNOTISM.—*Inquirer, Philadelphia.*—Hypnotism literally means a condition resembling sleep, artificially produced; that is, not by drugs, but by the magnetic (?) effect of one mind upon another. That condition of mind, however, to which you doubtless refer as "hypnotism" is a different condition entirely. It is not connected with sleep at all, but could be defined to be that condition of mind in one person (called the subject) set up by the attractive or impulsive power of one or more minds, and in which the subject, by the power of "suggestion," is made to obey the behests or commands of his operator or operators. This power can be exerted at a distance, and the operator need not be known to the subject. The operator is not legally responsible for the acts of his subject, not being personally concerned.

HOT WATER AND DYSPEPSIA.—*Dyspeptic's* question is best answered by the following from Dr. S. Baruch, in the *Times and Register*: "Another hyriatic method, which acts by removing the cause of disturbance, is the sipping of hot-water an hour before meals, in dyspepsia. The hot-water craze, which now has taken a firm hold upon the lay public, is but the legitimate outcome of a valuable therapeutic application of water, whose simplicity commends it at once to the judgment of the intelligent physician. Brought into prominence by Dr. Salisbury, who committed the error of most enthusiasts, of regarding it as a penacea for most diseases, it has now been adopted by the profession as a most valuable agent in many gastric troubles. By removing the products of fermentation, by cleansing the mucous membrane of mucus, it restores tone

and vigor to the gastric lining, and enables the natural forces to come into play. It is important to observe strict compliance with the rule laid down by the originator, viz. : that the water should be sipped as hot as possible, and that an hour should elapse before a meal is taken. Examples of failures due to neglect of this rule are numerous in the experience of all medical men.

How LONG TO SLEEP.—*Anxious Mother.*—The following is from good authority : Up to the fifteenth year most young people require ten hours, and until the 20th year nine hours. After that age every one finds out how much he or she requires, though, as a general rule, at least six to eight hours is necessary. Eight hours' sleep will prevent more nervous derangements in women than any medicine can cure. During growth there must be ample sleep if the brain is to develop to its full extent, and the more nervous, excitable or precocious a child is the longer sleep it should get, if its intellectual progress is not to come to a premature standstill or its life cut short at an early age.

To CORRESPONDENTS.—As we go to press unusually early with this issue answers to several questions are unavoidably deferred until next month.

THE HERALD OF HEALTH.

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No. 3.

VEGETARIANISM IN PRACTICE.

(FROM A LECTURE BY JOSEPH KNIGHT, SECRETARY OF THE VEGETARIAN SOCIETY, MANCHESTER, ENGLAND.)

Owing largely to the utterances of Vegetarians, many erroneous ideas have gone forth, such as that Vegetarians are not allowed to use alcoholic drinks, or to take tea and coffee, or to smoke; that they must not eat sugar, or must renounce salt; that strict Vegetarians never take milk and eggs; that Vegetarianism is a religion, or, at least, is a part of some peculiar shade of theological or religious belief. Individual Vegetarians may do all these things, or may hold peculiar views, but because they do so it does not follow that these things are a necessary part and parcel of Vegetarianism itself. Vegetarianism is a most simple thing, and I suppose it is because of its great simplicity that there exist so many misunderstandings about it. It is not an ideal in food and drink; it is an actuality which has proved widely beneficial; it is a reality, something which can be practised—not something which can only be looked at with desire from a distance; but Vegetarianism is a system or diet which leaves its adherents absolutely free, with one exception, to choose from all the entire range of food products which the world offers. The exception is that section of foods which are

OBTAINABLE ONLY BY LOSS OF LIFE.

I call to mind one Saturday afternoon when, in the reading-room at the Crystal Palace, a pamphlet was brought under my notice, the HERALD OF HEALTH, with a few words about Vegetarianism. This little pamphlet

contains four portraits of eminent Vegetarians. The few words, and they were very brief, of biographical sketch of those men at once impressed upon the minds of my wife and myself that there was something in Vegetarianism worth looking into. We did not decide to adopt it out and out. It was Saturday, and

THE SUNDAY'S JOINT WAS IN,

which may have had some influence in preventing our instantaneous conversion to Vegetarian principles. No decision to accept those principles was made at that moment, but on the Monday following my good wife went to town and bought a number of books upon the subject, and we commenced studying the question at once. We were not authorities upon Vegetarianism, in fact, were ignorant in the matter; and probably the best thing we could do was, instead of plunging headlong into something we knew nothing about, just to look into it first. These books explained somewhat more about Vegetarianism, and in a few days, instead of simply thinking that Vegetarianism was worth looking into, we decided that it was worth trying, so that by the middle of the week we were prepared to try it. More books, a wheatmill, a supply of wheat, the preparation of our own meal, the baking of our own bread, the purchase of a water filter, the abandonment of tea and coffee, and various other things of a similar character, very speedily followed, with the result that so far as expense was concerned there was a saving—at least on my side—for I had previously a very large appetite. But with regard to our appetites, the result was that mine came down, and my wife's, which had formerly been unduly small, went up, both becoming of a more normal character, so that while some saving was effected for the pocket, considerable benefit to health was realized at the same time.

Vegetarianism being taken up, studied, examined carefully, and put into practice judiciously, brought about those very desirable results. We have been going on with this trial for over twelve years. We did not at first entirely abandon the use of fish; probably using it some three or four times a year for a few years. I state this for the sake of correctness, not as recommending the procedure. But after the first few years that went the way of the flesh, and since then we have been *strict* vegetarians. I lay accent on this word "strict," because it has been sometimes said, "You are not a strict Vegetarian, you take milk and eggs." Nevertheless, I call myself a *strict* Vegetarian. I had perhaps better say more fully what a Vegetarian is.

A VEGETARIAN IS ONE

who, for any reason, abstains from the flesh of animals—fish, flesh and fowl—and the products of such flesh. In these products are included gravy, dripping, lard, suet, animal and fish oils, etc., which are procured by the destruction of the animals. But such food products as are yielded without the loss or destruction of life, such as milk, eggs and honey; the entire range of food products of the vegetable kingdom, and any food products found in the mineral kingdom, the Vegetarian may use at his or her discretion. That, I think, about as accurately describes a Vegetarian as can possibly be done in few words. So that if I take milk and eggs I am a strict Vegetarian, and those who follow that practice have every right to call themselves strict Vegetarians. We have, as I have said, gone on for some years with this strict Vegetarian practice. It has not made Samsons of us; it has not entirely done away with every sort of ailment, but it has done a few things in that direction. Our average health—which was of an indifferent character—has been better. Of course the change did not take place at once, but our health has gradually, and I hope, permanently improved. Money has been saved, or, less having been expended on food, there has been more to expend in other ways. Joseph Brotherton's words, "My riches consist not in the extent of my possessions, but in the fewness of my wants." are worth remembering; and herein have been whatever riches my wife and myself have possessed. It is not that we have been rich, but our wants have been few. Though not "passing rich on forty pounds a year," we have been happy on a small income, and anyone may be rich who adopts the same practice and has but few wants.

WHEN DISCUSSING THE TAKING UP

of the Vegetarian practice there are many conditions to be considered under which it may be adopted, seeing it may be entered upon for various reasons, under the promptings of unselfish or of what may be called selfish motives. It is important, for instance, to consider whether it is quite safe to make the change. I have not the slightest doubt that it is so in almost all cases. Indeed, with very few exceptions, under a condition of fairly good health, the change would be, I believe not only perfectly safe, but decidedly beneficial, provided it is carried out with due caution and with careful judgment. To the invalid a different dietary from that used by those in robust health will probably be useful. A man who has to work exceedingly hard in muscular employment can do with a far larger relative quantity of the pulse foods—containing, as they do, a large propor-

tion of nitrogenous substance—than would be suitable for those who are engaged in sedentary occupations. A blacksmith or a puddler can eat, perhaps, two or three times more of the pulse foods with advantage than one who is confined to the desk all day. By those who have much hard mental work the pulse foods should only be taken, as a rule, sparingly. Those who have plenty of out door work may take more, but even by these too frequently the mistake is made of taking more than is necessary.

WHEN FLESH FOOD IS ABANDONED

mistakes are often made in two diverse directions—the first by those who, in commencing the Vegetarian practice, take a much larger quantity of other foods; and the second, by flesh food being given up with nothing whatever to take its place. Either of these practices will naturally produce evil results. The appetite is rather a peculiar thing to deal with, and should never be “coaxed” to go beyond that which it is possible for the digestive apparatus to use. The natural appetite is a very good guide, and when it manifests a dislike for food it is generally an indication that something is amiss with the body, and that the nervous force is required to perform other work than the digestion of food. Those who have abnormally large appetites will need sometimes to exercise their will-power in order to guard against over-eating. If more food is taken than can be digested, the system will be severely taxed, and ill results are likely to follow. For health the diet should not consist of rich and complicated dishes, and too great a variety at a single meal should also be avoided. The meals can be varied from day to day and one may obtain numberless combinations, but the combinations should not be too numerous or complex, especially for the delicate and for invalids. In providing for such persons, for breakfast, a little wheatmeal porridge would generally be found more attractive and far more useful than the usual plate of oatmeal porridge—a large plate of oatmeal porridge might act in a somewhat repellant manner. The wheatmeal porridge nicely and daintily served, will frequently act as the best aid to the appetite. In such cases wheatmeal will be found altogether better than oatmeal, which has some properties that are less suitable for the weakly. With the porridge add a little brown bread.

Here, in speaking of porridges, I may say that it is advisable that they should always be taken with something of a hard nature to bite. Porridges are apt to slip through the mouth without any mastication and

without being mixed with the saliva, and when this is the case with starchy foods their value is very largely lost. In addition to the loss of their food value, they prove a tax upon the powers of the digestive apparatus. All food needs to be thoroughly masticated if we are to get the full nourishment out of it, and it should be our aim to get the best value we can out of everything we eat. In addition to a little wheatmeal porridge and brown bread, a little stewed fruit might be taken. If the will is sufficiently strong one may do without tea or coffee, and so much the better for the body. I said a little while ago that in our own practice we abandoned the use of tea and coffee. Since that time we have tried many kinds of experiments. We once lived for a good period on two meals a day; we have tried doing without various things, and have made sundry experiments in taking tea and coffee as well as doing without. When I spoke of having abandoned the use of tea and coffee, I meant for a time, and not as a permanent step.

COMING TO DINNER

it must be remembered that for the invalid the food should be small in quantity, and as daintily served as possible. For dinner we need not depend too much upon soups, but rather try such foods as will give the teeth something to do. All the pulse foods can be cooked in various ways, and when nicely cooked are excellent. After stewing they may be baked sufficiently firm to cut, and will form useful portable dishes. For travelers, picnic parties, or those who have to work away from home and who carry their dinners with them, such dishes as these will be found of great service. Macaroni cheese can be prepared in the same way, and is far better and less costly than beef or mutton. Such dinners as these, simply prepared, and alternated with various other Vegetarian preparations, act beneficially upon a small appetite, care being taken that quantity and frequency of the pulse foods are not too great. Varied by farinaceous puddings, and with a little stewed fruit or raw ripe fruit, excellent dinners may be had.

THEN FOR TEA OR SUPPER

a little brown bread and fruit, or a simple pudding, will probably be the best that can be had. I would particularly recommend that the number of meals be confined to three in the day, and that no meal be taken within three hours of retiring. The digestive organs will then have time to rest.

Although these suggestions are in the main applicable to those who are

not in the enjoyment of robust health, an extension in respect to quantity and greater freedom as regards variety will make them of service to the healthiest and strongest. In the case of children the more simple the dietary the better for them. I need hardly say that milk is a most valuable food for children. For the weakly a glass of warm milk or warm milk and water will often be found the most useful substitute for tea or coffee. There are many ways of preparing food which will commend themselves to the thoughtful housewife, and many other things call for consideration in regard to Vegetarian practice. Besides this, there are outside of Vegetarianism, many things to be considered if health is to be maintained. It will not do to imagine if we abandon flesh that this one action of our lives is going to counteract the injurious results of our habits of life. It will do its share, but no more.

IF WE PERSIST IN BREATHING BAD AIR

we must suffer the consequences of that persistence; if we continue drinking impure water—whether in the shape of alcoholic liquors or in any other form—we must of course suffer the natural consequences of those habits; still, if we take up the Vegetarian practice and will carry it out wisely and judiciously, we shall reap very great benefit from it, especially if at the same time we pay attention to the other conditions of health. The moral aspects of the Vegetarian practice I need hardly touch upon. They are of very great importance, and probably one of the most important is its influence upon the use of alcoholic drinks. The abandonment of animal flesh, the substitution of fresh, ripe, juicy fruits, will do much, I believe, to prevent and cure the drink crave. If we can induce those who are the victims of the drink traffic to take up the Vegetarian practice, and carry it out wisely, then we may help them very effectively towards breaking for themselves the fetters with which they are bound. If we want to do this, we shall be greatly helped by getting some practical experience, that we may know how to help our brothers and sisters who are needing such aid. I do want all our temperance friends to consider this question, believing, as I do, that the practice of Vegetarianism is one of the greatest aids to the progress of temperance reform.

NOTES CONCERNING HEALTH.

(BY M. L. HOLBROOK).

WEAK LUNGS.

One of our valued subscribers, whom we will call Mr. Denn, asks for advice concerning the best way to live for one who has weak lungs and is threatened with consumption. There is always difficulty in giving counsel in such cases because we cannot know exactly the condition of the patient without seeing him. Rules which may be applicable to one person may not be applicable to another, may even do harm. All I can do will be to give general directions. If the lungs are only weak and not specially diseased, very much may be done.

FOOD.

The first point to be considered is the food. Usually nutrition is defective in such cases. If it is possible to use new milk freely with perhaps a little cream, together with good bread and such other articles as are easily digested and assimilated, avoiding everything that taxes unduly the organs of digestion, there is much to be hoped for. Of course it must be from a perfectly healthy cow. Sometimes perfectly fresh milk agrees with the stomach when stale milk does not. It is always better to use some bread with milk so that it will not all curdle in one mass, but be broken up and made accessible to the gastric juice. Sometimes it is very beneficial for the patient to take a glass of water just as hot as it can be borne half an hour or so before each meal. There are many advantages in that which cannot be mentioned here. Sip the water with a teaspoon slowly; half an hour may be consumed in swallowing a pint of it. If the cough is laryngeal or bronchial this hot water drinking will be of great service. It would take a long paper to give in detail all that could be said on the subject of food, but as other information is found mainly in books it is not necessary to give it here.

AIR.

Air is a food as well as milk and bread. The person with weak lungs gets too little of it and much of their apparent starvation is for want of air. Such persons may practice deep breathing to an unlimited extent. An hour devoted to deep breathing every morning before breakfast is none too much. Let the patient lie on a comfortable bed or lounge and inflate the lungs slowly to their fullest extent. If they can have a lounge in a

veranda out of doors well protected from wind and storm and be well clothed and covered with woollen blankets and take this gentle exercise so much the better. Indeed this is one of the modern hygienic methods of treating consumption. The patients are kept in beds out of doors well protected from drafts, wind and rain, from 8 to 12 hours daily, Summer and Winter. A dry and sunny exposure is necessary. Some of the institutions in the mountain regions of Switzerland report 25 per cent. of cures even in advanced cases. The object of keeping the patients in bed is to keep up an equal warmth and circulation and to husband the strength. The feet and legs do not get cold by this treatment, a point of great importance.

EXERCISE.

As to exercise, it should never be carried to extremes, nor exhaust the patient. Sometimes horseback exercise is very beneficial. Several hours in the saddle daily have helped to cure more than one patient. In other cases rowing has helped to develop the lungs and increase their power. I have several such cases in mind as I write. Gymnastic training has also been useful. I remember in Dr. Lewis's school for physical culture several persons with weak lungs took a six months' course of the exercises and were greatly benefited. The same occurs now in Dr. Anderson's institute for physical culture. Of course these cures are not those of consumption, but of weak lungs with a tendency to it. The club exercises are especially suitable.

THE SKIN.

In persons with weak lungs the skin is generally weak and such persons do not bear cold bathing. An excellent substitute is dry rubbing with a flesh brush morning and evening. See the article on this subject in the May number of the *HERALD OF HEALTH* for 1889, I think. This rubbing has two benefits, one is to prevent taking cold, which is the bane of all persons with weak lungs and insipient consumption. Another benefit is in making the skin tough and more capable of performing its functions. The lungs too are relieved of a portion of their work.

OVERDOING.

Always keep within the strength, that is, never overdo. Never assume burdens and cares that will prevent any good to come by the method advised. The strength should be husbanded, not wasted; abundant sleep should be taken and the mind should not be worried by anything. It is

useless to try and get any benefits by hygienic methods when these benefits are all neutralized by unhygienic ones.

CLIMATE.

I ought to say a word about climate. In looking over the census map for 1880 I find but few places where the death rate from consumption is almost nothing. One of these places is Florida, but there are some objections to this climate from the amount of malaria in summer. A more favorable climate is that of the Cumberland mountains in Tennessee. Here there is practically no consumption. Both the government map and the reports of the State Board of Health for Tennessee show this to be a fact. I would suggest that those who wish to change their climate on account of weak lungs bear this in mind. I know well that the social drawbacks here are great, but they will not be so long. Northern capital and enterprise will soon change all that. The Tennessee Land Company just organized have purchased a quarter of a million of acres of this region and will in a few years have settled it with northern men and women who will make society here as good as in most places north, perhaps better.

I also find in the government map a region in the Adirondacks of New York free from consumption. For a short space of each year this region is very pleasant and the air bracing and healthful. In the winter it is rather cold and as yet sanitariums are wanting. It would require a volume to say all that can be said on this subject. Such a volume I hope to prepare at an early day.

THE SUN BATHS.

Last month I mentioned in connection with a paragraph on light in the sick room, Dr. Babbitt's sun baths. The printer or I spelled it Babit. This incident brings a letter from the doctor, which I think worth printing. He says:—

DEAR DR. HOLBROOK:

Mr. H. S. Haynes, of Colorado Springs, has been an invalid for fifteen years, and has been trying different sanitariums in Europe and America to get well, without much success. Having lately tried the solar sweat bath in an instrument called the thermolume, a remarkable work has commenced in his system. The forces seem to have been brought into action from circumference to center, and such a mass of impurities is being ejected as to cover his body with a rash and in some places with blisters.

I told him that the original sin was being driven out in companies and platoons. To show the great chemical power of sunlight on the bare body, I will quote a little from his letter:

“I find no trouble in getting up a profuse sweat in ten to twenty minutes. I took a thermometer into the thermolome with me when the sweat was running off in streams. It was up to only 80 degrees and I never sweat half so much in a Turkish bath at 150 degrees. The solar sweating was done in less than half the time also, and much more pleasantly. I do not have the spasmodic attacks of neuralgia half as often as before.” Respectfully,

E. D. BABBITT, M. D.

HEALTH AND SUCCESS.

Russell Sage has been giving some advice to young men as to how to get rich. As one of the factors he mentions health. He says:

“A man should make it a point to save. What percentage of his salary or income he should put aside it is difficult to say. That should be governed by circumstances. Men’s surroundings are different, and a rule that one could follow another could not. Judgment must be exercised in saving as well as in spending. It is safe to advise a young man to save all he can, and he will find that the saving of his first hundred dollars will teach him to save the second, and so on, until he has laid the foundation for a fortune that may by good management be made a large one. A man’s health has much to do with his success in life, and it behooves him to look well after his bodily condition. Ill health will deprive him of energy, which he must use to achieve success. The young man must work on a salary until he is able to comprehend the value of money, and also the source of supply and the ease with which it may be dissipated. He must read books and newspapers to keep posted on the topics of the day and the course of human events. It would be well for him to attend debating societies to qualify himself to stand on his two feet and express himself in an intelligent manner. Learning acquired by a young man in his own room after his labors of the day are over is hard gained and for that reason more lasting than the education acquired in the great institutions of culture. The young man taught in a fashionable college is a house plant, while the young man who cultivates himself is an outdoor growth and better able to stand a severe drought or a severe storm, which all are subject to in the variations of life.”

THE TEETH

Shirley Dare, in a letter concerning the health of English women, has a word to say about their care of the teeth:

"Each month the dentists called and examined the teeth of every one of the family, filing an edge here or touching the enamel there with a preparation which kept off decay and left no need of gold filling. Wasn't it funny, by the way, about Professor Youmans, of the *Popular Science Monthly*, who sent for his dentist the month before his death and insisted on having his teeth all attended to and new ones put in? Everybody knew he couldn't live, and the dentist told him he was having a good deal of pain and trouble for nothing. But the Professor intimated pretty strongly it was his own business, and if he was willing to pay \$100 for having good teeth to be laid out in the dentist needn't complain. Do you know how many people are poisoned by decaying teeth? They suffer with dyspepsia and bad complexions from nothing else than the constant drainage of bad matter from an imperfect tooth or two. Our complexions depend upon our stomachs and internal economy, and this a thoroughbred English mother fully understands, or her governesses and doctors know it for her. We smile at the idea of eating five times a day, as the English do, but if we were out of doors in all weather, as they are for their tremendous walks or rides, we could eat too, and eat less after all than a middle class American family at three meals.

"NON-SECRET NOSTRUMS" AND OTHER DEADLY IMPOSITIONS.

THE relentless war waged by the HERALD OF HEALTH upon quack doctors and "cure-all" nostrums has borne good fruit in many sections of the country. At the last meeting of the "American Association for the Study and Cure of Inebriety," N. Roe Bradner, M. D., of Philadelphia, chairman of the committee on "nostrums, proprietary medicines and new drugs," made a most interesting report, prefaced with the following letter from Dr. E. A. Craighill, president of the Virginia State Pharmaceutical Association:

"In my experience I have known of men filling drunkards' graves *who learned to drink* taking some advertised bitters as legitimate medicine. The soothing syrup for children, and the cough syrup for everybody, all contain opium in some form. It would be hard to estimate the number

of young brains ruined if not destroyed, and the maturer opium wrecks from nostrums of this nature. I could, if I had time, write a volume on the mischief that is being done every day, to body, mind and soul, all over the land, by the thousands of miserable frauds that are being poured down the throats of not only ignorant people, but alas, intelligent ones too. All of these medicines known as 'patent medicines' are prepared by uncultured people, with no medical education. But there is a certain other class of so-called remedies, prepared by a more intelligent set, sometimes by physicians and pharmacists, that do a great deal more harm. I allude to the 'non-secret proprietaries' that claim to publish their formulas *but do not*. One in particular has made thousands and likely tens of thousands of *chloral drunkards*, dethroned the reason of as many more, besides having killed outright very many. It is impossible for any one to estimate the mischief that is being done by such remedies, and the physicians who recommend them. It is impossible for any one not in a business such as I am to form an idea of the amount of misery and mischief that is being done by these same so-called 'non-secret remedies.' If I can serve you, and you will say how, I will be glad for you to command me. I would like to contribute my best effort, though feeble, to destroy what I honestly believe to be one of the curses of our day and generation. Yours truly and respectfully,

E. A. CRAIGHILL."

The report continues: Dr. S. W. Abbott has furnished us with the astonishing result of Dr. B. F. Davenport's chemical examination, proving beyond the possibility of doubt that nineteen out of twenty of the nostrums most commonly sold as opium cures were composed in part of opium itself, constituting unmistakable evidence of a monstrous fraud as well as dangerous evil.

Very many who could not be induced to taste whisky, can be easily deceived into doing the same thing if, peradventure, the bait is called "tonic," "bitters," or even elixir or ginger. It is true that such people must be easy of seduction, indeed, they would seem purposely blind, when they accept it more readily because it is of vegetable extraction. Those of the better class, at least those better educated, most often become victims of these treacherous compounds; those indeed who know that all alcohol as well as narcotic drugs used by inebriates are of "purely vegetable origin."

Alcohol and opium have, as a matter of course, produced the most of

inebriety; together, they compose the arch enemy to mental equilibrium, and have received as they deserved the greater part of our attention. But, gentlemen, the scope of this subject is too large to be even explored at first attempt. We must of necessity leave the subject unfinished, and as time presses we are nearly ready to do so, without having even named chloral, cocaine, chloroform or tobacco.

THE MISERABLE CIGARETTE

must not be overlooked. There is no question but that tobacco is a powerful irritant to the nervous system, not only fully able to produce intoxication, *per se*, but more dangerous probably by reason of the appetite if not necessity it creates for other stimulation. All this is too well known to be discussed here, and is merely referred to to make clear our present conclusion, which is, that in the suspected danger of the cigarette the real danger of tobacco has been overlooked. Cigarettes made of pure tobacco are certainly no more noxious than cigars or other forms of the weed. It has been assumed and widely published that cigarettes are made from an admixture of cigar stumps and opium, and if we should believe half of what we have heard and read about the dangers of cigarettes and the noxious drugs they are said to contain, we would certainly forget all about tobacco. We acknowledge that the use of these abortive cigars has produced alarming and fatal results, but think the theory of their being drugged or otherwise more noxious than other forms of tobacco, less tenable than that the cigarette is the only form in which it is used by children; and we are confident that any fatal or serious consequences that have befallen women or persons of tender years, through cigarette smoking, were simply due to tobacco. We cannot doubt that the use of the pipe or full grown cigar would have been more quickly followed by the same consequences. But, the small boy and the fast girl do not indulge in these articles, and the very reason that teaches them that they *can* smoke a cigarette, but not a cigar, should teach us that the former is less potent, notwithstanding it is but a smaller morsel of the same thing. We do not hear of men being killed or injured by the cigarette, and doubt if any confirmed smoker could consume enough nicotine to do him serious harm through cigarette smoking. It is not to us a reasonable argument, that the low price at which they are sold should compel the manufacturer to use poor tobacco, making up any deficiency of strength with opium. We learn that enough good tobacco to supply

America with cigarettes for a year can be bought in Maryland and Virginia for ten cents per pound.

OPIMUM COSTS FROM THREE TO FIVE DOLLARS

a pound, and when prepared for smoking requires also a pipe prepared to burn it. No, gentlemen, it is not the cigarette, but tobacco, that is poisoning our youth; the danger of the cigarette, *per se*, is that it presents tobacco in an attractive and tolerable form for persons of immature years. We deplore the existence of cigarettes containing *tobacco*; of soothing syrups and other concoctions containing *opium*; and of vegetable tonics containing *alcohol*; but words fail us in attempting to foretell the result of this awful traffic. Insanity, palsy, idiocy, all forms of physical, moral, and mental ruin, have followed the sale of these nostrums through and throughout our broad land. New remedies, elegant specimens of pharmaceutical science, are daily added to the above list, notwithstanding they are recommended by physicians and praised by medical journals.

SURELY THE TIME HAS COME

for some one to cry halt, and if any legitimate or other means of lessening, if not eradicating, the evil can be effected, now is the time for action. This association has made the initial step, and having taken the "bull by the horns," should never yield nor suffer the just cause it has espoused to be strangled by brute force, guided by the wisdom of the devil, whose emissaries and agents are charlatans and proprietary nostrums; altogether constituting a powerful antagonist, and rich of blood money—the price of numberless bodies, minds and souls.

No; right shall prevail, but if that monitor has slumbered he must be awakened, and in full armor, with all his might and strength, stretch forth a saving hand, and quickly, for the peril is imminent. Persons of every class are rapidly falling victims to habits worse than death, for death would put a period to their misery. They live, however, not only as a curse to themselves and contemporary friends, but to bring forth children tainted even to the third and fourth generation. Where, oh, where will it end! Already the largest proportion of our patients, whether inebriate or insane, may charge such an inheritance with aggravating their disease, perhaps as its primary cause.

ONE STIMULANT LEADS TO ANOTHER,

and it has been estimated that nine hundred and fifty out of one thousand men are consumers of tobacco. If they acquire the habit in early life,

especially before their physical and nervous systems are developed, their mental powers must become impaired by this powerful brain irritant; divergence to other and more powerful stimulants ensues; the usefulness of their lives is wrecked; and their posterity will positively suffer impairment of either or both physical and mental strength.

IT IS BEYOND THE PROVINCE

of this committee to suggest the remedy, and he who does will deserve a towering monument. Surely it will require local, State, and national legislation, but this can only be effected through individual activity. Who can dare to ignore the importance of the subject or fail to comprehend his own duty. Time and talent are needed. The field is large. We must work or perish, and one and all should start at the command that aroused Jonah from a less dangerous lethargy—“What meanest thou, O sleeper.”

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

EDITOR'S STUDY.

ONE HUNDRED AND SEVEN YEARS OLD.—Mrs. Lanchester, of Bildershaw, near Darlington, England, is well in her one hundred and seventh year, having been born at Gallow Hill, Yorkshire, on May 29, "Oak Apple Day," 1783. A healthy old lady she is, too. She no longer rises early, but she performs her own toilet, and, though a little deaf, can see without glasses, her "second sight" having come to her about eighteen years back. She also talks and walks well, and during the late harvest actually took part in the gleanings. Mrs. Lanchester, who is a widow of forty years' standing, has had several children. Her eldest surviving "child" is eighty years of age, and she has a great-grandson of twenty-five. She cannot "abide" doctors, and has only traveled by train three times in her life.

THE POISONOUS EFFECTS OF ALCOHOL.—Dahlstrom experimented for a period of eight months upon three dogs, and daily gave each of them six ounces of potato brandy. At the end of this time one died and two were killed. The undoubtedly poisonous effects of alcohol were shown all along these eight months of experimentation. Duchek made similar experiments upon dogs with like results. The many cases of chronic alcoholism seen by every physician afford indubitable proof of the poisonous effects of alcohol on the human organization, even when taken in moderate amounts, if long continued.

TESTS FOR UNDERWEAR.—A new method of testing woolen garments is by putting caustic soda into a cup of water, and dipping the article whose genuineness is doubted into the mixture, of course being careful not to touch the liquid. The caustic soda will quickly eat animal fibres, but has no effect upon those of vegetable origin. If the article is all wool it will be dissolved in the liquid, leaving nothing but a track of coloring matter. If the material is cotton it comes out unscathed. When the material is wool supported by a framework of cotton, the latter being indistinguishable to the eye or by ordinary test, the caustic soda quickly divorces the two, dissolves the wool and leaves the cotton as clean as if it had been woven by itself. It has been suggested that people might buy a set of underwear made of wool and cotton mixed, that when the sultry days of Spring arrive, a bath of caustic soda might be prepared, the garments dipped therein to emerge in the form of cotton gossamer for the summer season.

REPRODUCTION OF BACTERIA.—As regards the reproduction of the bacteria, many of them can double their numbers every hour when placed in the best conditions for their activity. In such circumstances, then, a single bacterium would, in twenty-four hours, produce no less than 16,777,220. At the end of forty-eight hours the offspring would amount to 281,500,000,000, and would fill a half-pint measure—all produced in two days from a single germ measuring 1-15,000 of an inch. Fortunately, however, bacteria can rarely so propagate themselves; they meet with all sorts of drawbacks, and thus, in spite of their enormous fertility, the survivors are in a general way only enough to keep up a fair balance in nature. The diseases producing bacteria, however, have no claim upon our forbearance, and in these the enormous fecundity we cannot too closely contemplate. Some, like the bacteria of tuberculosis and glanders, propagate themselves slowly, but the great majority of the bacteria causing animal plagues will, in favorable cases, double their numbers hourly.

RESEMBLANCES IN MARRIED COUPLES.—It has long been accepted as a fact that married couples, who are not only exposed to the same conditions of life, but the influence of whose minds must necessarily react upon each other, assume a more or less facial resemblance to each other. The Photographic Society of Geneva, Switzerland, with a view to determine this question, have made photographs of seventy-eight young couples. The result is that in twenty-four cases the resemblance in the personal appearance of the husband and wife was greater than that of brother and sister; in thirty cases it was equally great, and in only twenty-four was there a total absence of resemblance.

THE PERILS OF DAMP AND COLD BEDS.—If trustworthy statistics could be had of the number of persons who die every year, or become permanently diseased, from sleeping in damp or cold beds, they would be astonishing and appalling. It is a peril that constantly besets traveling men, and if they are wise they will invariably insist on having their beds aired and dried, even at the risk of causing much trouble to their landlords. But the peril resides in the home, and the cold "spare room" has slain its thousands of hapless guests, and will go on with its slaughter till people learn wisdom. Not only the guests, but the family often suffer the penalty of sleeping in cold rooms, and chilling their bodies at a time when they need all their bodily heat, by getting between cold sheets. Even in warm summer weather a cold damp bed will get in its deadly

work. It is a needless peril, and the neglect to provide dry rooms and beds has in it the elements of murder and suicide.

VENTILATION OF SICK ROOMS.—To insist on the advantages to be derived by sick persons from breathing an air that is perfectly pure, and of which the supply is being systematically renewed, may seem at the first glance commonplace, a self-evident truth; and yet this truth, with all its simplicity, is constantly disregarded. Ignorance, seconded by inveterate prejudices, prevents, and will continue to prevent for many a long day still, this idea from entering into our daily habits. The result of this is that persons suffering from chronic complaints, and particularly consumptives, are placed in extremely unfavorable conditions, which may be the cause of a turn for the worse in the disease and of a darkening in the prognosis, which is already quite sufficiently disheartening as it is. A distinguished French surgeon, M. Nicaise, recently read a most interesting paper on this subject before the Academie de Medecine. After having tried it personally for several months, M. Nicaise has shown that there is no risk in spending the entire twenty-four hours in a room with the window constantly open, even in winter at the season when the outdoor temperature frequently falls below zero. All that is required is to take certain precautions, such as to keep the blinds closed while the window remains wide open; the object of this is to prevent a too rapid and extensive cooling of the air in the room, which might be caused by the radiation of the heat from within toward the exterior, and as regards which the blinds act as a protecting screen. Under these circumstances the ventilation is accomplished in an insensible and gradual way, by means of which the air of the room is systematically renewed without sudden changes of temperature or risk for the patient. In countries where the climate is more rigorous than on the shores of the Mediterranean, which is where M. Nicaise investigated the subject, this idea could still be put into effect, provided a fire be kept burning in the room to raise the temperature of the air as fast as it comes in by the window. With these precautions there is no danger to be feared for the patient, and the objection raised as to the risk of bronchitis or pneumonia falls to the ground, as experience has shown that this anxiety is entirely unfounded.

CHEESE AS FOOD.—Much difference of opinion has prevailed in regard to the value of cheese as food, but we are beginning to get at real facts with a better understanding of the relations of the digestive functions to food elements. Cheese has been lauded by many because of the great

amount of nutritive food elements it contains, and people have been urged indiscriminately to eat it freely, some enthusiasts making the most extravagant claims for it as a health diet. But many people who have sought to follow this counsel find themselves speedily the victims of indigestion and dyspepsia. They would consider it little short of treason to charge their disordered digestion to the cheese, but the truth is the cheese is the most probable cause in any such case. Although, so far as its constituents are concerned, cheese is fairly entitled to its fame as a model food, yet in raw cheese these constituents are very difficult of solution by the digestive juices—that is, raw cheese is indigestible to a degree that makes it unavailable as food except to the strongest and healthiest stomachs, and should not be eaten by anyone who finds on trial that it gives its stomach the least discomfort. It is found, however, that cooking the cheese removes this difficulty and makes cheese easy of digestion, and as nutritious as tender meat, or more so. Various methods have been adopted for this purpose, from plain broiling, frying or toasting, to the most elaborate compound dishes. The main point is to get the cheese cooked so that the stomach can digest it.—*Exchange*.

A CONTRIVANCE TO KEEP CREASES OUT OF THE FOREHEAD.—A great many earnest thinkers of a nervous temperament fall into the habit of scowling when they read, write or talk seriously. This causes two little perpendicular lines to plow in between the eyes, and ages the face ten years. It is a habit almost impossible to correct, once formed, as it is done unconsciously by a great many young people. Even in sleep their brows will be drawn together in this malicious little frown that is the aider and abetter of age. A bright, studious young woman, still in her twenties, found herself the victim of this scowl, which had already made two fine hair lines in her white brow. She set herself to work to cure the habit by setting her mirror before her face when she read, wrote or studied. But, as this distracted her attention from her work, she finally fastened a ribbon band tightly across her brow, tying it in a knot at the back of her head, and at night she slept in the band. After several months the little hair lines disappeared from her pretty forehead, and she is quite cured of the disfiguring habit. A smooth, white, uncorrugated brow is one of the greatest attractions in a woman's face, while a prematurely furrowed and wrinkled brow mars the beauty and youth of the fairest features.

WOMEN AND THE HOUSEHOLD.

CONDUCTED BY HELEN FLETCHER.

WOMAN'S CRAZE FOR AILMENTS.—There is a large class of women in constant trouble about their health, although the same amount of strength in a cheerful woman would be taken as healthiness. You fear to accost her with, "How are you to-day?" for that would be the signal for a shower of complaints. She is always getting a lump on her side, an enlargement of the heart or a curve in the spine. If some of these disorders did not actually come, she would be sick all the same—sick of disappointment. If you should find her memorandum book you would discover in it recipes for the cure of all styles of diseases, from softening of the brain in a woman down to the bots in a horse. Her bedroom shelf is an apothecary-infantum, where medicines of all kinds may be found, from large bottles full of head-wash for diseased craniums, down to the smallest vial for the removing of corns from the feet. Thousands of women are being destroyed by this constant suspicion of their health. Others settle down into a gloomy state from forebodings of trouble to come. They do not know why it is, but they are always expecting that something will happen. They imagine about one presentiment a week. A bird flies into the window, or a salt-cellar upsets on the table, or a cricket chirps on the hearth, and they shiver all over, and expect a messenger speedily to come in hot haste to the front door and rush in with evil tidings. Oh, do away with all forebodings as to the future. Cheer up, disconsolate ones! Go forth among nature. Look up toward the heavens insufferably bright by day, or at night when the sky is merry with ten thousand stars joining hands of light. Go to where the streams leap down off the rocks and their crystal heels clatter over the white pebbles. Go to where the wild flowers stand drinking out of the mountain brook. Hark to the fluting of the winds and the long-metre psalm of the thunder. Look at the Morning coming down the mountains and Evening drawing aside the curtain from heaven's wall of jasper, amethyst, sardonyx and chalcedony! Look at all this and then be happy.—*Exchange.*

KISSING MOTHER.—How many young ladies of to-day would laugh at the absurd idea, as they express it, of kissing mother; but you cannot, dear girls, imagine how it will brighten her dear face. Besides, you owe her a kiss or two. Away back, when you were a little girl, she kissed you

when no one else was tempted by your fever tainted breath and swollen face. You were not as attractive then as you are now. And through those years of childish sunshine and shadows she was always ready to cure by the magic of a mother's kiss the little, dirty, chubby hands whenever they were injured in those first skirmishes with the rough world. And then the midnight kisses with which she routed so many bad dreams as she leaned above your restless pillow have all been on interest these long, long years. Of course she is not so pretty and kissable as you are, but if you had done your share of work these last ten years the contrast would not be so marked. Her face has more wrinkles than yours, and yet if you were sick that face would appear far more beautiful than an angel's, as it hovered over you, watching every opportunity to minister to your comfort, and every one of those wrinkles would seem to be bright wavelets of sunshine chasing each other over the dear face.

SOMETHING WHICH WOMEN SHOULD HEED.—Here is something I got from my family physician which I really think every woman should know: Women who sit with their legs crossed, to sew or to read, or to hold the baby, are not aware that they are inviting serious physical ailments, but it is true, nevertheless. When a man crosses his legs he places the ankle of one limb across the knee of the other, and rests it lightly there. A woman, more modest and restricted in her movements, rests the entire weight of one limb on the upper part of the other, and this pressure upon the sensitive nerves and cords, if indulged in for continued lengths of time, as is often done by ladies who sew or embroider, will produce disease. Siatica, neuralgia, and other serious troubles frequently result from this simple cause. The muscles and nerves in the upper portion of a woman's leg are extremely sensitive, and much of her whole physical structure can become deranged if they are overtaxed in the manner referred to.—*Courier Journal*.

THE COMING AMERICAN GIRL.—The prediction is freely ventured that as a result of the cosmopolitan mixing of races in this country the American girl of the future will be a brown-haired, dark-eyed creature, smaller as a type than the girl of to-day, but plumper and less angular.

DONT SIT UNDER GAS LIGHT.—The sun bath is beneficial. No sitting or reading in darkened rooms, or those lighted by gas. Gas burns up oxygen very rapidly. Sitting under a gas jet turns the hair gray, and by overheating the scalp destroys its vitality and causes the hair to fall out.

MOTHERS AND THE NURSERY.

(CONDUCTED BY MRS. F. C. PRESSLER).

HOW TO TREAT CHILDREN.—People appear to think that, while good manners should be strenuously exacted from children, precept in this connection may stand instead of example, and that orders may be given them and remarks made upon them as if they were devoid of natural feelings and perceptions. As a matter of fact, if, when people want children to do something for them, they would ask it in the same way in which they would address an equal, if they would thank them for little services rendered, speak to them gently, answer their reasonable questions civilly and avoid unnecessary comments upon their appearance, they would have far less trouble in teaching them to behave with like consideration for others.

NEAR-SIGHTEDNESS IS DEVELOPING to such an alarming extent among the school children in France that the Academy of Medicine has taken up the subject and discussed it at one of its recent sittings. It appears that near-sightedness is generally noticed among the young men who are preparing to enter one of the large special schools, such as the Polytechnic School, the Normal School, the Mining School, etc. Nearly all the students admitted to these institutions have a beginning of near-sightedness, which afterwards increases and becomes hereditary. To remedy this state of things, the Academy suggests several changes in the arrangement of the school buildings, so as to give better light, the appointment of an oculist for each State institution of learning, and a regular and careful inspection of the scholars.

THE "FIRST INTENTION."—If children are taught to do things by the "first intention" and the parents keep up the practice, half the work of housekeeping will be saved. For example, the boy who is always whitening should be taught to do the cutting over the wood box or on papers spread down to protect the carpeting, and when he is through he should see that the room is as tidy as before, not leaving the dirt for his mother or sister to sweep up. In cutting out work or in dressmaking, no time is lost in gathering up the scraps as they fall from the scissors and putting them in a basket, and the room is not kept in such a state of disorder that one can hardly tell which way to turn. In short, there is no need of two movements where only one is necessary. It takes no longer to put

the burnt match into the receptacle provided for it or into the fire at the time it is used than it does an hour later. If a smutty kettle is set on a table, it takes more time and strength to wash off the marks left than it would to have placed paper beneath the kettle in the first place. Teach the children when eating their luncheons to sit quietly in one place and not scatter the crumbs broadcast over the floor, or, when eating candy, impress it upon them to touch nothing about the room with their sticky fingers. It is chiefly in avoiding the "litter" or confusion made by both the children and the elders that the saving tells. There are hundreds of other matters wherein the first way of doing them saves time and trouble; but these given, though simple, may serve as samples.—*Lewiston Journal*.

A LESSON IN PATIENCE.—"Do be a little patient with the children, my dear," said Mr. Bixby to his wife, when she spoke sharply to them for upsetting her work-basket and sending its contents all over the floor. "Remember that you were a child yourself once, and the most obedient and pleasing children are those who are ruled by love. When they vex me I—what in the name of Moses do you mean, Willie Bixby, by deliberately sticking your feet into my silk hat? If that don't beat anything I ever heard! Now look at that hat, sir, look at it! For half a cent I'd take you out into the woodshed and give you such a warming up as you wouldn't forget as long as you live! I ought to do it! It's the only way to teach you young ones to behave a little less like a lot of hyenas! Now you put off to bed without your supper, young man."—*Time*.

BABIES' TOES AND FINGERS.—"Clarissa Potter" advises mothers to pay more attention to the fingers and toes of crawling babies. When baby cries examine her tiny toes and fingers to make sure that no splinter of wood or iron has entered them. "As baby grows older and boots take the place of soft wool socks, care must be given that the fast growing little feet are not cramped by too small boots. Even dainty kid can goad-ingly pinch and chafe the dainty flesh, and if the boot is too short, barbarously double the flexible, hapless toes in under themselves, causing baby much wailing distress, which we in our ignorance try to relieve with generous doses of castor oil and catnip tea."

HEALTH INVENTIONS AND APPLIANCES.

[Under this heading the HERALD OF HEALTH is always prepared to notice, as their merits deserve, the latest inventions in hygienic science. Inventors and patentees are invited to send to the editor descriptions and

plans of new apparatus and devices in their line. No notice, however, will be taken of quack medicines or new fangled drugs.]

SAID TO BE A CURE FOR SNORING.—A recent invention, it is claimed, practically abolishes the snore. It consists of a thin piece of celluloid to fit between the teeth and lips. It is made to follow the arch of the teeth, and when well made fits snugly. The reason why people snore is that they sleep with their mouths open. About nine out of ten persons breathe through the mouth during sleep. They all say they don't, but it's only a little fancy; they do. A moment's reflection will show that the nose was made for breathing and smelling and the mouth for eating and speaking.

Three-quarters of the throat troubles are said to come from mouth breathing, and much of the evil of supposed catarrh is nothing but the effect of mouth breathing. The bad taste in the mouth in the morning, the dryness of lips and tongue, all come from the passing of the air through the wrong channel. The piece of celluloid, called a "mouth-breathing inhibitor," prevents air from passing through the mouth and forces it through the nose. It may be supposed that a cold in the head will sometimes necessitate mouth-breathing, but not so. Colds in the head are largely due to the sensitiveness of the nasal membranes to the touch of air, caused by not using the nose for breathing. Once accustom the nostrils to passing air, especially the cool air of night, and cold in the head will disappear. Nose-breathing is an art, and an athlete is not sure of success until he has mastered it. The celluloid appliance is light, and after a few nights' use is no longer noticed. It cannot be swallowed, and causes no disagreeable feeling. After a few weeks it develops the habit of nose-breathing and then it can be laid aside.

THE WHISPER CURE OF STAMMERING.—It is said that stammerers rarely, if ever, show any impediment to speech when speaking in whispers. On this fact a new method of treatment has been advocated by Dr. Coen, which is as follows: In the first ten days speaking is prohibited. This will allow rest to the voice, and constitutes the preliminary state of treatment. During the next ten days speaking is permissible in the whispering voice, and in the course of the next fifteen days the ordinary conversational tone may be gradually employed.

THIS BEATS THE FAITH CURE.—Paris has a new device for the treatment of nervous diseases. It is in the form of a little cherry box, about five inches square, above which project two shafts, one within the other, sleeve

and arm fashion. On each shaft is balanced a black bar nine inches long, an inch wide and a quarter inch thick, edge up. By clock-work in the box these ebony arms or bars are made to revolve in opposite directions. Six little round mirrors are placed on each side of each bar. The patient is seated in a chair in a dark room, facing the machine. An electric light, or any bright light, is concentrated on the black arms of the machine by means of a convex mirror placed behind the patient, and then the arms are set whirling. The patient watches them whirl. The motion and the flashing lights operate on the nerves through the eyes. Patients are put to sleep by this means, and extraordinary cures accomplished. The explanation of the effect of the whirling arms and flashing lights is that they change the habit of the brain.

PUBLISHER'S DEPARTMENT.

IMPORTANT TO SUBSCRIBERS.—At the solicitation of many subscribers living at a distance from New York, the HERALD OF HEALTH CO. will cheerfully undertake to fill any commissions that may be entrusted to us in the purchase of articles or apparatus for Hygienic and Health purposes. We do not desire, nor can we undertake to do a purchasing business, but will be pleased to aid our subscribers and friends in the manner above indicated. We can obtain everything in the line of Health and Hygienic articles for them at New York prices, and will mail descriptive and price lists upon application, provided stamps for return postage are sent. In this list are embraced electric batteries, machines for physical culture, ventilating, filtering and disinfecting apparatus, health foods, clinical thermometers, invalid's chairs, ear trumpets, etc. We will, however, fill no orders for patent medicine trade, electric belt humbugs, nor drugs of any description, and do not expect to receive any. No commission is expected nor will any be received, as we are willing to put ourselves to a little trouble if we can prove of any service in this way to our friends. We will freely answer all questions as to prices, forward circulars, etc., insisting only that stamps be enclosed in all letters seeking information, and that we do not be required to pay return postage.

STILL ANOTHER VALUABLE PREMIUM.—We call special attention to the announcement in this month of another valuable premium for new subscribers to the HERALD OF HEALTH. For One Dollar and Sixty Cents we will

send the magazine for One Year, from January to December, and in addition a complete set, in five volumes, of the "Leather Stocking" series of Cooper's famous novels. These books are printed in large type from new plates, bound in paper, and are a marvel of cheapness even in these days of cheap literature. Sixty cents is no price for them, and we make no profit on the list, but offer them merely as an inducement for new subscribers. They are sent postage free. We are desirous that our old subscribers should also share the benefit of this liberal offer, and we will mail the books to them for sixty cents, the same price, provided they will show them to their friends and thus enable us to obtain additions to our subscription list. The HERALD OF HEALTH needs no premiums to keep up, or increase, its already large list of readers, but having an opportunity to procure these books from the publishers, at the price named, we are willing to offer them to our friends without profit. The Dickens and Scott books will also be offered for a short time longer. See announcement elsewhere.

QUESTIONS AND ANSWERS.

IS IT OVERWORK?—*W. C. B., Detroit, Mich.*—We should judge from what you write that you for one thing work too hard. You seem to have followed a sensible course in taking exercise and diet, with change from a badly ventilated office to one where you could obtain more fresh air. It is pretty difficult to decide in your case; but why do you not take a good and long vacation? Perhaps your work is of the worrying kind, and of a nature that keeps you pegging away year in and year out. Try change of air and scene; travel or go to some place where you can drop business and other cares for a time. Men like you keep at work continually for years, defying nature's demand for rest until at last nature unexpectedly exacts the inevitable penalty, and health gives way under the strain. Being a young man, with no bad habits, you have a good chance of a long life, providing you do not grind yourself to death with overwork. This reply is based upon the only theory we can draw from your letter, for in every other respect you seem to be taking proper means to secure good health. See article on "The Rest Cure," in "Editor's Study," December, 1889, issue.

TO INCREASE THE WEIGHT.—*D. D.*—"Is there any way for a thin person to get stout? Please advise me as to what I should eat and drink. I al-

ways cut all the fat off the meat I eat." In reply we reproduce the following. It gives all in small compass the information he needs as to the kind of diet necessary to increase the weight : Eat, to the extent of satisfying a natural appetite, of fat meats, butter, cream, milk, cocoa, chocolate, bread, potatoes, peas, parsnips, carrots, beets, farinaceous foods, as Indian corn, rice, tapioca, sago, corn-starch, pastry, custards, oatmeal, sugar, sweet wines and ale. Avoid acids. Exercise as little as possible ; sleep all you can and don't worry or fret.

ARE MODERN TOOTHPICKS INJURIOUS?—*W. H. F. Chicago.*—A New York dentist says in reply to this question : "The best kind of toothpick any one can use is the quill. It is not injurious to the teeth and little pieces won't break off and get down the throat and cause many other ills. The habit of toothpick chewing is responsible for a great number of human ills. A great many people stick a toothpick in their mouths and chew on it until the wood is reduced to a pulp before they throw it away. Very often several small pieces of the wood are swallowed. A man may go on chewing toothpicks for fifty years and never suffer any ill effects, but his less fortunate neighbor may chew them for a few days and die on account of it. I tell you a fact when I say that lots of troubles with the digestive apparatus and lots of more serious ailments may be and have been known in many instances traced to the use of toothpicks, as I have pointed out. The habit, I notice, is one that is growing rapidly, and aside from the fact that it is ill bred and a rude custom, it is to be detested on hygienic principles."

SCHOOL ROOM SPACE.—*Teacher, Indianapolis.*—Mr. Courthope Bowen, an Englishman, whose opinions on the proper size and arrangement of school rooms are received with great respect in his own country, recently made the following statement as to what, in his judgment, might be regarded as a fairly good school room : Taking, for instance, a room 14 feet high, fairly ventilated and always well aired at recess, two-thirds of the floor space should be assigned to the scholars and their desks, and the other third should be kept for the teacher, blackboards, etc. With single desks, 22 inches should be allowed from side to side, and 3 feet from back to front, for each scholar. The passages need not be more than 18 inches for those running from back to front, and 1 foot for those running from side to side. In such arrangement, counting the passages, each scholar has (without reckoning the share of the space allotted to the teacher) a trifle more than 40 inches from side to side, and just 4 feet

from back to front. In a room 25 feet by 20 feet the floor space for scholars' desks will be 16 feet by 20 feet, with 4 feet from back to front per row, and accommodation is provided for twenty scholars. The whole floor space is 500 square feet, and the cubic contents of the room 7,000 cubic feet, with 20 square feet and 280 cubic feet per person.

IS THERE DANGER IN WINTER BATHS?—*Cleanliness, Louisville, Ky.*, wants to know if it is dangerous to indulge freely in bathing in winter. The London *Lancet* says on this point. "All danger could be avoided if bath-rooms were heated all the time, not just when one wants to bathe, but continually during the day and evening. The trouble of starting a fire often deters one from taking a bath. The bath rooms should be heated very warm, not merely enough to take the "chill off the air," but enough to prevent the bather receiving a chill after his bath, and to permit him to bathe without hurrying. One of the greatest dangers of the bath is that in rising from the water to be struck by chilling air. Make the room warm enough, and the bather can ventilate it himself. Too many people seem to believe that the bath-room is only for summer, and leave the health-giving tub alone from November to April, contenting themselves with light sponge baths, more or less incomplete. By failing to have bath-rooms properly heated people simply lose the use of their bath-rooms. By spending a few cents more a day they could have continually within reach the greatest of disease-defying blessings.

THE HERALD OF HEALTH.

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THE
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No. 4.

EXPERIENCE OF A VEGETARIAN.

(BY M. L. HOLBROOK, M. D.)

SOME years ago I met in Dr. James' Lifting Cure Rooms a gentleman taking his exercise, a gentleman to whom I was introduced and entered into conversation. I found he was a brother of the eminent Sir Wilfred Lawson, member of the English Parliament, and well known as a teetotaler. He was also a vegetarian. I asked him for his experience for the HERALD OF HEALTH, and he promised to furnish it. After long waiting I have just received the following letter :

“MY EXPERIENCE OF VEGETARIANISM.

“It is twenty-nine years since I became a vegetarian. In England, on the 4th of October, 1860, Mr. Andrews, of Leeds, had luncheon at my father's house, and said he was a vegetarian. Having never seen a vegetarian before, I listened with interest to his statements ; and, as he said he thought vegetarian diet would be good for me, I determined that after eating one more mutton chop I would give vegetarianism a trial. I thought it might prove good for my deafness. I was twenty-four then. Experience taught me that vegetarian diet agreed with me better than diet that included the flesh of animals ; and I began to read about vegetarianism in such books as Smith's 'Fruits and Farinacea,' and Graham's 'Science of Human Life,' and in the 'Dietetic Reformer,' and the publications of the Vegetarian Society ; and the investigation showed me that vegetarianism was good in theory as well as in practice. So I stuck

to it, and have done so ever since; for, during the twenty-nine years that have elapsed since I ate my last mutton chop, the times when I have experimentally eaten fish or tasted prairie chicken, or, in the Middle Park of Colorado, tasted bear and venison, have been so few as to be scarcely worth mentioning.

“In June, 1866, on teetotal as well as vegetarian diet, I made the ascent of Monc Blanc, while the gentleman from one of the hotels of Chamonix, who started up the mountain with me and carried a brandy flask, failed to reach the top.

“Upon the whole, whether at sea or on land, in the cold of Canada or the heat of the West Indies, in miners’ cabins or in good hotels, I have not found much inconvenience from my being a vegetarian.

“Vegetarianism has not cured my deafness; but, generally, my general health has been, I think, what is called good. At any rate, I recommend all my friends to be vegetarians. I dislike the taste of meat now; and when I am asked why I don’t eat it, the answer is—*Because I’m not obliged to do so.*

WILLIAM LAWSON,
Prince of Wales Hotel,
Cannes, France.

3d January, 1890.

TO MAKE FAT FOLKS LEAN.

At a recent meeting of the New York Academy of Medicine, the paper of the evening was read by Dr. Walter Mendelson. His subject was “The Physiological Treatment of Obesity.” He said he had selected this subject for treatment, because it was one upon which some definite and accurate knowledge was at hand—knowledge which might be called scientific, because if the necessary conditions which it imposed were fulfilled a certain and no inconsiderable degree of success could be attained. The study of the causes of the deposition of fat was an old one. In former years it was believed that the excess of fat taken in the food was deposited in the cells of the body. Later on Liebig came to the conclusion that fat was formed directly from the starches and sugars eaten.

THE MOST RECENT INVESTIGATIONS

show clearly that the albumen in the food is the principal source of the fat formed in the body. This albumen after it has reached the cells of the tissues, undergoes certain chemical changes by which part of it is

converted into fat, and part goes to the nutriment of the tissue cells. Many experiments have been made which prove this conclusively. Thus dogs fed on lean meat accumulated considerable fat. One fed on lean meat and palm oil, which contains no stearic acid, stored up fat, having the usual amount of stearic acid normal to dog's fat.

It is not asserted that all fat deposited is formed from albumen. A certain amount of that taken as food is stored up. But the increase of body fat occurring after eating much fat, though in part a direct result, is chiefly brought about indirectly, the food fat shielding from oxidation that which has previously been formed from the albumen. Thus, when a dog is fed on meat and mutton suet the dog gets fat, not because the mutton suet is changed into dog's fat or is deposited as suet, but because the more ready oxidation of the suet prevents the fat proper to the animal's tissues from being destroyed by the various activities of the animal.

IT IS IN THE SAME WAY

the starches and sugars act. They are not ordinarily converted into fat, but are so converted only when taken in abnormally large quantities. But when taken with the ordinary food, they are more easily oxidized than the proper fat of the body, and so the proper fat accumulates instead of wasting.

The sources of fat in the body were found to be three: First, the splitting up of the albumen of the food; second, the transfer of that fat ingested as food; and third, fat formed from starches taken in too large quantities.

The next step was to consider what conditions of the body tended to hoard up this fat. It is known that all the cells of the body have the power of splitting up relatively complex chemical compounds into bodies of simpler composition. It is further known that certain external agencies have the power of modifying the chemical powers of the cells. Thus quinine, alcohol, morphine, low temperature, deficient food supply, deficient oxygen, diminish the powers of the cells, while excess of food, high temperature, and muscular activity increase them. It is further known that the disintegrability of the different classes of food brought to the cells varies. Of the three classes into which all foods may be divided the albumens (lean meats) are most easily split up by the cells, the sugars coming next, and

THE FATS LAST.

It has been determined that the following quantities of the food classes are equivalents in that each yields an equal quantity of energy measured as heat: Fat, 100 grams; albumen, 211; starch, 232; cane sugar, 234; glucose, 256.

From this it appears that an accumulation of fat will most readily occur when the diet contains an overplus of fat. If it be supposed that a man who required 118 grams of albumen and 259 of fat should take albumen only, he would have to eat six pounds of lean meat alone to keep up his supply. But he could not digest so much meat as that. If he took the albumen and excluded fat, he would have to take a pound and a quarter of starch to make up for the fat omitted. If the man ate all three kinds of food, he would need 118 grams of albumen, 100 of fat, and 368 of starch.

AN EXCESS IN ANY ONE

would produce an accumulation of fat. Now, ordinarily no man habitually eats meals composed of any one or any two sorts of these foods. If he did he would hardly accumulate an overplus of fat, because the monotony of the diet would produce a lack of appetite, and so he would not become obese. But on a mixed diet, containing plenty of fats and starches, a little more albumen than is needed to maintain the equilibrium of fat and flesh may be eaten. This surplus of albumen fat would make itself apparent in the form of the eater.

A MAN NEED NOT BE A GLUTTON

to grow stout. A slight excess will gradually load up the body with fat. An excess is not even necessary if certain contributory causes become operative. Thus any one of the causes that tend to diminish the powers of the cells—a too free use of alcohol, life in a hot, close room—will promote the accumulation of fat, even though the quantity of food consumed daily be diminished. The tendency to become obese is also very often inherited.

IN TREATING OBESITY

the individuality must be kept in mind, but in general the aim must be to make the consumption of fat exceed the production. In the great majority of cases, in spite of what fat people say, the cause of the fat is the eating of either too much food, or food of an improper quality, combined with a lack of exercise. It remains, therefore, suitably to regulate

the diet and exercise, bearing in mind that the change must be gradual to be beneficent, and that anything approaching to starvation must be avoided. It must be a general plan to give much albumen and relatively little fats and sweets. This is done in order that the cells, from the abundance of nourishment brought to them, shall be capable of great chemical activity; and further, that the tissue fat formed from the albumen shall not be preserved from oxidation by the presence of the more readily oxidizable fats and starches.

For a diet list for a corpulent person the Doctor

RECOMMENDED THE FOLLOWING :

Breakfast—One cup (6 ounces) tea or coffee, with milk and sugar; two or three slices ($2\frac{1}{2}$ ounces) of bread; butter, half ounce; one egg, or $1\frac{1}{2}$ ounce meat.

Dinner—Meat or fish, 7 ounces; green vegetables, such as spinach, cabbage, string beans, asparagus, tomatoes, beet tops, &c., 2 ounces; farinaceous dishes, such as potatoes, hominy, rice, maccaroni &c., $3\frac{1}{2}$ ounces, or these may be omitted and a corresponding amount of green vegetables substituted; salad, with plain dressing, 1 ounce; fruit, $3\frac{1}{2}$ ounces; water sparingly.

Supper or Luncheon—Two eggs or lean meat, 5 ounces; salad, three-quarters of an ounce; bread, one slice; fruit, $3\frac{1}{2}$ ounces; two ounces of bread (two slices) may be substituted for the fruit; tea or coffee, 8 ounces; no beer, ale, cider, champagne, sweet wines, or hard liquor must be taken, but claret and hock are permitted in moderation; milk, save as an addition to tea or coffee, must be taken rarely.

It is important to remember that as the fat becomes reduced, the diet must be modified somewhat; giving more of the sweets and fats, lest the albumen, as well as the fat of the body, be consumed.

UNDER A PROPER DIET

the patient feels better instead of weak or in any way worse. A feeling of lassitude is an indication that the muscular tissues, as well as the fat, are being reduced. It is imperative that the patient should not be impatient or in a hurry to get lean. It is only by slow degrees that the cells can be habituated to a mode of action in harmony with the welfare of the whole system.

In the discussion that followed the reading of the paper, Dr. S. Baruch called attention to the value of cold baths for over-fat people. A simple

cold bath was not sufficient. A swim in cold water was the best method of application, but a douche from which the water was impinged under pressure of two or three atmospheres on the flesh was nearly as good. A vapor bath was better than either. It had been demonstrated by actual experiment that the increase of temperature incident to a vapor bath promoted tissue metamorphosis to a very marked degree. The vapor bath followed by the cold douche would afford results that could be

SECURED IN NO OTHER WAY.

It was commonly agreed that with a proper regulation of the diet and the application of cold baths with friction after, and the avoidance at all times of the sorts of liquors objected to by Dr. Mendelson, the reduction of superfluous fat was certain and easy of accomplishment.

FASHION IN DEFORMITY.

DR. JAMES LEWIS HOWE delivered a popular scientific lecture at the Polytechnic Society, taking for his subject "Fashion in Deformity." The first point to which the lecturer alluded was that of deformities of the feet, caused by shoes. He said: "There are few or no shoes made at the present time which do not to a greater or less extent compress the feet into an unnatural position, and the result is a plentiful supply of corns and bunions."

THE EFFECT OF HIGH HEELS

was spoken of and demonstrated from a specimen of fashionable shoe, with the heel nearly in the middle of the foot. This, the lecturer said, had the effect of throwing the foot forward upon the toes and thus not only is the foot deformed, but the gait is to a greater or less extent stilted. The practice of making children wear tight shoes in order to keep the feet small can only be compared to the Chinese method of deforming the feet. The practice of turning out the toes in walking was declared to be a common cause of weak ankles, inasmuch as the weight is thus thrown upon the inside of the foot.

THE SECOND POINT SPOKEN OF

was the compression of the chest by tight lacing. The framework of the chest is elastic and normally expands when the lungs are filled with air, but when the ribs are laced in, it is impossible for the lungs to fill properly. The result is insufficient oxygenation of the blood, and the various

forms of ill health which follow in its train. This compression acts even more decidedly upon other organs; the liver, in particular, is forced from its normal position, generally downward, and is more or less contracted and deformed. At times portions of this organ are nearly or even quite severed, with the most serious results. Sketches were shown of livers thus deformed, and instances were given of two cases where death had been caused in this manner. In one of these cases a young lady dropped dead, and an examination showed that she had on two pairs of corsets, laced as tight as was possible. Tight corsets, or even any corset at all for young children, were pronounced far worse than the

WORST FORM OF TIGHT SHOES.

“The whole of these deformations,” the speaker said, “are the result of fashion, and this is supposed to be an attempt to obtain the highest beauty. Standards of beauty differ with different people, and by considering a tightly-laced figure beautiful we merely place ourselves on a par with the Malay, who considers his blackened teeth beautiful; or the African or the Brazilian, whose type of beauty is a lip several inches wide, or a brass ring in the nose.” Several views were shown by the stereopticon of masterpieces of ancient art, such as the Venus of Milo, and these were contrasted in beauty with figures shown from modern fashion-plates. The lecturer said that tight lacing was not only putting ideas of beauty above those of God, but it was contrary to the laws of nature.

THE SUBJECT OF THE COMPLEXION

was the last touched upon, and the lecturer deprecated very strongly the use of face powders of all kinds and all cosmetics, except pure water and pure soap. Even pure starch is certain in time to ruin the best complexion from the fact that it clogs up the pores of the skin, and thereby renders the skin unhealthy. In conclusion, the lecturer said that all attempts to improve upon nature were failures, and all were dangerous.

CHILLING THE FEET.—A medical authority, Dr. Munde, says that the imprudent act of getting out of bed without protecting the feet has caused more disease to women previously healthy than could result from any other imprudence. The sudden exposure of the feet to cold has brought on many an attack of cellulitis.

DYSPEPSIA DUE TO THE NEGLECT OF COMMON LAWS OF HEALTH.—We do not suppose that any thoroughly well man ever raised this question in his own behalf, says the *Youth's Companion*. To such a one digestion is a process of which he is never conscious. The stomach digests just as the heart beats or the lungs heave. It is a powerful organ, and will stand a great amount of abuse.

But if a mother should ask the question in the interests of her children, we should reply in general terms that the prevention of dyspepsia lay in the avoidance of its causes. These are many. We can indicate only some of the more common of them.

The most common is, perhaps, over-eating. A physician lately said: "Most persons eat four times as much as they should." The proportion seemed pretty large, but an eminent British physician of a former generation said almost the same thing—that one-fourth of what we eat goes to sustain life, while three-fourths go to imperil it. Another physician wittily remarked that most people dig their graves with their teeth. The foundation of the habit of overeating is apt to be laid in childhood and youth, since the stomach then seems able to bear almost anything. There would be little danger of eating too much if the food were always plain and simple; in that case the natural appetite would be a safe and sufficient guide. The trouble is that the natural appetite is too often spoiled by cakes, pies, condiments and highly seasoned food.

Another source of dyspepsia is emotional waste of nervous force. The nerve force is to the practical system what steam is to the machine. In the normal condition of things it is renewed as fast as it is used. But nature makes no provision for the immense amount expended by excessive care, by fuss and worry, by hurry and drive, by explosions of passion and by the undue excitements of pleasure. All these are like a great leakage of steam. The stomach is the first and largest sharer of the loss.

Another source is overwork of the brain. Brain work is specially exhaustive of nerve force, and the exhaustion is greatly increased by the fact that high intellectual activity gathers to itself a most delightful momentum, making a few hours of high-pressure work more productive than days of plodding. Moreover, a brain worker generally neglects physical exercise and curtails sleep. He is like the careless engineer who, while driving at the highest speed, fails to supply the needed wood and water. He cannot help being a dyspeptic.

Another cause, which generally acts with all the others, is a lack of active, exhilarating outdoor exercise and recreation. Such exercise and recreation are absolutely essential. We only add that it is vastly easier to prevent dyspepsia than to cure it.

LIME WATER AND MILK.—When the stomach is intolerant of food, it is the general practice of physicians to order lime water to be given with milk; and, if they are rightly given, they are almost always well borne. But, unless duly instructed as to the necessary proportions of each, the majority of people are quite sure to make the mistake of not using enough lime water. It is, of course, only of value as an antacid; and it is but very slightly alkaline. As compared with the bicarbonate of soda, an ordinary dose of the same is equivalent to six ounces of lime water. So a tablespoonful of the latter in a cup of milk—the scanty proportion used by many in sickness—is really of no value. To obtain an action of any moment, it is necessary in giving milk and lime water to have the mixture contain the latter in proportion of at least one-third. Very often where they are in equal parts the milk is vomited up in hard, sour curds, in which event, if the mixture has not been given too freely, it is best to use a stronger antacid. Bicarbonate of soda is a good substitute, and about a teaspoonful should be dissolved in a large cupful of water, and that solution be added to the milk in place of lime water.—*Boston Herald.*

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

EDITOR'S STUDY.

MARRIAGE UNPOPULAR IN ENGLAND.—The unpopularity of marriage continues unabated, and last year was the first in recent times in which, while the price of wheat fell, the marriage rate remained stationary. It is now 14.2 per thousand. The decline in the popularity of matrimony is greatest with those who have already had some experience of wedded life. Between 1876 and 1888 the marriage rate fell twelve per cent. for bachelors and spinsters, twenty-seven per cent. for widowers, thirty-one per cent. for widows. The drop in the remarriage of widows, however, is probably due to the glutting of the marriage market with surplus spinsters. The excess of women over men in England and Wales is estimated at 765,000. Another interesting fact is that the births have now reached the lowest rate recorded since civil registration began. In 1876 the rate was 36.3 per 1,000; it is now 30.6. This is very satisfactory; and it is also notable that the illegitimate birth rate has declined, the proportion, 4.6 per cent., being the lowest yet registered. The worst feature in the Registrar-General's returns, however, is the fact that the male births had fallen in proportion to the female; in the last ten years, 1,038 baby boys were born for every 1,000 girls, and last year the male preponderance had dropped by 5, and is now standing at 1,033 to 1,000. With a surplus female population of three-quarters of a million, this is a move in the wrong direction.—*Pall Mall Gazette.*

HEAT OF THE BODY.—That animal heat is due to combustion was first recognized by Lavoisier, who was unable to determine whether the combustion takes place in the lungs at the place where the oxygen is absorbed or throughout the entire system. Bertholet, in a late paper on the subject, states that one-seventh of the heat is produced in the lungs, and six-sevenths in the system by reactions of oxydation and hydration. The temperature of the blood in the lungs is raised by absorption of oxygen, while the return of carbon to a gaseous state and the evaporation of moisture tend to lower it.

A PHYSICIAN'S RULES OF LIFE.—A prominent physician recently said: "There are ten simple precautions which form an excellent rule of life, and if people would but observe them, I should have to resort to some other means of making a livelihood. Don't read in street cars or other jolting vehicles. Don't pick the teeth with pins or other hard sub-

stances. Don't neglect any opportunity to insure a variety of food. Don't eat or drink hot and cold things immediately in succession. Don't pamper the appetite with such variety of food that may lead to excess. Don't read, write or do any delicate work unless receiving the light from the left side. Don't direct special, mental or physical energies to more than eight hours' work in each day. Don't keep the parlor dark unless you value your own and your children's health. Don't delude yourself into the belief that you are an exception so far as sleep is concerned; the nominal average of sleep is eight hours. Don't endeavor to rest the mind by absolute inactivity."

APPLES AS MEDICINE.—Chemically, the apple is composed of vegetable fibre, albumen, sugar, gum, chlorophyll, malic acid, gallic acid, lime, and much water. Furthermore, the German analysts say that the apple contains a larger percentage of phosphorus than any other fruit or vegetable. This phosphorus is admirably adapted for renewing the essential nervous matter, lethicin, of the brain and spinal cord. Also, the acids of the apple are of signal use for men of sedentary habits, whose livers are sluggish in action; these acids serving to eliminate from the body noxious matters which, if retained, would make the brain heavy and dull, or bring about jaundice or skin eruptions and other allied troubles. Some such an experience must have led to our custom of taking apple sauce with roast pork, rich goose and like dishes. The malic acid of ripe apples, either raw or cooked, will neutralize any excess of chalky matter engendered by eating too much meat. It is also the fact that such fresh fruits as the apple, the pear and the plum, when taken ripe and without sugar, diminish acidity in the stomach rather than provoke it. Their vegetable salts and juices are converted into alkaline carbonates, which tend to counteract acidity. A good ripe raw apple is one of the easiest of vegetable substances for the stomach to deal with, the whole process of its digestion being completed in eighty-five minutes. Gerard found that the "pulpe of roasted apples mixed in a wine-quart of faire water, and labored together until it comes to be as apples and ale—which we call lameswool—never faileth in certain diseases of the raines, which myself hath often proved, and gained thereby both crownes and credit." "The paring of an apple, cut somewhat thick, and the inside whereof is laid to hot, burning or running eyes at night, when the party goes to bed; and is tied or bound to the same, doth help the trouble very speedily, and contrary to expectation—an excellent secret."—*The Hospital*.

SAND BAGS A CONVENIENCE.—The sand bag is invaluable in the sick room. Get some clean, fine sand, dry it thoroughly in a kettle on the stove. Make a bag about eight inches square of flannel, fill it with dry sand, sew the opening carefully together, and cover the bag with cotton or linen. This will prevent the sand from sifting out, and will also enable you to heat the bag quickly by placing in the oven or even on top of the stove. After once using this you will never again attempt to warm the feet or hands of a sick person with a bottle of hot water or brick. The sand holds the heat a long time, and the bag can be tucked up to the back without hurting the invalid. It is a good plan to make two or three of the bags and keep them on hand ready for use at any time when needed.

AS TO COLD TOES.—Many people, especially women and children, suffer the whole winter through with cold feet. This is mainly due to the fact that they wear their shoes too tight. Unless the toes have perfect freedom the blood cannot circulate properly, hence follow stiffened and benumbed toes, cold feet, and often a numbness up the limbs. People who wear rubbers the whole winter through generally suffer with their feet. Rubbers make them very tender by overheating and causing them to perspire. They should only be worn during stormy or slushy weather, and even then should be removed as soon as one enters the house. They draw the feet, keep them hot and wet with perspiration—then as soon as one goes again into the air the feet are chilled. In the country I have noticed that the farmers put some dry straw or pieces of newspapers in the bottom of their boots. I myself have often tried the latter, and can assure you that it is a good preventive against cold feet. This is doubtless because the paper or straw absorbs the perspiration and keeps the feet dry.—*Philadelphia Record*.

TAKE CARE WHAT YOU EAT.—It is true, emphatically, that many men (and women) “dig their graves with their teeth.” Enough heed is not paid to a proper selection of food, and the following suggestions, made in the *New York Ledger* on this subject are worth remembering: All dyspeptics should avoid anything which they (not others) cannot digest. There are so many causes for and forms of dyspepsia that it is impossible to prescribe one and the same diet for all. Nothing is more disagreeable or useless than to be cautioned against eating this or that, because your neighbor, “So-and-so,” cannot eat such things. If we would all study the nature and digestion of food, and remember that air and exercise are

as essential as food in promoting good health, we could easily decide upon the diet best suited to our individual needs. The diabetic should abstain from sugar and anything which is converted into sugar in digestion, such as all starchy foods, sweet omelets, custards, jellies, sweet sauces, starchy nuts, wines and liquors. The corpulent should abstain from fat as well as sugar and starch. A diet of whole wheat, milk, vegetables, fruits and lean meat will produce only a normal amount of fatness, while an excess of acids, sweets, spices and shortening keeps the system in an unhealthy condition. Those who can digest fine flour, pastry, sugar and fat become loaded with fat, but are neither strong nor vigorous. Thin people with weak digestion should avoid such food; for thin people are often kept thin by the same food which makes others fat. If they cannot digest the starch, butter and fine flour, the system is kept in a feverish, dyspeptic state; they become nervous or go into consumption for no other reason than that the life is burned out by a diet which only feeds the fire and does not renew the tissues.

COMMON SALT FOR NEURALGIA.—It is not generally known that common salt is an admirable remedy for neuralgia. Dr. George Leslie gives details of thirty or forty cases of facial and other neuralgias, odontalgia, etc., which have been cured, in most instances instantaneously, by the insufflation of common salt. The salt was either "snuffed" or blown up the nostrils. He said he had been unsuccessful in only two cases; both of these were cases of old standing, which had been treated frequently by morphine injections.

THE INHALATION OF HOT AIR as a remedy for phthisis having been advocated by a German doctor, has been recently tried and reported upon by another doctor in practice at St. Petersburg. The cases selected were purposely those in which the upper part of the lungs or adjacent tissues were affected, it being thought that however hot the air, it must get cooled before reaching the more remote structures. The treatment, although tried with every precaution, and over a period of many weeks, was found to have no remedial effect whatever.

HOW TO KEEP WARM.—It may not be generally known that when exposed to severe cold a feeling of warmth is readily created by repeatedly filling the lungs to their utmost extent in the following manner: Throw the shoulders well back and hold the head well up. Inflate the lungs slowly, the air entering entirely through the nose. When the lungs are

completely filled, hold the breath for ten seconds or longer, and then expire it quickly through the mouth. After repeating the exercise while one is chilly, a feeling of warmth will be felt over the entire body, and even in the feet and hands. It is important to practise this exercise many times each day, and especially when in the open air. If the habit ever becomes universal then consumption and many other diseases will rarely, if ever, be heard of. Not only while practising the breathing exercise must the clothing be loose over the chest, but beginners will do well to remember in having their clothing fitted to allow for the permanent expansion of one, two and even three inches which will follow.

BREATHE ONLY THROUGH YOUR NOSE.—A Dutch physician has recently declared that a close connection exists between the exercise of our mental faculties and disorders of the nose. The opinion is expressed that if it were generally known how many cases of chronic headache, of inability to learn or to perform mental work, were due to chronic disease of the nose, many of these cases would be easily cured, and the number of child-victims of the so-called over-pressure in education would be notably reduced. According to the above-mentioned authority it would seem that breathing through the nose is absolutely indispensable in order to secure the full value of the mental capacity.

WHICH IS THE BREATH OF LIFE—AIR OR SMOKE?—While eminent medical authority has shown that tobacco tends to produce paralysis, heart failure and cancer, there is danger in another direction that should not be overlooked. Smoke, we know, is made up mainly of fine particles of carbon and other products of imperfect combustion. To take smoke into the lungs is to invite asphyxia or suffocation. Our brave firemen in their heroic efforts to save life, often fall, palsied by suffocating smoke. Now tobacco smokers voluntarily fill their own and other people's nostrils with an atmosphere that is a foreign and mechanical irritant to the lungs and eyes, in addition to the chemical or nicotine poison with which tobacco smoke is charged, while, in every breath of our lungs and every pulsation of our hearts, nature calls for pure air—the breath of life—not for stifling smoke.—*Seth Hunt.*

A HINT TO PARENTS.—It is a common occurrence for children to get beans, grains of corn and other foreign substances up their noses. This simple remedy is worth remembering: Get the child to open its mouth, apply your mouth over it and blow hard. The offending substance will be expelled from its mouth.

WOMEN AND THE HOUSEHOLD.

CONDUCTED BY HELEN FLETCHER.

THE WOMEN MEN WANT.—Men often admire women for their intellectual culture, their skill in music, or their taste in matters of dress; but they do not love women because they possess these distinguishing qualities. Brainy women, so called, have a great many admirers, but they are not in demand in the matrimonial market; at least they are not fought over to any great extent. Business men want wives who are competent to manage the domestic end of their business, and not such as have to be managed, or who want to manage all or nothing. The latter usually wreck the business of the firm, or keep the man in such a state of worry, that he only gets along tolerably well. A sensitive, sensible business man doesn't want a wife who poses as the head of the domestic concern; who carries the purse and the night key, and practically wears the trousers. There are some men who like such wives, but they are exceptions to the rule. The best husbands in the land want wives who are intelligent, practical and affectionate; who take pride in their homes, feel an interest in the success of their husbands, and are ready to share either fortune or misfortune. Such a woman is brave, generous and independent, and will command the respect of any honest, courteous man in the land. It will not be asked of her whether she speaks French or plays high-class music on the piano. A man wants a wife of whom he is proud, either at home or abroad. He wants her to be neat, tidy, and well-mannered. It is not really necessary that she be pretty, but she must be agreeable, of kindly disposition, loving, and affectionate. The woman who is fitting herself for the position of wife should be careful not to bank very heavily on either her pretty face or good shape, nor even on her boarding-school accomplishments. These are good enough to secure passing admiration, but they are not just the points a sensible man looks for when he starts out to select a wife. He prefers good, every-day common-sense, gentleness of disposition, and soulful affection.—*Chronicle Telegraph*

COLORED UNDERCLOTHING. —Sanitary folks have lately been alarming the public about colored underclothing of all kinds, off which the dye flows copiously. It must be trying enough to find your skin tattooed in pink, black, or blue designs not easily removed by soap and water

applications, but this is a trifling inconvenience compared to the rash, which appears on some delicate skins after a course of dyes. Plainly the moral is, that the only safe color is white, and next to that grey; black should not be bought at all, but if it is should be warranted, and not bought cheaply.

MAKING SHOES SOFT.—Take a pair of shoes that have become stiff and uncomfortable by constant wear in the rain, and apply a coat of vaseline, rubbing it in well with a cloth, and in a short time the leather becomes as soft and pliable as when it was taken from the shelves of the shoe dealer.

THE MARRIAGE OF THE FUTURE.—Women are so progressive that it is only a question of a short time until the women will ask the men to marry them. A woman would be more likely to use her head in selecting a husband than a man in selecting a wife. The marriage of the present is a marriage of the heart, and something of a failure. The future will show what success the marriage of the head will be.—*Atchison Globe.*

GIRLS ARE BETTER OFF IN THE COUNTRY.—I have heard country girls talk of coming to the city for employment, giving as one reason that they wanted more social life. Well, that is just what they will not get; the woman of business is not a woman of leisure, and she has no time for society. She will find more social life in her own home, even if she be a worker, than she could ever have in the city, and there is no lonesomeness more absolute than the loneliness of a stranger in a crowd. Salaries are not large enough to permit of much relaxation in the way of entertainments, and after the day's work is over one is too tired to go in search of enjoyment.

In the country home, in these days, the daily paper and the magazine come, so that one may keep in touch with the world even if she be at one side of the bustle and confusion of city life. The fashion article tells her how to dress her hair and make her gown, and gives her the latest notions in small toilet details. No town is so small that it has not its public library, where all the new books come, and the lecture and concert are not infrequent in visits. Railways and telegraphs have brought the corners of the earth together, so that one is never far away from the centres of things. There are occupations, too, for the girls who stay at home, and particularly those who stay in the country. Do not throng to the cities in search of employment, for you will be doomed to disappointment.—*Sally Foy White.*

A WRONG TO OUR GIRLS.—One of the most discouraging social tendencies of the time is that in the direction of mercenary marriages, and one of the most shocking and brutal abuses of type and paper is the flip-pant and cold-blooded way in which certain newspapers of wide circulation and corresponding influence place the young girls who from time to time appear in society upon the block and rattle off their personal and material advantages with the glibness of the auctioneer. In no other city is this lamentable class of imported snobbery so prevalent and so offensive as in Washington, which is infested with a class of correspondents who respect nothing in their hungry search for news. Every girl who makes her social debut at the capital is duly catalogued by these reporters, and her beauty, her wit, her breeding—most important of all her fortune—spread before the public, accompanied by the portrait, if by any means, fair or foul, a photograph can be obtained. The vulgar coarseness of some of these newspaper articles is enough to make the blood boil, and if they do not bring the blush of anger to the cheeks of those at whom they are directed it will only prove that publicity has already had the hardening effect which is its inevitable result. In these debutantes of to-day, the social leaders of the year 1900 and the mothers of the debutants of 1910, are educated down to the standard of snobbery which McAllister and the Tuxedo circles set—if they are taught that responsibility, thought, development and growth in serious things are for the common people—while wealth may purchase plenary indulgence for the neglect of all the duties for the doing of which God created Eve—then Heaven help the society of the twentieth century.—*Detroit Free Press.*

DREAMS AND THEIR AWAKENING.—Oft at night in dreams we live as it were a lifetime over again. We experience, as we do in real life, the same joy and sorrow which we have no power to control. We cannot help smiling, nor can we help weeping. In the morning how sad the awakening, sometimes, to real, practical, earnest life. The beautiful dream of the past night, with its soul pictures, is so real to our spiritual eyes that we exclaim, "Oh, was it only a dream?" while the sad, heavy weight at our hearts echoes, "Yes, only a dream!" The loved form you clasped to your heart years ago—be it mother, wife, baby—long since left your protecting side, and you thought your light had gone out forever; but now in dreams they come back to you as in olden times, with the same loving affection that never dies, and you feel that if you could only retain the dream, life would not be so dreary. No wonder we are

sometimes "in the world, but not of it," for there are some dreams that draw us very near heaven. Then we have our day-dreams, all of us. Oh, I love them the best. I think some would call them air-castles; I do not, for the name suggests something beyond my reach. Mine are soul-castles—thoughts and feelings so beautiful that I cannot weave them into language as yet, but can feel deeply the power from whence they spring—divinity! From such a great first cause may I not dare to hope that my day dreams may sometimes be realized?—*Delma Dusanne.*

NO REST FOR WOMEN UNDER ANY CIRCUMSTANCES.—Women have a very hard time, no matter how you look at it. How would a military man like to be on dress parade from the cradle to the grave? That's what a woman has to be. A man can luxuriate in mental dressing gown and slippers half of his life, and stretch his arms and put his feet up and take fate easily, but a woman can't shake the harness off and have a good fling in any direction whatever for one moment, without paying for it for a year. If a man has ten minutes in which to keep an appointment he can jump into his clothes anyhow, run after a car, get there on time and never turn a hair. A woman's hooks won't hook, her buttons won't button, she loses one glove, her hair came out of crimp, and she can't even swear at the conductor, who wouldn't pull the bell-rope till after she had walked a quarter of a block and partly dislocated her arm that brandished her umbrella. She is fifteen minutes late, and the men all speak maledictions under their breath at the woman who "never can be on time," while the fellow who took a fancy to her on a former occasion discovers that she's a guy with her face flushed and her collar awry, and never looks at her again. When things go wrong with a man he can neglect his barber for a day or two and forget the brillianine for his mustache, and grow black and hollow around the optics, and ten to one he will simply seem in female eyes "so Byronic and interesting, you know." But a woman may have a thousand gnawing devils at her heart strings, and she's obliged to put on just so much poudre de riz, and to pull out the gray hairs on her temple, and pinch the wrinkles out between her eyes all the same, or she's handed over to the world by her hundred most intimate friends as "such a wreck, my dear," and the jury on the case, and even her lawyer, begin to find excuses for the husband. If a man has weary nerves and a thumping headache, nothing prevents his coming home and tying a towel about his brows like a Turk, and being as grumpy as one the rest of the evening. But a woman in the same case

can only look longingly at her old wrapper, and then go and painfully build up her Psyche knot and an agreeable smile at exactly the right angle, else she will hear that "Hang it! It's enough to drive a fellow to his club to have an untidy wife lying about on the sofas!" and that "the deuce knows why a woman always manages to look pretty before marriage and never after." It is generally supposed that if a woman can only sit down and have a good cry that is panacea for all her woes. But when she finds out that the indulgence makes her nose red and swells it, she has to give up that satisfaction along with the others. A man may exhibit fearlessly, upon occasions, a carmine proboscis produced by causes far less confessable, but a wife is pronounced not half a wife and woman if she shrinks from him on that account. In fact, being a woman at all is a snare and a delusion.

SILK THREAD IS POISONOUS.—The *Sanitary News* draws attention to the fact that silk thread is soaked in acetate of lead to increase its weight, and persons who pass it through the mouth in threading needles, and then bite off the thread with the teeth, have suffered from lead poisoning.

CAN COUNT 180 DESCENDANTS.—The Marietta (O.) *Register* tells of a somewhat remarkable family in that vicinity. Joseph Burke, a freeman from Prince William County, Va., came with his family in 1854 to Newport, where he died three weeks afterward, leaving a wife and twelve children. The widow still survives, and most of her children. A recent census of the family, including children, grandchildren and great-grandchildren, gives an aggregate of 180 souls. Mrs. Hannah Burke, now aged eighty-seven, is probably the most motherly woman in Ohio.

IMPROVED DUMBBELLS.—In athletic exercise, which now plays such a prominent part in hygienic cult, the old notion of severe laborious exertion at the outset has been utterly exploded, and modern science has decided that light and very gradually increasing tasks are productive of the best and most lasting results. In dumbbells of the usual construction the athlete must have a large assortment of gradually increasing sizes, and unless a great many are kept the transition to a heavier pair cannot be made in the moderate gradation that is advisable. To meet this contingency an improved dumbbell has been devised. It consists of two hollow wooden shells through which the handle passes. These balls can be the receivers of a large or small quantity of sand or shot as may be desired, and thus the weight of the dumbbell can be graduated with the greatest nicety.

WOMEN ARE IN A GREATER DEGREE THAN MEN SLAVES OF FASHION. Possibly there is some excuse for them. They have in many cases to depend upon their good looks for getting a husband, and naturally they like to make themselves as stylish as possible. Unhappily a notion prevails amongst women that a slim and delicate waist is an attraction. This is especially unfortunate, because one-half the ailments from which women suffer arise from tight lacing. Many ladies would give anything to be able to dispense with the cruel corset which keeps them in torture hours at a time. But they cannot do it because Mrs. Grundy refuses her sanction. If ladies of high standing in social life could only realize the benefit they would confer upon their suffering sisters if they would dispense with tight lacing they might be led to change the fashion and let nature have fair play. It is quite astonishing that tight lacing has so long withstood the attacks that have been made upon it by the press and the medical profession. But the fashion seems quite impregnable, and there will be no change until those who lead the way in the social scale set the example.

MOTHERS AND THE NURSERY.

(CONDUCTED BY MRS. F. C. PRESSLER).

HOW TO AMUSE THE LITTLE ONES.—In regard to toys, the mother will soon find that the most lasting in the child's favor are the ones that he can change the form of, or invent new ideas about. I believe that is one reason the doll is never forsaken. A few cheap articles will be just as valuable to the little one. For example, a bundle of lamp lighters will afford interest, as the child can first lay them down in rude outline of houses, trees, or animals; then weave them into fences, gates, the letters of the alphabet, etc. A paint box and some advertising pictures, a pencil and paper, a pair of blunt scissors and a newspaper will help to fill in the hours and give mother a chance to breathe.

Another excellent plaything is a soft ball, which one child can throw up and catch, while the others count, thus learning to catch and count at the same time. If mamma will bring out her box of buttons, little Mischief will be pleased to string them for her, and she will also pull out basting

threads with the greatest dispatch and skill. In fact, a child that is trusted and feels some responsibility, will be much happier, and there will always be a confidence in the mother and a desire for her advice.—*Henrietta C. O'Kane.*

A PLEA FOR THE BABY.—We have so often seen examples of cruelty to children while being taken around for an airing by unscrupulous nurses, that we are constrained to say a few words to those mothers who trust their little ones out of their sight, and to the care of thoughtless and careless nurses. About as common a source of danger and pain to the little one thus sent out for its health and pleasure, is the manner in which the nurse crosses the gutter and curbing at every square. We have frequently watched this performance and seen stupid, careless nurses use all the force in their bodies in jamming these carriages time and again against curbing, and at each effort poor little heads have been violently struck against the carriage, little backs have been strained and often foundations laid for grave nervous troubles or infantile paralysis, Pott's disease, etc. Did you ever sit in a carriage or buggy, when, without warning, you were suddenly thrown from your seat? This is nothing to what the little one gets in crossing the gutter. Next to this comes the case of little ones who are left unattended in their carriages, while nurse chats away for a half hour with some stray acquaintance. Securely strapped in, the little one can face a broiling sun, or a violent wind and dust storm until its little head is ready to split. No body knows it, and nurse doesn't care. Promiscuous kissing is another and terrible danger, menacing these little ones when out of sight of their parents. Because a child cannot talk is no reason to suppose that it does not think and observe, does not have its likes and dislikes, and it is wrong to have it held and kissed against its will by people who care nothing for it. But this is nothing to the danger of infection from such practices. Syphilis, scarlet fever, measles, diphtheria, smallpox, and numerous skin diseases are communicated in this manner, and you have *no right* to risk your child's life by allowing every stranger and negro nurse to kiss the pure sweet lips of your helpless baby.—*The Family Physician.*

CANDY EATING.—There is one very simple rule of health which every one should know, and that is, that everything you eat either helps you or hurts you; there is no middle course. Candy eating comes under this head. It cannot be maintained that candy helps in the formation of flesh, improves the blood or strengthens the nerves, and therefore it must

be injurious. This reasoning is amply supported by facts. Eating candy is a cause of much ill-health among children, and the predisposing cause of many acute attacks of disease of various kinds. Much dyspepsia, indigestion and many bilious attacks are directly or indirectly due to candy eating. Candy produces a condition of the stomach which is very unfavorable to the patient when attacked by severe disease. Most of the candy sold nowadays contains a considerable portion of glucose, a kind of sugar made from starch, and which more easily ferments or sours in the stomach than does cane sugar. An excess of sugar of any kind in the stomach tends to ferment, becomes sour, sometimes intensely sour, so as to produce great irritation of the stomach, resulting in a catarrhal condition, bilious attacks and other derangements of the digestive organs. Eating nuts along with the candy renders it still more injurious, as the nuts are hard to digest. Peanut or cocoanut candy is especially a hurtful compound, and all prudent parents should forbid their children eating it. Some of the candy is colored with substances which are injurious and adulterated with a kind of white clay, rendering it still more objectionable. A child who is in the habit of eating much candy, and has thus brought its stomach into an irritated condition, takes cold from a slight exposure and is easily made sick by a slight indiscretion in its diet, resulting in a severe attack of vomiting, diarrhoea or febrile disturbance. Much of the sickness among children may be traced to this cause. — *Golden Days*.

A DOCTOR'S REBUKE TO INDULGENT MOTHERS.—Most children, up to the age of three or four, and especially if in charge of a nurse, are systematically overfed, says Dr. Mendelson in the *Medical Journal*. There is apparently a tendency to regard children of that age more as prize cattle in training for exhibition at a county fair than as material out of which rational beings are to be shaped. Consequently, strict attention to the quantity of food and to the nurse is indispensable. If a child is fat and dyspeptic, is inclined to bronchial and intestinal catarrhs, to amygdalitis, to eczema, and to bilious attacks, you will find, as a rule, I think, that it is being overfed and that its diet is too uniform. It is a common error to give a child one kind of food too exclusively. Children often get too much animal food, especially eggs, with the idea that it is "strengthening," and not enough green vegetables and fruit, because these are supposed to "upset the bowels." A judicious combination is what we must insist on. And, as a rule, it will not be necessary to either proscribe or prescribe certain foods, except on the lines just indicated. The diet of

small children should be largely farinaceous, I think, except where there is a tendency to flatulent dyspepsia, whether of the stomach or bowels. Many little patients in whom eczemas are imputed to too starchy a regimen, will be found on inquiry to be really suffering from a want of those alkaline salts which normally are introduced into the system through the medium of green vegetables and fruit. Hence I insist on children being brought up to eat such vegetables as are in season, with certain exceptions—such as corn, cabbage and egg plant; and to have plenty of fruit, raw in summer, stewed or baked in winter.

In older children the dangers of constant indulgence in rich and highly seasoned food, in pies, pastry, cakes and desserts generally, cannot be too strongly insisted on. But, above all, we must condemn in unmeasured terms the use by children of nerve stimulants, whether alcoholic or in the shape of tea and coffee, for stimulants act injuriously in a double way. In the first place, they generally produce indigestion; and in the second, their use induces a condition of nervous erethism, which is, I am inclined to believe, in itself a strong predisposing cause in the production of gout. In children, next to attention to diet are the subjects of clothing, bathing, and exercise. Just as most children are overfed, so, too, are they overdressed, in the sense of having too much on, and that not properly made. The habit of putting a great number of woolen clothes upon a child, which I find to be common, is the cause of much illness, especially as most houses are overheated by a furnace. The free perspiration which these practices induce is too often followed by taking cold whenever there is a sudden change of temperature. Another reprehensible thing often found is that the clothes are made to button by a waist snugly to the chest and abdomen. This, by the rapid growth of the child, soon becomes too tight, impeding the free action of the lungs, and through them of the circulation. The clothes of children should be few in number, and should be so made as to hang free from the shoulders, leaving the body entirely untrammelled.

Bathing—Sponging in cold water in a warm room—should be insisted on, followed by a good rubbing to stimulate the circulation in the skin. As for exercise and fresh air, I believe that, unless children are absolutely sickly, they should be sent out in all sorts of weather, no matter how inclement it may seem. If it rains give them rubber boots and waterproofs, and let them have a good time wading in the puddles. In recommending such a course of hardening, I am well aware that there will always be

found a certain number of children who cannot stand it, and a vastly greater number of parents who are opposed to trying it. But where there are twenty children of whom it has been thought that they were of too delicate a nature to bear such treatment, there will perhaps be found but one of whom this is really true. In fact, it is often the so-called delicate ones—those who have been shielded from every draught that blows—who need it most and thrive under it best.

GYMNASTICS FOR THE YOUNG.—There can be no greater mistake than to suppose that the “gymnastics” which physiology advises as suitable for the school, bear any relationship either to violent exertion or to dangerous athletics. On the contrary, the exercises of the school are especially graduated to the ages of the pupils, are never excessive or violent in their nature, and are arranged so as gradually and consistently with natural growth to develop to the full the frames of the boys and girls who take part in them. When a parent declares that he won’t allow his boy or girl to attend the school gymnastic class on account of any presumed roughness or violence, it is clear he does not comprehend what “physical exercise,” in its true sense, means. A visit to any of the schools where such exercise forms a part of the curriculum, would serve to dispel all false notions regarding this subject, and would show how weak chests, pigeon breasts, and stunted frames at large are made, by gentle exercises willingly undertaken, to develop into healthy bodies, which will stand the strain of life and existence when, as weakly subjects, they would have gone to the wall in the inevitable struggle which awaits the toilers and moilers of the earth.—*Health.*

FOOD OUGHT TO BE THOROUGHLY CHEWED.—Children should be trained to eat slowly and chew the food well before swallowing it. Many a life of suffering has resulted from neglect just here. Mr. Gladstone is said to chew thirty-three times whatever he puts in his mouth before he swallows it. Food needs to be thoroughly mixed with saliva as well as to be chewed and crushed between the teeth. Food that is bolted irritates the stomach and impairs the digestive organs.

HEALTH INVENTIONS AND APPLIANCES.

BROMINE AS A DISINFECTANT.—Bromine, as a disinfectant, is said to be coming to the front. It is an inexpensive by-product of the manufacture of salt, selling at 70 cents a pound, and in solution containing one part

in weight to about 800 of water ; it may be used freely without affecting anything it may touch. A few gallons used daily will remove all ammoniacal odors from stables, or a few quarts will thoroughly deodorize the entire plumbing system of an ordinary house. The undiluted bromine is strongly corrosive, and if it touches the skin causes a painful burn.

THE LIVER NOT ESSENTIAL.—In the course of long investigation, Professor Ponfic, of Breslau, has made the important discovery that a large part of the liver—even as much as three-fourths—may be removed without serious disturbance of the animal functions. Surgeons had before known that the whole of the liver is not absolutely essential to health, but could hardly suppose that the sudden destruction of a considerable part of it would not be serious, and now may be enabled to perform operations hitherto believed to be impossible. Professor Ponfic found that the liver has a wonderful power of reproduction, in some cases a portion equal to two-thirds being replaced by a new growth within a few weeks.

PUBLISHER'S DEPARTMENT.

A REMINDER.—Will subscribers who have failed to remit for arrearages kindly consider this paragraph a polite reminder that we will cheerfully send them receipts, if they will forward us amounts due ?

MARION HARLAND HAS WRITTEN A BOOK of nearly 64 pages, entitled "Our Baby's First and Second Years," which contains most valuable information regarding the care of infants through the troublesome term of nursing and teething ; also contains valuable hints about the treatment of Diphtheria, Scarlet Fever and Cholera Infantum. This book is published by Messrs. Reed & Carnrick, of New York, and they will send it free upon application.

AN ADIRONDACK SANITARIUM.—The statement in our issue of March, that sanitariums were wanting in the Adirondack region, has elicited a circular from the Superintendent of the "Adirondack Cottage Sanitarium, for the cure of pulmonary diseases, at Saranac Lake. The object of the Adirondack Sanitarium, we are told, is to offer to persons in the first stages of lung disease, and who could otherwise ill afford the expense of a sojourn in these mountains, the benefits to be derived from a change of climate, a well-regulated out-of-door life amidst hygienic surroundings, a nourishing diet and the latest and most approved methods of medical

treatment. The cottage plan has been adopted, and cottages sheltering from two to four inmates only are clustered around a commodious main building. In the winter time carriage exercise or sleigh rides are furnished as often as possible free of cost. The deficiency in the running expenses of the institution is made up by donations and subscription.

IMPORTANT TO SUBSCRIBERS.—At the solicitation of many subscribers living at a distance from New York, the HERALD OF HEALTH Co. will cheerfully undertake to fill any commissions that may be entrusted to us in the purchase of articles or apparatus for Hygienic and Health purposes. We do not desire, nor can we undertake to do a purchasing business, but will be pleased to aid our subscribers and friends in the manner above indicated. We can obtain everything in the line of Health and Hygienic articles for them at New York prices, and will mail descriptive and price lists upon application, provided stamps for return postage are sent. In these lists are embraced electric batteries, machines for physical culture, ventilating, filtering and disinfecting apparatus, health foods, clinical thermometers, invalid's chairs, ear trumpets, etc. We will, however, fill no orders for patent medicine trash, electric belt humbugs, nor drugs of any description, and do not expect to receive any. No commission is expected nor will any be received, as we are willing to put ourselves to a little trouble if we can prove of any service in this way to our friends. We will freely answer all questions as to prices, forward circulars, etc., insisting only that stamps be enclosed in all letters seeking information, and that we do not be required to pay return postage.

QUESTIONS AND ANSWERS.

ALTOGETHER TOO NERVOUS.—We fancy that you are over nervous about yourself. We should recommend you to try for a time to live on extremely light food such as milk and eggs. In this way, by giving your digestive organs a rest somewhat, you will be able to conquer the symptoms you describe. It is probable also that a prolonged rest and a change of air would be beneficial to you.

THE MARRIAGE OF FIRST COUSINS AGAIN.—*C. W. Smith.*—Because albino children have been known in one case to follow the marriage of first cousins, there is no logic or reason in the idea that the children of

such marriages must invariably be so. If first cousins are perfectly healthy, there is no reason why marriage in such a case should not be undertaken.

ONLY GROWING PAINS.—*Youthful Reader*.—The pains you complain of are of no great account. When they are severe, rest may be enjoined, attention to the general health, and plenty of nourishing food. All young persons are liable to suffer from them more or less. They pass away quickly, and are only an indication of a slight temporary excess of growth over nutrition.

RUN DOWN.—*Herbert W.* complains that he eats too much, but that in spite of his appetite he is running down. We should recommend you to make a change in your food—to give up tea, try cocoa instead, and likewise to see the effect which a larger proportion of vegetables in your food would have on your health. A little Mineral Water, taken in the morning, might also benefit you; and you also apparently require more open-air exercise.

ENLARGED TONSILS.—*Anxious Mother*.—Have the children's throats examined by a surgeon. If much enlarged, the tonsils should be excised. This is the only permanent cure, and prevents all future ailments.

ADVICE TO A YOUNG MAN.—We reiterate for the benefit of other correspondents, advice frequently given before to inquirers anxious to overcome bad habits—in brief: sleep on a hard mattress; try cold sponging night and morning; avoid fluids late at night; live plainly; avoid stimulants, and take plenty of open-air exercise. No need for any electrical apparatus.

CARE OF THE EYES &c.—*J. C. Tennessee*.—The advice the London physician gave you as to the cure of your eyes was good. You should have continued to wear glasses, even after you broke the ones you alluded to. No person can safely use glasses for two years and then abandon them. Send the remaining glass by mail to the oculist in your nearest town, and he will obtain one to correspond. Better still, it will pay you to take a journey and have your eyes again fitted properly. There may be various causes for the back-ache you complain of. Cold or possibly a strain. Your treatment is right, as well as we can judge from your statement, and you had better continue it as long as it gives relief or works a cure.

ICE IN THE SICK-ROOM.—*W. F. G., New Orleans.*—A saucerful of shaved ice may be preserved for twenty-four hours with the thermometer in the sick-room at 90° Fah., if the following precautions are observed: Put the saucer containing the ice into a soup-plate, and cover it with another. Place the soup-plates thus arranged on a good heavy pillow and cover with another pillow, pressing the pillows so that the plates are completely embedded in them. An old jack-plane set deep is a most excellent thing with which to shave ice. It should be turned bottom upward, and the ice shoved backward and forward over the cutter.

ANGER IN THIS PROCESS.—*F. Q. R., Chicago.*—Electricity is now much employed in the removal of wens, warts, moles and superfluous hair upon the face, and in general with safety. Yet, according to a writer on the subject, there is a risk of injury to the nerves or other parts of the face if these operations are not very delicately and intelligently done. A case is mentioned of a lady who had a delicate shading of hair on her upper lip removed by the usual electric process of piercing the root of each hair with a very fine needle, through which the current was given, killing the bulb in the skin. The operation was painful, so that it could only be completed in several sittings. It removed the hair perfectly, but the effect on the fine facial nerves nearly cost the lady her eyes, and she lost the use of them for over a year.

THE HERALD OF HEALTH.

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THE
HERALD OF HEALTH.

Fortieth Year.

MAY, 1890.

No. 5.

LAWS OF PERSONAL HYGIENE.

ABSTRACT OF A LECTURE BEFORE THE STUDENTS OF THE NEW YORK
MEDICAL COLLEGE HOSPITAL FOR WOMEN.

BY M. L. HOLBROOK, M. D.

A GREAT majority of the people who have knowledge in these matters avoid the practice of them in one or more of the essential requirements. Obedience to hygiene is not easy and is a thing acquired only by effort. Two things are necessary, intelligent grasp of certain ends to be sought, with the means of obtaining them ; and secondly, formed habits. The individual is not practically much better off for the former until he has made his information take the form of a settled daily habit in each matter, running on without any marked effort or thought needed from him. The first law is that you keep your expenditure of force each day somewhere near the manufacture of it in your body. Or if on a given day you run out more than your vital production, that you see it is made up without much delay on the next days subsequent. The standard of force produced in a human body is based on the estimate of the number of tons a person can lift in a day this one perpendicular foot. We call these foot-tons. Expressed in this way, the vital energy of a man in his prime

averages 3,000 foot-tons. Unusually strong men might go as high as 4,000, even 5,000.

THIS FORCE HAS A FIXED RELATION

to the food consumed in the same time. If the food were oxidized in a laboratory, that is, simply and actually burnt, it would give by its heat the same mechanical equivalent in foot-tons as when it is burned as the bodily tissue, which it supplies the waste of. Different foods are estimated in relation to the same foot-ton. The waste of a man's tissue by an amount of labor represented by 16 foot-tons is what one ounce of cabbage could furnish the repair of, for instance. One ounce of carrot could thus stand against 20 foot-tons; of milk, against 24 foot-tons; of lean meat, against 55; of oatmeal, against 152; of butter, against 281, and of fat pork, against even more than butter. You have here an indication of the great value of fat pork to those doing very severe labor; as the men in winter lumber camps, soldiers in active service, sailors, and the like.

BUT AGAINST THE FORCE

to be looked for from the taking of a given amount of food, must be charged two items. They are, the part which is undigested and leaves the body along with the excrement; and second, the force expended in digesting what does enter the artal economy. There is need of laboratory work to determine for women, as has been done for men, the proportion of the food they eat which leaves them undigested. I think with certain classes of women it is larger than we know anything about. Now, as for the force lost to the body in the act of digesting foods. It varies very greatly with the food and its state and form; each product of the vegetable or animal world having its peculiar quality in this respect. Thus the starch in wheat is not the same starch structurally as the starch in potato or oatmeal. The plant built it up differently. The starch granule of oatmeal is larger and tougher than that of wheat. That of rice is very fine and fragile. Certain processes of heat and water application *might* almost level these differences. Unfortunately, as a fact, they commonly do not.

YOU OBSERVED THAT LEAN MEAT

we gave a potentiality of about $\frac{1}{3}$ of that of oatmeal. However, taken as usually cooked, it gives nothing like the force three times its weight of lean beef would. Why? Because where in beef the nutritive elements are combined with the very large proportion of water which accompanies

them throughout their career in the body, in oatmeal they are not ; and the body loses much force in simply watering or hydrating the elements in the case of oatmeal, which is saved to it in the case of beef. The discovery of this principle of hydration and artificial hydration, as soup-making, enabled Count Rumford, in Austria, to feed the pauper population with an enormous saving over previous methods. Here the whole "art and mystery" of cookery has its field, involving mechanics, chemistry, and finally vitality itself, for foods not only supply wastes but determine processes in the internal operations of the body, by elements not destined to be consumed, and yet whose presence is necessary in the blood. And so the complication and the possible variety of the subject becomes endless. Let it be enough that cheese is not the same thing it was when it was part of the milk ; over-baked meat not the same thing as rare meat ; stewed apple as raw apple. As related to the foot-tons our bodies can ever get out of them they are as if they were of different chemical composition. Here we leave it to the cooks.

NOW THE FORCE IN OUR BODIES

once acquired is expended in various lines. During the years up to adult life, growth receives—or should—a large share. Both then and afterwards till the moment of death, repair receives another share. Heat, respiration and digestion receive other large shares. Out of the 3,000 tons produced in health 2,700 are thus used, and the surprisingly small figure of 300 is what is left over as surplus to be put into outward energy or work. But this is commonly much below 300. Every bad habit or condition reduces it. The 2,700 of running expense is easily raised by abuse or difficulties ; and the 300 dwindles to the half, or the fiftieth, or to nothing. Investigation among poor sewing women of London gave an average of 47 foot-tons as their actual output. Lacking food, bad air, injured machine, imperfect repairs—it is not hard to see. Now remembering these figures of 2,700 and 300, which stand for a body at its best of production, it follows that any expenditure in labor of more than 300 will come somewhere out of the 2,700, that is out of the machine or some of its internal operations, unless we soon restore the balance due. Weston in one of his walks made such an encroachment daily of 600 tons. He rested and repaired his accounts, however, for many weeks after the walk was over. This seems wonderful to me, though, to run over his output 600 foot-tons each day ! Indications from the using of more

force than we make are, loss of weight, loss of strength, loss of digestive power, of power to enjoy, low and saddened thoughts, imperfect color and heat in certain parts of the body.

THE TERM "PHYSIOLOGICAL BANKRUPTCY"

was invented by Dr. Fothergill, of London, to express this state when extreme. Women of invalid class show about half the muscular strength of the average invalid men. In health they probably have an average of two-thirds the strength of men, much of it expressed or spent in other lines than muscular power.

All excess of food beyond the actual need of repair wastes force in disposing of it. All the bodily surplus may go thus and without immediate suffering or inconvenience. A gourmand may use *all* his power in handling surplus food and passing it out of his body.

THE CONDITION AND ACTIVITY OF THE STOMACH

are what determine more than any other one thing the strength a given person can develop. Rules for securing its best and easiest performance of its task are of high importance :

1. Regularity in eating.
2. Thorough mastication of food.

Count Rumford estimated that if soldiers chewed their food, two-thirds of the amount ordinarily needed would do them. Gladstone is still one of the hardest workers in Europe, accomplishing in his age an amount of work daily which is phenomenal—a very wonderful worker. He is particular to give each piece of food "32 bites," as he expresses it. The late Emperor of Germany had very exact habits, and preserved very remarkable vigor and working capacity into advanced age. There is a story, I can't say it certainly happened, but it is told, that his mother when he was little, in order to get him to chew his food well, used to give it to him with each little piece large enough for a mouthful done up in wrappings so numerous that he would get one piece chewed well before he could get the next unwrapped.

THIS IS A VERY HARD HABIT

to acquire, especially if one eats alone. It is to be hoped Americans will never realize the state of things portrayed in a comical picture which came out, of what eating would get to be in the year 1900. A man seated at a table and a large funnel down his throat. The waiter with various dishes

and drinks stands by and is about to pour them down. (A member of the class then instanced the feeding of chickens by injection of the food from a large syringe.) I was once a partner at table with a man whom I esteemed very highly, who was a friend more like a brother to me and I to him. His habit was not good in this respect, and so we formed a society, of which somehow I got to be president, to enforce chewing. The fines for neglect went to one of the charities. Society at table is the best aid in chewing one's food properly.

NEXT, FOOD SHOULD BE GOOD

but simple. The teeth must be kept in good order. Western nations seem to have a general lack of good teeth, in great contrast to Eastern nations. Thus the Hindoos have good teeth till quite aged. They take great care to keep them clean. After meals they chew a bit of wood to a pulp and so rub all debris away. A missionary movement was once actually started among cultivated Hindoo gentlemen to convert the English classes to better habits of bodily religion. The neglect of proper observances in the matter of health in England seemed to them monstrous and deserving charitable instruction. Cold water is said to crack the dentine. I cannot vouch for this myself. Dentists tell us chewing of hard substances is needed, the pressure causing growth of the circulating vessels and good nutrition and repair in the tooth substance.

RULES FOR CARE OF THE BRAIN.

First, systematic exercise and regular employment. The brain stands most abuse of any organ in the body. Its best tonic and stimulant is success. The worst and most depressing thing to it is failure. The most injurious effects come by using stimulants in early life; young people should use no liquors, tea, or anything of this sort. They act mostly on the brain and injure its growth very materially. Abundance of sleep is necessary. I am inclined to think eight hours is not more than enough. Sleep is the time of relatively lowered expenditure and increased repair. *Learn to think straight*, and allow no morbid fancies to remain in your mind. They soon get an obstinate foothold and are hard to remove, and may make whole life unhappy. Watch for the beginnings of false ideas, more particularly when anything has thrown you into depression, sickness, or a bad indigestion. Case in point: I remember an accountant—a very good, upright man. He over-worked. An idea came to him that his accounts were wrong. He knew they were not, and went back several

times and found everything correct ; and still let the idea cling to him till it became permanent ; and he suffered at the close of every day with this fear over his accounts having a mistake. I told him all he could do was to quit the business.

A CASE UNDER DR. HAMILTON.

A gentleman fancied he could not go above 59th street in this city. The Doctor, after trying vainly to disabuse him of the idea, took him in his own carriage, and after a drive of many miles in various directions, tried to go past the line. The man began to entreat him to stop and not carry him over. He did go on, but the man was immediately seized with a paroxysm and the convulsion lasted some time. The good done by mind and faith healers is brought about mostly in this way. Anything else which broke up the bad mental habit which is making them sick and got their minds off themselves, would do as well. The force of one's will can be used sometimes to stop a lying fancy. I had a man under my care once, who was making himself and his family miserable about something which existed only in his mind. I got him to stamp on the floor every morning on getting out of bed and swear by the eternal God that he would behave himself that day. It cured him entirely.

Care of the lungs is important. They (the oxygen) and the food are the direct manufactory of force.

THEY WANT AIR AND EXERCISE.

For the latter the clothing must be free and loose about the trunk. Gymnastic exercises are needed to develop the breathing muscles. Erect sitting position. If one does stoop at his writing or work it is needful to counteract it by exercises which will straighten and expand the chest enough to make up. Five per cent. decrease of lung space would mean five per cent. less power.

Exercise in general is important, and to do most good should be of every muscle in the body, and should be gentle. Each muscle needs to furnish to the circulation that is, certain substances which arise from its activity, and the production of all the muscles is needed. There is a difference between this and the protracted or violent use of just a few muscles. Exercise should be daily. Every school should be a gymnasium on its upper floor. Physical training should be half the education of the future. This was introduced by me in Cleveland, Ohio. The children were said by the teachers to be better scholars, brighter and more

obedient in every way. *Skin* needs cleansing. Also exercise, that is rubbing till it is *red* at least once every day. Feet need care; should be washed once every day, be clean, warm, dry and loosely covered, and dip in cold water and rub well. Don't catch colds. For this cold foot baths and rubbing, exposure of skin to cold air all over and friction. These are the best preventives.

PAST SEVENTY-SEVEN.

INTERESTING ACCOUNT OF THE HEALTH HABITS OF REV. FRANCIS COLEMAN.

(SPECIAL FOR THE HERALD OF HEALTH.)

THE following account of the health habits of Rev. Francis Coleman, a well known Canadian clergyman who has passed his 77th birthday, will be found of no little interest :

In the pursuit of this great earthly blessing, Mr. Coleman is guided by no cast-iron rules. He always led a temperate life, having totally abstained from alcoholic liquors for more than fifty years, and for some time discontinued the use of tea, coffee and all rich pastries. At meals he drinks white tea, that is, hot water with milk and sugar, varied with an occasional indulgence in cocoa. In the heat of summer, to quench his thirst he drinks unfermented wine, which he manufactures from the produce of his own grape vines. This he finds to be very refreshing and conducive to health. For breakfast he eats porridge, toasted bread, fruit and vegetables; for dinner he adds a small quantity of young tender animal food, having the idea that such meat, containing little or nothing to clog the system of the aged, tends to prolong life. Third meal is very light, sometimes omitted.

EVERY SECOND MORNING

he takes a sponge bath in tepid water. He has tried bathing every morning in cold water until his system became weak, and sciatica warned him against its continuance. Just before retiring at night, twice a week, he thoroughly washes his head, rubbing dry with a coarse towel. He believes this to be a preventive of apoplexy and a remedy for headache and catarrh, as thereby the pores of the head become so active as to throw off the offensive matter that causes these complaints. Once a day he gives

his feet a good ablution. At night in bed if his brain is too active, he puts a brake on his mind. True, these thoughts are wholesome and pure, but this is not the time for their intrusion. He compels the current to cease its flow. The mind at ease, the blood does not rush to the brain, then he is quickly lost in slumber. It benefits him to take an hour for repose at noon. For mental recreation he writes in his diary every day, and has done so for the last fifteen years, noting every item of income and expenditure.

FOR EXERCISE HE CULTIVATES A GARDEN

and small fruit orchard, in which he has the pleasure and profit of raising nearly every kind of fruit, great and small, grown in his latitude, $43^{\circ} 30'$ North. Some of his pears, peaches, plums, grapes, berries or vegetables are on his table almost every day through the year. He keeps a horse and is his own stable boy; enjoys frequent drives on errands of mercy and for fresh air through the city and surrounding country. For outing in summer he crosses Lake Ontario on different steamboats, which he did fourteen times last season, believing that the pure air on the lake promotes longevity.

FOR RESEARCH IN THE SUBLIME AND BEAUTIFUL,

on clear, mild evenings he mounts his telescope and scans the wonderful phenomena of the heavens. He has the idea that these observations improve his sight. He is astonished that so few take pleasure in these delightful investigations. He strives to live in peace with God and in harmony with all mankind, except with those who openly violate the natural or revealed laws of God. Then he endeavors in public discourses and private converse earnestly to admonish, assured that suitable efforts for the good of others add to his own health and happiness. While he rejoices in the use of his own foresight and wise free-agency to prolong his days, yet for longevity he believes man is dependent on a higher power, that of Divine Providence. He has experienced many striking interpositions, or long since he would have ceased to breathe. In his life work as a minister of the gospel he has frequently visited persons ill with contagious diseases, as cholera, smallpox and fevers, yet never caught the infection. Does not this indicate providential safeguard? Twice he was unhurt in dangerous falls. Twice an unseen hand

SNATCHED HIM FROM A WATERY GRAVE.

The marks of a narrow escape from falling trees he will carry to his grave. Once he was struck by a furious runaway team, but was shielded in a

most singular manner by an invisible protector. Fifty years ago in the back woods he lodged in a close room. "The night is cold," said the lady, "I will air your room." (?) She did so by putting in it a large pot of burning coals. Here he would have slept the sleep of death, but at midnight he was startled by a loud voice of alarm calling out, "If you want to save your life get up and open the door!" With difficulty he obeyed, for his senses were almost gone; but on gaining the open air he experienced immediate relief. But for this providential voice, not a human voice, spoken at the critical moment, perhaps to his inward ear, the deadly carbonic acid gas caused by the live coals would have quickly ended his life. The wise Creator never designed man's body for disease, but for health and long life. Where these are not attained

THE CREATURE IS AT FAULT.

In brief these are the hygienic rules he endeavors to practice, mostly learned from the excellent *HERALD OF HEALTH* :

1. The use of plain food with plenty fruit. 2. Personal cleanliness by frequent ablutions from head to foot. 3. Flannel next the skin the year round, graduated according to the season. 4. Open-air exercise every day. 5. Ventilation of dormitory winter and summer. 6. Harmonious companionship. "Poor is the friendless master of a world. A world in purchase of a friend is gain." 7. Right relations to Jehovah and all his creatures.

He aims at such vigorous health that there shall be no morbid soil in his system where the germs of disease can take root. Whether he succeeds or not he is blessed with a good prospect of immortal health and youth in heaven.

TORONTO, April, 1890.

BATHING ALMOST UNKNOWN AMONG CANADIAN FARMERS.

At a recent meeting of the "Societe d'Economie Sociale," held at the residence of Mr. A. Desjardins, M. P., Dr. J. A. Beaudry, secretary of the Provincial Board of Health, read a very interesting paper on "The Farmers and Hygiene from a social point of view." He held that according to statistics carefully gathered by himself during the last ten years in the surrounding country districts the death rate was higher there than in

our cities, though the farmer certainly ought to enjoy the best health and live the longest. This alarming phenomenon was due to the non-observance of the laws of health, and also to ignorance, prejudice and habit. In winter, he remarked, the farmer shuts himself up with his whole family—which is generally very numerous—in the kitchen of the house. Ventilation he never dreams of, so that the family live for whole months in foul air, and experience shows that during the winter months deaths are more numerous among women and children in the country districts. The doctor next called attention to the fact that bathing is almost unknown among Canadian farmers. On Sunday morning the face and hands are given a thorough washing, but the rest of the body never feels water. Still another fatal mistake was made by the farmer in sending his best produce to market, and keeping to feed himself and his family whatever he considered least salable. In conclusion, the lecturer referred to the influence of the body over the mind and the imminent danger of an enfeebled state of the agricultural race, a weakening already ascertained to be a fact in certain quarters. Finally, he called on the principals of schools and colleges to recognize the importance of instructing their pupils thoroughly in the laws of health.

HOW THE DUCHESS OF MARLBOROUGH REDUCED HER WEIGHT.

NEITHER the good clothes nor the coat-of-arms worn by the Duchess of Marlborough have interested the ladies of New York as much as the slender proportions of her figure. The Duchess is slight in bearing and outline; her flesh has vanished, and the things she has done, or rather the things she has refrained from doing, entitle her to be classed among the heroines of society. When she married the Duke of Marlborough she was more than plump. She filled out every crease and wrinkle that escaped her bodice maker; her breath was short, her step considerably heavier than the rustle of angels' wings and the

SLIGHTEST EXERTION DISTRESSED HER.

She consulted an adipose doctor, who, after a careful diagnosis, pronounced her case chronic. Then she was plain Mrs. Hamersley, but a very pretty woman predisposed to take up considerable room in the

world. This revelation horrified the pretty widow, who at once offered superior financial inducement and pledged herself to carry out minutely whatever prescription he warranted to relieve her. A bargain was closed and the treatment began at once and has been religiously adhered to ever since. Here are

SOME OF THE RESTRICTIONS :

Not a morsel of bread, cake, rolls or pastry.

No tea, coffee, chocolate or sweet wine.

No potatoes, peas, rice, carrots, turnips, macaroni, cheese, butter, cream, custard, jellies or sweets.

Not a drop of ice-water.

No warm baths.

No flannel, and only enough clothing to keep from taking cold.

No bedroom heat.

Not a drop of any liquid food at meals.

IN PLACE OF BREAD

she had fruit, a section of apple or orange, some fresh grapes, berries, cherries or stewed fruit being used where ordinarily one craves a bit of bread or a swallow of water. Her diet was limited to two meals a day, breakfast at 10 and dinner at 7, with the following bill of fare to select from : Rare, lean meats, game and poultry, soft-boiled eggs, sea foods, toast, lettuce, spinach, celery, cresses, fruits. She had half a gallon of hot water to drink every day, with lemon juice in it to take away the flat taste. Cold water was denied her, and ales, frappes, champagne and claret strictly forbidden. She was even forced to forego the luxury of bathing in water, in place of which she had sponge and vapor baths. Every few days she took a fast, allowing the system to consume the adipose tissue. While no limit was put upon the pleasure of driving or riding, she was asked to select the roughest, rockiest roads and to walk from five to ten miles a day in the open air.

THIS PRACTICE OF SELF-DENIAL

the Duchess of Marlborough has persisted in for the last two years, and to-day she is perhaps the handsomest woman of her age in New York society. She weighs about 140 pounds, her eyes are bright, her complexion is as clear and smooth as a school girl's, and she has the carriage of a cadet and the health of a child of Nature.

BENEFITS OF VEGETARIANISM.

AN INTERESTING COMMUNICATION FROM MR. A. H. FRANK.

EDITOR HERALD OF HEALTH :—I still am in love with the vegetarian mode of living. Two years ago last November I adopted the two-meals-a-day principle, and have not eaten a dinner since. I eat as near 6 o'clock A. M. and P. M. as I can arrange my business to. I find this better for me than three meals. It gives the stomach a good time to rest after disposing of each meal. My health is excellent, and I have done much hard physical labor, such as shoveling and hoisting rock in the mines in Nevada, chopping wood and making maple sugar on my farm in Chautauqua County, this State, the felling of oak trees, cutting them into stove wood, grubbing out the roots, as well as to saw palmetto roots. I have also done the carpenter work on five small buildings the last six months; the only help I had was in raising. I am nearer 77 than 66, and do not have to use spectacles yet.

ONE OF THE GREATEST ADVANTAGES

I experience from my mode of living is that I am not subject to colds, as formerly. I have been more than usually exposed the last seven or eight months. Last fall while attending the fairs I slept on the ground with straw for a bed. It was very rainy weather, and often my blankets were wet through and through and my clothing wet through. The weather was quite cold, and several days at a time I went near no fire. At times I was out from four to seven hours at a time and got dripping wet and not change my clothes until bed-time. It does seem that I can stand almost any amount of exposure without taking cold.

I preach vegetarianism everywhere I go, but it is hard for people to make so radical a change as to adopt this way of living. Yet the world does move, and many are eating less animal food and more fruit. I have sold out my manufacturing business and am engaged in raising fruit. I have twenty-five acres in grapes, shall put out five or six more this spring, and will continue to add the acres until I can supply 200 tons of fine grapes yearly to help crowd out so much flesh meat. When one is well filled with fruit there is not so much room to

GET A PIECE OF A PIG

or some other animal into him. While in Florida last winter I bought a

piece of land that I am having set to fruit. My son attends to it in my absence, as it is alongside of his.

One of the most encouraging signs of the times is the large amount of fruit being raised, which makes it cheap. Most every one loves fruit, and if it is cheap they will buy and eat it. I see my letter is already too long. I intended to write but a few lines on the start. When I get to talking or writing on this subject I hardly know when to stop.

Truly yours,

A. H. FRANK.

BUFFALO, N. Y., April 30.

A little girl took the following order into a Bridgeport drug store the other day: "Mister Druggist—Please send ipecac enough to throw up a four-year-old girl.

Mrs. Partington claims that there are few people nowadays who suffer from "suggestion of the brain."

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

EDITOR'S STUDY.

HYGIENE FOR THE EYES.—Dr. Lincoln, of Boston, in the *Annals of Hygiene*, formulates the following rules for the cure of the eyes for school work :

First—A comfortable temperature, and especially let the feet be kept warm and dry.

Second—Good ventilation.

Third—Clothing at the neck loose ; the same as regards the rest of the body.

Fourth—Posture erect ; never read lying down or stooping.

Fifth—Little study before breakfast or directly after a hearty meal ; none at all at twilight or late at night.

Sixth—Great caution about study after recovery from fevers.

Seventh—Light abundant but not dazzling.

Eighth—Sun not shining on desks or on objects in front of the scholar.

Ninth—The book held at right angles to the line of sight or nearly so.

Tenth—Frequently rest by looking up.

Eleventh—Distance of book from the eye about fifteen inches.

OUR SKIN AREA.—The human skin is composed of three layers, averaging in all between one-twelfth and one-eighth of an inch in thickness, and, in extreme cases, as much as one-fourth of an inch in thickness. The skin area of the average adult is, therefore, estimated at 2,000 square inches. The atmospheric pressure being about fourteen pounds to the square inch, a person of medium size is daily and hourly subjected to a pressure of 28,000 pounds.

A DUTCH PHYSICIAN HAS RECENTLY DECLARED that a close connection exists between the exercise of our mental faculties and disorders of the nose. The opinion is expressed that if it were generally known how many cases of chronic headache, of inability to learn or perform mental work, were due to chronic diseases of the nose, many of these cases would be easily cured, and the number of child victims of the so-called over-pressure in education would be notably reduced. According to the above-mentioned authority, it would seem that breathing through the nose is absolutely indispensable in order to secure the full value of the mental capacity.

CAUSED BY TIGHT COLLARS.—Dr. Forster, Director of the Ophthalmic University at Breslau, has figured out a connection between tight collars and shortsightedness. He alleges that in 300 cases that have come under his attention the eyesight had been affected by the pressure of such collars upon the muscles of the neck, disturbing the circulation of the blood to the head.

THE FOOD OF A LIFETIME.—Apropos of victuals, the statistics which a clever Frenchman has just published concerning the food we eat are interesting and perhaps suggestive. According to his reckoning a human being of either sex, who is a moderate eater and who lives to be 70 years old, consumes during “the days of the years of his life” a quantity of food which would fill twenty ordinary railway luggage vans. A “good eater,” however, may require as many as thirty vans to carry the luggage for the inner man, but what those people would require who are always hungry, and whose stomachs are, to all intents and purposes, bottomless pits, that the statistician is unable to indicate. Another investigator affirms that women eat much less than men, after making allowances for differences in weight and work. Where a man eats nineteen ounces, a woman of the same weight and of active habits eats only fourteen or fifteen ounces.

CONSUMPTION AT HIGH ALTITUDES.—The distribution of phthisis in Switzerland has been reported upon in the *Lancet* by Dr. L. Schrotter. Facts and figures stated do not give much support to the common impression that high altitudes are practically free from consumption. Tables of deaths for the years 1876–86 show that the disease is endemic to every district of Switzerland, not one escaping it. It is true that deaths from this cause are fewer in the high regions than in those that lie lower, yet the ratio is not by any means inversely proportionate to the altitude. It is remarked that consumption prevails wherever the population is largely industrial. Agricultural populations suffer less from it than do industrial populations at the same altitude.

TALK WHILE EATING.—Talk and be merry while you eat. Talking while eating will naturally necessitate eating more slowly. The children need not expect to monopolize all the time at table with their talk, but if they dine alone let them tell their own little experiences and laugh over their own adventures. If they dine with their elders it might be well for

papa and mamma to address some of their conversation to the children. This not only aids in digestion of the meal, but aids the little ones in becoming self-possessed and self-reliant.—*Dora Harvey Vrooman in Philadelphia Press.*

COOLING THE BODY BY A SPRAY OF WATER.—Dr. S. Placzek, in the course of experiments as to the effect of spraying a considerable part of the body surface of animals with cold water, has applied the spray for the purpose of reducing febrile temperatures in human beings. In the case of a man suffering from phthisis, whose temperature was high, he found, according to the *Lancet*, that by spraying about a pint of water at between 60 degs. and 70 degs. F. over his body, the temperature fell to normal, and continued so for several hours. Again, a similar method was satisfactorily applied in the case of a girl with diphtheria. In the healthy human subject, the spray lowered the temperature nearly 2 degs. By keeping healthy guinea pigs and rabbits some hours under spray, and using from half a pint to a pint of water at the temperature of the room (44 degs. to 62 degs.), the temperature of the animals fell several degrees.

IMPORTANT THEORIES IN ANIMAL CONSUMPTION.—Dr. Samuel G. Dixon, of the University of Pennsylvania, who has made some important discoveries about consumption and its cause, in speaking about that disease, said: "It is well known among medical men that tuberculosis is not confined to the human race, but has been known to infect the lower animals, especially those used for food. For the past few months," he said, "I have made experiments to ascertain whether or not human beings can contract consumption by eating the meat of animals suffering from this disease, or of using milk from cows with tuberculosis of the mammary glands. The results of many of these experiments leave no room for doubt that this fatal disease is contracted by eating tainted meats. One important discovery I made in the course of these experiments was that domestic animals, especially the hog and sheep, which have been fed on milk slightly tainted with these germs, have contracted consumption and in a short time thereafter died. One interesting experiment, made by a few physicians with whom I was connected, was made on a dog. This animal has an acid gastric secretion much stronger than a man, and it was principally for this reason that the test was made. Many attempts to communicate consumption to dogs by feeding them on tuberculous food had failed. Our experiment began by selecting a healthy dog a year old

and permitting his stomach to become empty. We then gave him as his first meal some infected cow's meat. This course was continued for several days, and in about a week we noticed symptoms of failing health, which increased for three weeks, when the canine died, wasted to a skeleton. The post-mortem examination gave every evidence of tuberculosis. Now that it has been demonstrated that man can contract consumption from eating meat containing tubercle bacilli, and by drinking milk from cows whose glands are affected, I would suggest that, in order to prevent this contagion, veterinary inspectors should be empowered to condemn all tuberculous meat, a reasonable compensation being paid to the owners of animals found in that condition. These inspectors should visit all milk dairies and condemn every cow found suffering from this infection. Another preventive of the transmission of these germs of consumption would be the prohibition by law of the breeding of such animals."

SOME SENSIBLE REMARKS ON DRESS REFORM.—You see we are grown modest and fearful of some nameless, imaginary moral evil. We have become ashamed of the way God made us, and we cover ourselves up, just as if the human figure were a deformity. Who first invented clothes which make men look like stiff, forked, shapeless forms? The ancients showed the lines of the female figure and gave a piquancy to its pliancy, its graceful flexibility. To-day the women put themselves in stays and load themselves with bustles and stick themselves out with all sorts of improvement until they look—still attractive, but falsely, unhumanly attractive. I don't believe the Grecian women, those from whose figures goddesses were modeled, had a bit better forms than the women of to-day. The race in California is simply wonderful in its development of anatomical beauty, judging by the display one sees any day on the street. But it would be a great deal more effective if the costumes permitted the supple grace of nature to be shown. Every now and again the female lecturer comes along to teach new fads about dress and to air new ideas about hygiene. The principle of all health is freedom of action of the body and plenty of exercise, and the principle of health is, curiously enough, the principle of comfort and the principle of beauty of form. When in the olden times men and women wore clothes that looked odd and quaint in cut to us, if they sacrificed comfort it was to appearance. We sacrifice appearance and get no particular comfort. Even men wear too many clothes, with an awful waste of material that does not embellish or add to the comfort. Some day the "biled shirt," with its starched front, will

disappear. It cannot go too soon. Why should a man wear a stiff board under his waistcoat? It may be useful and ornamental for evening wear, when it certainly looks clean. But with the wonderful development in the manufacture of materials, why should soft white silk not take its place? Or, indeed, why should all colors be left to the female sex? Between the gaudy and the tasteful there is a great difference. Oscar Wilde only carried his ideas a little too far. He had sense at the bottom of them. We will come to it by and by.—*San Francisco Chronicle.*

WOMEN AND THE HOUSEHOLD.

CONDUCTED BY HELEN FLETCHER.

SIMPLE COSMETICS.—There is nothing that equals fresh buttermilk for removing tan, freckles, sunburn or moth spots. It has the great advantage that it does not injure the skin, but renders it soft, like a little child's. Take a soft cloth or sponge and bathe the face, neck and arms thoroughly with buttermilk before retiring for the night; then wipe off the drops lightly. In the morning wash it thoroughly and wipe dry with a crash towel. Two or three such baths will take off all the tan and freckles. It will keep the hands soft and smooth. The acid of the buttermilk answers a far better purpose than any powder or paste that is in a drug store. It is a simple remedy, but effectual.

BURN YOUR OLD LETTERS.—So much mischief has been done by the foolish habit of keeping old letters, that it is wise to adopt the rule of destroying them at once. Their mission is ended; what are they good for? "I may like to read them while recovering from an illness," says some one. Pshaw! As if these would be the tonic you needed at such a time. Better far a breath of pure air. We are all prone to brood too much at such times, and need no such help in that direction. Let this plea for the burning of letters be a strong one. Business letters should be filed and labeled. Have a blank book, into which copy such dates or extracts as may be of value in the future for references. This can be done when letters are answered. Then burn them and see the ashes. It is the sorrows instead of the joys that most letters contain. They are the safety valve for deep feeling from friend to friend, good in their time, but sometimes worse than useless in the future. Every day brings new experiences. We are constantly changing, and in many cases would be ashamed of our own letters written ten years ago.

THE SECRET OF A LONG LIFE.—You sometimes see a woman whose old age is as exquisite as was the perfect bloom of her youth. You wonder how this has come about. Here are some of the reasons :

She knew how to forget disagreeable things.

She understood the art of enjoyment.

She kept her nerves well in hand and inflicted them on no one.

She believed in the goodness of her own daughters and in that of her neighbors.

She cultivated a good digestion.

She mastered the art of saying pleasant words.

She did not expect too much of her friends.

She retained her illusions, and did not believe that all the world was wicked and unkind.

She relieved the miserable and sympathized with the sorrowful.

She retained an even disposition and made the best of everything.

She did whatever came to her cheerfully and well.

She never forgot that kind words and a smile cost nothing, but are priceless treasures to the discouraged.

She did unto others as she would be done by, and now that old age has come to her, and there is a halo of white hair about her head, she is loved and considered.

This is the secret of a long life and a happy one.—*Ladies' Home Journal*.

COURTESY IN THE FAMILY.—There is nothing so necessary to gain perfect order as kindness. It must predominate. The home which is governed by harshness could never become an ideal home. It is not difficult for an ordinarily observant person to see at once what kind of spirit prevails in a family. A person must be dull who partakes of a meal without forming some opinion of the prevailing spirit.

In homes where true courtesy prevails it seems to meet one on the threshold. The kindly welcome is felt on entering. It is beautifully expressed. "Kind words are the music of the world." Hard words, on the other hand, "are like hailstones in summer, beating down and destroying what they would nourish were they melted into drops of rain." Life without love would be a world without a sun; without one blossom of delight, of feeling, or of taste.

A GREAT-GRANDMOTHER AT FIFTY.—The youngest great-grandmother in the United States probably lives near Pomona. Her name is Francesca Cordolla, and her age is but 50 years. She is a poor Spanish woman, who has lived in that region for over thirty years. She was married when she was a little over 17 years old, and her eldest daughter married when she was a little over 17 years old. Mrs. Cordolla was but 33 years old when she was a grandmother. Her eldest granddaughter was married last April at the age of 16 years, and now that a great-granddaughter has been born into the family there is great rejoicing among the Cordollas and their Spanish relatives. Mrs. Cordolla is in superb health, and she says that if the record of the family keeps up she will have the felicity of holding her great-great-grandchild upon her knee before the biblical allotted time for her on earth is measured out.

WHY DO GIRLS LOOK SO OLD?—I live in a city that is comparatively small, and my circle of acquaintances is quite extensive. Among them all I notice that with few exceptions the mothers are better looking, and, in many cases, but little older in appearance than the daughters. I know this is true in my own case. I cannot flatter myself that I am near as good-looking as my mother. Nine persons out of ten who do not know us take us for sisters, and the tenth usually takes us for stepmother and stepdaughter. As I remarked before, a large number of my personal friends have the same experience. Since I have been in Washington I have noticed that the same rule will apply, and with equal force. I often wonder whether it is that the mother looks younger than her age, or the daughter older, and I have come to the conclusion that it is both. But why is it? Is it because the girls keep later hours and dissipate more than they did a few years ago, or that the mothers take better care of themselves? It cannot be because the mothers work less than they used to, because many work just as much, and I have a very good example of the case in our colored washerwoman, who, attired in an old dress and hat, as she always is, looks as young as her grown up daughter, who, when she condescends to bring the clothes home, wears a nice dress, stylish hat and kid gloves, even if it is nine o'clock in the morning.—*Washington Post*.

LITTLE WOMEN SHOULDN'T WEAR TALL HATS.—Little women with large heads very often think they will look taller if they wear large hats and a fluffy arrangement of the hair. This is a fallacy, and instead of

looking taller they will only appear the shorter. The reason is very simple. Their height is only about six lengths of the head. Naturally, by increasing the size of the head the disproportion will be greater, as then their figure will appear to be only five times the length of their head. Little women should wear small hats and simple hair dress.—*New York Journal*.

WHEN A WOMAN SHOULD MARRY.—I am opposed to early marriages.

First—Because a very young person has not sufficient maturity of judgment or life to make a wise choice. Tastes change and character develops rapidly between sixteen and twenty-five, and the man who pleases the fancy of the inexperienced girl may be very different from the man who would please the intelligent young woman of a few years later.

Second—Because maternity makes a heavy draught upon a woman's physical strength, and in order that she may support it without losing her own health, and may transmit a strong constitution to her child, she must be a full-grown woman.

Third—Because a girl in her teens is not past the frolicsome and kittenish age, and the love of play and amusement which is natural to her time of life is apt to interfere with maternal duties. I have known a wife of nineteen dread the coming of children because they would keep her away from parties and other gayeties, and even bring her baby up on a bottle, though well able to nurse it, because she did not want to be tied at home by the child. She had married too young. Her next door neighbor, a young matron of twenty-five, who asked nothing better than to nurse her own child and give the necessary time to it, was shocked and indignant at her proceedings; but it was largely the difference of age. You cannot harness a half-grown colt and expect him to pull steadily.

Fourth—Because an early marriage is apt to mean the cutting short of a girl's education. The woman who is to bring up children needs to be well and thoroughly educated, for their sake as well as for her own.

Some persons mature much earlier than others, both physically and mentally, so that it is hard to lay down an invariable rule. But, unless in exceptional cases, I do not think a woman ought to marry under twenty-five.—*Lucy Stone*.

Mr. Phlatterly (trying to make himself solid)—“What a remarkably strong, manly face your grandfather has, Miss Phillips.” Miss Phillips—“Pardon me, Mr. Phlatterly, but that's grandma.”

MOTHERS AND THE NURSERY.

(CONDUCTED BY MRS. F. C. PRESSLER).

HINTS ON THE CARE OF INFANTS.—A good time to give an infant its bath is about one hour and a half after breakfast. Of course, in saying that one bath is all that an infant requires, we have no reference to the light, quick sponging which a child may receive at night, and which is often very soothing to nervous, fretful babies. But with regard to a child's regular daily bath, we would advise it not remaining in the water any length of time, and as soon as they are taken from the bath they should be gently rubbed, and carefully dried and dressed at once. After this bath they should be fed, and, if children are healthy, they will then sleep several hours. It seems singular that with all that is written and said about the care of infants, so little is known about their need of water occasionally. I suppose most mothers would be shocked if they knew that babies actually suffer thirst sometimes. Milk does not quench it, and, therefore, the occasional sip of water, not too cold, is very important. One physician of note says that a babe should even have one meal of warm water daily, just the temperature of milk. If given toward night, he says, it often ensures sleep.

“The hardest time in baby's life is perhaps when it is ‘teething.’ If ever it is excusable for crying and peevishness it is when it is trying to push a new tooth through; and I want to tell you of a blunder that is then often made, when fond friends and admirers give it ivory and rubber toys to bite on. This contact with hard substances actually toughens the gums, gives it therefore greater pain to bear, as it takes longer than it otherwise would for it to push the tiny tooth through. One excellent remedy when a child is teething is a drop of cooled, not cold, water, which should be given every two or three minutes. The water should be dropped from a spoon on the inflamed gum, not allowing the metal to touch it. Another way to vary with is to soak a loose roll of soft linen in water, then very gently press it against the gums. When there is serious inflammation it is better not to depend too much on home methods, and a good physician should generally be called. Mothers would do well to

remember that no one but a physician should ever attempt to lance the gums, as it is an operation that may be easily bungled.

“When one sees the way babes are stuffed with all sorts of medicines, by persons incompetent to judge what should be given, etc.,” said the nurse in conclusion, “one may well wonder that so many live to grow up. Herb teas are boiled down into powerful *extracts*, which a druggist might hesitate before prescribing, and poured by the teaspoonful down the baby’s throat. Their little stomachs are often actually poisoned and almost destroyed while mere babies. But, strange as it is, they manage to pull through all this commotion—those that don’t die of it, I would add, and more die for want of common sense treatment than anything else.”—*Emma S. Allen.*

WORTH REMEMBERING.—Better give a boy a good warm coat with a collar which he may turn up in a cold wind, rather than a scarf; the latter overheats the neck, and then the main trouble is, boys will wear it one hour and throw it aside the next.

If you have any children at home it is best not to attend any funerals of those dead of scarlet fever or diphtheria; you may convey it to your own. If the children recently had the above diseases, remember they may be a long time in making a complete recovery; hence, do not expose them more than possible all winter. The boys will not be able to do as much work as at other times.

Also the above, as well as measles, whooping cough, and other children’s diseases, leave the eyes weakened. It may not be well for such children to attend school, or to read for some time. Whenever a child complains that its eyes ache, it should not use them for reading or study. From study at these times comes many of the weaknesses of the eyes so prevalent. When these diseases prevail it may be best to keep the children from day and Sabbath school.—*Dr. G. G. Groff.*

HARSHNESS WITH CHILDREN.—I wonder if parents really know how much they are standing in their own light when they are so strict and severe with their children, forbidding them to play cards, dance, and go to the opera and theatre. Let them reason with them and advise them not to go if they are opposed to such places of amusement, and give them amusement at home, but forbidding them will oftentimes make the children lie in order to accomplish their end.—*Farmer’s Voice.*

MEMORY IN INFANTS.—My mother went on a visit to my grandfather, who lived in London. She took with her a little brother of mine who

was 11 months old, and his nurse, who waited on her as her maid. One day this nurse brought the baby boy into my mother's room and put him on the floor, which was carpeted all over. There he crept about and amused himself according to his lights. When my mother was dressed, a certain ring that she generally wore was not to be found. Great search was made, but it was never produced, and the visit over, they all went away, and it was almost forgotten. Exactly a year after they again went to visit the grandfather. This baby was now a year and eleven months old. The same nurse took him into the same room, and my mother saw him, after looking about him, deliberately walk to a certain corner, turn a bit of the carpet back, and produce the ring. He never gave any account of the matter, nor did he, as far as I know, remember it afterwards. It seems most likely that he found the ring on the floor and hid it, as in a safe place, under a corner of the Brussels carpet where it was not nailed. He probably forgot all about it till he saw the place again, and he was far too infantile at the time it was missed to understand what the talk that went on was about, or to know what the search, which perhaps he did not notice, was for.—*Jean Ingelow.*

THE FATHER'S EXPERIENCE.—Experience is a great teacher, and my experience as a father has taught me a real lively rollicking boy or a self-willed imperious little miss of four or five summers can completely destroy and set at naught many of one's most beautiful theories regarding the rearing of children. But it is comforting to feel that about half of your theories ought really to be upset anyhow, and you realize how much more charming children really are as *children* than they would be as the "little ladies and gentlemen" of your imagination. I don't want him to know it, but the very willfulness and defiance of my authority by the little tow-head of three years now cuddled up in his bed upstairs, is irresistibly funny sometimes—the little rascal. I have, indeed, seen a few children raised wholly "by rule," or according to a certain "system," and the poor little creatures were about the unhappiest children I ever saw. Some allowance should be made for the natural inclinations of childhood; so let us accord our children the privilege of being natural and childish and happy while they can be so. Care will come soon enough to them all.

CARE OF THE TEETH.—A child's teeth should be confided to the care of a dentist while they are making their appearance. If the dentist is properly versed in his profession, he makes a record of the child's physical

tendencies as well as the state of its dentition, and to these notes he adds from time to time such variations as are significant; then he sends for the child once a month or once a year, according to its needs, and is thus able to develop the best teeth that are possible to the little one's constitution or physical condition.

HEALTH INVENTIONS AND APPLIANCES.

TO PREVENT SNORING.—We have received many letters requesting further information as to the apparatus described in our March issue for the prevention of snoring. The invention is an English one, and the description was taken from a London paper, which, however, gave neither the name nor address of the inventor. We wrote to the editor of the London journal for further information, but up to this writing no reply has reached us.

BREAD FROM WOOD.—Science has already enabled man to extract fiery beverages and many other things of more or less value from wood, and it is now proposed to go a step further and produce bread from wood. In an address recently delivered in Heidelberg, Germany, by no less eminent an author than Victor Meyer, it is announced "that we may reasonably hope that chemistry will teach us to make the fibre of wood the source of human food." What an enormous stock of food, then, would be found, if this becomes possible, in the wood of our forests, or even in grass and straw! The fiber of wood consists essentially of cellulin. Can this be made into starch? Starch has essentially the same percentage composition, but it differs very much in its properties, and the nature of its molecule is probably much more complex. Cellulin is of little or no dietetic value, and it is not altered, like starch, in boiling water. It really gives glucose, when treated with strong sulphuric acid, as is easily shown when cottonwool, which is practically pure cellulin, is merely immersed in it. Starch gives the same product when boiled with weak acid. The author further quotes the researches of Hellriegel, which go to show beyond dispute that certain plants transform atmospheric nitrogen into albumen, and that this process can be improved by suitable treatment. The production, therefore, of starch from cellulin, together with the increased increase of albumen in plants would, he adds, in reality, signify the abolition of the bread question.

PUBLISHER'S DEPARTMENT.

IMPORTANT TO SUBSCRIBERS.—At the solicitation of many subscribers living at a distance from New York, the HERALD OF HEALTH Co. will cheerfully undertake to fill any commissions that may be entrusted to us in the purchase of articles or apparatus for Hygienic and Health purposes. We do not desire, nor can we undertake to do a purchasing business, but will be pleased to aid our subscribers and friends in the manner above indicated. We can obtain everything in the line of Health and Hygienic articles for them at New York prices, and will mail descriptive and price lists upon application, provided stamps for return postage are sent. In these lists are embraced electric batteries, machines for physical culture, ventilating, filtering and disinfecting apparatus, health foods, clinical thermometers, invalid's chairs, ear trumpets, etc. We will, however, fill no orders for patent medicine trash, electric belt humbugs, nor drugs of any description, and do not expect to receive any. No commission is expected nor will any be received, as we are willing to put ourselves to a little trouble if we can prove of any service in this way to our friends. We will freely answer all questions as to prices, forward circulars, etc., insisting only that stamps be enclosed in all letters seeking information, and that we do not be required to pay return postage.

QUESTIONS AND ANSWERS.

TO GET RID OF OIL IN HAIR.—*E. W. V.*,—By washing your hair with a weak solution of borax, the excess of oil in it may be considerably reduced. It must not be used more than once in two weeks; applied oftener, the borax will cause the hair to be crisp, harsh and very liable to break off or fall out.

THE GERMAN REMEDY FOR BURNS.—*Victim, Louisville.*—The celebrated German remedy for burns consists of fifteen ounces of the best white glue, broken into small pieces in two pints of water, and allowed to become soft; then dissolve it, by means of a water bath, and add two ounces of glycerine and six drams of carbolic acid; continue the heat until thoroughly dissolved. On cooling, this hardens to an elastic mass covered with a shining, parchment-like skin, and may be kept for any length of time. When required for use it is placed for a few minutes in a water bath until sufficiently liquid, and applied by means of a broad brush. It forms in about two minutes a shining, smooth, flexible and nearly transparent skin.

TREATMENT OF WRITER'S CRAMP.—*Veteran Journalist, New York.*—Dr. Vigouroux describes a method of treating writer's cramp practised with much success by Herr Wolff, a calligrapher of Frankfort. The essentials of the method are gymnastics and massage of the affected muscles. The patient has to execute thrice a day a long series of abrupt movements of the arms and hands. The muscles are then extended and even put on the stretch by the operator or the patient himself, till fatigue overcomes the tendency to spasm. Massage, friction and slapping are also persistently used, and writing movements practised so soon as the diminished cramp allows. It should be added that the treatment is painless,

LOSS OF VOICE IN SINGERS AND SPEAKERS.—*Vocalist, St. Louis.*—For this affection Dr. Corson recommends the patient to put a small piece of borax (two or three grains) into the mouth and let it dissolve slowly. An abundant secretion of saliva follows. Speakers and singers about to make an unusual effort should, the night before, take a glass of sugared water, containing two drams of saltpetre, in order to induce free perspiration.

FOR INGROWING NAILS.—*W. M. T.*—After soaking in hot water, the nail should be thinned by scraping, and if very painful a flaxseed poultice will bring relief. After the irritation has sufficiently subsided, soft cotton should be pressed between the flesh and the nail, and after that is done it should be saturated with tincture of iodine, and the application repeated several days, after which the tenderness will disappear. It may be necessary to lift the end of the nail, and this can be done by pressing cotton between it and the toe. This treatment is usually effective, and is attended with as little pain as any which can be suggested.

HARMLESS FOR THE COMPLEXION.—*Edith.*—A mixture of honey, lemon juice and *eau de cologne* is exceedingly useful to whiten the hands when discolored by sun, wind or work, and may be kept mixed for the purpose in a small toilet jar. Take a wineglassful of each ingredient and mix well; then pour into the jar and keep tightly corked. This may be applied night or day, and the inside of the fingers rubbed with pumice stone.

WHAT MAN IS MADE OF.—*Inquirer, Chicago.*—Dr. Lancaster, a London physician and surgeon, recently analyzed a man, and gave the results to his class in chemistry. The body operated upon weighed 154.4

pounds. The lecturer exhibited upon the platform 23.1 pounds of carbon, 2.2 pounds of lime, 22.3 ounces phosphorus and about one ounce each of sodium, iron, potassium, magnesium and silicon. Beside this solid residue, Dr. Lancaster estimated that there were 5,595 cubic feet of oxygen, weighing 121 pounds; 105,900 cubic feet of hydrogen, weighing 15.4 pounds, and 52 cubic feet of nitrogen in the man's body. All of these elements combined in the following: One hundred and twenty-one pounds of water, 16.5 pounds gelatine, 1.32 pounds fat, 8.8 pounds fibrin and albumen and 7.7 pounds of phosphate of lime and other minerals.

BLACK ANIMALS IN HOT COUNTRIES —*C. W. D., Savannah.* —Not only are human beings black or dark in hot climates, but other animals vary in like manner. Pigs are unusually black in hot climates. The carbon layer in the negro, being opaque, like other forms of carbon, must form an effectual veil, and thus protect that most important organ below, the true skin, a bodily envelope or tissue presenting a vast surface of circulating blood which is certainly subject to brilliant illumination when only protected from sunlight by the thin translucent cuticle. We know that sunlight has considerable chemical energy, and also that sunstroke, to which light complexioned people are especially liable, is more dependent on light than on mere temperature.

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NOTES CONCERNING HEALTH.

(BY M. L. HOLBROOK, M. D.)

OBJECT OF SANITARY SCIENCE.

WHAT is sanitary science for, is a question often asked but rarely plainly answered. Dr. Farr, however, does it in the following words, easily understood and learned:—"The primary object to aim at is, placing a healthy stock of men in conditions of air, water, warmth, food, dwelling, and work most favorable to their development. The vigor of their own life is the best security men have against the invasion of their organization by low corpuscular forms of life—for such the propagating matters of zymotic diseases may be held to be. Yes; this is Sanitary Science, no doubt, and what we are all working for according to our lights. One difficulty is that our enemies seem so contemptible. If we had lions and tigers to fight, no doubt men would be as brave as they are in shooting pigeons—but microbes, sewer gas, and general nastiness! making war on them seems to bring no glory. The destroyers of life are honored and rewarded—the savers and prolongers of life are scarcely noticed. 'Virtue is its own reward'—a very good thing, too; since, in many cases, it has no other."

PINEAPPLE AS A CURE FOR DIPHTHERIA.

The HERALD OF HEALTH has given wide publication to the assertion of a correspondent, that pineapple juice is good for Diphtheria. It is, as

stated, a popular remedy among negroes in the South where this fruit grows. No doubt as a remedy it has value. It is strongly acid and in no way poisonous, and as a domestic remedy would be safe. But pineapples nor their juice are not to be had every time nor at all seasons of the year, while diphtheria may prevail at any time. A better remedy, and one easily procured at any season, is lime water, to be used as a gargle and with which by means of a brush to paint frequently and thoroughly the affected parts. By putting a few lumps of unslacked lime in a bottle and allowing them to slack, you have a good article, which will keep as long as may be required, or it can be had at any drug store. But as diphtheria is a dangerous disease, we ought not to rely upon curing it except where we must; but upon preventing it before it appears, by the thorough application of hygienic means of the discovery and removal of all its causes. My friend R. T. T., furnished me the following three topics some time since, and they have lain unnoticed in an old book on hygiene, printed in 1620, for several years :

UNHEALTHY OCCUPATIONS.—The ancient man or woman who pounded wheat between two stones knew nothing of the trouble that was in store for the miller of to-day. Man's breathing apparatus was made to utilise pure air, charged with a minimum of dust. When a man lives in an atmosphere in which flour dust floats about in large quantities, there is bound to be some part of his organization get clogged up. While workers in acid works are liable to have their teeth soften, and they wear away in a year or two if not protected, artisans in mills where metallic dust is in the air, are very apt to engender diseases that will be chronic, if not speedily fatal. The miller is generally an unhealthy individual, unless he be of the old-time sort, who used to ride about the country during three parts of his working hours, and spend only a little time within reach of the dust from his mill stones. It is not to be supposed that man will ever be able to get along without the miller. Such being the case, it is to be hoped that something more will be done in the near future to protect his lungs while at his work than has been accomplished hitherto.

AN EXAMPLE.—A contemporary publishes an account of an experiment to show that one meal a day is enough for a man. A machinist and inventor aged 28 years, whose work was hard, resolved to adopt the one-meal system, and did so, leaving off meat and all condiments, and eating chiefly wheat-meal bread and fruit, the bread made from unsifted meal,

and mixed with water only. Within seven months his weight increased from 145 pounds to 170 pounds, and his strength of both body and mind increased in proportion. His health under this system is perfect. For three months last winter he worked in an iron foundry for the purpose of testing the sufficiency of one meal of pure food for such trying labor, and the result was eminently satisfactory. Colds, which he formerly suffered from, never trouble him now. His daily ration consists of six to nine ounces of Graham flour, besides fruit sufficient to supply all the liquids necessary—half a dozen apples or their equivalent in other fruit. This meal is taken at night, after entire recovery from fatigue, usually about 7 o'clock. He has occasionally made a trial of bolted-flour bread, but has invariably experienced a loss of weight and strength at such times.

An experience of this kind must not be characterised as phenomenal. It will not do to say that one man is stronger, constitutionally, than another, and therefore is able to do with less food. A man with a strong constitution requires more food, other things being equal, than one who is weak. It is fashionable for us to eat two or three meals a day, and we conform to the fashion. The fact that a great many men only eat one or two meals daily may be taken as absolute proof, that not only they, but others, could live in the same way. One argument that is urged against a system of diet which would curtail the table pleasures of the public is that nature has provided a great variety of food which man is justified in appropriating and enjoying. This argument has some little force, while we admire the spirit which prompts some men to teach us such lessons by their experience as are taught by the case referred to above, we do not insist on the adoption of such a *régime*, simply because such insistence would be of little avail. But we may point out to those who praise the three or four-meal-a-day custom, that what the abstemious man may lose in coarser pleasures, he more than makes up in those of a higher nature. The fact that men live and labor who set good examples in a dietary sense is an unmistakable sign of the advent of a day, when the sense of the people will be subdued by their spiritual natures. The time is a long way off, and will not be reached for many generations to come, but it is worth our doing something individually to hasten its approach.

HEALTHY LOCALITIES. —Hawthorne somewhere, in speaking of the City of Rome and its attractions, says, half ambiguously, that "its final charm is bestowed by the malaria." After this epigrammatic remark, he states

that if you go to Rome in summer and stray through its glades in the golden sunset, fever walks arm in arm with you, and death awaits you at the end of the dim vista. Thus the scene is like Eden in its loveliness; like Eden, too, in the fatal spell, that removes it beyond the scope of man's actual possessions. All this is not a very great recommendation of the ancient city. There is no doubt, however, that the founders of the city under Romulus were not so much to blame for their choice of a site as the residents of this and past generations for neglect in their public duty of observing sanitary laws.

Some cities possess a complete, or almost complete, immunity from certain diseases, and this is in many cases traceable partly to the natural advantages such cities possess. For example—Saltzbury and Lyons, in Europe, are never troubled with cholera, and whenever that fell disease makes its appearance in Paris or Marseilles, the rich inhabitants go to Lyons, which, although it is situated between these two centres of infection, remains free from it. It has been proved that this is not due to superior cleanliness, better water, or more favorable atmospheric conditions. It is claimed that the character of the soil is the sole cause for the city's immunity from epidemics.

The study of soil and its relation to diseases is an important one, and is receiving the attention of scientists. Experience has shown that alluvial soil—that is, soil washed down by rivers from higher land—is the favorite resort of certain infectious diseases. This is due to the fact that such soil is porous, and therefore contains a large amount of air, water and organic material. Poisonous germs are bred in the porous soil, against which houses and those who dwell in them need protection. The importance of investigation on the part of the man who values his health and that of his family, of the locality in which he lives and the soil on which his house stands, cannot be over-estimated. Thousands of suffering mortals are to-day being doctored and physicked for complaints which are merely the calls of an outraged nature for purity of soil. As surely as arsenic kills, so surely does a poisonous soil, slowly sometimes, but certainly, give forth its germs of death.

LOVE OF LIFE.—A recent writer says that persons who earnestly desire to live can keep a mortal disease at bay much longer than those who are comparatively indifferent to their fate. A resolute determination not to succumb is, as every army surgeon knows, the salvation of many a wounded soldier, who without it would assuredly died.

MISTAKES IN MEDICAL DIAGNOSIS.

THAT errors in the diagnosis of infectious diseases have occurred, is an old story. The pity is that it should not be only old. But it isn't; it is also quite new. That is to say, it is still a common incident of daily mortal and medical life. Dr. Russell's memorandum to the Health Committee, says the *Glasgow Herald*, on the subject is as interesting as it is edifying. Medical men, even of the highest skill, are, at the best, not infallible. What in that case may be predicated of men of the humblest skill? It takes many years for a medical man to reach even the confines of perfection—a condition of which the most skilful in art or science know little or nothing. Still, the facts laid before the Health Committee by Dr. Russell

POSSESS A PROFOUND INTEREST

to dwellers in cities. It was two peculiar cases in the experience of the Sanitary Department which induced Dr. Russell to look into the register of patients admitted to Belvidere Hospital from the beginning of the current hospital year (1st June, 1889) up to the 31st December. In that period some 1,499 cases were admitted as suffering from infectious diseases. But as a matter of fact, not fewer than 114, or 7.6 per cent. of that number, were found not to be suffering from the diseases with which they were supposed to be afflicted when sent in; and, further, that not fewer than 85, or 5.7 per cent., were not suffering from infectious diseases at all, and ought not, therefore, to have been removed, at least to Belvidere. The dangers and inconveniences, not to speak of the expenses, attending these mistakes of medical skill will be obvious. It must, we suppose, be true that the

PRACTITIONER WHO MISTAKES ONE DISEASE

for another has no proper knowledge of either. The results may be rather serious. A patient suffering from one infectious disease taken into the ward of another infectious disease, may communicate his own disease to others, of whose disease he may himself become the victim. The chances against both acts are multiplied by two.

In the case of the patient who has no infectious disease at all, but is supposed to have, and is consequently sent into an infectious ward, the

danger of receiving infection amounts almost to a certainty. But even if there is an escape, the removal of the patient to a non-infectious ward may carry the seeds of the disease, and convert the safe ward into one of danger. But why not remove such patients to other hospitals? If they are not too ill this may be done; if otherwise, we have the spectacle of an hospital for infectious diseases becoming responsible for the safe treatment of non-infectious diseases, which is certainly a serious

RESULT OF INCOMPETENCY SOMEWHERE.

We have mentioned that of the number of patients sent to Belvidere about $13\frac{1}{2}$ per cent. had been sent there under essential error, or, as Councillor Thomson remarked, "that they had gone there with a wrong diagnosis altogether." As showing what deadly results such an error might lead to, it is pointed out that 21 cases and 3 deaths had arisen out of one instance, "on account of the criminal neglect or ignorance of the party who had notified the case which was about to be removed to the hospital." This was a case of removal, the diagnosis notifying enteric fever, while the actual disease was typhus. The case is certainly a remarkable miscarriage of medical skill.

SANITARY MARRIAGE.

(FOR THE HERALD OF HEALTH.)

THE not infrequent marriages between kith and kin in our country, as well as the union of persons who are not perfectly sound in body, are aiding very materially to reduce to a comparative minimum the longevity of the rising generation. Various bureaus of vital statistics in the larger cities show that a vast percentage of deaths in both sexes occur between babyhood and 25 to 30 years. And nearly all of these, thus borne to an early grave, it is safe to infer, were the issue of persons totally unfit and unqualified constitutionally to enter into marital relations. We not infrequently hear of cousins marrying, but they have done so to their sorrow, as in many instances their sickly or deformed issue has given evidence.

IT IS A WELL-KNOWN HISTORICAL FACT

that the Spartans worshipped not only the beautiful but the useful, and they took especial pains to secure them. Bodily perfection and mental

activity were attained by well appointed exercise and healthy parents. By Sparta's laws the sick and the constitutionally diseased of either sex were not allowed to marry under any circumstances, but the healthy were punished if they did not marry. Bachelorism was tabooed. Men that were unmarried after a certain age were rigidly excluded from female society, and if they persisted in living a life of single blessedness they were publicly exhibited once a year and jeered at, as a warning to other and younger men. So fared the bachelor in Sparta's happy days. Neither young men nor young women were allowed to marry before they had attained their majority or cut loose from their mothers' apron-strings. The Spartan system, which was in force at least five centuries, was established purely for the welfare of the State, and no braver nor stronger men nor more beautiful women existed than in Sparta. Though there is not the slightest probability of Spartanism being revived in these days, or deep thinking people may learn some valuable lessons from that ancient State.

IN THIS CONNECTION

my readers may learn something from our newly-born sister Republic, Brazil, where there is a remarkable and self-imposed family custom in regard to marriage in the higher classes. The man about to marry is required to furnish a certificate from two reliable medical men that he is free from disease, and that he is free, also, from all signs of diseases that may be transmitted to his offspring. Further than this, the doctors must testify that, so far as they are able to ascertain, there is no reason to believe that the marriage on either side will be otherwise than in strict accord with the sanitary laws. It is a great pity that we had not some such law in this country, as it would tend to the benefit of people physically and mentally.

DR. J. H. HARDENBROOK.

THE ABUSE OF COFFEE.

DR. F. MENDEL has recently enjoyed opportunities of studying the results of an unbridled abuse of coffee, and his results are now published. The great industrial centre round Essen, Germany, includes a very large female population. Whilst the women of the working classes in this country are often addicted to dosing themselves with tea that has stood

too long, it appears that the workmen's wives at Essen drink coffee from morning till night. Some consume over a pound of Ceylon coffee weekly, and one pound contains over sixty-four grains of caffeine. In consequence, nervous, muscular, and circulatory disturbances are frequent. The nerve-symptoms are characterized by a feeling of general weakness, depression of spirits, and aversion for labor even in industrious subjects, with headache and insomnia. A strong dose of coffee causes the temporary disappearance of all these symptoms. The muscular symptoms consist of distinct muscular weakness and trembling of the hands even during rest. The circulatory symptoms are marked by a small, rapid, irregular pulse and feeble impulse of the apex of the heart. Palpitations and heaviness in the heart-region are frequent. The hands and feet feel very cold, and the complexion becomes sallow. Dyspeptic symptoms, chiefly of the nervous type, are very common. Acne rosacea is seen in a large number of the sufferers. These coffee-drinkers cannot be cured by simple abstinence from their favorite drink, with substitution of milk as a beverage. They require rest from work, open-air exercise, cold ablutions followed by friction, and small doses of brandy.

THE DEADLY DANGER THAT LURKS IN QUININE.—Dr. William B. Clarke, of Indianapolis, Ind., well known as an alienist and authority on all matters relative to insanity, recently prepared a paper which he entitled "A Study of Suicide." One paragraph in the article cannot fail to be of general interest. It is this:

"I feel confident that a frequent cause of suicide has been generally, if not entirely, overlooked, and so am impelled to utter a word of warning regarding it, viz., the reckless use of quinine, especially its use unauthorized by a physician. Any one who knows the pathogenetic ability of quinine, or rather its ability to cause symptoms or perturbations in the well or nearly well person, especially brain and nerve symptoms, cannot deny that it possesses the power to produce a condition nearly allied to insanity, if, indeed, it practically falls at all short of insanity. In large doses it is a depressant instead of a stimulant, contrary to the popular belief, and it is the most popular and universal everyday amateur remedy. Everybody seems to take it, and for any and every ailment. It is reasonably easy of proof that many insanities, suicides and murders can be traced directly to the ill-advised and inordinate use of quinine."

WHITE FLOUR AND ITS EFFECT UPON HEALTH.—Bread has been called the staff of life, and yet this figure of speech, in view of the kind of bread that some persons eat, is a decided misnomer. The ordinary white flour, which forms the basis of so much food that is eaten, is principally a starch compound, and contains only 3 of the 15 elements that go to compose the body, namely, carbon, hydrogen, and oxygen. To prove that white flour does not meet the requirements of the body, Magendie fed it wholly to a number of dogs, and at the end of 40 days they died. Others to whom he gave the wheat meal, at the end of this time were in first-class condition. More than half of the children under 12 years of age have decayed teeth, owing to the insufficient supply of the required mineral ingredients, and this deficiency is caused as a rule by eating white bread. Dyspepsia, constipation, loss of nerve power and many other diseases are produced by improper feeding. Sulphur is required for the growth of the hair, yet white flour does not contain a trace; the phosphates are also notably lacking, and as these substances are absolutely necessary in the animal economy, then, arguing a priori, the use of bread as ordinarily prepared should be interdicted. When flour is made of the whole grain of wheat, we have an article of food which contains all the elements that the body requires for its support; and this flour should be universally used in spite of the false æsthetic taste that demands a "white loaf."
—*Science Amateur.*

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

EDITOR'S STUDY.

IT IS REALLY WONDERFUL, when you come to think of it, with what equanimity people deliver themselves up to sleep every night, plunging into a state of absolute oblivion, without even a thought that they enter the penumbra of the shadow of death. It is safe to say that not one man in ten would feel easy in his mind if he thought of Shelly's lines on "Death and His Brother, Sleep," just as he turned in for the night. The metaphysicians who define certainty would have a difficult time explaining the confidence everyone has on going to sleep that he will wake up all right next morning. Is it moral certainty, or what is it? When it is considered how much of a man's life is passed in sleep, in oblivion, the fact of the closeness of death is brought out with appalling distinctness. If sleep were not a habit, and its necessity did not recur so regularly—that is to say, supposing man slept only once a week—would not the approaching of the time to surrender consciousness be contemplated with fear and trembling. One would hardly wish to "knit up the raveled sleeve of care" if he realized always that the yarn was likely to part in the knitting.

HOT WATER FOR SLEEPLESSNESS.—A most wretched liar awake of thirty-five years' standing, who for ten years has thought himself happy if he could get twenty minutes sleep in the twenty-four hours, said: "I took hot water—a pint, comfortably hot, one good hour before each of my three meals and one the last thing at night—naturally, unmixed with anything else. The very first night I slept for three hours on end, turned round and slept again till morning. I have faithfully and regularly continued the hot water, and have never had one bad night since. Pain gradually lessened and went; the shattered nerves became calm and strong, and instead of each night being one long misery spent in wearying for the morning, they are all too short for the sweet, refreshing sleep I now enjoy."—*London Spectator*.

COLD AND DAMP HOUSES.—A large proportion of colds and ailments of the respiratory organs are attributable to the want of proper measures being taken by builders in laying foundations and in executing the basements of our houses. Hundreds of houses are built upon clay and marshy ground, often of "made earth" and rubbish. The present by-laws as to foundations and building sites have been in operation only a few years,

but previous to that time houses were built upon decaying matter deposited by dust contractors, the foundations of walls were laid on the damp soil without concrete or proper courses to prevent the rising of damp in them, and damp earth was allowed to extend above the basement floor level. By the legislation of recent years, these matters have been more looked after by the district surveyor. We may point now to a few of the causes which contribute to cold and uncomfortable houses. First and foremost is the imperfect arrest of dampness from the soil. The only way of securing a healthful house is to cut it off as much as possible from the soil on which it stands. Ideally, one may imagine a house standing on stilts or piers, having a free current below, and a stair up to the floor; but this would be unattainable under existing arrangements. The next best thing is to obtain a well ventilated cellar, or, what is almost as good, a sufficient air space between the ground and the floor, this space being well ventilated by bricks and the ground covered with asphalt or concrete.

—*Building News.*

SAVE THE TEETH.—An eminent English dentist protests against the present extravagant waste of human teeth by country surgeons and incompetent dentists, and declares that while there are maybe sufficient reasons for extracting a tooth, it is never necessary to do so merely to relieve pain. In at least 90 per cent. of the cases coming to an active dentist, pain in the teeth are due to what may be called primary and secondary toothache. Primary toothache, the pain of which is oftener felt in the nerve-terminals in the face than in the tooth itself, is congestion of the tooth-pulp, and it may be relieved very easily by careful excavation, sufficient to allow an escape of blood from the pulp, which may then be devitalized by an arsenical dressing. To complete the operation, which may be postponed for weeks without further inconvenience, the pulp must be removed from the root canals and these filled to the apex. Secondary toothache, or alveolar abscess, is caused by gangrene of the pulp, and is regarded by most surgeons as so serious as to call for a removal of the tooth, which, in nine cases out of ten, might be retained and made useful and comfortable. The course of treatment is an opening to the pulp to relieve the pain, followed by a series of antiseptic dressings in the roots to cleanse them from all putrescent matter, and then, as in the other case, filling them to the apex.

SOME INTERESTING STATISTICS AS TO HUMANITY'S AVERAGES.—The average weight of the male adult is 130 pounds; of women about 110 pounds. The average height of the American is about 5 feet 9 inches. The average height of all English-speaking nations is about the same as above; of women, 5 feet 4 inches. One inch of height adds two pounds of weight, on the average, especially from 5 feet 2 up to the general average. The specific gravity of the body ranges from 0.950 to 1.030. The heart weighs 260 grammes in women and 320 grammes ($10\frac{1}{4}$ ounces) in men; the average weight is 292 grammes. The period of its maximum weight is between the ages of 50 and 80 years. The amount of blood in the body is one thirtieth the weight of the body, or five or six quarts, or eleven or twelve pounds. The average man dies when he has lost one-fifth of his blood. The heart with each contraction ejects six ounces of blood from each ventricle, and at a pressure in the left ventricle of one-fourth of an atmosphere. The heart sends all the blood around the body of the average man once every thirty seconds, or in about thirty-five contractions of the organ. A deadly poison injected into the veins kills in fifteen seconds on the average; injected under the skin in about four minutes. A cubic millimeter of blood contains 5,000,000 blood cells in the average man and about 4,500,000 in the average woman. There are 300 red cells to every one white blood cell. The red cells have an average diameter of $1-3,200$ of an inch, the white cells of $1-25,000$ an inch. The specific gravity of blood is 1.055. The frequency of the pulse in the new born is 150; in infants, 1 year old, 110; at 2 years, 95; from 7 to 14, 85; an adult man, 75; woman, 80. The respirations are one-fourth as rapid as the pulse.

ALWAYS GET THE LIGHT FROM THE LEFT.—Americans are great readers, and hosts of them spend evenings at home engrossed in the work of some favorite author, or, in many cases, with periodicals of every description. Generally this occupation is pursued in a recumbent position and without any regard to lights or shadows, and the reader is continually complaining of dull pains in the head and loss of vision. This can be remedied in a simple manner by holding the book or magazine in such a position that the light from the gas or lamp will fall over the left shoulder, and there will be no cause for complaint about bad eyes or sick headaches by readers. Applying the same rule on wet, dark nights when crossing the streets, it will be found that hidden pools of water will be revealed and the

pedestrian's journey made much more endurable and with less provocation for swearing.

WEAK HEARTS NOT COMMON.—Weak hearts are by no means so common as is often supposed. Many a man who thinks he has got one is merely dyspeptic; many a woman owes her symptoms to tight lacing or insufficient feeding. If the dyspepsia be cured and the tight lacing dispensed with the symptoms of heart weakness will disappear. Even when the heart is genuinely "weak," the weakness is not always due to special disease of that organ. It may be only part of a general weakness of the whole system, which is easily curable.—*American Analyst*.

AS TO "SPRING MEDICINE."—The practice of meddling with the internal economy in the Spring is a vicious one. People who are well are liable to make themselves sick by bringing about abnormal operations, and the sick are liable to aggravate their symptoms by blindly swallowing some nostrum which may be little less than poison to them in their weakened state. It is never safe or good policy to disturb the physical system by experimenting blindly with patent medicines. Dieting and care as to exercise and hours of rest will do more than drugs can accomplish, and do it without cost.—*Wisconsin*.

ANCIENT FEET MUCH LARGER THAN THE MODERN ONES.—A noticeable thing about the statues found in our museums of art, supposed to represent the perfect figures of ancient men and women, is the apparently disproportionate size of their feet. We moderns are apt to pronounce them too large, particularly those of the females. It will be found, however, that for symmetrical perfection, these feet could not be better. A Greek sculptor would not think of such a thing as putting a nine-inch foot on a five-and-one-half foot woman. Their types for these classical marble figures were taken from the most perfect forms of living persons. Unquestionably the human foot, as represented by these old sculptors, was larger than the modern one, and, in fact, the primitive foot of all people of whom we have any record, either in printing or statuary, was considerably larger than the restricted foot of modern times. The masculine foot, forming an approximate average of four different countries, was about twelve inches long. This would require at least a No. 12 or 12½ shoe to cover it comfortably. The average masculine foot to-day is easily fitted with a No. 8½ shoe, and is, therefore, not above ten and seven-sixteenths

of an inch. Now, by the old scriptural rule of proportion, a man five feet nine inches in height should have a foot eleven and one-half inches long, or one-sixth his height. It was of no great consequence what size sandal he wore, but he would have required a modern shoe of at least a No. 10½ for a minimum fit, or a No. 11 for real comfort. For women, allowing for the difference in the relative size of the two sexes, which was about the same then as now, a woman of five feet three inches in height would have had a foot ten inches long, requiring a modern shoe—it ought to be spoken only in a whisper—No. 6 as the most comfortable for that foot, or a No. 5½ as the limit of torture. The reason for the difference between the old classical foot and the modern one is obvious. Restriction is what has done it.—*Shoe and Leather Reporter.*

A NEW DANGER FROM TOBACCO.—It is stated that a German physician, on examination of a number of cigar tips, found that many of them were infected with tubercle bacilli. The makers were tuberculous, and in the manufacture of the cigars moistened the tips with their saliva. This certainly represents a new danger from using tobacco, at least in the shape of cigarettes and cigars. We were aware that there is considerable difference between bad and good tobacco, and have been inclined to attribute injurious effects to the use of inferior product. Any tobacco, however, may be impregnated as above. And if tobacco may be contaminated by one bacilli, there does not appear any reason why it should not harbor other microbes. This is a point which will doubtless be taken up by the anti-tobaccoists, and if it reduce the consumption of tobacco it will not do any harm except to the revenue.—*London Hospital.*

FLOWERS AND THE PERFUMES DISTILLED from them have a salutary influence on the constitution, and constitute a therapeutic agency of high value. Residence in perfumed atmosphere forms a protection from pulmonary affections and arrests the development of phthisis. In the town of La Grasse, France, where the making of perfumes is largely carried on, phthisis is almost unknown, owing to the odorous vapours inhaled from the numerous distilleries.

WOMEN AND THE HOUSEHOLD.

MUSCULAR BEAUTY FOR NINETY CENTS.—If an athletic teacher can be believed, the pallid faced, blue lipped, chicken-breasted woman with leaden eyes and a willow-wand figure can be transferred into a buxum jade of muscular beauty and dawn red cheeks for ninety cents. A pair of three pound dumb-bells are to be had for thirty cents. Two towels of heavy Turkish crash costs the same sum each. On rising in the morning begin practice at once. With a dumb-bell in each hand lift the arms, touch the shoulders with the bells, and straighten the arms out smartly at right angles from the body. Do this smoothly and regularly ten times. Then touch the shoulders, and lift the bells ten times straight up on either side of the head. Hit out from each shoulder ten times; drop the bells at full length of the arms and draw them up to the armpits; and vary these motions in the 20 or 30 different directions possible, as one's own cleverness suggests, thus exercising every muscle. Begin with only two or three the first morning, and increase them as the strength increases. Finishing with the bells, set a mark on the wall at a height of four or five feet, and standing on the left leg, try to touch the mark with the right toe ten times, doing the same afterwards with the left. The mark can be raised nearly a foot more as one's agility increases. Then set hands on hips and jump up and down ten times. Next spring into the bath—a warm one is best—sponging one's self off with cold water afterwards, and dry the skin with vigorous manipulation of the rough towel. Try that for a month, says the *Minneapolis Tribune*, and see whether health and beauty are not the consequence.

AT WHAT AGE DOES WOMAN REACH HER FULL SPLENDOR.—The notion still held by certain shallow women that maturity is ugliness is one of the most incomprehensible pieces of nonsense of the time. Here is a fair muddler in one of our cotemporaries complimenting Mme. Albani on her having overcome her matronliness and on the renewed girlishness of her appearance. From this I should judge that women who live on public exhibition fear nothing so much as development. If they can only stay all their lives in a lisping glutinous sweetness, and not grow, they are satisfied. To get on in appearance, or in character, or in strength is a calamity. In this extraordinary view of things a green coddling is better than a ripe pippin. Women who exhibit themselves have only one standard

of merit—and that is youth. Poor creatures, they do not know that the pretty girl ought to become the handsome woman, and never reaches her full splendor until she is a matron. They cannot comprehend the fact that fixed beauty has no existence except in death, and even then only when the embalmer has put in his work. The law of beauty in life is the law of development and attainment, and the beauty of a matron and the beauty of a miss differ from each other as one star differs from another in glory—and, curiously enough, the older the star the more beautiful it becomes. Women who think of nothing but how they shall stay young, are women of characterless minds. All things considered, the greatest woman is she who can grow old gloriously, and defy time with something better than enamel. But your woman who is professionally on exhibition has got to bring to the market what the public most desires. And it is a patent fact that the mob would rather look at the pastyness of youth than the perfection of personality. It is this popular instinct that makes exhibiting women starve themselves, enamel themselves, prison themselves, restrict their functions, suppress their minds, and crucify their bodies.

THERE ARE THOUSANDS OF LITTLE COURTESIES, also, that should not be lost sight of in the cruel candor of marriage. The secret of a great social success is to wound no one's self-love. The same secret will go far toward making marriage happy. Many a woman who would consider it an unpardonable rudeness not to listen with an air of interest to what a mere acquaintance is saying, will have no least scruple in showing her husband that his talk wearies her. Of course, the best thing is when talk does not weary—when two people are so unified in taste that whatever interests the one is of equal interest to the other, but this cannot always be the case, even in a happy marriage; and is it not better worth while to take the small trouble of paying courteous attention to the one who depends on you for his daily happiness than even to bestow this courtesy on the acquaintances whom it is a transient pleasure to please. Ideality is a good house-mate. That love lasts longer, as well as reaches higher, which idealizes its object—yet there is one dangerous direction which ideality may take. If it deceive us into the belief that we are wedding perfection, then the revelation of human infirmities, which is an inevitable consequence of all marriage, comes upon us with a shock which is sometimes perilous to contentment. The best antidote for this rude shock

would be a little wholesome self-examination. The vainest of us can scarcely cherish a secret belief in our own perfection. We realize in ourselves, when we look within, the very faults of which we are most intolerant in others. Above all things, let those who would find in earthly marriage heavenly delight and life-long sweetness, learn that to love—which includes all good things—includes forgiveness of sins and gentleness of judgment.

HOW TO USE CANNED GOODS.—An “expert,” writing to the *Grocers’ Chronicle*, well says that canned goods should be turned out and eaten as soon as possible. If kept at all, the food should be covered up and put in a cool place, always, however, turned out of the original tin. The liquor around lobsters, salmon, and all vegetables, excepting tomatoes, it is desirable to strain off and throw away. Lobsters and prawns are improved by being turned out into a sieve and rinsed with clear cold water. Never on any account add vinegar, sauces or any kind of condiment to tinned foods while they are in the tins, and never leave such mixtures to remain an hour or two, if from forgetfulness it is done. All tinned goods are put up as fresh as it is possible to be, but unless corned or salted, will not keep if turned out as freshly cooked goods will, and certainly not longer, as many thoughtlessly suppose or expect they will. Sardines, if preserved in good oil, and if of good quality, will be an exception; so long as the oil is good, the fish can be kept in the tins. But seven days is long enough to trust these before eating. Consumers should not buy larger packages of canned goods than they can consume quickly; if they should, most of the fish and meats can be potted after re-cooking, sauces and seasoning being added. If the nose and eyes are properly used, it is as impossible to partake of an unsound tin of canned food of any kind as to partake of bad meat, fish or vegetables from a shop. Apropos of this subject, Sir Morell Mackenzie says that bread should never be eaten with fish, because the presence of the former during mastication often prevents the detection of bones in the food until one is fairly lodged in the throat. Bread is never served with fish at his own table, nor does he allow the members of his family ever to eat them together. In eight cases out of ten of death from the lodgment of bones in the throat, he declares the accident has been made possible by the presence of bread in the mouth while the fish was eaten.

MEDICINE IN VEGETABLES.—The following information may be useful to some, if not new to many : Spinach has a direct effect upon the kidneys. A common dandelion used as greens is excellent for the same trouble. Asparagus purges the blood. Celery acts admirably upon the nervous system, and is a cure for rheumatism and neuralgia. Tomatoes act upon the liver. Beets and turnips are excellent appetizers. Lettuce and cucumbers are cooling in their effects upon the system. Onions, garlic, leeks, olive and shallots, all of which are similar, possess medicinal virtue of a marked character, stimulating the circulatory system and the consequent increase in the saliva and the gastric juice, promoting digestion. Red onions are an excellent diuretic, and the white ones are recommended to be eaten raw as a remedy for insomnia. A soup made from onions is regarded by the French as an excellent restorative in debility of the digestive organs.

MANY WAYS IN WHICH SALT CAN BE UTILIZED TO ADVANTAGE.—If the feet are tired or painful after long standing, great relief can be had by bathing them in salt water. A handful of salt to a gallon of water is the right proportion. Have the water as hot as can be comfortably borne. Immerse the feet and throw the water over the legs as far as the knees with the hands. When the water becomes too cool, rub briskly with a flesh-towel. This method, if used night and morning, will cure neuralgia of the feet. Carpets may be greatly brightened by first sweeping thoroughly and then going over them with a clean cloth and clear salt and water. Use a cupful of coarse salt to a large basin of water. Salt as a tooth powder is better than almost any thing that can be bought. It keeps the teeth brilliantly white and the gums hard and rosy. If, after having a tooth pulled, the mouth is filled with salt and water, it will allay the danger of having a hemorrhage. To clean willow furniture use salt and water. Apply with a nail-brush, scrub well and dry thoroughly. When broiling steak throw a little salt on the coals and the blaze from the dripping fat will not annoy. Damp salt will remove the discoloration of cups and saucers, caused by tea and careless washing. Brass work can be kept beautifully bright by occasionally rubbing with salt and vinegar. Wash the mica of the stove doors with salt and vinegar. Salt in whitewash will make it stick better.

THE WELL BRED GIRL.—A well bred girl thanks the man who gives her a seat in the street car, and does it in a quiet and not in an effusive

way. She does not declare that she never rides in street cars. She does not accept a valuable present from any man unless she expects to marry him. She doesn't talk loud in public places. She doesn't shove or push to get the best seat, and she doesn't wonder why in the world people carry children in the cars, and why they permit them to cry. She does not speak of her mother in a sarcastic way, and she shows her the loving deference that is her due. She doesn't try to be a man, and she doesn't try to imitate him by adopting masculine dress and manners. She doesn't say she hates women, and she has some true good friends among them. She doesn't wear boots without their buttons on, or a frock that needs mending. She doesn't scorn the use of the needle, and expects to make clothes for very little people who will be very dear to her.—*Home Queen.*

THE DIFFERENCE BETWEEN WOMEN OF THREE NATIONS—There is, I believe, no country where men and women go through life on such equal terms as France. In England (and here again I speak of the masses only), the man thinks himself a much superior being to the woman. It is the same in Germany. In America I should feel inclined to believe that a woman looks down upon a man with a certain amount of contempt. She receives at his hands attentions of all sorts, but I cannot say that I have ever discovered in her the slightest trace of gratitude to man. Will you have a fair illustration of the position of women in France, in England and in America? Go to a hotel and watch the arrival of couples in the dining room. In France you will see them arrive together, walk abreast toward the seat assigned to them very often arm in arm. In England you will see John Bull leading the way, followed by his meek wife, with her eyes cast down. In America, behold the dignified, nay, majestic, entry of Mrs. Jonathan, a queen going toward her throne—and Jonathan not behind!—*Max O'Rell.*

THERE ARE VERY SIMPLE WAYS of getting foreign substances out of the eye. A glass of water filled to the brim, in which the eye should be immersed until the object floats out. The upper lid placed over the lower is a remedy widely known. As good a one as any, and accessible wherever flax seed can be obtained, is to place a grain of flax seed under the lower lid, and close the lids. The seed becomes surrounded by a thick mucilage, which entraps the foreign body, and soon carries it out from the angle of the eye.

MOTHERS AND THE NURSERY.

MILK PREPARED FOR FEEDING INFANTS.—A writer in *The Pharmaceutical Journal* gives the following formula for preparing cow's milk for feeding infants: Finely ground oatmeal, 1-4 gradually increasing to 1-2 ounce; fresh butter, 1 drachm; milk sugar, 2 drachms; fresh cow's milk, 6 fluid ounces; pure water, 4 fluid ounces; salt, 5 grains or a sufficiency. Mix gradually the water with the oatmeal, milk sugar and salt, so that no lumps are formed in the mixture, then add the milk and butter, and heat to the boiling point in a clean, enameled saucepan. The product should be made up to the measure of half a pint, if necessary, and given lukewarm with a spoon when required. The oatmeal has been found to act as a laxative and also as a direct fat and heat producer in the process of digestion. The process of feeding with a spoon is at first troublesome, but it is to be preferred to the use of a feeding bottle, if care be taken to have all the vessels employed scrupulously clean.

GIVING SHAPE TO FEET.—Every one, but especially children, should wear properly fitting shoes, no matter how common their material. They should be neither too large nor too small, and should have low, flat heels that should be promptly "righted" as soon as they begin to wear to one side. If the toes of the foot show a tendency to overlap they should be rubbed with the hands once or twice each day; and if this care be given when the curving commences it will, as a rule, prove sufficient to correct any irregularities of this nature. If a nail is wayward in its growth, trim it only lightly at the opposite corner. If both corners grow too deeply into the flesh clip them carefully and lightly, and then scrape the centre of the nail from the tip to near the root until it is thin and flexible. This process seldom fails to correct refractory nails—provided, of course, they are not neglected too long.

ANXIOUS MOTHER.—"I wish, Susan, that when you give a baby a bath you would use the thermometer, so as to ascertain whether the water at the proper temperature." Susan—"Oh, don't you worry about that, ma'am; I don't need no 'mometers. If the little one turns red, the water's too hot; if he turns blue, it's too cold; and that's all there is about it."

BABIES WHO SUCK THEIR THUMBS.—Sarony, the great New York photographer, says that he has taken pictures of young ladies possessing almost faultless faces, the solitary defect being malformation of the mouth. He is strong in the opinion that in such cases the defect was due to the pernicious habit of thumb-sucking. One lady frankly confessed that her pretty daughter never relinquished the practice until she was 14 years old. Sarony also says that the injury done the thumb is very slight. The thumb will survive a thousand shocks received while a recreant lad is trying to straighten out a crooked pin with a brick, while the mouth, on the contrary, would get flattened out of existence by such treatment. Teeth, moreover, seldom stand long in the way of a brick. "I have tried to impress on mothers and nurses," said a friend, how careless it is to let children indulge in the practice you speak of. But I suppose they find it a convenient way by which to deceive the infant. But such deception does not pay in the end. It is better to be frank with the youngsters. Give them what they call for, and do not try to pass off any spurious article on them." "Follow the career of a boy baby who sucks his thumbs. You will find that in 999 cases out of 1000 that when he grows up he will smoke. Smoking, I believe, arises out of a desire always to have something in the mouth. Mothers are apt to quiet the little one by giving him a sugar plum, or his thumb, or something else. In this way he gets accustomed to never having his mouth empty. What is more natural than that, when he believes he is a man, he will take to pipe, cigar and cigarette?"

BRINGING UP CHILDREN.—It is as natural to a child to be happy as it is to a fish to swim. But for this they need a certain amount of "letting alone." It is a great mistake for parents to hamper their children with foolish restrictions. We pity the little B's, our next-door neighbor's children, from the very bottom of our heart. There is a picket fence in front of the house, and they are scarcely allowed to go near it, lest they should climb and hurt themselves. They cannot climb a tree for the same reason. The consequence of this training is that their parents have made cowards of them all, with the exception of little Bessie, who is the most daring little mischief that ever wore a sun bonnet, and she has learned to be deceitful, and plays all her mad pranks well out of sight of her parents' eyes. Don't fancy your boy is made of glass. Grant a reasonable request, and let him feel that when you refuse it is for his own good. The

youngest child needs some sort of agreeable occupation, and a certain amount of physical freedom. There is nothing more painful to young people than to feel that life is one dull routine, and that "nothing ever happens," as we once heard a disconsolate lad remark.

GOOD AND SENSIBLE MOTHER.—"With my experience, after raising three girls to womanhood, I wish I had a dozen to prepare for the duties of life," writes a good lady. "Dear me, how many frightful mistakes I made, and all through ignorance. I was greatly interested in woman's rights, temperance work, and reform movements. While I was engaged in these good works my daughters were being neglected. One of the grandest God-given rights of a woman is to raise her girls and boys so that they will not only be a credit to her, but be useful in the world. To have raised a boy or girl properly is more than to have made a thousand stump speeches or to have voted for a president. I am fully convinced that mothers can do more towards reforming the world by so raising their children that they will not become drunkards and vagrants than by preaching from the housetops."—*Pittsburg Gazette*.

A NOVEL PREVENTIVE OF SOAR THROAT.—People who are subject to inconvenient throat trouble, caused by a proneness to catch cold on slight exposure, are advised by a recent writer to place a few threads of Berlin wool around the neck and wear them continuously. From ten to twenty threads are enough for the purpose. They should only be removed for making ablutions, and should be left off gradually by discarding daily one thread at a time. The remedy probably acts by keeping up a belt of skin action, thus acting mildly and continuously as a slight counter-irritant.

CHILDREN AND POULTRY.—Let one of the children assume the care of the poultry yard if you have not the time to make it a feature of your farming. Encourage him by selling him the fowls at a fare price, allowing him to pay for them in eggs, which you buy at the regular price, or which are sold and placed to his account. Get him to keep his own accounts; let him pay for the feed purchased; also by the sale of eggs and chickens. The boy will be happier for the experiment, and will gain habits of industry that will be valuable to him for all his life.

THE EYES OF YOUNG CHILDREN.—In an article on "Blindness and the blind," in the *Journal of the Franklin Institute*, Dr. Webster Fox refers, among other things, to the need for care being exercised with regard to the eyes of young children. The eyes are more sensitive to light in childhood than in adult life, yet a mother or nurse will often expose the eyes

of an infant to the glare of the sun for hours at a time. Dr. Webster Fox holds that serious evils may spring from this, and he even contends that "the greater number of the blind lose their sight from carelessness during infancy." From the point of view of an oculist, he protests against the notion that children should begin to study at a very early age. He thinks that until they are between seven and nine years old the eye is not strong enough for school work. When they do begin to learn lessons, they "should have good light during their study hours, and should not be allowed to study much by artificial light before the age of ten. Books printed in small type should never be allowed in schoolrooms, much less be read by insufficient light."

A VEGETARIAN COOKERY BOOK—THE GRAPE CURE.—Mr. Hudson Tuttle writes, concerning Eating for Strength, as follows to the *Golden Gate*: "I noticed in your columns an inquiry for a good vegetarian cook-book. There are several works of varying merit, for "flesh and fish" have not quite monopolized the attention of the Professors of the culinary art. In almost all public places where food is served the principal dishes are meats, and vegetables take the second place. Fruits are relishes, or more usually added like flowers by way of ornament. To make a meal of fruits seems never to be thought of. Of all the works on this subject which have met my attention, that of Dr. M. L. Holbrook, entitled "Eating for Strength," is in many respects the best. It gives the reasons for eating as well as the methods of preparation, and is a guide to health as well as to correct cookery. I learn that a new and enlarged edition has just been published by the author.

"He is admirably well qualified for the work, having been manager for many years of a sanitarium in New York City, where he carefully studied how to make food and hygienic conditions take the place of medicines. While flesh and fish were set on his table prepared in the best manner, they were secondary to the vegetables, grains and fruits. Those who had the pleasure of staying there even for a day will remember with delight the *menu* furnished them."

To this kind notice by Mr. Tuttle I may add that this work contains a very carefully prepared chapter on the Grape Cure, which ought to be better known in this country than it is. In Germany this method for certain bodily conditions has been very much used, and with excellent results. For home use, however, it has almost equal advantages.

M. L. H.

MORE WOMEN DOCTORS.—The New York Medical College and Hospital for women, had its commencement for 1889 and '90 last week. Fifteen women were graduated, it being one of the largest classes for several years. In point of talent and character, this class we think stands much higher than the average of the graduates at the colleges for men. No one doubts at the present time, that women make as good physicians as men, if they have the proper natural talent for this profession, and in addition suitable training. They labor often under some difficulties in not having as well equipped buildings and laboratories for work, but this deficiency is often, as is the case in this school, more than counter-balanced by the earnestness and devotion of both teacher and pupil. Of the twenty teachers we doubt if any school can boast of more capable and devoted ones. Women desiring to study medicine should send for their annual announcement.

HEALTH APPLIANCES AND INVENTIONS.

ANOTHER DRUG ABOMINATION TO BE AVOIDED.—Exalgine is the name of a new drug similar in composition to antipyrin and antifebrin, which has lately been the object of much laudation for its energy as a painkiller. Neuralgias of all kinds, wherever located, are generally dispelled by its use in about half an hour at the outside. Frequently the pain does not return, and the cure is permanent, but sometimes there may be a relapse and further doses are necessary. Exalgine, however, has been engaging the attention of Dr. Bardet and Dr. Dujardin-Beaumetz, two French physicians, who have been making an investigation into the therapeutic qualities of this substance. While they agree as to the activity of the drug in destroying pain, the doctors are equally unanimous in their opinion as to the danger of its use. The new pain killer is a powerful poison as well as a sedative, and its action affects the brain, giving rise to violent convulsions like those of epilepsy. The moral of the findings of MM. Bardet and Dujardin-Beaumetz is that it is better to endure pain than to resort to the use of so dangerous a drug to assuage it.

GASTRIC JUICE A GERM KILLER.—Drs. Kurlow and Wagner describe some interesting experiments which they have made on this subject, from which they are led to the conclusion that constant or specific microbes do

do not exist in the stomach and those which enter it, together with sputum, food, or other ingesta, are only accidental and temporary residents, and cannot live in the normally acid contents of the stomach. Gastric juice is, according to the authors' experiments, an exceedingly strong germicidal agent, and where living bacilli get into the intestinal canal it is due to various conditions entirely independent of the gastric juice. When the latter is normal and in full activity only the most prolific microbes escape its destructive action, all others are destroyed in less than half an hour.

PUBLISHERS' DEPARTMENT.

ONLY ONE REAL WEBSTER'S DICTIONARY.—There have lately been placed upon the market several books called "Webster's Unabridged Dictionary," "The Original Webster's Unabridged," "The Mammoth Webster Dictionary," and the like. They are sold at a very low price, or given as a premium, and in many cases they are represented as being substantially the same with the WEBSTER'S UNABRIDGED published by G. & C. Merriam, Springfield, Mass., and which is generally accepted as the highest authority in the English language. These books are cheap and inferior reproductions of early editions of WEBSTER which have long been superseded by modern improvements. It should be clearly understood that both in a mechanical and a literary sense these cheap reprints are essentially inferior to the WEBSTER of to-day, that they are from thirty to sixty years behind the times, and that they cannot be depended on as a standard authority. Do not be deceived by these cheap and valueless reprints. The only WEBSTER UNABRIDGED is the modernized work, every copy of which bears the imprint of G. & C. Merriam, Springfield, Mass., and which has justly won the confidence of the general public as the most comprehensive, convenient, and sufficient store-house of the riches of the English language in its past and present phases.

FRUITS AND HOW TO USE THEM—is the title of a manual for house-keepers containing nearly 700 recipes for the wholesome preparation of foreign and domestic Fruits, by Mrs. Hester M. Poole. The work tells how to put fruits on the table, and how to prepare the various forms, baked, stewed, canned, jellies, preserving, etc., and how to prepare puddings, pies, sauces, cakes, ice-cream, etc., dealing not only with new

ways of using well-known fruits, but bringing into notice many fruits somewhat unknown or that have been deemed of but little value. The hundreds of delicious desserts that are described make the old-fashioned crusty and heavy contrivances that are deemed so essential to the completeness of a meal, appear unnatural and dyspepsia-breeding. The volume is neat and compact in form and in style, and the arrangement shows the hand of an experienced writer on topics affecting the home and family. Price, \$1.00. Fowler & Wells Co., Publishers, 775 Broadway, New York.

ABOUT PEARLINE.—Every one knows about Pearline, almost every one uses Pearline, but we wonder if all the house-keepers who use it know half that can be done with it. We wonder if they all know what some of the bright ones have discovered, that those mountains of dishwashing—the greasy pan and kettle—may be reduced to mole hills of the smallest size by the judicious use of Pearline. Fill the roasting pan, as soon as the gravy is poured from it, with cold water, shake in a little Pearline and set on the stove. By the time the rest of the dishes are washed, all the grease is dissolved and the pan can be washed as easily as a plate. Treat the kettle in which anything greasy has been boiled in the same way, and beside clean utensils you will have a clean sink, the use of the Pearline rendering it safe to pour such dishwater into it. Sinks regularly treated to a bath of Pearline and scalding water will seldom need the services of a plumber.—*Watchman, Boston, Mass.*

QUESTIONS AND ANSWERS.

ANTI PYRENE.—*W. J. B —Middleburgh, N. Y.*—Ludwig Knorr, a Bavarian chemist, is responsible for the discovery of anti-pyrine, which is a product of coal tar, like aniline and hundreds of other chemicals. Chemically considered, it is an artificial alkaloid, obtained by the action of acetic ether on coal tar. Its effect is mostly directed on the nervous system, but it influences also the action of the heart and stomach. Frequently it produces fits of vomiting, and, if persisted in, will lead to dyspepsia. The dizziness which often seizes persons taking anti-pyrine is due to its powerful influences on the nervous system. If judiciously used, its friends claim this new remedy is valuable in relieving fever and headaches of every description. The fever will return despite frequent

doses of anti-pyrine, though it reduces the temperature and sufferings for the time being. It will drive away an attack of neuralgia or sick headache. It will be of momentary benefit in a number of complaints. But it will not permanently cure anything. It is a remedy, not a cure. For further description see *HERALD OF HEALTH* for July, 1889.—The wheezing you allude to proceeds from obstructed air passages, and is common in infants.

SOME ADVICE ON TEETH AND MENTAL OVERWORK.—*HEARLD OF HEALTH Reader.*—In reference to question as to advisability of having your wife's teeth extracted, we think it would pay you to seek the advice of the best dentist in Chattanooga. As far as we can judge, there is no reason why the stumps should not be extracted and a new set inserted. If the lady objects to chloroform, let her try nitrous oxide or "laughing gas." Of course there must be some pain, but this gas, properly administered, is safe and reduces pain to a minimum. Do not have the sound teeth extracted. Even an ordinary dentist can make a plate retaining the good teeth. It will take some little time to make a plate. If your wife has a tendency to heart disease consult a physician before she goes into the hands of the dentist. We are unable to state the cost of the work in Chattanooga. Perhaps the mental overwork you complain of leads to worryment. Your health habits are evidently correct. Try and worry as little as possible, and through all means in your power avoid mental overwork.

NO CAUSE FOR ANXIETY.—*Subscriber (John.)*—There is nothing whatever in the case of your friend to cause him the slightest anxiety. At his age what you allude to is perfectly natural, and unless it occurs far more frequently is not worth bothering about. Perhaps he has been reading too much upon the subject and has become unduly morbid. Pretty full advice was given upon this point in the issue of the *HERALD OF HEALTH* for December, 1889. Let him consult that number.

THE HISTORY OF CREMATION.—*Constant Reader.*—Cremation, or the burning of the dead, has been practised among many nations and from very early times. The relics of the Bronze age in Great Britain and Denmark show that it was usual in that period, and its prevalence among the ancient Britons is known from history. It was practiced from a very ancient date among several other Western nations and among the people of Eastern Asia. It was general among the ancient Greeks, and must

have been adopted by them at a very remote period. Numerous instances of cremation are described in Homer's poems and in Virgil's "Æneid," as occurring about the time of the Trojan war. Cremation was borrowed by the Romans from the Greeks, and was not generally practised among them till toward the end of the republic. The custom gradually fell into disuse under the empire and appears to have been abandoned about the end of the fourth century. There is no record that it was ever practised by Christian nations. Cremation still prevails among many of the nations of Eastern Asia. In India until recently the living widow was buried upon the pyre with the body of her deceased husband. Within a few years new attempts have been made to commend cremation. The first furnace for cremation in the United States was built at Washington, Pa., by Dr. J. Le Moynes.

SUN BATHS.—*J. W., Independence, Mo.*—Sun baths can only be arranged on upper room with skylight or with windows affording free entrance to the sun's rays is the best adapted for the purpose. But better than sun baths is living in sunlight, which is as necessary to health as pure air. Let yourself and family live and work in rooms where plenty of sunlight can enter. There is no way to avoid the natural itching produced in some persons by cold water-baths. Be careful what kind of soap you use, however, as soap often causes irritation otherwise avoidable.

THE HERALD OF HEALTH.

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T H E

H E R A L D O F H E A L T H .

Fortieth Year.

JULY, 1890.

No. 7.

IS LIFE GROWING LONGER ?

(SPECIAL FOR HERALD OF HEALTH)

THERE are some philosophers who maintain that longevity is becoming more general than it was, even forty years ago. There is no doubt but that during the first few centuries of the Christian era the average duration of life in the most favored classes was 30 years, while in the present century the average age of the same classes is 50 years. In the 16th century the average longevity in Geneva was 21 years ; between 1814 and 1833 it was 68, and as large a proportion now live to an age of 70 as lived to 43 three hundred years ago.

To-day of each 1,000 only 228 medical men live from 63 to 72, and 328 theologians. In the last fifty years the mean term of life seems to have increased from 33 to 41 years. In the professions, of those who attain the age of 66, there are found to be 43 theologians, 40 agriculturists, 35 men in office, 32 military, 32 clerks, 29 advocates, 28 artists, 27 professors, and 24 medical practitioners.

FROM RECENT STATISTICS

it seems to be shown that woman has a greater tenacity of life than man, and that the Hebrew women are the longest lived of any race. Then, too, among insects the male perishes at a relatively earlier period ; in plants the seminal blossoms die earliest, and are produced in the weaker limbs ; and female quadrupeds have more endurance than male, although

these facts are not generally known. In the human race, despite the intellectual and physical strength of man, the woman endures longer, and bears pain to which the strong man succumbs. Physicians tell us that zymotic diseases are more fatal to males, and the records of our health departments prove that more male children die than female. The proportion dying suddenly is about 100 women to 700 men. In our large cities pulmonary consumption takes off many women, while the diseases fatal to the males are apoplexy, intemperance, affection of the heart or liver, scrofula, gout, paralysis, and hydrocephalus.

AGAIN THERE IS AN EXCESS

of more than 6 per cent. of females in the various populations, though there are from 2 to 6 per cent. more males born than females. Up in Connecticut many women have lived to be over 100 years old, while scores at the age of 90 are found in every town in the State. In the State of New York the average life of a woman appears to be 48 years. In Maine the males outlive the females, while in Massachusetts it is the reverse, the average among women being 52, while among men it is but 47. In New Hampshire the men live the longest. In Vermont the men live on an average to be 51, while the women average but 49. The women of Rhode Island live longer than the men, and so they do in Pennsylvania. The average in New Jersey for women is but 45, while for men it is 48. In Delaware the women outlive the men. The average duration of life in Virginia among men is 47 years, while that among women is 48. In the Southern States there is but little difference in the average between males and females, but the men as a rule live longer than the women. In the Western States the men live on an average three years longer than the women, and according to recent statistics this average is 50 years. The average for both men and women in the Northwest is 60 years.

OPERATORS DIE SOONER

than those engaged in any other profession, and men unemployed live the longest. The average life of a clerk is but 34 years, and this is also the average among teachers. Machinists are outlived by printers, the average of the former being but 38 years, while that of the latter is 39. Musicians live a year longer. The years of life of an editor is 40, and of manufacturers, brokers, painters, shoemakers, and mechanics, 43. Judges live to be 65 years of age on an average, and farmers to be 64. Bank officers

also live to be 64 on an average. The duration of life of coopers is 58 ; of public officers 57 ; of clergymen, 56 ; of shipwrights, 55 ; of hatters, 54 ; of lawyers and ropemakers, 54 ; of blacksmiths, 51 ; of merchants, calico printers, and physicians, 51 ; of butchers, 50 ; of carpenters, 59 ; of masons, 48 ; of traders, 46 ; of tailors and jewelers, 44.

PEOPLE LIVE LONGER,

that is, to an older age, in Oregon, than in any other State in the Union, and they die sooner in Arkansas. The death rate in Oregon is one to every 200 inhabitants, while it is one to every 49 inhabitants in Arkansas. In France the death rate is 1 in every 32 ; in Prussia, 1 in 39 ; in Austria, 1 in 40 ; in Norway and Sweden, 1 in 41 ; in Belgium, 1 in 43 ; in Denmark, 1 in 45 ; and in England, 1 in 46. According to the Carlisle table of mortality, based upon very extensive observation, and largely used as an authority in life insurance calculations in the United States, of 10,000 born, 3,540 die in 10 years ; 3,910 in 20 years ; 4,358 in 30 years ; 4,915 in 40 years ; 5,603 in 50 years ; 6,357 in 60 years ; 7,599 in 70 years ; 9,047 in 80 years ; 9,848 in 90 years ; 9,991 in 100 years ; 9,999 in 104 years, leaving only one of the 10,000 living

AT THE AGE OF 104 YEARS.

Mrs. Phoebe Trapis, of Hornellsville, New York, lived 104 years, and Matilda Riley, of Raywick, Kentucky, died at the age of 115. Mrs. Sarah Horne, of Dover, New Hampshire, is 99, and never fails to visit her friends every day, walking two miles. Patrick Dailey, of Meriden, Conn., is well and hearty at the age of 102 years. Mrs. Bridget Eagan, of Rondout, N. C., is in good health at the age of 106. Mrs. Rachel Hicks, of Oyster Bay, Long Island, lived to be 104. Bridget Feeney recently died at the Home for the Aged in New York City at the age of 104, and "Uncle" William Sullivan, of Richmond, Canandaigua County, N. Y., is strong, healthy, and in possession of all his faculties at the age of 104. Mr. Sullivan's mind is clear, his memory good, and he frequently walks from his home to the village of Honeoye and back, a distance of ten miles. William Shirley, a neighbor of Sullivan, and a native of England, is 103 years of age, and was one of the stalwart soldiers of Wellington's army in

THE BATTLE OF WATERLOO.

Mrs. Annie Gaines, of Walton, is a century old, and so is Thomas Sanders of the same place. Mrs. Elizabeth Stewart, of Carrollton, Mary-

land, has just celebrated her 103d birthday. James Kilpatrick, of Dawson, is nearing the 101st goal. He was a soldier of the war of 1812, and served under General Andrew Jackson in the Indian wars. Baal Edwards, of Springplace, is 92 years of age, but as chipper as a man of 40. He amuses himself by hunting and fishing, and recently married a woman 62 years younger than he is. Mrs. Jane Bennett, of Vienna, Ga., is 80 years of age, and can dance a jig with a tumbler of water on her head without spilling a drop. And so the list grows, with hundreds of centenarians within the borders of the United States who have not yet been heard from.

AS TO THEIR MODE OF LIVING,

these old people, as a rule, take coffee, hard toasted bread, and soups, with an afternoon nap thrown in. However, there is a minister at Southold, L. I., the Rev. Epher Whittaker, pastor of the 1st Baptist Church, who claims that the old age to which so many residents of Long Island attain is due to their being, as a rule, religiously inclined. "Piety favors longevity," says the pastor, and in support of this he cites the fact that during his pastorate of 37 years the average age of the members of his church who have died is 82 years, the youngest being 57 and the eldest 97.

J. JOSEPH GOODWIN.

**WITH PATIENCE AND ENERGY CONSUMPTION
CAN BE STAYED.**

THE curability of consumption has been so thoroughly established that rules for the suppression of the disease have been drawn up by medical experts, and these have been found to be of the utmost value. If possible, the residence of the patient should be situated in the country, in a healthy suburb, or in a wide, open street. The rooms, and especially that used as the sleeping apartment, should be lofty, capacious, well lighted by windows that open and ventilated by direct and continuous free communication with the external air, summer and winter, night and day. Gradually lower the temperature of the room until there is not nearly so much difference between it and that of the external air as that to which we are now accustomed. Great care should be taken about the

CLOTHING OF THE BODY.

It is essential that the clothes should be made so loose that they offer no impediment to the full and free movement of the chest. When order-

ing clothes be sure the measurement is taken at a full inspiration, and see that they are quite easy, even then. Don't use braces, corsets or respirators; they tend to impede the respiratory movement. Wool manufactured in such a way that it is elastic and permits free ventilation should be worn next the skin, and the under linen should be frequently changed, so that no impediment is offered to its emanations.

A SPONGE BATH

should be taken every day. Low heeled boots, with wide, broad toes, should be worn, so that walking exercise may be taken in comfort. Spend as much time as possible, and that daily, in some form or other of active exercise in the open air. Certainly avoid the habit of stooping, throw the shoulders back, the chest forward and get into the habit of holding the body erect at all times. Breathe through the nose, and take a half dozen deep inspirations, followed by full expiration, several times daily. Go in for gymnastics, giving special attention to the development of the muscles of the chest; swimming, singing and athletics, and get gradually acclimatized to the external air, wind and rain. Don't overload the body with clothes, and maintain the temperature in the natural way by increased muscular exertion.

GET THE CHEST GIRTH

and vital capacity taken at regular periods and record them, so that you may know what progress you are making, and do not relax these efforts for a day until the chest girth at the nipple line has come up to the standard prescribed by your physician. The members of consumptive families and those who bear the marks of threatening disease—a narrow chest and faulty carriage of the body, associated with some indication or other of deranged health—should make it the first business of their lives to carry out the above directions. It is not every one who is in a position to carry out the whole of them, but by making it a rule of life to observe such as lie within the power of the patient the difference between sickness and health can in the majority of cases be effected. Those who are engaged in sedentary, chest constricting or dust inhaling occupations should most scrupulously devote a specified time daily to the development of the lungs on the foregoing lines.

AMONG SPECIAL METHODS

of curing consumption, says a writer in the *Pittsburg Dispatch*, may be mentioned that of a physician who depended almost entirely on exercise

in the open air. He ordered his patients to continually ride on horse-back till they got well. This exercise was to be taken in the country where the air was good; the riding was to be increased from 7 to 150 miles a day; and the patients were to stop only for food for themselves and their horses, and not to remain more than one night in a place. The result of this treatment was almost invariably successful.

NOS. 13 AND 15 LAIGHT ST.—A FAMOUS SANITARIUM CONE.

MANY interesting memories cluster about the buildings known as the Hygienic Hotel, at 13 and 15 Laight street, New York city, now doomed to be torn down to give place to an immense woollen warehouse. The buildings were originally erected for residences for the families of George Schuyler and a son of Alexander Hamilton and Col. Thorne, in what was then the fashionable quarter of the city about seventy years ago, in the vicinity of St. John's Park. The carriage houses of the high-toned old families stood until recently on the back of the property. The queer old stone trimmings of the windows and doorways, and its mahogany folding doors, its elaborate white marble jambs, and the generously large rooms were reminders of the time when land was much less valuable than it is now, when flats were unknown and the hum of business had not reached as far up town as Canal street.

FOR MORE THAN HALF A CENTURY

the place, says a writer in the *New York Sun*, has been noted under various auspices as the headquarters of progressive medical men. Dr. Schew, a famous hydropathic physician, lived there many years ago. Dr. Trall, one of the pioneers of the hydropathic movement, took the place about forty years ago and established the Hydro-Therapeutic College, published a hydropathic newspaper, and kept a sanitarium. The newspaper was called the *Water Cure Journal*. Dr. Trall had great faith in water outside and inside the human frame, preached vegetarianism, graduated a good many water cure doctors, and treated a great many patients. It was a temperance institution, too, and its patrons numbered many of the men and women who became prominent in the reforms then agitated.

HERE WAS STARTED, IN 1859,

the first Turkish bath in New York city. Dr. E. P. Miller was the founder of it; he still keeps a similar establishment in this city. Under

Dr. Miller the place became famous. It was he who gave it the name of the Hygienic Hotel. Among those who stopped at the Hygienic Hotel were George Francis Train, who bought the first package of Turkish bath tickets; Horace Greeley, who at one time tried vegetarianism; Henry Ward Beecher, Caleb Cushing, R. H. Stoddard, Gen. N. P. Banks, Julian Hawthorne, Mrs. E. Oakes Smith, Prof. Moses Coit Taylor, Dr. Dio Lewis, Prof. Evans of the Michigan University, Capt. Codman, Mrs. Barboza, daughter of the United States Minister to Liberia; Mr. Roy of Calcutta, Joel Benton, Bright Eyes, the Indian Princess; Dr. Mary Walker, D. Fuller Walker, Elder F. W. Evans, the famous Shaker; O. S. and L. N. Fowler, and many others.

Under Dr. Miller the hotel was very prosperous. The Turkish baths took the place largely of the original wet pack and wet compress water-cure methods, and the diet became more generous, with less of water and vegetables. They had five meals a day, so that all tastes could be suited, and probably there never were such a set of cranks about their food as were here served and suited for a generation. The place continued to be a sanitarium, but it was more of a hotel.

THE HYGIENIC WAS A VERY SOCIAL

place. There was always some one to talk to. The parlors were the scene of many vigorous discussions. They had a lecture room, and there were musical parties and an intellectual vigor about the place that kept things lively. The very nature of the place brought the people of conflicting mental proclivities, and the consequence was a succession of lively intellectual scimmages. Dr. Miller bought the *Water Cure Journal* and published it for years as the HERALD OF HEALTH.

Dr. Miller sold out in about 1869 to Wood & Holbrook, who continued the place upon much the same plan, while Dr. Miller moved up town. When Dr. Miller bought No. 15 he paid \$25,000 for it, and when he sold it twenty years later it brought \$1,000 more. But this land is now worth nearly double what Dr. Miller paid for it. Dr. M. L. Holbrook was for many years the sole and practically the last proprietor of the Hygienic Hotel. He was also the proprietor of the HERALD OF HEALTH until 1887, when he disposed of that publication to the Herald of Health Co.

A LEVEL HEADED DOCTOR ON THE DRUG ABOMINATION.

At the one hundred and twenty-fourth annual Convention of the Medical Society of New Jersey, among the papers read was one by Dr. George T. Welch, of Passaic, on the use of drugs. "There are few physicians to-day," he said, "who do not try a shot gun perscription at an obscure disease. Death lurking in ambush might get a stray pellet and retire. Even in these last ten years I have known the most maddening variety of drugs administered in pulmonary tuberculosis. Whence comes this all-pervading worship of foul, ill-smelling drugs? We throw into the vitals of mankind roots and herbs and seeds, liquors and gums and oils, sodas and zincs and leads, poisons and counter poisons, and expect somehow to see evolved the charms of perfect cure."

Dr. Welch cited statistics to prove that drugs are not going out of use, and continued :

"What feeling of pulses and sounding of ribs, analyzing of fluids, grouping of symptoms, pausing and weighing and doubting goes with all these figures! What rasping of drugs in the apothecaries' pots, roling of pills, swishing of liquids! The drowsy nurse fumbles at vials, while the clock ticks drearily, and the sick man stares at the ceiling and groans at the trooping phantasmagoria of his mind. What hard-earned money is swallowed up for his dismal potions before he swallows them!

"Drugs help us to a certain extent, but we have found a more powerful magic in mountain air and rolling seas, gay converse, riding, driving, wheeling, rowing, and travel. The sanitarian saves more lives to-day than did all the doctors of the last century, Jenner excepted."

SUGAR FOR CHILDREN.—After the baby is six months old it can have thin oat meal gruel, or barley gruel, but its food should consist principally of milk until the eight front teeth have come. After a year old it can have rare meat, finely minced, the yoke of a soft-boiled egg, and oat meal porridge. It should have as much milk as it will drink. After it is two years of age it should have a little of every kind of wholesome food, including a small quantity of candy. Sugar is necessary to children, and their craving for it is an indication that nature means them to have it. No tea, coffee, hot bread, pastry or unripe fruit should be given.—*Ladies' Home Journal*.

EDITOR'S STUDY.

SUPERFLUOUS FAT CUT OUT.—We are constantly hearing of extraordinary surgical operations, but the most astounding that has been performed is that of *degraissage*, or the removal of fat from the body. Drs. Marx and Demars, of Paris, have carried out the operation on a literary man, M. Hiroguelle. They raised the skin and cut away four and a half pounds of the adipose tissue. The patient was under chloroform while thus being pared away. The skin was then stitched up. More than a week has passed since the operation, and M. Hiroguelle now feels well, and is overjoyed at the improvement in his figure. He says he only suffered from headache, the effect of the chloroform. It is arranged that he is to undergo further parings or *degraissages* on other parts of the body.

REPRODUCING POWER OF THE LIVER.—A scientific fact of great value, and one which should bring comfort to legions of that large class of persons who are weary of the caprices of an erratic or tardy liver, has lately been established. Experiment has proved that large portions of the liver can be removed without serious disturbance to the animal functions of the human body. The explanation of this curious fact seems to be that the liver has a wonderful power of reproduction. Ponfick found that, within a few days of the removal of portions of the liver, the work of its reproduction began, and that it proceeded with great rapidity to completion. In certain cases he found that within a period of a few weeks as much was reproduced as had been removed, and this amounted occasionally to twice as much as had been left behind. These investigations have an interest altogether outside of that which is absolutely scientific, because they cannot fail to influence the development of abdominal surgery, if it is understood that large portions of the liver may be removed without serious danger to life.—*Pittsburg Dispatch*.

THE ETIOLOGY OF DIPHTHERIA.—In the appendix to the report of Dr. Buchanan, the Medical Officer of the Local Government Board, London, is contained the results of most recent investigations made by Dr. Klein into the etiology of diphtheria. From time to time statements have been made as to the presence in diphtheria of various species of microbes, and as to the etiological relations of one or other of them to that disease. Klebs was the first to point out that in diphtheria membranes, which commonly contain abundance and great variety of microbes, there is

uniformly present a bacillus possessing definite morphological characters by which it can be identified. Löffler, while confirming the frequent presence in diphtheria of this species of bacillus, succeeded also in isolating it, and further in showing that it is only present in superficial layers of the diphtheritic membrane, and absent from the deeper layers. At first it was assumed that these bacilli were etiologically connected with diphtheria, but Löffler subsequently found this identical species in the mouth of a perfectly healthy child, and Hoffmann also found a bacillus identical in morphological and cultural characters with the Klebs-Löffler bacillus constantly present in the human pharynx. But in spite of this, two French pathologists—MM. Roux and Gersin—only as recently as last year, in pursuing some investigations into the subject, started with the assumption that the Klebs-Löffler bacillus is really the cause of the disease. With the object of tracing if possible the cause of diphtheria, Dr. Klein has undertaken a number of experiments, but so far without any very positive results, though it may be taken for granted that the Klebs-Löffler bacillus is not the cause of diphtheria. Nor can the disease be communicated to animals—except to cats, which alone show any definite results of inoculation with diphtheritic membrane. Several pathologists and sanitary observers have maintained a relation to exist between diphtheria in the human subject and a peculiar necrotic disease of the fauces of pigeons and fowls. According to Löffler this process is altogether different from human diphtheria, Pfeiffer has recently come to the same conclusion, and now Klein has conclusively shown that there is no connection whatever between the two. His further experiments will be watched with close attention, for the subject is of much importance.

WEALTH AND HEALTH.—That wealth is any enemy to health seems a contradictory statement at first sight, but, briefly considered, it shows itself unfortunately to be anything but that. The making of money keeps a man occupied and healthy, but it is found when the fortune is accumulated that the mischief begins. The worn-out old rhyme that “Early to bed and early to rise, keeps a man healthy, wealthy, and wise” has a great deal of truth in it, for we naturally conclude that the man who takes the trouble to “rise” early, would scarcely do so unless he meant to fill up the time thus gained by giving exercise to his physical and mental powers, and to this species of individual wealth does no harm. But

when, having strived and accumulated, a man sits down to take life easily, which means very often luxury, self-indulgence, and diminished activity of mind and body, wealth is distinctly an enemy to long life and health, not only to the one generation, but to those who follow after, and who suffer from the sins of their fathers unto the third and fourth generation.—*The Hospital.*

BEFORE WE TURN TO DUST.—How long will a human body remain in the earth before it decays until it cannot be distinguished from the surrounding clays is a question as yet undecided by the scientists. Much depends upon the character of the soil and the different elements of which it is composed. In countries abounding in limestone, or, again, in regions thoroughly saturated with alkaline waters, human flesh will retain a natural color and firmness for an indefinite period of time. The bogs of Ireland have yielded up bodies fresh and natural as life that had been buried in their slimy depths for centuries. It is said to be an historical fact that the bodies of three Roman soldiers were found in a peat bog on the Emerald Isle, in the year 1569 A. D., fresh and life-like, although they had been buried almost sixteen centuries.

FAVORITE MONTHS FOR SUICIDE.—It is a rather singular fact, but one which has been proved by statistics, that the period of the year which brings with it the longest list of suicides is not dull and dreary November, nor the dark days of winter, but rather the brilliant summer days of July and August. In Japan, according to recent returns, a similar tendency to self-destruction prevails in the summer time. Taking the six years from 1883 to 1888, inclusive, it appears that the number of Japanese who committed suicide in the month of July ranged from 500 to 800, whereas the number during the remainder of the year only averaged from 200 to 300. It is a somewhat curious circumstance that the great majority of persons who cut short their lives in Japan have passed their fiftieth year; next on the list coming, in respect of numbers, the suicides of persons between the ages of 20 and 30, the cause of self-destruction with the last-named being, in the majority of cases, love affairs that have not gone on smoothly. Between the ages of 30 and 50 it seems the Japanese rarely turn their backs on the world, nor are there many suicides after the age of 60.

THE IDEAL SANITARY HOUSE.—The picture of the ideal sanitary house, as drawn by a contemporary, is a pleasing one. The house will stand

facing the sun, on a dry soil, in a wide, clean, amply sewered, substantially paved street, over a deep, thoroughly ventilated and lighted cellar. The floor of the cellar will be cemented, the walls and ceiling plastered and thickly whitewashed with lime, every year, that the house may not act as a chimney, to draw into its chambers micro-organisms from the earth. Doors and windows will be generous in size, so as to admit of plenty of air. The outside walls, if of wood or brick, will be kept thickly painted, not to shut out the air, but for the sake of dryness. The inside walls will be plastered smooth, painted and varnished. Interior woodwork, including floors, will be varnished. Movable rugs, which can be shaken daily in the open air—not at the doors or out of the windows—will cover the floors. White linen shades, which must be clean or they become unsightly, will protect the windows. The furniture will be plain, without upholstery. Mattresses will be covered with oiled silk; blankets, sheets and spreads—no comforts or quilts—will constitute the bedding. There will be as little plumbing as possible, and what there is will be exposed. The hot air furnace which heats the rooms will take its supply from above the top of the house instead of the cellar, and, we are told, the “spring” cleaning will be twice a year.

AN ALCOHOLIC DISEASE.—It is a strange fact, says the Boston *Herald*, that a good many of those persons who occasionally go onsprees, and keep drunk for several days, have neither a fondness for the taste of liquor nor find pleasure in its effects. These unfortunates for weeks, and even months, continuously keep perfectly sober, and cannot be induced to “touch a drop.” But suddenly there comes to them an inclination to drink, which is absolutely impossible to resist. They must and will have liquor. Then for a time they literally wallow in it, drinking, often, from one to two quarts of whiskey or brandy each day—pouring it down, in fact, until they are actually paralyzed; then rousing up again a little, and again drinking to insensibility. After several days the paroxysm stops suddenly, and when consciousness is restored the desire for liquor is found to be replaced by a perfect abhorrence for it. But few people sympathize with this class of inebriates, and yet they deserve the deepest pity. They are just as plainly the victims of disease as is the epileptic. They are affected with a nervous weakness which is absolutely beyond their control. Their debauches are but the natural results of their disease, just as the convulsions of an epileptic are the results of his

disease. And yet the law makes no distinction between this class of inebriates and those who have an appetite for strong drink which they themselves have created. Attacks of insanity are quite common after prolonged debauches, and frequently crimes are committed during them. A person insane, be it the consequences of alcohol excesses or disease, is irresponsible; in fact, insane inebriates are, if anything, less responsible for their acts than many of those who are insane in consequence of disease. Considering these facts, it is evident that, in administering justice to inebriates, a distinction must be made between the different classes; and the victims of appetites for strong drink which are but the promptings of disease be held irresponsible, as are all others suffering from insanity.

A FRENCH STATISTICIAN HAS JUST ASCERTAINED that a human being, of either sex, who is a moderate eater, and who lives to be seventy years old, consumes during "the days of the years of his life," a quantity of food which would fill twenty ordinary railway baggage cars. "A good eater," however, may require as many as thirty. It would have been interesting if this fellow had added to his French discovery an explanation as to whether the peck of dirt each one of us has to eat serves to season all these car loads of provender.

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

WOMEN AND THE HOUSEHOLD.

CONDUCTED BY HELEN FLETCHER.

MRS. CHANT'S ADVICE TO GIRLS.—“These are the last public words I shall speak in Boston for a long time,” said Mrs. Laura Ormiston Chant to several hundred young persons gathered around her upon the main floor of Jordan, Marsh & Co's big store. Mrs. Chant made a short speech, brimful of happy hits. I want to ask you to keep up the standard of gentlemanly and ladylike behavior that I see around me, as well as to preserve your good looks. How are you going to keep up this standard? Well, by avoiding certain youthful vices. Some of these you know very well. Eating your dinner in a hurry is one. Smuggling your breakfast into your stomach is another. Reading in bed is a third, and even worse is smoking in bed. In order to take new ideas into our minds we must read, but reading at the wrong time does no good. Some people wonder at me for doing so much work and never appearing fagged out. I will tell you how I do it. I laugh heartily. I love to laugh. I sleep soundly. I love to sleep. I eat well. I should say I love to eat, but you might consider me greedy. Girls, if you are beautiful at 20, and more beautiful at 30, you will be excellent at 40, and as lovely as princesses at 50. Always speak the truth, and speak it in love, or else it is not worth speaking. But you must not believe it right always to speak your minds. Our minds are sometimes not fit to be spoken. Remember that silence, as well as truth, is golden. Many of you are thinking about getting married some day. If you marry well and in the right spirit, it is a great thing; but, for heaven's sake, don't be in a hurry about it. To the young men I may add, make yourselves worth marrying. Be faithful in love. When you get married I hope you will marry a man whom you can love as I love my husband. And may he love you as my husband loves, or says he loves, me—and I believe him, to be sure.

GET SHOES AFTER NOON —The best time to get fitted to shoes is in the latter part of the day. The feet then are at their maximum of size and sensitiveness. Activity measurably enlargens them. When the muscles are in play, the flow of blood in the arteries is increased, and the joints also; consequently they are more tender. Even gravity affects the

venous circulation, so that standing on the feet alone tends to enlarge these members. It is gravity that produces varicose veins in the legs and feet of persons of relaxing fibre, who are required to be much in the erect position. Hence, when healthy persons lie down at night their feet, being relieved from the weight of the body, resume their normal size. Try on the new shoes with moderately thick stockings, too, and you then have a margin of room by putting on thinner ones when the feet are ill at ease. For tender feet fit them late in the day with the aid of heavy stockings, and the next morning, clad in thinner stockings, those feet will rest in the new almost as comfortably as they would in old shoes.

POWDER ON THE FACE.—Powder? What can I say! Nothing is more hideous than a face so thickly covered with powder that it looks as if it had been whitewashed; and yet a greasy skin is not pretty, says a writer in the *Delineator*. If you must use powder, learn to apply it well—that is, make its presence imperceptible by smoothing it slightly over the skin. The best cloth for the purpose is an old linen handkerchief, one that is in its “sere and yellow” age so far as tatters are concerned. If you wish to make your neck look a little whiter for the evening, put on a very thin coating of vaseline, let it remain a few minutes, and then apply the powder, which, of course, must be done by someone else if you would have it perfectly even. Beware of too much powder, is advice very often needed. Many women must learn how to apply even a little properly, and, if you would stop to think a little, probably you would wisely decide to use none at all.

VEGETARIAN DINNERS.—Haricot beans, onion sauce, and potatoes, either fried in cakes or mashed, preceded by lentil or pea soup, and followed by date pudding, make an excellent family dinner. *Lentil Soup:*—One teacupful of lentils to be steeped over-night in water, then place in a saucepan with one quart of water, and gently stewed for three or four hours; an onion, sprig of parsley, little turnip and carrot cut thinly, and fried a little brown, to be added to the soup along with a second quart of water. After it is well stewed, pass through a hair sieve, and season to taste. Steep the beans and afterwards boil them *slowly* for one hour, then drain. Boil three onions, chop finely, and make a good thick white sauce; add the onions and pour over the beans. Serve with potatoes and cabbage if desired. *Date Pudding:*—Half a pound of stale bread, $\frac{1}{2}$ lb. of dates, $\frac{1}{4}$ teaspoonful grated nutmeg, 2 oz. butter, and a

little water. Stone the dates and stew till soft. Soak the bread, mix a little brown sugar, a pinch of salt and the nutmeg with it, beat it well with a fork. Butter a pie dish, put a layer of bread in the bottom, then a bit of butter, add the stewed dates, cover with the mixture, placing butter on top, and bake a pale golden color.

ARE WOMEN SMARTER THAN MEN?—The writer went into the office of a man who has a school of typewriters—that is, he instructs men and women to operate typewriters and assists them in getting work. I asked him for the result of his observations. He replied: “Women learn quicker than men. They are more in demand than men. They give better satisfaction—as a rule—I mean, than men. And there is another thing I want to tell you,” he said. “A few years ago, when women first began learning how to operate the typewriter and began getting work, a cry went up among men about cheap female labor. In the last twelve months I have known of a number of cases in which men have not only offered to do this work for less than women, but have undertaken to get the places by means that were not creditable. I am not a woman’s rights man by any means, but it is my observation that the woman of to-day who is put on her mettle surpasses her brother.”

KEEP AN EXPENSE ACCOUNT.—Every economical housekeeper will do her own marketing, keeping a book, which she takes to market and in which she has the marketman put down what she has bought—the quantity and price—after she has seen the meat cut and weighed and has selected her vegetables. Only those who have tried this way of marketing know how much money is saved by so doing. If you have a good cellar you can afford to buy meat in large pieces, but it is not well to lay in a quantity of vegetables if your family is small. A bushel of potatoes is enough to buy at one time for a small family, a peck of onions or turnips, and butter in small quantities. Flour and sugar may be bought by the barrel if enough bread and sweet food—such as cake, puddings and preserves—warrant the use of much sugar, or if the family is large. And always deal with a trustworthy butcher and grocer. Poor meats and vegetables are not worth eating; they are not cheap. Food must be nourishing; it is not enough that the appetite should be satisfied; quality is more than quantity, and it is “better to pay the butcher than the doctor.”

JUDGING HOSIERY.—All hosiery is to be judged by the fineness of the thread and the closeness of the texture, which, in the case of stockings especially, may be partly appreciated by weighing, as it were, the articles in the hand. In ribbed stockings a deception is sometimes practiced, against which it is necessary to guard. The spaces between the ribs, which ought to be formed by an inversion of the stitch, contains no stitch at all, but an open range of threads pervious to the weather and utterly destitute of durability. As ribs of stockings exposed to sale are necessarily almost in contact the fault cannot be detected without introducing the hand and opening the tissue, where it will be instantly apparent, and indeed will exactly resemble the flaw caused by a dropped stitch in a stocking in wear.—*Dry Goods Chronicle*.

IS THIS SO — “Did you know that men take more care of their feet than do women?” said a dealer to a Boston *Herald* reporter. The writer said he had not noticed that such was true, and the dealer continued: “You notice the feet of men and women on any stormy or wet day, and I will wager that you find that more men than women wear rubbers. Of course, one naturally thinks why this is so. I do not believe it is due to the meanness of the gentler sex. Not at all. It is to be credited to their vanity. They will not wear overshoes or the like simply because they make their feet look large. There are some men about as silly; but many people, you must know, have to decline wearing rubbers because they swell the feet and make them very uncomfortable.”

TIGHT LACING KILLED THE MONKEY.—A recent number of the London *Standard* contains in a prominent place an advertisement with the somewhat unusual heading, “Tight Lacing in Monkeys.” This is not, as might be supposed, a mere trick to attract attention to a subsequent catalogue of merchandise for sale. It is an appeal from the Society for the Abolition of Vivisection against the experiments of a certain Dr. Brunton in dressing female monkeys in the prevailing style of fashionable woman’s apparel. The experiments were highly interesting. Within a few hours the corsets caused the death of several of these unfortunate simian ladies, and the survivors pulled through, according to the doctors, only because of certain lucky peculiarities in their internal organism. The Society for the Abolition of Vivisection protests in bitter terms against the outrage. “Such practices,” the honorary secretary and treasurer observes, “are not of a nature

to promote the propagation of the gospel in foreign parts." And the honorary secretary may be right, especially if the heathen natives in foreign parts were to get wind of the civilizing processes indulged in by Dr. Brunton upon their fellow heathens and neighbors. But why should not the society for the Abolition of Vivisection turn its attention to the wicked infliction of the same instruments of torture upon unfortunate females who are neither monkeys nor heathen? Is a persecuted and suffering slave of fashion to be ignored by benevolent associations, merely because she is not a monkey?

REFRESHING EGG LEMONADE.—A correspondent gives this recipe for egg lemonade: Break an egg into a tumbler; rub two lumps of sugar on the rind of a fine lemon; put the sugar into the tumbler; squeeze the lemon into it and half-fill the tumbler with ice broken small; fill up with water and with a shaker shake the whole vigorously for a few seconds; then grate a little nutmeg over the top. If you have no shaker beat the egg with a fork.

DON'T TOY WITH YOUR EYES.—Many people are troubled with itching eyes and try all sorts of washes. The eye is one of the most valuable organs of the body. Unfortunately for careless humanity, it is also one of the most delicate. It does not pay to trifle with it. The best way to treat itching is to use a cool, weak salt water wash every few hours. If this does no good, go to a physician who makes a specialty of eye diseases.

A REFRESHING BATH.—A warm salt bath is very refreshing to any one suffering from exhaustion of travel or of a long shopping expedition—which is as trying to mind and body as anything that can be undertaken by a woman. Away from the seashore a very simple substitute for seawater is a cup of rock salt dissolved in warm water and added to the bath. When the salt is irritating to the skin, take a warm bath and sponge off with a mixture of violet or lavender water and alcohol, about half and half, and rub briskly with a warm friction towel. Such a method prevents the exhaustion and danger of cold which follow a warm bath.

MOTHERS AND THE NURSERY.

(CONDUCTED BY MRS. F. C. PRESSLER).

SOUR MILK is one of the most common causes of indigestion and diarrhoea in artificially nourished children. Of course, says the Boston *Herald*, no mother would give her baby milk which has "begun to turn" did she know it, but the trouble is when milk is only slightly sour, and yet enough so to upset a baby's digestion, the fault is not distinguishable by taste or smell, unless the same be marvellously acute. Mothers should provide themselves with a sheet of blue litmus paper, which is cheap, and can be obtained of any druggist. This should be cut up into short and narrow strips. When one of these is dipped into an acid fluid the blue color changes to a pink. Doubts as to whether baby's milk is sour or not can easily be set at rest by this means. In warm weather especially fat babies often chafe in the groin, neck, and under the arms. A very good application in such cases, also where the skin covered by the napkin is inflamed, is the following : Boracic acid, eight grains ; lanoline, 1½ ounces ; vaseline, one-half an ounce. Of course the inflammation under the napkin is very often due to neglect on the part of the mother or to wearing those utter abominations, napkins made of waterproof materials. To use a sponge and a little warm water whenever the napkins are changed should be a fixed rule. Infants so treated are seldom troubled with chaffing. After sponging it is a good plan to freely dust powdered talc on those parts. This, by the way, is considered by many physicians to be the best toilet powder for children. Every one knows that all vessels used for milk must be scalded every day. Very likely, however, many do not know that if this is done before the vessels are washed there will be left on them a cheesy matter which only scraping and scouring will remove. They should be first thoroughly rinsed in cold water ; then washed in tepid water to which a little soda has been added. After washing and again rinsing comes the scalding with clean, boiling water, after which the vessels should be so placed that they will drain off. Many housekeepers think that they must use a wiping cloth. It is rarely ever needed, and certainly had best be dispensed with, for the boiling water used in rinsing leaves them clean, and the cloth might not do that.

THE USE OF TOBACCO BY BOYS.—The *Philadelphia Medical Reporter* states that an energetic opposition to this practice is now being made in some of the most enlightened educational establishments in the United States, among which are the United States Naval Academy at Annapolis and the United States Military Academy at West Point. The naval surgeons, and especially Dr. Gihon, U. S. N., have been the principal movers in the opposition, alleging that tobacco (1) leads to impaired nutrition of the nerve centers; (2) is a fertile cause of neuralgia, vertigo and indigestion; (3) irritates the mouth and throat, and destroys the purity of the voice; (4) produces defects of vision; (5) causes a tremulous, hard and intermittent pulse; (6) develops a conspicuous irritability of the heart; and (7) retards the cell change, on which the development of adolescence depends. Moreover, it is alleged that the records of schools and colleges indicate very positively that tobacco deteriorates the mental faculties. Non-smokers take the highest rank in every grade; and whether we look at the exceptionally brilliant students or compare the average of those who use and those who refrain from tobacco, the result shows the same. All our readers would do well to make a special note of this.

HOW TO CLOTHE THE BABY.—A baby's clothes should be sufficiently long to cover its feet, but without the superabundant length that we are accustomed to see it wearing. The dress should not be low-necked, for that exposes the throat and chest; and flannel should be worn next the skin. The long clothes should be discarded, if it were for no other reason than harboring dirt. Such clothes do not serve the purpose of keeping the heat of the body. Besides, it is an extra expense, which, with poor people, is a consideration. But baby is growing, and soon it reaches a period—that of shortening—which marks an epoch in babyhood. Then what do we find? The child wears a frock, low-necked, reaching little lower than the knees, and the sleeves are tied up with pieces of ribbon. Such a dress at once exposes the arms, legs, throat and chest to draughts, and it is small wonder if the most disastrous results follow. And, to finish the costume, baby wears the merest semblance of a sock, that still leaves the legs bare, or more frequently it wears no socks at all. By a law of nature, it is well known that small bodies cool more readily than larger bodies. Here, then, at a time when the child should be kept specially warm, the best means of *cooling* it are afforded by improper

clothing. Remember the good old rule, "Keep the head cool and the feet warm." If these precautions are necessary when indoors, then special attention is called for them when out of doors. There should be no exposed part but the face.

PROPER WASHING OF AN INFANT.—Very few people look upon washing with the importance that it really deserves. They think that the hands and face only call for special attention. The whole body should be washed at least once a day, and some cases may call for twice. The water used should be warm, and, as the infant grows, the temperature of the water should be reduced. You must remember that sweat is coming from our skin at all times, but it is only when we work very hard or take brisk exercise that we are aware of it. Now it is this sweat that causes the unpleasant smell that dirty babies have, and this same sweat helps the dirt to stick to the body. If you, therefore, allow your baby to remain dirty you are ruining its health. The cooler the water that you accustom the child to the more the nerves of the skin are stimulated and the circulation helped. Be careful to dry the body quickly and thoroughly.

FEEDING OF INFANTS.—For the mother's sake as well as the infant's, the child ought to be suckled. There are extreme cases where the mother is too weak or maybe diseased. At these times the medical attendant will decide what course should be adopted. If mother's milk cannot be supplied, then the best substitute should be adopted—viz., cow's milk. Now, cow's milk requires a little water, the curd in it being too strong for infants. A little white sugar should also be added. Herein you observe the difference between mother's and cow's milk. Great care must be taken to see that the feeding bottles are well cleaned. They must always have a sweet smell, and it is better to have two in use. The india-rubber tubes soon grow dirty, and must be cleansed after each time of feeding. With the use of cow's milk there is just the danger of disease germs being introduced. These germs may be derived from the cow or from the water with which the cans are washed. To prevent the chances of any such danger it is advisable to first boil the milk before using it. Now, those who have had any experience with babies are well aware that they have no regular time for feeding. This should not be. When born they should be fed every two hours, and the interval gradually lengthened with the age. If a baby cries, it is the most common thing in the world for it to be fed. Mothers seem to forget that it cannot always be hungry, and

that the cry may be caused by pain, fright, or cold. First seek the cause of the cry before using a remedy which is frequently wrong. This irregular feeding, too, has a great tendency to cause indigestion. For the benefit of the child it is better that, for the first nine months at least, its food should only be milk. If solid food be given earlier than this, then are the stages of illness being laid. Boiled or scalded bread is what ignorant mother's generally give. They are not aware that the digestive organs of the child cannot make use of the food, and that it merely passes through the body as so much waste material, often resulting in diarrhoea or convulsions. The one great point that I wish to impress upon mothers is this—never give your baby solid food until over nine months. The fact of its having no teeth should warn you that such food is improper, being contrary to nature's provision. After nine or ten months, the patent foods advertised may often be used with advantage, as well as potatoes and gravy, and rice or egg puddings. To sum up, let me repeat three very short and easily remembered rules :—1. Clothe the baby well, but not tightly. 2. Wash thoroughly every day. 3. Feed with nothing but milk for nearly the first year.—*W. J. B. in Newcastle Chronicle.*

SALT FOR MOTHS.—For moths, salt is the best exterminator. The nuns in one of the hospital convents have tried everything else without success, and their experience is valuable, as they have so much clothing of the sick who go there ; and strangers, when dying, often leave there quantities of clothing, etc. They had a room full of feathers, which were sent there for pillow making, and they were in despair, as they could not exterminate the moths until they were advised to try common salt. They sprinkled it around, and in a week or ten days they were altogether rid of the moths. They are never troubled now. In heavy velvet carpets sweeping them with salt cleans and keeps them from moths, as particles of salt remain in the carpets and corners. Salt is not hurtful to any one, and has no bad smell. Here is a little hint I add, and which perhaps every one does not know: For cleaning wash basins, bath, etc., use the same thing, common dry salt. Rub a little of the salt with your fingers on the basin. Often a sort of scum is noticed in the basins in a marble washstand in the bath room ; the salt takes it off easily, and leaves the basin shining and clean.—*Philadelphia Press.*

HEALTH INVENTIONS AND APPLIANCES.

TESTING THE DEAF.—Dr. Cheval, of Brussels, has devised a modification of Professor Hughes's sonometer for testing the degree of deafness, and also for detecting the conscripts who plead deafness as an excuse for not serving in the army. He calls it the electric acoumeter, and it consists of three flat coils placed parallel to one another on a graduated rod passing through their axis. The centre coil is the primary and is fixed, the two outer coils are secondaries, and can be slid along the rod. The rod and coils are arranged on a board, on which there are an electrical tuning-fork, a microphone, switches, plugs, and other accessories. The individual whose hearing is to be tested is placed with his back to the apparatus, and has two telephonic receivers fixed tightly over his ears. Various sounds are then produced; the two outer coils being moved gradually away from the centre one until no noise is heard in the telephone receivers. The distance through which the coils have been moved is a measure of the hearing power of the individual. But suppose the subject being tested pretends *not* to hear long before the true limit of his hearing power is reached, how does the doctor detect the imposition? We are not informed.

PUBLISHER'S DEPARTMENT.

THE ST. LOUIS HYGIENIC COLLEGE.—This college, a notice of which will be seen in another column, appears to be rapidly coming to the fore. It has already graduated one class of men and women, and these graduates, as stated in the fourth annual announcement, which we have just received, have had no difficulty in securing desirable situations. On the contrary, there are more positions offered, it would seem, than there are physicians to fill them. This is exactly what might be expected. There are thousands of people in the United States that have tired of the older methods of taking nostrums and pills, and that would gladly welcome a physician that relied less on drugs and more on nature.

We wish the college in St. Louis the best of success, and we hope that in the coming years it will send out many competent physicians to fill the great demand, which is every year increasing.

THE BEST OF SUMMER READING.—For a short time only we continue our offer of a complete set of Cooper's Leather Stocking Tales (Five Volumes), at sixty cents. For summer reading there is nothing better, and the price at which they are furnished is but little more than nominal.

QUESTIONS AND ANSWERS.

RELIEF IN PNEUMONIA.—The following offers a good help for pneumonia: Take ten or twelve raw onions and chop fine; then add about the same quantity of rye meal and vinegar enough to form a thick paste; let it simmer five or ten minutes. In the meantime stir it thoroughly, then put it in a cotton bag large enough to cover the lungs, and apply to the chest as hot as the patient can bear; when this gets cool apply another, and thus continue repeating the poultices, and in a few hours the patient will be out of danger.

AVOID COLD DRINKS DURING THE HEATED TERM.—It is a mistake to suppose that cold drinks are necessary to relieve thirst. Very cold drinks, as a rule, increase the feverish condition of the mouth and stomach, and so create thirst. Experience shows it to be a fact that hot drinks relieve the thirst and “cool off” the body when it is in an abnormally heated condition better than ice-cold drinks. It is far better and safer to avoid the free use of drinks below sixty degrees; in fact a higher temperature is to be preferred; and those who are much troubled with thirst will do well to try the advantages to be derived from hot drinks, instead of cold fluids to which they have been accustomed. Hot drinks also have the advantage of aiding digestion, instead of causing debility of the stomach and bowels.

ANTIPIRENE LEADS TO OPIUM.—One cause assigned by several physicians and druggists for the fact that many become victims to the opium vice is from the use of antipyrine. A great number of young women, and especially female clerks, take antipyrine in such quantities that it finally loses its restorative power. Then they resort to morphine. One druggist in Louisville said that every day as many as a dozen shop-girls come into the store for the medicine, and some two or three times a day. In London and Paris, where the Government restricts the sale of opiates, the consumption of antipyrine is marvelous. One woman of position, whose husband attempted to break her of the habit, was found pawning her jewels in order to buy the drug.

CARE OF THE HANDS.—There are not nearly as many secrets in hand treatment as people imagine. A little ammonia or borax in the water

you wash your hands with, and that water just lukewarm, will keep the skin clean and soft. A little oatmeal mixed with the water will whiten the hands. Many people use glycerine on their hands when they go to bed, wearing gloves to keep the bedding clean ; but glycerine does not agree with every one. It makes some skins harsh and red. These people should rub their hands with dry oatmeal, and wear gloves in bed. The best preparation for the hands at night is white of an egg with a grain of alum dissolved in it. Quacks have a fancy name for it, but all can make it and spread it over their hands, and the job is done. They also make the Roman toilet paste. It is merely the white of an egg, barley flour, and honey. They say it was used by the Romans in olden times. At any rate, it is a first-rate thing ; but it is sticky, and does not do the work any better than oatmeal. The roughest and hardest hands can be made soft and white in the space of a month by doctoring them a little at bed-time ; and all the tools you need are a nail-rush, a bottle of ammonia, a box of powdered borax, and a little fine white sand to rub the stains off, or a cut of lemon, which will do even better, for the acid of the lemon will clean anything.

A WORD ABOUT CORNS.—One of the chief causes of corns, bunions, &c., is tight shoes. The majority of customers are ladies. Corns come in two varieties—soft and hard. The soft corn is formed by the acid perspiration of the feet, and first appears in the shape of a white blister, whose edges easily peel off. Ladies who wear shoes large enough for them, seldom if ever, suffer from corns. Stumpy or short shoes cause corns to form easily. I have frequently known cases where a soft corn would affect the whole foot and ankle. Bunions are often mistaken for hard corns. A bunion forms usually on the side of the foot or between the toes. A bunion is nothing more nor less than a strained joint caused by a short or narrow shoe. French-heeled boots and shoes have been the cause of untold misery to ladies, and since the common-sense shoe has become fashionable the wearers of them have had fewer corns. Narrow dancing pumps are also injurious to the feet. Operations on fibrous and nerve corns are extremely difficult.

THE CURATIVE POWERS OF WATER.—The following, from the *Woman's Journal*, is a full reply to the questions of E. W. F., Louisville, Ky., as to the curative powers of water : It would seem that everybody ought to

know the value of a remedy so easily obtained as water. Yet, though there is no remedy of such general application, and none so easily obtained as water, nine persons out of ten will pass by it in an emergency to seek for something of less efficacy. There are but few cases of illness where water should not occupy the highest place as a remedial agent. A strip of flannel or a napkin folded lengthwise and dipped in hot water and wrung out and then applied around the neck of a child that has croup will usually bring relief in ten minutes. A towel folded several times, dipped in hot water, wrung out, and then applied over the seat of pain in the toothache or neuralgia will generally afford prompt relief. This treatment in colic works like magic. We have known cases that have resisted other treatment for hours yield in ten minutes to this. There is nothing that will so promptly cut short a congestion of the lungs, sore throat or rheumatism as hot water when applied promptly and thoroughly. Pieces of cotton batting, dipped in hot water and kept applied to old sores and new cuts, bruises and sprains is the treatment now generally adopted in hospitals. Sprained ankle has been cured in an hour by showering it with hot water poured from a height of three feet. Tepid water acts promptly as an emetic, and hot water taken freely half an hour before bedtime is the best of cathartics in case of constipation, while it has a most soothing effect on the stomach and bowels. In this connection it is interesting to know that a distinguished children's doctor believes, from his practice, that infants generally, whether brought up at the breast or artificially, are not supplied with sufficient water, the fluid portion of their food being quickly taken up and leaving the solid too thick to be easily digested. In warm, dry weather healthy babies will take water every hour with advantage, and their frequent fretfulness and rise of temperature are often due to not having it. A free supply of water and restricting the frequency of nursing have been found at the nursery to be a most effectual check in case of insipient fever, a diminished rate of mortality and marked reduction in the number of gastric and intestinal complaints being attributed to this cause.

DANGERS OF DIRTY FINGER NAILS.—*F. R. M.*—Seventy-eight examinations of the impurities under finger-nails were recently made in the bacteriological laboratories of Vienna, and the cultivations thus produced showed thirty-six kinds of micrococci, eighteen bacilli, three sarcinæ, various varieties; the spores of common mold were frequently present.

It is sometimes said that the scratch of a nail is poisonous. There is no reason to suspect the nail issue; it is more likely the germs laid in a wound from a bacterial nest under the nail. Children are very apt to neglect to purify their nails when washing hands; and this matter is not always sufficiently attended to among surgical patients.

A CURE FOR POISON IVY.—Many country places are beset with poison ivy, from which summer visitors are apt to suffer. It is well to know that it can be cured by a few applications of wood-lye. Tie wood ashes in a bag and boil a few moments. Dilute so that it will not be too harsh, yet leave it quite strong. Paint with it the afflicted parts, and in ten minutes wash off with soft tepid water and annoint with vaseline. Repeat two or three times, or till a cure is effected.

MORE DYSPEPSIA IN ENGLAND THAN IN AMERICA—Doctors say that Americans rush too much and eat too fast, but when they are asked for figures they can't show 'em. On the contrary, the English, who never rush, and who eat as though they had all day to a meal, suffer with dyspepsia 28 per cent. more than Americans, and the average age at which business men die is five per cent. below the hustling Yankee.

CUT THE CHILDREN'S HAIR.—“*Mother,*” *Boston.*—The only way to keep a boy's hair healthy, says a New York expert on hair, is to cut at regular intervals, keeping it at a reasonable length, so that it may cover his head and protect it from cold or draughts without imposing any burden on it. Boys with exceptionally lusty and strong hair might employ the Fauntleroy long style of dressing it without injury, but to the average youngster it was certain to bring some result in the way of an impairment of the hirsute growth. The direct effect of too long hair was to exhaust the only secretions of the hair itself, and so destroy its vitality. It also imposed a drag on the little bulb or root by which each hair is fastened in the scalp. When this bulb is injured the healthy life of the hair is at an end. It ceases to lubricate itself, and grows dry and brittle, and at last falls out. Even when not actually dead, it is so weakened that a slight pull or drag in combing it will bring it out. The cutting of human hair, and especially in children, has the same foundation and reason as the pruning of vines and trees and the clipping of grass. It prevents the sap from being distributed over too extensive a surface, and by concentrating its circulation strengthens the parts to which it is applied. It is true that the female hair will endure being worn at greater length than the male be-

cause of its structure. It is finer in fiber, and the same amount of natural sap in it goes a greater way. But little girls would be better off for having their hair regularly trimmed up to a certain age. You will notice that where little girls have in childhood worn long and heavy hair, and especially when it has been artificially curled, in adult age they often exhibit a scanty and frequently an unhealthy crop. If you will show me a woman with thin hair or none at all I will undertake in nine cases out of ten to discover for you that in her childhood she had a fine head of it, and that she is now paying the penalty for a very common vanity of babyhood." "According to your statement, then," said the reporter, "all children's hair should be cut." "Yes. That of the female child need not be kept short enough to deprive her of its picturesque effect, but it should certainly not be allowed its natural growth, because it will surely run to seed if it is. If it is left to itself the ends will be found to dry and split, and the roots themselves be sooner or later seriously affected. As for boys, the Little Lord Fauntleroy mania is as great an injury to him as it is a humbug and a farce upon public sentiment. If I had my way I would take a pair of shears and make a raid on that whole crowd of long-haired youngsters out there, and the time would come when they would thank me for it. They look pretty, it is true—too pretty for boys, I think. But prettiness is a costly luxury when it is purchased at the expense of future health."

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No. 8.

THE HYGIENIC TREATMENT OF CONSUMPTION.

No. I.

(BY M. L. HOLBROOK, M. D.)

(SPECIAL FOR HERALD OF HEALTH).

THERE are many diseases afflicting the race, but none more to be dreaded than consumption of the lungs, or phthisis pulmonalis, and for many reasons.

1. It is to be dreaded on account of its frequency and fatality.
2. It is to be dreaded on account of the protracted suffering it causes and the painful sympathy of friends, who are often powerless to help, excepting to a slight extent. The weakness is a distressing feature, the coughing is hard to bear and often racks the debilitated organism almost beyond endurance. The difficulty of full and perfect respiration causes what may perhaps not inappropriately be termed a continuous partial suffocation, or deprivation of air, so necessary to fill and complete life and health.
3. It is a disease which in a majority of cases unfits one for the duties of life except in a minor degree. If it occurs early the person could never with propriety marry or become the parent of children, for they might inherit a weak or defective organism and a tendency to the same disease, and be a perpetual care if they survived infancy.

4. It is a disease causing much expense, which in a majority of cases the patient can ill afford to bear. The loss of strength prevents one from engaging in remunerative labor and others must support him. Medical fees, medicines, better food and constant care, and perhaps travel or dwelling in a foreign land, must be provided for often out of a purse not well filled.

5. It is an insidious disease often, indeed almost always becoming more or less firmly established before the patient and friends are willing to admit that it is anything more than a cold, a disease of the throat or some trivial derangement of the respiratory passages, which will soon pass away.

6. It is without doubt contagious, and there is danger of conveying it to others; perhaps those the patient loves and would on no account harm, or perhaps to strangers, whom they have never seen and have no right to injure.

7. It is a disease most difficult to cure, only now and then in the past has one once in its embrace ever escaped, and even in more recent times it is beginning to yield to treatment, yet the best methods are only partially known and not very successful.

These are some but not all of the reasons why consumption is a disease to be dreaded, and I may add, to be dreaded more than even small pox or cholera. The latter are indeed terrible, but they are of short duration and far less fatal than the former, and, taken all together, causes less suffering.

NATURE OF THE DISEASE.

The true nature of consumption and its causes has only recently been discovered. It is very true that Laennac as long ago as 1819, in his masterly and philosophical and classical work on the chest, did much to give to the world a true knowledge of its character, and the direction which he gave to its study has been the basis of most that has since been done. Since the publication of his work the term *phthisis pulmonalis*, or consumption, has been used only to denominate a disease of the lungs in which there were particular morbid productions known as tubercles. Previous to his time, the term consumption included several affections of the lungs and throat, largely catarrhal in their nature, such as bronchitis, chronic pneumonia, a chronic cough of any kind, laryngial catarrh, etc., etc. These diseases require a different treatment, and are quite

generally curable. It is their cure which the quacks, who prey on human credulity and rob man and woman of their hard earned money, use to bolster up their medicines.

The nature of tubercle is worthy of mention. It is a very small tumor, often as small as a pin head or pea, and now and then, especially when several of them combine, as large as a marble, a chestnut, or even, though rarely, larger. They are insulated, of a light yellowish color, opaque, and when rubbed between the fingers are brittle and easily crushed, or pulverised to a powder. It has been described as resembling old cheese, both in appearance and consistence. In this stage they are crude and immature.

After being once formed, tubercles go on increasing in size, losing their hardness until they become a fluid mass of pus, which breaks through into the air passages and is expectorated or expelled by an act of coughing. Examination with the microscope we find abundant pus corpuscles and more or less fragments of the elastic connecting tissue fibres which give to these organs their great elasticity. The result of their breaking down of living substance is the formation of ulcerous cavities, which, like a boil, continue to discharge matter, that finds its way into the air passages and is coughed up.

These cavities enlarge, extend into other cavities, and soon the substance of the lungs is so far consumed as to render them unfit for performing the functions of respiration, when the patient dies. It is simply a process or decay of the lungs, organs as necessary of the heart or brains.

(To be continued)

MAN NOT A FLESH EATING ANIMAL.

(FOR THE HERALD OF HEALTH.)

I HAVE received from Miss B. Lindsay, the editor of the *Vegetarian Messenger*, the text of an interesting paper delivered by that lady in Manchester upon the subject that heads this article. While not agreeing with all her conclusions, I believe that, in the interests of good health and good living, some of her theories as therein advanced will prove of no little interest. Says Miss Lindsay :

PEOPLE WHO KNOW NO BETTER

tell us that human teeth are adapted for eating flesh. Now the idea of suggesting that the human animal has teeth adapted for flesh-eating, to any one who has ever studied an elementary text-book of comparative anatomy, is calculated to turn the hair gray. Medical and scientific testimonies in favor of Vegetarianism tell you what Cuvier said with regard to man's teeth. This was one of those things in which Cuvier was well in front of his time; and he gave no uncertain dictum on that point. You will say, however, that comparative anatomy has very much changed since the time of Cuvier. It has, of course, from a theoretical point of view, been entirely reconstructed. The theories of Darwin, the facts of embryology established by many illustrious co-workers and made known to this country chiefly by Professor Balfour and the school he founded, have completely changed the aspect of anatomical science; but they have changed it in a direction which is favorable to Vegetarianism. They have exploded many old superstitions which require to be cleared away.

LET US SEE WHAT ARE THE DIFFERENCES

in teeth, and how these differences are indicative of different kinds of diet. Considering the formation of teeth from the comparative anatomist's point of view, that is to say from the point of view of one who believes that the different existing types of animals have been derived by successive variations from a common ancestor in some lower type, we find that the primitive type of vertebrate teeth is exhibited in some fishes of the shark kind in which the teeth exist in rows on rows, all alike in pattern, and arranged in a spiral order. The shark, unlike the Vegetarian, has a great deal of use for its teeth; and its front teeth get worn away. They are then replaced by those in the next row, so that there is a constant succession of teeth in the mouth of such a fish. We, from an anatomist's point of view, inherit something of that arrangement. We have no longer the spiral arrangement of teeth in unlimited rows—some of us wish we had—but we have two sets of teeth, succeeding one another, which are sufficient to show the rudiment of what existed in our aquatic ancestors. The higher vertebrates have not teeth all alike, like the shark, but have teeth of different patterns, incisors, canines, premolars and molars, each being, as we believe, modified from a common type. Of these the canines and incisors, molars and premolars, may, broadly speaking, be respectively classed together as very much alike. The front teeth bite, and the back teeth chew.

NOW, THE ACTION OF BITING

is pretty much the same, whatever is the thing bitten ; but the action of chewing is very different, according to whether the food is flesh, grass, or grain and fruit, these respectively requiring to be torn, chopped, or chewed. Accordingly, it is the *molar* teeth that show the nature of the diet ; those of the carnivora have sharp cusps, which interlock like the toothed valves of a shell-fish ; those of the herbivora have somewhat flat crowns, usually with sharp straight ridges ; but those of the frugivora have cusps moderately rounded and rather opposed than interlocking. The canine teeth are modified, not so much with a view to eating as with a view to fighting ; the carnivora have them well developed, since they have to worry their prey before they eat it ; but there are some animals which are strictly vegetable feeders, which have long tusk-like canines : and these are animals that fight each other. Hence it happens that the large apes, those typical Vegetarians, have canine teeth very much longer than those of man, necessitating that gap in the opposite row of teeth which, as we have already seen, is the only thing which distinguishes the dentition of the ape from our own. For the apes have a custom which at one time was very prevalent among the human race, a custom which laid the foundation of that feeling which we so much admire—chivalry ; that is to say, the gentlemen fought each other with a view to winning the favor of the ladies by victory, their chief weapons for this purpose being the canine teeth. For this reason, and for this reason only, they have that long pointed canine tooth. Similar instances are to be found among the ruminants.

THE STRUCTURE OF MAN,

as a whole, is that of a frugivorous animal, for the structure of the stomach and intestines also resembles neither that of the carnivora nor that of the herbivora, but that of the apes. Why has he ever changed and departed from the frugivorous practice ? All animals are subject to change, according to the conditions of existence around them ; and some animals have changed for the better. From the structure of man we may conclude that he originated in a warm and genial climate. This, indeed, is agreed by everybody, for our Bible Christian friends, in describing Eden, and Haeckel postulating for the origin of mankind the existence of a continent now sunk beneath the tropical sea, both agree in an Oriental climate for the cradle of mankind. Now, when man migrated, from whatever

cause, to colder climates, he would find in their scanty herbage and meagre fruits but poor sustenance compared with the nourishing cereals and fruits of the warmer countries whence he came; and before agriculture was perfected he had recourse to animal food to supply the balance of proteids in which a diet of herbs and bramble fruits would be sadly deficient. Now, however, that agriculture has become an art, and we have plenty of grains, pulses and all the best products of the vegetable kingdom, Vegetarians claim that man, no longer driven by the force of hunger to feed on animal foods, ought to return to his primitive food.

And here, dismissing the so-called anatomical argument against Vegetarianism, I come to the most common physiological argument that is brought against Vegetarianism. People say: "Man became carnivorous because it was an advantage to have a larger proportion of the proteid constituents of food than is supplied by vegetable products; if you return to a vegetable diet, you will suffer from an insufficiency of proteid food." I shall not need to deal so fully with the physiological argument, for the other side of the question has been stated in a far better manner than could be done in any statement I might make; it has been

FULLY EXPLAINED BY A NON-VEGETARIAN,

who is a high authority on matters of dietetics. I allude to Prof. Church's *Food Grains of India*. In this the author does not even consider it necessary to explain to the reader that the vegetable kingdom supplies all that is necessary for the support of human life; the educated reader, for whom a technical handbook like this is intended, being expected to be fully aware of this fact. Not to weary you with figures, I may state broadly, that, taking Playfair's estimate, given in his tract on the "Food of Man in the Relation to this Useful Work," of the right proportion of proteid foods to the whole of the food, Church's figures show that many cereals and pulses supply about this proportion; and no one will doubt, after comparison of Playfair's dietaries with those given by other observers, that the optimum proportion as stated by him is considerably above what is necessary for the maintenance of strength. A number of the food-grains of India present, in Prof. Church's terms, a nutrient ratio, *i.e.*, a proportion of the nitrogen compounds to the carbon compounds of the food, which is approximately a ratio of 1 to 5; and numbers of others present a value not very far behind. Our own pulses and cereals are in many respects comparable, although they differ in not presenting so great a variety of kinds.

WE HEAR ALL SORTS

of speculations about the man of the future—he is to be a dwarf, bald, toothless ; his mighty intellect is to be the only fully-developed part of him. Now I do not recommend Vegetarianism to you because it will enable this feeble type of creature to go on existing, instead of becoming gradually extinct owing to prolonged dyspepsia. I do not approve of people allowing themselves to approximate to so feeble a type. The person who is dyspeptic—I use the word dyspepsia, in this connection, in the wider sense of any failure of the alimentary functions—is, in a sense, as much disgraced as the man who is drunk. It is a crime to be dyspeptic, for there is nothing that causes so much of human misery as dyspepsia, and the intemperance, the ill-temper, and domestic squabbles which it gives rise to. The majority of the human race in civilized countries construct for themselves all the obstacles that lie between themselves and happiness. Vegetarianism is, at least to those of gouty tendencies, an antidote for bad temper ; so it does something to decrease the unhappiness of mankind. But there would be sense in mending matters at both ends ; that is to say, if the town populations, instead of being content with merely altering their diet, would go to the root of these evils and take more exercise. It is well to avoid what is not the best possible food, but still a man in robust health ought to be able to digest almost anything

SHORT OF ARSENIC OR TENPENNY NAILS !

I do not think that the man of the future should be allowed to degenerate at the rate our prophets predict. The man of the future—and of course I include in my mention of him the woman of the future, for the two are not, as some people seem to think, inimical and opposing classes—the man of the future will be, I hope, much superior in physical development to the man of the present. I look upon a stronger physical frame as the only means to a higher intellectual development ; and I hope the man of the future, possessing at once the stronger frame and the higher intellect, will be so far sensitive to a higher morality that he will find it impossible to use animals for food, *not* because such food does not agree with him, but because it does not agree with what he thinks is right. In that “City of Man” to which we look forward in the future, where the human race developed to its physical best will also be developed to its moral best, the “man of the future” will be, I think, a Vegetarian.

EDGAR VANDERBILT, M. D.

SOME FACTS CONCERNING CANCER.

[BY R. ALLAN, M. D.]

CANCER is said to have its germ, but the history of cancer, dealt with on the broadest basis, militates against the idea in question. That cancer can be taken by one person from another I should not like to utterly deny, for who would deny that poison will poison? Cleanliness and sanitation, temperance and caution, are antagonistic to disease germs, yet cancer marches steadily on. It thrives under conditions least likely to favor the development of germs, and is curable by remedies which aim at things other than these, as, for instance, the nervous system.

THE MOST SUCCESSFUL TREATMENT OF CANCER

opposes the germ theory, and illustrates to a considerable degree the true origin of the disease. Whatever germs may be, and whatever they may have to do with cancer, there are other factors more worthy of consideration. We must look to constitutional states and dynamic change. In regions where cancer is unknown it has, so testifies a surgeon of my acquaintance, made its appearance in strong, robust men used to fresh air and active life—men who have spent all, or nearly all, their lives away from persons having the disease. The sole cause he could discover was the

HOT STEM OF A TOBACCO PIPE

which had been used a long time. The tobacco might have had something to do with the disease. How's that for the germ theory? I have known very delicate people who were exposed to all the contagion of open cancer, yet they never developed it, and so of various other germ theory diseases. Women with cancerous breasts have, to my own personal knowledge, allowed their children to suck at the diseased parts, deriving their sustenance therefrom, and from the breast on the other side. Cancerous women have also given birth to children, yet in neither case have I known the children to ever show signs of the disease.

IF CANCER IS SOLELY CAUSED BY GERMS,

the fact stated is more than a marvel. Yet the employment of disinfectants in cases of open or discharging cancer is advisable. People will find that the higher the life they lead the less cancer will torment them.

The children of healthy, moral people, living in healthful surroundings, have shown cancer (glioma) soon after birth. Germs, as ordinarily understood, seem rather out of place here—circumstances are against them.

AN ORDINARY DOCTOR

has, I believe, hardly a single good remedy for cancer. To give ease he relies on opiates, sedatives, and the like, but they do not cure or stop the growth. The knife, as witness the results of most operations, is not very reliable, even in the early stages; it is often positively injurious, causing the disease to evolve with remarkable rapidity, but used synchronously with other things it may be an excellent thing. Not long since I took with the knife a rapidly formed cancerous mass from a seaman's bowels, and under the influence of some carefully applied remedies he has done very well.

THE CAUTERY IS NOT A VERY EFFICACIOUS REMEDY

for cancer, but caustics have sometimes done good in this disease when superficial. I know of several radical cures being effected by them. Arsenic has often been applied as a caustic; it has been the chief element of many a quack compound, but is dangerous. Bromine is a good caustic, and if sufficiently diluted may be useful in other ways. A young surgeon I knew out in Mexico tried, for some reason or other, the fermented juice of the fruit of the papaya tree. My information of his mode of procedure is rather meagre. He

INJECTED THE SUBSTANCE INTO THE TUMOR

with a syringe, as well towards the edge as at the core, in small quantities and with moderate frequency. It caused softening and wasting. It was useful in retarding development. My own opinion is that it may be useful in grappling with the disease locally, but ought to be used concurrently with internal remedies aiming at the cachexia. It is no child's remedy, and people ought not to tinker themselves with it. To conclude, let me say that such experience as I have had, and much that I have seen recorded, prove cancer to be often curable.

DRUNKENNESS FROM COFFEE.

DR. MENDEL of Berlin calls attention to the use of coffee in a manner to make his remarks of importance. The inebriety of coffee, if not as dangerous to others, may be as harmful to its subject as alcoholism, and generally leads to it. Dr. Mendel's studies have covered Germany, but he has given special observation to the great working force in the gun factories at Essen, where wages are high and employment uninterrupted, and a comparative degree of luxury is within the reach of all. The people of Essen drink immense quantities of coffee, bringing the average for a large portion of them up to a pound a week, many men taking much more than that. The result is a form of neurosis, in which the nerves are disturbed in a degree and manner approaching that which accompanies *delirium tremens*. Intoxication is followed by gloom and sleeplessness, and about all the disorders characteristic of acute nervous derangement, added to a hate for work. As in the use of alcohol or opium, temporary relief can be had by more and stronger coffee, by tinctures of coffee formed by crushing the berries in spirits; but the cure of a confirmed coffee drunkard is next to unknown, unless the final change to alcoholism be counted as a cure.

Troubles of this nature, says the *New York Sun*, commenting on the above facts, are said to be much more widely spread than one would think from the immediate evidence. Most of the stages of excessive coffeeism are too obscure to be apparent. And they are increasing. Tea is merely a weaker agent of the same sort, so that in fact there is no such thing as a cup which cheers without inebriating. Moderation must be the law for tea and coffee as for alcohol.

HOW TO HAVE COLD WATER WITHOUT ICE.

It is well known by those who have only a smattering of scientific experimental knowledge that rapid evaporation produces cold. It is upon this principle that all ice machines are made. The inhabitants of all hot countries know how to cool their drinking water, even in the hottest weather, if there is sufficient movement in the air to cause even a gentle breeze. They fill a porous vessel with water, leaving it in a draught of

air, and in a little while the water in the vessel is cold and refreshing to the palate. A gentleman of experimental turn of mind, so situated that the delivery of ice at his rooms would be more a source of trouble than convenience, and familiar with Mexican methods of cooling water, has been enjoying

THE LUXURY OF COLD WATER

even during the torrid weather of the past few days. He thought at first that he would depart somewhat from the primitive method, therefore procured an ordinary bean pot, glazed on the inside—one of the big-bellied ones with a narrow mouth—and filled it with water. Then he covered this with an unglazed flower pot upside down. This worked fairly well, but it necessitated the constant wetting of the two earthenwares, which was an inconvenience; it called for the expenditure of too much time, therefore he discarded the bean pot, plugged up the drainage hole in the flower pot, and filled the pot with water. Then he covered the pot

WITH AN ORDINARY TEA PLATE,

set it in a larger plate on three little blocks, so as to have free circulation of air all around the pot. The refrigerating apparatus, complete and fully primed, was set on the window sill, not exposed to the sun, where there was a strong draught. He has had good cool water ever since without the slightest expenditure for ice. Curious to know the difference between the temperature of the water and the air of his room, he placed a thermometer in the water on a hot day. A thermometer in the room registered 80 degrees, while the mercury in the water rose to only a little above 50 degrees. Anybody can have water cold enough for refreshing drink by adopting this plan.

THE HUMAN BODY INSENSITIVE TO MAGNETISM.—The most careful experiments have shown, says a medical authority, that the human body is as completely insensitive to magnetism, and as wholly unaffected by it, as a piece of rubber or of wood. A person may stand between the poles of the strongest magnet, one of which might hold up a ton of iron, without the slightest perceptible effects upon any of the bodily functions being produced. Hence, all so-called magnetic appliances, brushes or combs, disks, belts and magnets, have absolutely no curative power whatever.

AN INTERNATIONAL VEGETARIAN CONGRESS.

EDITOR OF HERALD OF HEALTH.—*Dear Sir:* I beg to inform you that an International Vegetarian Congress will be held on the 11th, 12th and 13th of September next, in the Memorial Hall, London, when it is hoped that a goodly gathering of Vegetarians will be present from all parts of the world. Vegetarianism has now become one of the questions of the day, and it has been thought good that its representatives should meet together in conference as to the best mode of advancing the cause, etc.

I am instructed by the Council to invite the assistance and presence at the Conference of all Vegetarians and sympathizers with our cause, and shall be pleased to send formal Invitation Cards, with programme of proceedings, to anyone applying for same.

I shall esteem it a favor if you will kindly make the above known in the columns of your valuable paper. I am, yours faithfully,

R. E. O'CALLAGHAN.

London, June 27th.

Hon. Sec'y.

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

EDITOR'S STUDY.

TO AVOID SUNSTROKE.—Sunstroke is one of the afflictions to which humanity is liable in summer during the hottest of the weather. Heat and moisture together seem to be the conditions most favorable to its occurrence, for moisture in warm air prevents the radiation of heat from the body, and thermal fever, or sunstroke, as it is called, is probably an overheating of the blood, producing chemical or fermentive changes in it which are inimical to health and even to life. When, therefore, during the heated term, one who has been exposed to the sun's heated rays in a humid atmosphere begins to suffer from headache, giddiness, nausea and disturbance of sight, accompanied with sudden and great prostration of the physical forces, sunstroke is probably imminent, observes the *Boston Herald*. If such a one is wise, he will, when the symptoms above given manifest themselves, immediately seek a cool place and make use of some simple restoratives, such as aromatic ammonia, &c., and he may avoid further trouble; but if he persists with his business, he will doubtless soon become ill, which illness usually takes the form of heat exhaustion, heat apoplexy, or genuine sunstroke, the thermic fever of some writers. Those who are exhausted by the heat have a cool, moist skin, a rapid, weak pulse and respiration movement, and the pupil of the eye is dilated. In fact, the symptoms are those of collapse. These patients will probably recover promptly, an event which may be hastened by the use of a tonic and restorative treatment. Those who suffer from heat apoplexy frequently become unconscious at the outset. The heart and breathing apparatus are not markedly disturbed, and the pupil may be normal, but unconsciousness deepens, the case runs on to a fatal termination. An artery has been broken in the brain, and the poured out blood pressing on the nerve centres brings about the fatal event.

A treatment calculated to draw the blood from the brain to the extremities, hot foot baths, bleedings, &c., promises to be the most useful in such cases. The thermic fever patient is unconscious and convulsed, and his body temperature may be 108 degrees Fahrenheit—that is about 10 degrees above normal. The skin of this patient feels as though it would burn your hand when laid thereon. In this case the thorough and prompt application of cold is needed. Ice to the head and cold water to the body generally will be in order. Medical advice and assistance

should be promptly had in either of the two cases last referred to. Complete recovery from sunstroke is rare, the brain being permanently crippled or affected in many cases. Residence in a cold climate, it is said, affords most hope for such patients.

HEAT AND THE GROWTH OF THE HAIR.—It is generally understood that the hair and nails grow faster in hot weather than in cold; but, perhaps, few are aware that any temperature can impart so great a stimulus to the growth as Colonel Pejevalsky, the Russian traveller, says the Central Asian heat did during his journey in those regions in the summer of 1889. In June the ground and the air became excessively hot, so great, indeed, as to render travel in the daytime impossible. Within a fortnight after this oppressive weather began it was noticed that the hair and beard of all the party was growing with astonishing rapidity, and strangest of all, some youthful Cossacks, whose faces were perfectly smooth, developed respectable beards within the short period of 20 days.

A CENTENARIAN DANCING.—There is a gay and festive old lady of 103 years, at Etrepagny, in the Department of the Eure, France, who danced and frisked about as if she were a merry maiden of sweet seventeen when her friends went to wish her health and happiness the other morning, on the occasion of her birthday anniversary. Mme. Nourry is the said centenarian, and was born at Songeons, in the Department of the Oise, at or about the time when people were talking of that famous diamond necklace given by Cardinal de Rohan to Queen Marie Antoinette, which was afterward worked into an exciting volume of fiction by the elder Dumas, and when Calonne was beginning to give trouble to poor Louis XVI. and his Finance Minister, Necker. Mme. Nourry has probably troubled her head very little at any time of her life about these historical episodes, for she has for many years been engaged in agricultural pursuits, her husband, who is long ago dead, having been a farmer. Until about four years ago the aged widow used to take her butter, eggs, and poultry to the Gisors Market. She is still in full possession of all her faculties, is able to see without spectacles, has an excellent appetite and temper, and romped on the green during her birthday fête with the most agile of the young folks.

WHAT IS "HEART FAILURE"?—People at large have been rather accustomed to make light of the words "heart failure," as they read them day after day assigned as the cause of death. They ask why it would not be

just as well to designate the phrase "lack of breath." Some doctors, however, have been interviewed on the subject, and make out something more of a case than the laity have suspected. It is a way men familiar with a subject have of surprising those who are not. They say, in substance, that where the heart has long been affected some severe disease may so reduce the general strength that the already weakened organ gives out, and the patient dies. Or an acute disease may in its progress cause sudden weakness or other ailment of the heart, which therefore succumbs. In such instances the disease does not kill directly, and the words heart failure properly describe the immediate cause of death.

A VERY POPULAR FALLACY is that profuse perspiration is weakening. The best reply, perhaps, to this supposition is a reference to the men engaged at gas works, to the puddlers in the manufacture of iron, to the sugar boilers, and to all whose daily labor is of the severest bodily description. Many of these work stripped to the waist. The perspiration pours off in such quantity as often to make a pool at their feet, yet these men are the perfection of health and strength. They have no encumbering fat, are free from colds and nearly every disease. Again, it is well known how gymnasts, pedestrians and oarsmen induce profuse perspiration while training, and yet they do not lose their strength or limit their powers of endurance.

HOT WEATHER DRINKS.—Weary workers often do much damage to their system by drinking copiously of ice cold water, milk or other beverages. A farm lad came in the other day from the harvest field and threw himself face downward, and drank as much as he could from a cold spring. In three hours he was dead. Whenever overheated the hands and face should first be bathed and cold water poured upon the wrists. Then drink a very little at a time until you feel refreshed. Eight or ten minutes are none too long to sup a glass of water or milk. Milk should be taken even slower than water, in order that the saliva may have a chance to mingle with it while swallowing. A glass of milk taken at one draught has a detrimental effect on the digestion, outside of the fact that it may chill the stomach. The ideal way is through a straw. Water with an addition of sugar, and the pure juice of the fruit in season, is the best drink for most people; like the old-fashioned unfermented currant wine, for instance. A tablespoonful of good raspberry vinegar to a glass of water is cooling and refreshing. To cool, refresh and strengthen at the

same time, we have found nothing equal to an egg phosphate. An egg is beaten, a spoonful of acid phosphate is added and both beaten again and then add some soda water. Whenever you drink, drink slowly.

BUTTERMILK AS A SICK-FOOD.—I. Burney Yeo, of London, in *British Medical Journal*, makes some right interesting observations on food for the sick. He says among other things: "I will ask you at the same time to consider the use of 'buttermilk' as an invalid food, not so largely used in this country as in Germany, but calculated, I believe, to be of service in many cases of gastric difficulty. It is highly acid from the presence of lactic acid, and it contains the casein of milk in a very finely divided form. I have known dyspeptic patients to live upon it in comfort for considerable periods at a time, taking only a little thin water biscuit besides."

[Our Southern doctors have known this for years and used it in practice.—*Dixie Doctor*.]

AN ENJOYABLE DAY ALL AROUND.—The doctors ate their annual dinner yesterday with that hearty disregard of dietetic that characterizes the profession on gala occasions. The doctor who says "You must leave off smoking, sir," is always the first to light a post-prandial cigar; and the author of the latter interesting treatise on food reform goes steadily through the bill of fare and would eat the colopnon if it were edible. For one day in the year the doctors get away from their patients, and how they do enjoy themselves! So do the patients.—*Boston Transcript*.

NATURE'S DEMAND FOR A HOLIDAY.—Weariness, says *The Hospital*, is generally a physiological "ebb tide" which time and patience will convert into a flow. The checks that many a man draws on his physiological resources are innumerable, and, as the resources are strictly limited, like any other ordinary banking account, it is very easy to bring about a balance on the wrong side. One day's holiday in the week and one or two months in the year for those who work exceptionally hard usually bring the credit balance to a highly favorable condition; and thus with care and management physiological solvency is secured and maintained. But a physiological fortune is as good a thing, or even a better thing, than a money fortune. Stored resources, well invested, keep the mind easy and the body youthful. If, however, a man have not these, but only enough of strength to go on steadily from day to day, he should watch carefully against excessive weariness. A feeling of prostration is the dark thunder cloud that portends a change in the atmosphere. Health, like

weather, may "break;" and when once it is broken nobody knows when the barometer will mark "set fair" again. Weariness, coming on in the ordinary course of work, without any special and temporary cause, is nature's demand for an immediate holiday. As nothing in the world can properly satisfy hunger except food, so no drug or stimulant of any kind except rest can restore the weary to energy and health.

SOME FACTS ABOUT OBESITY.—Obesity, or corpulence, says a standard authority, is inconsistent with perfect health. A decided tendency to superfluous fat conflicts with the tendency to muscle, and weak muscles mean a weak heart—for the heart is merely a hollow muscle—and weak organs generally. Every athlete gets rid of superfluous fat before meeting his antagonist. Every corpulent woman complains of being easily exhausted. Sometimes obesity is a serious disease in itself, bringing the body to a monstrous size. Some people inherit a fat-forming tendency, as others inherit a tendency to excessive leanness; both conditions are to a certain extent independent of the food eaten, but in much the greater number of cases the cause of obesity may be traced to the person's habits. The body needs fat no less than muscle and nerve. Fat serves as a protection against a too sudden lowering of a bodily temperature. It contributes to roundness and beauty of form. It enters largely into the composition of various parts. It is a storehouse of nourishment when the normal supply is cut off by destitution or disease; the system does not draw upon the muscular and other tissues until the fat is exhausted. Hence nature has made ample provision for its normal production. The cells can elaborate fat from any kind of food, but far more readily from some kinds than from others. It should be understood that in the kind of food, rather than in the quantity, is the cause of the formation of excessive fat to be sought, and those who have a natural tendency to become corpulent can counteract it best by regular and vigorous exercise. Those who are becoming alarmed by their growing obesity should follow rigidly the necessary rules as to food and exercise in the open air; but it is very important that the reduction of the superfluous fat should be *gradual*. Sad results may otherwise follow. The muscular tissues themselves may be wasted. As the fat diminishes, there will be a relaxation of the rules of diet, but unless they are still followed to some extent there will be a recurrence of the trouble.

The corpulent should avoid medicines that promise to reduce their obesity. Such drugs do their work only at the expense of the general health.

WOMEN AND THE HOUSEHOLD.

CONDUCTED BY HELEN FLETCHER.

IS SICK-NURSING UNHEALTHY?—Sick-nursing, the *Hospital* fears, is going to prove an unhealthy occupation. It is a very common thing nowadays to meet nurses in the street, and the observant doctor cannot but notice how pale and anæmic many of them look. No one need be surprised that large numbers of nurses are so pale and bloodless. Their life is for the most part spent indoors; and indoor life is bound to produce anæmia sooner or later. Moreover, the work of a nurse is anxious, responsible, solitary. She eats all her meals alone or in the presence of a sick person. She is not at home in the kitchen, and is seldom welcomed as a member of the family upstairs. She has long hours of work, short periods of relaxation, and is often disturbed in her sleep. Many employers look upon her as a kind of eight-day clock, which, if periodically wound up, ought to "go" for ever. How can she be tired—is she not a nurse? How can she have a poor appetite—is she not a nurse? Why should she have a headache and be depressed in spirits after a sleepless night—is she not a nurse? There are hundreds of people who seem to think that because a woman is a nurse, therefore she is no longer a woman, but a kind of cast-iron machine, or, as we have said, an eight-day clock, wound up, and by the nature of the case warranted to "go." What is undoubtedly now required is ready and efficient means of securing rest for a nurse before she is broken down and ill. That she will break down and be ill is certain if she keeps on long enough with her work without rest. That she cannot afford to rest, if at the same time she has to pay for her own lodgings and food, is equally certain. Proper provision for trained nurses during convalescence and holidays is one of the most urgent wants of the times.

ONE WAY TO CLEANSE A CARPET.—Having dusted and removed such articles as can be carried from the room, wring a flannel mop out of hot water and wipe the carpet thoroughly, wringing the mop from clean water as often as it may become soiled. Now sweep with a clean broom as you ordinarily would, and when you have finished you will have a bright, clean carpet, with little or no dust, and all at the expense of a very little hard labor. Those who have not tried this method are skeptical about its merits, but one trial will convince, says *The Sanitary Volunteer*

HOW TO GRACEFULLY DISPOSE OF THE HANDS.—“In order to be graceful in the disposal of your hands, it is only necessary to get rid of consciousness about them, and you may accomplish this to a surprising extent by a very simple gymnastic process. Let them hang limply and wring them as violently as possible for five minutes, say. This will render them unconscious to a great extent, so that you will not be disturbed for some time after by the excess of feeling in them. Consequently, while the effect lasts, you will find yourself at ease about your hands and will have no trouble about their management. You will be astonished, if you try it, to find how admirably it works. I have recommended it to hundreds of people, and they have uniformly found it successful. Do it once every day for a month and you will discover that by the mere practice of the habit your embarrassment in this regard has been greatly diminished. The time to perform the operation, obviously, is just before you enter a room full of company, though it will not do very well to be found wringing your hands in the vestibule of a house to which you have been invited, or engage in what may appear to be a frantic exhibition of grief in the reception room.”

KEEP YOUR SICK FRIEND'S FEET WARM.—A well person, certainly a sick one, should never be allowed to go to bed with cold feet in summer or winter. It interferes with sleep as well as with comfort, and the night's rest is not one-half as refreshing as it would be if the feet were warm. Rub them vigorously with a dry coarse towel or bathe them with warm water, rub dry and draw on warm loose stockings; or at any time when they are cold in bed let a large well stoppered bottle of hot water be wrapped in a towel and applied to the feet. This is preferable to the hot irons or bricks or soapstones commonly suggested. Bottles or jugs of water retain the heat much longer, have no sharp corners to injure sensitive flesh, and are always clean. A nurse should know whether the feet of a patient are warm or not, and if she has any doubt should ascertain by feeling them. Nurses have no more right to be delicate of their hands than doctors have. Soap, water and brushing will always cleanse them. You should remember that persons in sickness do not produce heat as they do in health, and your constant watchfulness in some cases is necessary every hour, every half hour and in extreme cases constantly. The hand should be placed over the surface of the body and extremities to learn of their condition. Many a patient has sunk rapidly and died from

the want of this precaution. It may seem a little thing; it may be a little thing at the beginning, but your whole duties are made up of trifles and so is perfection, but "perfection is no trifle." The fatal chill is most apt to occur toward early morning at the period of the lowest temperature of the 24 hours, and at the time when the effect of the previous day's diet is exhausted. Generally speaking, you may expect that weak patients will suffer cold much more in the morning than in the evening. The vital powers are much lower. If they are feverish at night, with burning hands and feet, they are almost sure to be chilly and shivering in the morning. Some nurses are too fond of heating the feet warmer at night and of neglecting them in the morning when they are busy. All these things require common sense and care. Yet, perhaps, in no single thing is so little common sense shown, in all ranks, as in nursing. In that side of the body affected by a paralytic stroke the temperature is much lower than in the other side. Profound occupation of the mind lowers the temperature of the body.—*Transcript.*

HOW TO GUIDE THE HOME.—Housework in moderation is healthy and pleasant. It is the want of just such an unemotional vent for their restless energy that produces many victims of nervous prostration. It is also wholly compatible if brought under any proper system, with good intellectual work. Moreover, the creating and guiding of a home is the best gift the world has to offer. When one thinks of the flood of bad art and second rate literature of the present day, is it not melancholy to reflect upon the wasted energy that might have gone into beautiful and helpful lives? The education is costly, indeed, whose price is the woman's joy in the superintendence of her home. If she, with all the incentives of love and pride, despises the daily cares that make the comfort of the household, how can she expect them to be rightly met by a hired housekeeper, whose only interest is money getting? "No man can serve two masters;" and, therefore, it seems to me self evident that any woman who accepts the gift of a home thereby pledges herself to devote to it her best service. The neglect of her first duty and highest privilege cannot lead to any true work in other directions. There are women whose God given talents require to tread a lonely path. There are many others to whom the supreme treasure of a home is denied. But the best work of artist or poet or physician will ever spring from the hidden, passionate womanliness that appreciates to the full the greatness of the sacrifice or loss.—*Christian Register.*

MOTHERS AND THE NURSERY.

(CONDUCTED BY MRS. F. C. PRESSLER.)

PROPER WEIGHT OF CHILDREN.—A child in the fourth year should be three feet high and weigh more than 28 pounds ; in the sixth year, three and a half feet high, and weigh 42 pounds ; in the eighth year, four feet high and 56 pounds in weight ; at 12 years, five feet in height and 70 pounds in weight is a fair average. Growth is very irregular in children and young people generally ; perhaps two inches may be gained in two months, and for the next ten months not another inch, even up to the age of ten or twelve years. While growth is thus rapid fatigue is readily reduced ; during the pause weight is gained, and work or training can go on again.

ACUTE SORE THROAT.—Among the best remedies for this common affection is hot water. It should be applied outside and inside—outside by means of flannels wrung out of water as hot as can be borne, applied to the throat, and well covered, twice a day, for from fifteen minutes to half an hour. Gargle hot water, as hot as can be borne, every fifteen minutes or half an hour until relieved, and drink plenty of hot water so as to get in a profuse perspiration. A few hours of this treatment will effect a cure in any simple case.

TO DISLodge A FISH BONE.—It sometimes happens that a fish bone, accidentally swallowed, will remain in the œsophagus, and be troublesome. In fact, death has been occasioned by the great irritation of a fish bone. In such cases, as soon as possible, take four grains of tartar emetic dissolved in one-half pint of warm water, and immediately after, the whites of six eggs. This will not remain in the stomach more than two or three minutes, and probably the bone will be ejected with the coagulated mass. If tartar emetic is not convenient, a spoonful of mustard dissolved in milk-warm water and swallowed will answer every purpose of the emetic.

BOIL THE IMPURE MILK.—Mothers in populous districts of great towns may do much toward keeping their babies well if they follow the advice of Dr. Charles G. Currier. Dr. Currier says that milk, ‘‘containing, as

it does, the elements of a complete nutrition, affords a favorable medium for the multiplication of numerous kinds of bacteria. Scarlet fever and other diseases of which the causes are not yet precisely known have been conclusively shown to be spread by contaminated milk." The doctor says that the average milk sold in cities contains many thousands of bacteria in each teaspoonful, and that in the same quantity of the worst milk there are a million. The only sure way to kill these disease-producing bacteria, the doctor says, is to boil the life out of them. "Cold," the doctor admits, "retards greatly the increase of such organisms as may have found their way into milk, but the germs of disease can for a long time retain their vitality in milk, even if it be kept as cold as ice."

Boiling or steaming milk sterilizes it. "It is uncommonly good city milk," the doctor remarks, "which becomes completely sterilized in from half an hour to three-quarters of an hour. If impure milk, after being steamed for from half an hour to an hour, is not wholly sterilized, and a few spores remain alive in it, it will be much more wholesome than before the steaming process, and one can feel confident that, as far as the science of the day reveals, no living organisms of disease are present. Such milk will, in a cool place, keep for days; but if it is desired to keep it indefinitely, that purpose can be insured in advance and accomplished with certainty only by steaming it for hours, unless the milk is of unusual purity, most carefully obtained at the dairy, and put in the cleanest of containers."

To the multitude of folks who have to use for feeding their infants milk of questionable purity the doctor recommends this simple method of sterilization: Pour the milk into a bottle of any size, plugged with clean ordinary cotton, and keep it in a steamer or in hot water for at least an hour, and then keep cool until used. The doctor adds: "The danger that bacteria will fall in from the air when the milk is poured from the large bottle into the nursing bottle is a minor one. It is when they swarm in the milk that the bacteria are most to be apprehended, and not when they are solitary. Careful instructions should be given to keep the bottles clean. For soaking the rubber nipple use a three or four per cent. solution of boric acid." The doctor says babies thrive on sterilized milk and grow perfectly.

Dr. Currier strongly advocates the use of boiled or sterilized water as a means of preventing disease. He says a large number of laboratory ex-

periments convinces him that much typhoid, cholera, and less severe diarrhoeal attacks are due to the use of infected waters. The doctor declares that ordinary water becomes sterilized after being kept at or near the boiling point for fifteen minutes. A clear water containing the germs of malarial disorders, typhoid, cholera, or diphtheria may be made drinkable if merely brought to the boiling point. A contaminated water should be heated for one hour and allowed to cool slowly.

SQUINTING AND ITS REMEDY.—In the common form of squinting the eye is turned inward, both sometimes being affected. The affection usually begins between the second and sixth year. The cause lies in the fact that the eye is too long for the lens, so that the rays of light are brought to a focus behind the retina, thus rendering the image of a near object blurred. In order to clear the sight, the lens, by the power of a muscle situated within the globe, is rendered more convex, and so the rays are focussed more forward on to the retina. When this power is exerted the eyes are at the same time turned inwards. So that if a child be watched when examining anything intently both eyes will be seen to converge. Next, from constantly employing the eyes, they are always turned inwards, and then the child finds that it manages easier by using one eye only, the other becoming permanently turned inward, so that the child uses but one eye. This can be proved by holding the hand before the "working" eye, when the squinting eye will move outwards to fix any chosen object, while the good or working eye will be found to squint. The remedy first consists, says the *Family Doctor*, when the child is young, in employing spectacles to correct the faulty vision; these should have convex lenses. After the use of these for some time the muscles may regain power, and the glasses be used for close work or reading only. If the squint be permanent, the only way of curing the deformity is by dividing some of the muscles which move the globe. This operation requires great skill, and before the cure is complete has usually to be repeated once or twice.

There are other forms of squint, in which one eye is turned outwards or upwards, or in some other direction. This may arise in childhood from convulsions during teething and from other causes, and in the adult from paralysis of the nerve supplying the muscles. In children, also, any form of squint may indicate the existence of disease of the brain; at the same time, however, there will be other symptoms present.

HEALTH INVENTIONS AND APPLIANCES.

In these days of so-called "sanitary wear" humbugs and "hygienic garment" catchpennies it is a pleasing duty to call attention to manufactured fabrics that really prove by appearance and are all that is claimed for them. The Harderfold Fabric Co., of Troy, N. Y., have placed upon the market underwear that is fully indorsed and commended for its hygienic qualities by some of the best known scientists and physicians of the country. These all-wool garments, either in white or gray, being made of strictly pure natural wool, have all the advantages claimed for so-called sanitary woolen goods, together with the added distinctive hygienic principle of an inter-air space, created by double folding the fabric throughout the entire garment, thus affording the most thorough protection from sudden chills and draughts. Less weight with more warmth is another quality, as it is well known that two light weight garments worn over each other will afford more protection from cold than a heavy single garment, although the single garment may weigh more than the two lighter ones. Making the fabric of two thin films of wool, using the finest Australian lamb's wool, spun in fine yarns and knitted in finest gauge, an elasticity and softness is obtained unknown to heavy single fabric goods. Folding the smooth and finished sides of the cloth out in each fold, the same smooth, agreeable surface comes next to the person when worn as is presented by the exterior, all inequalities and rough parts of the fabric being folded in. The protection which one thickness of the fabric gives to the other increases the durability and wearing qualities of garments, while the elasticity of the cloth makes each garment better fitting, and yet free to conform to every movement of the wearer. The Harderfold underwear is carefully manufactured of such soft, elastic material, with no exposed seams to chafe or irritate the person, that they entirely overcome the objections to woolen underclothing which are urged by people whose skin is sensitive and easily irritated. The most fastidious and dainty lady, or the youngest child, can wear this clothing with comfort and pleasure.

PATENT CHILD PROTECTOR.—This is an ingenious and simple little apparatus for keeping the blankets upon sleeping children. By the use of this apparatus children in bed are safely and snugly kept covered with the bedclothes. The apparatus resembles an enlarged spring tape measurer. It has a chain which draws out, but immediately upon being released

springs back upon the drum from which it was unwound. Two of these are required for a crib or a bed. They are fixed to the iron rod at the head of the crib; a catch at the end of the chain is engaged with a tape loop fixed to the blankets on either side of the bed, and when the child turns or moves the chain runs out easily for a short distance, but the action of the spring draws the blankets back, bringing them in every case to their first position as they covered the sleeping child.

NEW PUBLICATIONS.

RECOLLECTIONS BY GEORGE W. CHILDS.—We have just received a neat little volume entitled: "Recollections of General Grant," with an account of the presentation of the portraits of Generals Grant, Sherman, and Sheridan at the U. S. Military Academy, West Point. The contents of the volume, as the title indicates, are of the most absorbing interest to all admirers of Grant, and are pervaded by the genial spirit of the writer, whose philanthropy and public disinterestedness have made his name as familiar in the mouths of Americans as "household words."

TRUE.—Writing to the editor from his justly celebrated Hygeian Home, near the Delaware Water Gap, Dr. F. W. Hurd says: Our place is practically full, and we could fill a larger if we had it. The world has need of true sanitarians and thorough teaching of physiology in the school, and Biology in the pulpit. God speed the day.

MORE THAN TWENTY YEARS A SUBSCRIBER.—In renewing his subscription, Mr. D. G. Dorrance, of Oneida Castle, New York, writes: "I have now taken your HERALD about twenty or twenty-five years, and find something new and useful in each number."

QUESTIONS OF INTEREST ANSWERED.

USE OF COLD WATER.—Fresh cold water is a powerful absorbent of gases. A bowl of water placed under the bed of the sick room and frequently changed is among the valuable aids in purifying the air. The room in which the London Aldermen sit is purified by open vessels of

water placed in different parts of the room. It can be easily inferred from this that water standing for any length of time in a close room is unfit for drinking. It has frequently been observed that restless and troubled sleep has been corrected easily by placing an open vessel of water near the head of the bed.

POISON ANTIDOTES.—If iodine be accidentally swallowed, quickly mix some common starch, as for starching clothes, and compel the patient to drink a large quantity of it. If laudanum or morphine is taken in overdoses, give strong coffee, and keep the patient continually moving, not allowing him to sleep. Tincture of belladonna is also an antidote for morphine, but should only be given by an experienced physician, as it is also poisonous, except in minute doses. Mustard and water will act as a prompt emetic, and if given speedily, will remove many poisons from the stomach, and prove efficacious in saving life. A teaspoonful of ground mustard may be taken with impunity. Tepid water, swallowed in large quantities and thrown up, aided by the finger in the throat, will “wash out” many poisonous substances if taken promptly, repeating the operation several times.

DISCOLORED HANDS.—Peeling potatoes, apples, and other vegetables and fruits will discolor the hands. Borax water is excellent to remove stains and heal scratches and chafes. Put crude borax into a large bottle and fill with water. When dissolved add more to the water, until at last the water can absorb no more, and particles can be seen at the bottom. To the water in which the hands are to be washed pour from this bottle enough to make it very soft. It is cleansing and healthful, and by its use the hands will be kept in good condition.

FOR TENDER FEET.—A remedy for tender feet is cold water, about two quarts, two tablespoonfuls of ammonia, one tablespoonful of bay rum. Sit with the feet immersed for ten minutes, gently throwing the water over the limbs upward to the knee. Then rub dry with a crash towel and all the tired feeling is gone. This is good for a sponge bath also.

FOR SALLOW COMPLEXION.—The occasional use of saline alteratives is advisable in the morning; strict attention to diet; the avoidance of rich, fatty foods, of pastry, and of alcoholic beverages, as well as regular attention to cold sponging and walking exercise. There is nothing half so good as severe temperance and purity, a gracious temper and calmness of

spirit. Rise early and go to bed early. These are the best recipes whereby to preserve health, and make beauty display its most fascinating points to the best advantage.

M. A. B. GOSFORTH.

DAMP CELLARS.—If a cellar has a damp smell and cannot be thoroughly ventilated, a few trays of charcoal set around on the floor, shelves and ledges will make the air pure and sweet, says *Medical Classics*. If a large basketful of charcoal be placed in a damp cellar where milk is kept the milk will be in no danger of becoming tainted.

INEFFICIENCY OF SAND FILTERS.—Drs. Frankel and Piefke, of Berlin, have recently made an exhaustive study on the filtration of drinking water through sand. Their experiments conclusively prove, says *Medical News*, that the danger of infection from impure water is only slightly reduced by filtration through sand, bacteria passing through at all times, but in larger numbers just after the filter has been cleaned, and again after it has been in use for some time.

A NEW CURE FOR TOOTHACHE.—A Russian practitioner recommends the use of hyoscyamus seeds for toothache. His plan is to burn the seeds, and to convey the smoke through a little paper tube to the hole in the tooth. He declares that in nearly all cases one application, or at most two, will suffice to cure the toothache.

A REFRESHING BATH.—A warm salt bath is very refreshing to any one suffering from exhaustion of travel or of a long shopping expedition—which is as trying to mind and body as anything that can be undertaken by a woman. Away from the seashore a very simple substitute for sea water is a cup of rock salt dissolved in warm water and added to the bath. When the salt is irritating to the skin, take a warm bath and sponge off with a mixture of violet or lavender water and alcohol, about half and half, and rub briskly with a warm friction towel. Such a method prevents the exhaustion and danger of cold which follow a warm bath.

TREATMENT OF PILES.—In reply to Boston subscriber would state that so called remedies for piles are without number. The complaint often lasts for years without affecting the general health, and on the other hand constant irritation and bleeding may at once affect the entire system. Keep the bowels regular, relying upon fruit and grain diet. Avoiding tobacco, condiments, liquor, etc. For bleeding, a wash or injection of tannin is recommended, one ounce to half a pint of water. Any good

antiseptic ointment may be tried, to be applied with a suppository syringe. Inflammation is remedied by frequent bathing in cold water, rest and plain food. These are of course general directions, as individual cases vary in many ways.

WHEN THE CHILDREN ARE TROUBLED WITH PIN WORMS it is the rule to dose them with "worm lozenges" or other vermifuges. Such medicines are extremely liable to disorder the digestive organs, if they do not do greater harm. Moreover, they are not needed in the case of pin worms. These parasites inhabit the lower part of the intestinal canal, which is nearly 30 feet long. It is easy to understand that medicines taken by the mouth would either lose much of their effect or become wholly inert before they reached the habitat of these worms. The essential treatment is by injections. A solution made by adding one teaspoonful of salt to a pint of water is very efficacious. If this is retained a few minutes, the worms will be expelled dead. They are said, also, to disappear promptly with injections of cod liver oil, pure or beaten up into an emulsion with the yolk of an egg. This is certainly a very simple and harmless remedy.

CONSTANT READER.—You do not give us details sufficient to judge of the case, but we are of the opinion from what you write that your life is undergoing that period known as "change in life." Write us at greater length and we shall take pleasure in replying.

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THE HYGIENIC TREATMENT OF CONSUMPTION.

No. 2.

(BY M. L. HOLBROOK, M. D.)

(SPECIAL FOR HERALD OF HEALTH.)

IT appears to be a law of the universe that there must be causes for all things. If during a rain storm the water leaks through the roof of our houses we know there is a reason for it in an imperfection of the structure. And if we wish to prevent it we make such repairs as are necessary. If a good farmer finds his crops defective, he seeks a cause for it, either in an exhausted soil, an unpropitious season, the ravages of insects, or slothful methods of culture, and if he is wise he removes these causes, so far as lies in his power, and substitutes better conditions. If he cannot do this, he fails in his occupation. The same principle applies to all occupations, and it naturally becomes an important part of life's work in civilized lands to seek for causes, and

IF NECESSARY TO REMOVE THEM.

And what is a cause? We may define it as that which makes any thing begin to be. The cause or causes exist *before* there can be any effect. Brown in his philosophical work says: "A cause in the fullest definition which it admits may be said to be that which

immediately precedes any change, and which existing at any time in similar circumstances has been always, and will be always, immediately followed by a similar change." Aristotle in his metaphysics divides causes into four kinds: First the material, second the formal, third the efficient, and fourth the final cause. And he explains each in this way: The marble is the material cause of the statue; the idea of the sculptor is its formal cause; the efficient cause is the principle of change or motion which actually produces the thing, as the labor of the artist with his tools, and the final cause is that for the sake of which the statue is made, as, for instance, the memory of the hero to whom it is dedicated.

IN MEDICINE AUTHORS

have gone to unnecessary extremes in defining causes as relating to disease. Thus we have a long list of different kinds of causes, of which I will mention the following:

The accessory causes, which have only a secondary influence in producing disease; the accidental causes, which act only in certain conditions, and do not always produce the same result, as cold, which may at one time cause bronchitis and at another rheumatism; external causes, as foul air, cold, raw, moist winds; internal causes, that arise within the body, as our passions and emotions; hidden causes, as those we cannot find out; mechanical causes, as pressure on any organ; negative causes, like privation of food; predisposing causes, as that condition of body which tends to certain diseases; and exciting causes, or those conditions which actually produce them.

ALL THESE CLASSIFICATIONS

are more or less arbitrary; and although they may have their value, under some circumstances, I shall in considering the causes of consumption make use only of the predisposing and the exciting ones.

THE PREDISPOSING CAUSES OF CONSUMPTION

are those bodily and mental conditions which render one liable to this disease whenever the exciting causes are present in sufficient force. They are the remote causes, those which may be inherited from ancestors, and which often lie dormant during a large por-

tion or perhaps all of the individual's life. They do not actually cause the disease. They only make it easy for the disease to become real when the true causes act upon the body. If a diamond merchant keeps his diamonds in a poor safe with a badly constructed lock and exposed to thieves, he may lose them. These conditions are the predisposing reasons for the theft. But if there are no thieves around, or if the thieves do not know of the treasures in the safe, the man's goods will be as safe as if they were guarded in the most perfect manner. The thieves are the actual, the exciting cause of the theft. Without them the predisposing causes, the carelessness, the insufficient guarding, might exist forever without evil results.

And what are those bodily and mental conditions which predispose to consumption? They are a constitution not sufficiently guarded against noxious influences, a weakly, scrofulous constitution, one in which there is a poverty of blood, a deficiency of good, healthy living matter, digestive organs that do their work poorly and are not able to digest an abundance of wholesome food. The chest may be narrow and the lungs small. The heart is weak, the nervous system not strong, often irritable. In other words, the constitution is not made of iron, and its powers of resistance are not equal to the demands that are likely to be made upon it. This predisposition may be inherited, as when the sins of the father are visited upon the children, or it may be acquired by over-exertion, by insufficient food, exhausting diseases, or

EXCESSES OF ANY KIND

which drain life of its forces faster than they can be restored. These are some of the predisposing causes. They may not all exist in the same person, or in the same degree, but some of them will be present in a majority if not in all consumptives.

The exciting causes are those which most immediately concern us, though this ought not to be the case, for if the predisposing causes were well understood by parents and physicians or sanitarians, the disease would be cured before it actually exists, by removing as far as possible the conditions favoring it, and by fortifying the constitution by means of those methods which I shall consider later.

ONE OF THE MOST CONSPICUOUS

of all exciting causes of consumption is a cold upon the lungs. This has been so regarded from time immemorial. A consumptive always takes cold easily. The slightest exposure will produce one. Dr. B. W. Richardson, for many years connected with a London hospital for consumptives, and under whose observation came thousands of cases, says: "But we, who have observed the phenomena of the commencement of phthisis pulmonalis are aware that the common excitant of the first symptoms is catarrh, or common cold, contracted usually when the body is exhausted from overwork, from anxiety, from fatigue or other depressing influence." And the same thoughtful observer adds: "I can scarcely recall a case in which the origin of the disease was not from a cold; and the eminent physician of our time, Sir Thomas Watson, once expressed to me when we were meeting in consultation in a case of acute tuberculosis brought on by an exposure to a severe chill, that there was no observation in medicine of which he was so assured as that of the development of phthisical disease in the predisposed from taking what in other persons would be simply called a cold."

I presume this is the experience and the observation of nearly every one who has paid much attention to the subject.

ONE CASE I WILL RECALL

of a marked character. It was of a young lady of eighteen who was in excellent health, but attending a ball one night in July she danced excessively during the evening, and indeed until near morning, became overheated and greatly exhausted, then she went to the window and stood in the draft for some time, took a severe cold, and never was well a day after it, but soon developed consumption, and died a few months later.

Closely related to colds as causes of consumption are bronchitis, pneumonia, catarrh, laryngitis and influenza, especially epidemic influenza.

ANOTHER EXCITING OR IMMEDIATE CAUSE

of consumption is confinement in foul and close, unventilated rooms, either at labor or while sleeping. Air, or the oxygen of the

air, is a food as much as bread, and without an abundance of it we become starved, exhausted ; besides, the confined air breathed over and over again becomes loaded with a peculiar and almost deadly poison, which has a terribly depressing effect on the body, and especially upon the nervous system and on the lungs. The effects of confined air as a cause of consumption have been observed on the Indians, who are not subject to this disease when living naturally in their out-of-door life ; but bring them into close contact with civilization, confine them indoors, as is sometimes done in schools, and he becomes consumptive as easily, or even more so, than a white man. The effect of confined air in producing consumption has been observed among the negroes of the West Indies, who often sleep at night thickly huddled in unventilated apartments. The results are very frequently consumption in its worst form.

THE SHOP GIRLS WHO WORK

many hours a day in foul, illy-ventilated rooms, and who have little light and exercise, develop consumption easily. It is one of the crimes against nature that such things are possible in any land. The physical deterioration brought about by such confinement is of the worst form, and robs those subjected to it of their first and greatest right, the right to good health.

In the same connection may be mentioned working in minerals, such as copper, brass, steel, where the labor of turning, polishing and grinding these metals produces a fine but almost impalpable dust that is breathed into the lungs and weakens its tissues. Fortunately, the number of such is not large, otherwise it would be observed more frequently as a serious cause of consumption.

THERE IS ONE OTHER SUPPOSED CAUSE

of consumption ; indeed, believed to be the only actual cause of it, and without which it could not be. I refer to bacteria, or micro organisms. To these I shall refer in my next paper.

IS THE HOT WATER BATH BEST FOR THE COMPLEXION.

"THE hot water bath," writes Evelyn Thorp, "is far better for the complexion than the cold water. The greasy secretions of the pores, the insensible perspiration, yield to hot water and soap, but not to cold water and a sponge. The latter is a great tonic, a great vivifier and strengthener, if the system be in a certain condition to receive the shock and benefit by it. But the hot bath is more purifying and undoubtedly just as stimulating to the nervous constitution of some women as cold baths to that of others. A charming woman of some literary aspirations, a grandmother, and yet blessed with a fresh, gracious and well-preserved beauty which wins admiration for her wherever she goes, was known to say a short time ago that she attributed the fairness of her skin, the continued plasticity of all her muscles and her freedom from the wrinkles which begin to beset women of her age very largely to her lifelong habit of taking a hot bath every morning on rising. 'I never go out before afternoon,' she continued, 'and so I run no risk of catching cold. I wrap myself in a warm, loose dressing gown or house dress, take a light breakfast of cocoa and rolls and fruit, and then

WORK WITH LUCID BRAIN

and quiet nerves until my luncheon hour at one. If more women would follow my practice, would try the daily hot bath, which limbers the muscles, soothes the nervous system and softens the skin by hastening the scaling off of dry, hard particles of the epidermis, and if, having done this, they would keep their morning hours quietly to themselves, for household duties or study, it is my opinion that they would grow faded and jaded far less soon than they do.' In this case the hot bath had certainly proved a great preserver of youth and beauty. Nevertheless, in another case it might prove neither.

A SECOND WOMAN DISCUSSING THE SAME SUBJECT

averred that she had been debilitated and made nervous by hot morning baths, and now only took hot baths twice a week before

retiring at night, for cleanliness, with cool sponge baths instead every morning. For washing the neck and face strictly the same diversity of opinion prevails. A famous English court beauty claims that the secret of the smoothness and fairness of her skin—smoothness and fairness preserved long after the age when the complexion begins to turn dry and harsh—lies entirely in her continuous use of water for the face as hot as can be borne—not warm water, not tepid, but just as hot as the skin will endure. This water is of the softest possible kind—rain-water whenever possible—if not, it is softened artificially by a bran-bag or by ammonia or a pinch of powdered borax. A great French authority on the complexion, on the other hand, asserts that hot water dries out the natural moisture from the skin, and consequently

INFALLIBLY CAUSES IT TO WRINKLE.

Tepid water he also considers too relaxing to the fibers of the skin, the great object being to keep these 'taut' and elastic. For this doctor only cold water exists, as far as application to the face is concerned. These, then, are the two horns of this dilemma. There are two separate factions, each upholding exclusively its own theory. How is the average woman to know the course to pursue? It is the very fundamental question in the case of the complexion—this of hot or cold water—the very most important one. Daily a woman is doing either the right thing or the wrong one, and slowly shaping the result that will overtake her in a few years; and how is she to know? To make an individual test of which, if hot or cold, best agrees with her own skin is not always feasible; for the action is so slow that it takes months, nay years, to decide the matter.

A THIRD COURSE,

however, is being recently advocated which combines the merits of both the other two, while seemingly obviating their possible demerits on either hand. It is this—An idea is advanced that washing the face may logically, for good results, follow in the line adopted in the Russian and Turkish bath for the surface of the whole body. In other words, that the way to wash the face, so

as to keep the skin soft and yet fresh, is first to use hot water with a fine soap, and then cold water immediately afterward, as a douche. The water and soap cleanse the pores, as the cold water can never. So, remove the insensible accumulations of grease and perspiration that catch and fix particles of dust and convert them into 'blackheads,' and hasten the scaling off of dead scarf-skin. For all these causes the hot water is to be applied liberally with fine soap; the face sunk into the basin, indeed, and held there, under water, as long as possible, until, in fact, it has had literally a bath and not a wash. Then, while yet

THE SKIN IS SOFT AND MOIST,

splash cold water plentifully over it from a basin standing ready hard by. This serves as an immediate and bracing tonic, counteracting the relaxing effect of the hot water upon the epidermis with brisk swiftness. If the face be afterward hard rubbed with a fine towel until a healthy glow is created the skin seems then to have been subjected to the most scientific treatment possible—to one which is logic and rational, and which wherever it has been tried has resulted favorably. The same order of ablutions is recommended after the application of any cream, or balm, or emollients, or right before. Preparations of this sort (and cosmetics also, if women will use them) should always be washed off with hot water, not with cold. The douche may follow after. Some such order of operations will always be found to have constituted the daily regime of the great beauties, for great beauties have invariably remained so at the cost of continual care. As to the use of hot or cold water separately, a

FEW GENERAL RULES

may, however, be laid down for the guidance of those who do not try the hot water and cold douche treatment. Where the skin is very thin and fine and the pores small—where the complexion is very fine-grained, in a word—the natural tendency of the cuticle is to dry rapidly. Such skins go into a multitude of thread-like wrinkles with advancing age. Hot water would probably only hasten this tendency. Cool ablutions, not ice-cold—water at that extreme of cold is always bad for the skin—would be far better,

and an emollient rubbed thoroughly into the face at night and after exposure to wind and sun would also be a good, a necessary, alternative.

WHERE, ON THE OTHER HAND,

the skin is large-pored and thicker and more supplied with natural moisture, hot water would appear, on a general theory, to be preferable. There are certain skins, yet pale and muddy skins, lacking in warmth and color and having a blue look in winter which can never be rubbed into any sort of reactionary glow after washing with cold water, but would look only the more chill and gray for the process. It is against all reason to adhere to cold water in such cases, when hot, on the contrary, will draw the blood to the little surface-veins of the skin and give some life and tone to it. After ascertaining which treatment, of hot or cold water, or both in conjunction, is likely to be the most judicious according to the state and texture of the skin, and its consequent needs, that treatment should be steadily and regularly pursued."

THE DEADLY POISON OF TOBACCO.

DR. A. H. P. LEUF, physical instructor at the University of Pennsylvania, has an excellent opportunity of observing the effects of tobacco on the human system. Having daily in his charge hundreds of boys and young men who use tobacco to a large or small extent, he has become an authority on the subject. His opinion as to whether or not the use of tobacco is injurious is therefore valuable and will be regarded with interest, coming as it does from an experienced physician, who has had the best possible opportunity of studying the matter. Dr. Leuf was asked: "What is the effect of tobacco on youth?" After a moment's thought he replied. "I consider tobacco nothing more nor less than poison. Very little, if anything, can be said in its favor, while there is hardly any limit to

WHAT CAN BE SAID AGAINST IT.

Its consumption is simply enormous, and is constantly on the increase, running up in quicker ratio than the population. For

instance, it was estimated some years ago that the annual production of tobacco in the five continents was as follows:—Africa, 26,400,000 pounds; America, 272,800,000; Asia, 341,000,000; Australia, 8,800,000, and Europe, 310,200,000; a total of 959,200,000 pounds, or 47,960 tons per year for the entire world, so far as can be approximately ascertained. Since then this has increased at least twenty-five per cent.

“A former American Consul at Havana estimated in his report to our Secretary of State that Cuba consumed 1,460,000 cigars per year, or ten per day for each member of its population. Now that we know how much is produced, let us see what tobacco is. It belongs to the genus *nicotina*, order of *solanacæa*. It contains small amounts of several alkaloids and acids, but especially the active poisons called nicotine, nicotainine and empyreumatic oil.

“PURE NICOTINE IS A LIQUID

and very nearly colorless, having an exceedingly irritating, acrid, burning taste. It is a remarkably virulent poison. The United States Dispensary says of it:—‘Nicotine in its action on the animal system is one of the most virulent poisons known—a drop of it in the state of concentrated solution was sufficient to destroy a dog, and small birds perished at the approach of a tube containing it. In man it is said to destroy life in poisonous doses in from two to five minutes.’ “Another point,” remarked the Doctor, as he laid aside the book; “It belongs to that class of drugs known as anti-spasmodics—for instance, belladonna, hyoscyamus and stramonium—but it is so intensely disagreeable and dangerously depressing that it is never prescribed. One-tenth of a grain would kill a medium sized dog in three minutes. Now as to the cigarettes and cigars. Havana tobacco contains two per cent of nicotine and Virginia tobacco seven per cent. There is enough in an ordinary cigar to kill two men if it were all absorbed, and in

CIGARETTE A PROPORTIONATE RATE.

“A smuggler was once fatally poisoned in an effort to escape the payment of duty by carrying tobacco leaves next to his skin. Men, women and children who work in tobacco factories have sallow, pasty complexions, due to this poison, and this effect is

noticed whether they use the weed in any form or not; enough is absorbed in handling it to ruin the constitution for life. Cigar makers, as a rule, grow old early, and few of them live to be very old if they keep to their work, and in no more marked degree is the benefit accruing to abstinence from cigarette smoking observable than in the University of Pennsylvania, where my predecessor, Dr. J. William White, was instrumental in having orders issued peremptorily forbidding their use on the athletic grounds, or anywhere in the buildings. Those students who have given up the use of tobacco show a marked improvement in their studies, as well as physically. Nicotainine is the constituent of tobacco that appears to cause the distressing giddiness and nausea so

PECULIAR TO THE 'FIRST SMOKE.'

"The empyreumatic oil is also a most deadly poison," continued the Doctor. "One or two drops placed upon the tongue of a cat will kill it in a few minutes."

"How do these poisons affect the system?" "They are carried by the smoke to the mucous membrane of the air passages, mouth and nose, and by them absorbed into the blood, which carries them all over the body to poison the nervous system, interfering with its proper action, and thus leading to an endless number of diseases that are almost incurable after they become well established."

"ONE OF THE EARLIEST SYMPTOMS

is the well known 'tobacco heart' of smokers and tobacco operatives; another is the defective vision or blindness that it produces. Nor is that all, for it often occasions death, especially in children. I myself know of several instances, one particularly vivid case being that of a young boy who died of nicotine poisoning due entirely to cigarette smoking. Very many of the deaths from tobacco are not recognized by the general practitioner, and are supposed to be due to bad air, poor food, summer heat, and so on. Not a single organ of the entire body escapes the damaging effects of tobacco, and no Legislature can enact too stringent measures to prevent its use by all minors.

“ YOU CAN QUOTE ME AS SAYING

as strongly as you please that I am prepared to meet the adverse skepticisms of smokers, and prove to them, against their will, that they are slowly poisoning themselves and their offspring. The law is in force in this State as well as in New York against the sale of tobacco to minors, and what its effects will be only the future can tell. Let a boy grow up to be of age without having formed the tobacco habit and the chances are that he will never begin so unhealthy and deleterious a practice. Drinking is objected to because of its immediate apparent effects, while its greatest danger is to be found in its remote effects. The same is true of opium, but tobacco, after the first few trials, shows possibly no bad effects or some slight one, supposed to be something else, which are generally unheeded until they become fatally perceptible.”

EDITOR'S STUDY.

NO BURIALS ALIVE.—Very comforting news is brought to those who stand in daily dread of being buried alive in the current number of the *Medical and Surgical Reporter*, which, in an editorial, says : “The fear of being buried alive haunts the minds of so many of our fellow men that it may hardly be regarded as strange, in some respects, that it was recently reported that a number of physicians in a city near Philadelphia had banded themselves together to devise means to prevent such a catastrophe in their own case. And, when physicians could take such measures in view of a supposed danger, it is not remarkable that the community should have a special and exaggerated horror of being buried alive. But this horror is as without reason as is the timidity of the physicians referred to. There seems to be no good ground whatever for supposing that it is possible in this enlightened age for any person to be committed to the grave while yet living. Stories reporting such occurrences are by no means rare ; but any one who examines them closely will certainly remark that they are wholly lacking in originality, and that there is in fact so strong a resemblance between them as to excite the suspicion that one has been copied

from another. Investigation will show, too, that this suspicion is a well-founded one ; at least such has been the experience of the editor of the *Medical and Surgical Reporter*, who has for some years followed up every story of burial alive which came to his notice, and always with the result of learning that they were false or of failing to learn anything about their origin.

WHAT TEARS ARE MADE OF.—It is said that people sometimes weep for joy as well as for sorrow, but such cases are at least rare ; any way there is not probably any difference in the material of the tears so shed. They are both made of the same stuff. The principal element in the composition of a tear, as may readily be supposed, is water. The other elements are salt, soda, phosphate of lime, phosphate of soda, and mucous, each in small proportions. A dried tear seen through a microscope of good average power presents a peculiar appearance. The water, after evaporation, leaves behind it the saline ingredients, which amalgamate and form themselves into lengthened cross lines and look like a number of minute fish bones. The tears are secreted in what are called the "lachrymal glands," situated over the eyeball and underneath the lid. The contents of these glands are carried along and under the inner surface of the eyelids by means of six or seven very fine channels, and are discharged a little above the cartilage supporting the lid. The discharge of tears from the lachrymal glands is not occasional and accidental, as is commonly supposed, but continuous. It goes on both day and night—though less abundantly at night—through the "conduits," and spreads equally over the surface of the lids. After serving its purpose the flow is carried away by two little drains, situated in that corner of each eye nearest the nose, into which they run, and called the "lachrymal points." The usefulness of this quiet flow of tears to both man and beast is manifest. There is such an immense quantity of fine dust floating in the air and constantly getting into the eyes that, but for it, they would soon become choked. Very little is requisite to keep the ball free, and when some obnoxious substance—smoke, an insect, or the like, that affects the nerves—does make its way in, an increased flow is poured out to sweep it away.—*Brooklyn Standard.*

PROPORTIONS OF THE BODY.—The proportions of the human body, as given by the best authorities, are as follows, the length of the head being the standard of measurement: From the bottom of chin to breastbone, one-half length of head. From top to bottom of breastbone or sternum, one-half length of head. From bottom of sternum to beginning of lower limbs, two lengths. From thigh to bottom of knee, two lengths. From the bottom of the knee to the ankle, one and one-half lengths. From ankle to the ground, one-half length. Adding to these measurements one length of the head itself, gives eight lengths for the proper height of the body of men. Women are slightly shorter, the proportion of their head to the height being about as one to seven or seven and one-half. The arm from the armpit to the elbow is one and one-quarter times the length of the head, from thence to the wrist one and one-quarter, and from the wrist to the end of the middle finger three-quarters of the length of the head. The distance between the right middle finger and the same finger on the left hand is, when the arms are spread horizontally from the body, equal to the height of the figure. It follows, therefore, that the breadth of the body from armpit to armpit is one and one-half lengths of the head.

THE NATURAL FOOD OF MAN.—A correspondent of the *English Mechanic* has discovered the "natural food of man" to be "nuts and fruit." "I consume daily," he says, "about nine or ten good-sized apples—about three at each meal—and at the mid-day meal I eat two ounces or three ounces of nuts (weight when shelled). At breakfast and dinner I occasionally add a banana or an orange. The outer surface of the body, including extremities, is certainly becoming more like that of a child. I am well on in the forties. I enjoy my fruit fare as I never enjoyed food all my life before. I do not know what a pain or ache is, and indigestion, flatulence, etc., are equally unfamiliar to me." "If my experience," he adds, "proves generally practicable, have we not found the road to easy independence, freedom from the ills and cares of existence, and perhaps a prolongation of happy, healthy life beyond the most sanguine expectation?"

EYESIGHT.—Throughout life, from youth to old age, there is a process of change occurring in the refractive media of all eyes, so that every one who attains to a ripe old age will, at some time or other during his or her existence, be a fit subject for the oculist—or, in other words, will need to wear glasses. In young people this change is usually gradual and unperceived, but from middle life onward its effects are plainly apparent. Those who have normal vision while young will require glasses for reading when they have passed beyond the age of forty, and those who are nearsighted before this age is reached, need glasses in early life, if the degree of nearsightedness (myopia) be at all great, and yet they may be able to read perfectly well without glasses when fifty, or even sixty, years of age. Persons who are included in this category are apt to consider themselves as lucky exceptions to general laws, and are usually very proud of their sharp sight.

HOW JOHN KEEPS COOL.—“The only people in New York who don't suffer much from the heat are the Chinese,” said Dr. John Uhl recently. “Your Chinaman,” he continued, “is a nerveless, unimpassioned animal, and doesn't let anything worry him. That is one reason. Another is that his food is largely fruits and vegetables during the warm months, when we hold to our heavy meats at least twice a day the season through. The Chinaman drinks very little intoxicating liquor. His great summer drink is tea, hot or cold, but never iced tea. Neither does he drink iced water, and thus produce an abnormal lowering of the temperature, which brings a consequent rise as far above the normal. Then his dress is loose, calculated far more for comfort, or, rather, for summer comfort, than ours; and altogether John gets through hot weather better than any other person I know. I have watched them here and in San Francisco for years, and I never knew of one being sunstruck, and I cannot recall ever having seen one of them in a profuse perspiration.”

THE OLDEST INHABITANT IN CANADA.—Toronto claims the oldest inhabitant in Canada. Mr. John Tinsley was born in Richmond, Va., on July 4, 1783. Mr. Tinsley is a man of medium height, well and compactly built. His hair and beard are pure white, his sight is somewhat dim, and of late his hearing has not

been acute, but he is in excellent bodily health, and his intellect is clear. Mr. Tinsley's father, Samuel Tinsley, was from the south of Ireland. He bore arms in the revolution, having the honorable rank of captain in the devoted band who claimed Washington as their general and leader. The mother was a mulatto. Mr. Tinsley was brought up to the trade of carpenter and millwright. At the age of 28 he married a free colored woman, who bore him eight children. She died in 1844, and none of her children now survive. Mr. Tinsley, however, has 7 grandchildren, 16 great-grandchildren now living, some in Australia, but most of them in Canada and the United States. One of his sons, James, was a musician and shorthand writer, and was lost on the steamer City of Glasgow on the way from England thirty years ago. Mr. Tinsley remembers having seen Gen. Washington when he passed through Richmond on one occasion. He also knew Hancock and Hopkins, two of the signers of the Declaration of Independence, and Chief Justice John Marshall. Mr. Tinsley went to Canada to visit friends on one occasion, and, as he liked the country, he settled in Toronto in 1842. The method of living is naturally a subject of inquiry in the case of one who has attained a great age, especially when, as in this case, age does not mean collapse and decay. On this subject Mr. Tinsley said: "I have tried always to be regular in my habits; never drank much strong drink, but was not a teetotaler. I tried a cigar once when a boy, 90 years ago, but it made me so sick I never tried another. I used to take snuff, but gave it up, and have not taken a pinch since 1835." The results of his mode of life are described by himself. "I have worn spectacles only eight years. My sight is now failing and my hearing is dull. The only tooth I ever had extracted was pulled with a string. I have still nine or ten which are wearing pretty low."

HOW TO REACH AND ENJOY OLD AGE.—It is no simple matter to state in terms at all precise what forces are directly connected with the production of hale and happy old age. More certainty is involved in the process than mere strength of constitution. Healthy surroundings, contentment and active, temperate and regular habits are most valuable aids. Hard work, so long at least as it is not carried beyond the limit necessary to permit the timely repair

of worn tissues, is not only a harmless, but a conducive circumstance. It is, in fact, by living as far as possible a life in accordance with natural law that we may expect to reap the appropriate result in its prolongation. Civilization is at once helpful and injurious. Under its protecting influence normal development at all ages is allowed and fostered, while the facilities it affords for self-indulgence are constantly acting in an opposite direction. The case of Hugh Macleod, aged almost 107, which has lately been published, illustrates in a remarkable manner the truth of these observations. This man, a Ross-shire Highlander, in what must be the sombre twilight of a blameless and fairly active life spent in his native country, still shows, it is said, a notable degree of vigor. He takes a lively interest in the affairs of life, has good appetite, is generally healthy, cuts and carries his peat for household use, and goes about among his neighbors as of old. His food is of the plainest, though nutritious—porridge, fish, a little meat, and his habit in this and other matters is not unworthy the attention of many who are daily hastening by opposite courses the end of a merrier, shorter, but perhaps not happier life.—*Lancet*.

REMEDY FOR DOG BITES.—“A woman” writes to the *New York Tribune*: I have been bitten by dogs repeatedly, once severely. A pet dog of a neighbor's was very sick, and I was attempting to relieve it. It bit me in the left thumb, just below the nail. That member became black as far down as the wrist. It remained so until the nail came off. The owner talked of hydrophobia, and said that the dog had not tasted water for two weeks. Had I been afraid, I should, no doubt, have taken nervous fits and died. The verdict would have been hydrophobia. I simply applied a solution of salt and vinegar—a little more vinegar than salt—washed the wound with it, tied a clean rag around the thumb, keeping it saturated well with the solution, and moved the rag so that a fresh part covered the wound at intervals. This remedy was once applied to my wrist by a colored woman in the South for a snake bite. My arm was then black, hard and painful. The remedy acted like a charm. In two hours the discoloration had disappeared, and with it the pain, and only the needle mark where the fang had entered was visible. Again, I was bitten by a weasel in the Grand

Central depot. A girl had it in a bag and had placed it on a seat next to mine, remarking that it was a kitten. I placed my hand on it. Quicker than thought a couple of teeth punctured the joint of my left forefinger to the bone. I compelled the girl to tell me what was in the bag. My finger was badly swollen and painful before I reached home, some hours after. I used the same simple remedy with the same speedy result. I have also applied it successfully in other cases.

DYSPEPSIA AND BAD TEMPER —According to a personal paragraph going the rounds, Sarah Bernhardt says that whenever she has a fit of anger it is invariably followed by sickness. Sarah is by no means the only person in the world that has such an experience. While dyspepsia is undoubtedly a factor in causing a bad temper, and frequent and ill-timed expressions of it, it is equally true that loss of temper not only sours the disposition but the stomach. Whether ill-temper precedes the dyspepsia or *vice versa* is a question. Dyspepsia leads to gout in many cases. A man of gouty habit should guard his temper well. An explosion of irascibility, especially near meal time, may so act on the digestive juices that they are unfit for their work, the food ferments instead of being digested, an attack of dyspepsia follows, and this is followed by an attack of gout, during which, of course, the sufferer has nothing of the mild temper of the turtle dove. It is a fact well known to physiologists that emotion and anger cause baneful chemical changes in the various secretions. Under the influence of violent passion the saliva is poisonous, and babies have been poisoned many times by nursing immediately after their mothers had passed through a storm of anger or emotion. From the standpoint of health, then, people should control their temper. — *Chicago Herald*.

WHY DOCTORS DISBELIEVE IN HYDROPHOBIA.—The disbelief, by doctors, in the real existence of such a fearful disease as hydrophobia, is one of the most curious illustrations of the thoroughly materialistic character of what is called medical science. It is only by repeated cases, occurring under their own observation, and under circumstances which contradict the medical notion that

hydrophobia is "a disease of the imagination," that half of the doctors have been forced to abandon that untenable idea. Even now, very many physicians, in the face of the hundreds of cases, refuse to believe in any such disease as hydrophobia, as a real disease, existing outside of the sufferer's imagination. The occurrence of the dread symptoms and fatal result in little children, and sometimes in persons who were attacked years after they were bitten, fails to convince such practitioners. They see that *post mortem* examinations of the victim's body fail to disclose any lesion, any mark on any organ, indicating any morbid change in the exercise of functions, or the texture of organs; so, they reject the doctrine, *in toto*, that there is such a disease as hydrophobia, and refer it all, as they refer some other hard-to-explain phenomena, to the realm of "imagination" alone. It is one of the many inadequacies of a purely materialistic system, that it fails to comprehend truths and realities in a domain above the gross plane of visible, tangible matter. Yet the greater, real world is invisible to merely physical eyes.— *Hartford Times*.

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

WOMEN AND THE HOUSEHOLD.

WOMANLY WOOING.—When a woman sees a man loves her—which is certainly not very difficult—she has a hundred little ways of showing her preference for him without openly avowing the fact. There are many specimens of the male flirt in society who for a short time make desperate love to any girl who may take their fancy ; but they have no intention of marrying, suddenly their attentions cool down, and they make for another victim (that is, if she chooses to pose as such). Many an experienced woman might have come to the conclusion the man loves her, so subtle are his ways, and also she may have learnt to like him herself ; and, actuated by her feelings, suppose she acquaints him of her love, thus subjecting herself to be lowered and degraded. Just fancy a woman being refused ! How undignified. I could name perhaps a dozen cases that I have come in contact with in society, of girls paying attentions to men, and the men despising them for so doing and seeking the society of a girl who may seem apparently indifferent. Men are always contrary. And again, there are many men who love a woman, but owing to their position refrain from asking her to share so small an income ; but she, desperately in love (allowing that the bonus of woman's modesty are to be broken through), brings her love to his knowledge ; he then throws all scruples to the wind. Result : more improvident marriages. Men often have the power of will to forego ; but, alas ! there are many women so foolish they see no farther than the honeymoon, and the glory of having "Mrs." prefixed to their name. It is cruel and wicked for a woman to marry a man who has barely sufficient for his own wants. It is but a selfish woman who acts thus to gratify her own vanity, and not love for the man she thus burdens. Let the men do the running after the women. They must content themselves to wait and be wooed, and it is more satisfactory in the end. If I were a man I should not have much respect for a woman who would lower herself to woo a man.

ONLY A GIRL.

ARE BOYS LESS VAIN THAN GIRLS?—When a boy passes from the cub stage of dirty hands and general slovenliness to the happy

stage of wishing to appear clean and smart, it is a great relief to his mother and his family circle, although some features of puppydom may sometimes make the judicious grieve. A correspondent appears to consider vanity a most objectionable feature in boys, while in girls it is "small blame to the dear creatures." But he has a very vague notion of what constitutes vanity in boys. Emulation to excel in athletic sports, and to lower records in wheeling, running, etc., is no more vanity than is the desire to succeed in a competitive examination or to win a good degree. Emulation is the salt of existence, and without it this would be indeed a dull and unprogressive world. Taking it all round, I believe that boys are less vain than girls, for the excellent reason that, while the world in general is apt to say of the latter "small blame to the dear creatures," there is a sort of public opinion which condemns and ridicules the outward and visible signs of vanity in boys and men. In short, within certain limits, vanity is encouraged in girls and discouraged in boys. Of course, there is a class of mashers and dudes who are apparently impervious to ridicule, and who freely air their vanity in dress and in ornamenting their persons, but they are only a drop in the great ocean of male humanity; while the class of girls who are, or profess to be, superior to such considerations, is, again, as a drop in the ocean of those who frankly attach great importance to dress and ornament, and to whose usually harmless vanity we men are indebted for much of the beauty and brightness of our lives and homes.

AN OLD BOY.

NO MORE COMPANY MANNERS.—It is no longer *comme il faut* in polite circles to have company manners, company clothes, company china and company cooking. What is good enough for the family ought to be good enough for the guest. There is no honor in terrapin, truffles, ices and marrons, but there is honor in a welcome to a refined home and a cover at the table where culture assembles. Cordial hospitality takes on an added grace when, forgetting self and personal comfort, the hostess anticipates the wants of the guests and manifests in innumerable attentions the esteem felt for them. A perfect meal is only a question of a few dollars, but the freedom of the hearthstone that friendship extends has a higher value than money expresses.—*New York World*.

MOTHERS AND THE NURSERY.

(CONDUCTED BY MRS. F. C. PRESSLER.)

RIDING THE WHEEL IN YOUTH.—In the current number of the quarterly journal, the *Asclepiad*, Dr. B. W. Richardson, himself an enthusiastic cyclist, recommends that cycling be delayed by young folks until the body is approaching to its maturity. He admits that cycling tends to induce a certain amount of derangement of the conformation of the framework of the body. Every kind of riding which tends to throw the body forward in a bent or curved position, in a temporary stoop, will in time produce a fixed bend or stoop. The large muscles in the fore part of the thigh are apt, also, to receive undue development. On the other hand, he never knew cramp or spasm as a direct result of working the machine; nor sprain, unless in case of collisions or falls. Competitive cycling he justly condemns. The proper method of riding is to walk ascents and always to walk steep ascents, when the healthy condition of body incident to pedestrian exercise is sustained. Dr. Richardson's own experience is that for every eight miles of distance traversed in conformity to health it is wise to do one mile on foot. In a ride of fifty miles in a day six at least should be done on foot. He utters a warning to those who exhaust their capital stock of vitality by competitive racing that there is no going back for more capital, no making up, no, not even by rest, for the prime loss from the original capacity. The most and best that can be effected is to keep on, with a measure of the original store of energy dissipated for ever.

STARING.—There is probably no instrument of torture more in vogue than the stare. A lively lady once remarked that she always revenged herself for the stare of a man by gazing long and fixedly upon his feet, if by chance they were where she could do so. It is well known that most men are very sensitive as to their feet. "That always makes them color and turn away," she said, laughingly; "I have tried it scores of times." There is too little attention paid to the training of children in this respect. Mothers

have often been heard in public conveyances admonishing their young people not to "point," not to "wrinkle their foreheads," not to "loungé," yet we have seen them staring at strikingly-dressed or deformed or otherwise conspicuous people for a quarter of an hour at a time, and apparently no reproof has been addressed to them for this offence against good breeding.

"DRESS REFORM IN BABYDOM has been more satisfactory than the dress reform of women," said Mrs. Johnson of the "Baby Bazar" in Buffalo. "A few years ago the babies were really bound up in swaddling clothes. The 'pinning' blanket, flannel and cambric skirts were each swathed around the little body and fastened with toilet pins. The dress reform has done away with the dozen toilet pins required and the bands of the flannel skirts have broadened into little straight waists with bands over the shoulders to support the weight. The pinning blanket bands extend to points which are wound around the body and tied with tapes. Little buttons like those worn on gloves are placed at the bottom of the band waists, to which the white skirts are buttoned, and which does away with an extra band and arranges for the skirt to be removed when baby comes in from an airing. The dresses too, except the robes are made not longer than one yard and are only two yards wide. The robes are made long for such swell occasions as when the relatives are gathered in for the christening. That gown, however, is kept as a souvenir for the grown-up infant to gaze upon, so there is no weary tucking up and shortening of that garment."

GOOD ADVICE.—"Put the little ones to bed happy," says an exchange, alluding to the habit some parents have of deferring punishments for faults committed during the day until bedtime. "Never whip children just before they retire to rest. Let the father's caress, the mother's kiss be the last link between the day's path of pain or pleasure and the night's sleep. Send the children to bed happy. If there is sorrow, punishment or disgrace let them meet it in the daytime and have hours of play in which to recover happiness, which is childhood's right. Let the weary feet and the busy brain rest in bed happy." We like that fellow's philosophy and humanity.

SCARLET FEVER AND HOW IT MAY BE PREVENTED.—At a recent meeting of the American Pediatric Society in New York Dr. J. Lewis Smith, the president of the society, read a paper on a part of the general discussion on "How to Prevent Diptheria and Scarlet Fever." The micro-organism of scarlet fever had not been positively ascertained, but its effects were known from clinical observation. The contagiousness probably did not cease until after desquamation had passed, and it had been said the discharges from the otitis due to it were contagious. Quarantine in a small room attached to one of the wards at the Foundling Asylum in this city had been sufficient for scarlet fever, but not for measles. The contagious element was more fixed and less diffusible in the former. It remained in clothes a long time. Most prophylactic measures consisted in isolation of the patient, disinfection of the person and air which surrounded him, and of objects and persons in close relation with him. He called particular attention to the danger in books handled by the sick with scarlet fever, for in them the contagious element remained a long time. Then there should be constant ventilation during the active period of the fever, no article should be sent from the room unless properly disinfected, new families not allowed to move into the apartments before proper disinfection, the physician should disinfect his hair and entire person, and not wear the same outer clothing when going to see midwife cases.

HEALTH INVENTIONS AND APPLIANCES.

A MEDICAL DRY BATTERY.—Among recent inventions that deserve more than passing mention, is that of a Dry-Battery Medical Apparatus, which requires no acids, chemicals or liquids. For home use, this Electro-Medical Apparatus is the most convenient and reliable of any of the hundreds of forms ever introduced. It is reliable, because with its Dry-Battery so much less care is necessary to avoid getting it out of order than is required with any other known form. The entire absence of acids, liquids or salts, will be appreciated by any one who has ever had occasion to use a Medical Battery. The box when closed up may lie in any position on a table or shelf, or in the bottom of a carriage without

harm. The strength of the various currents ranges from those which are so mild as to be scarcely perceptible to the most powerful that can be endured by a strong man. We are assured that wherever this Dry-Battery form of Electro-Medical apparatus becomes known there will be no further use for liquid batteries in the same capacity under any circumstances. The battery is manufactured in this city, and can be obtained at the low price of \$7.50.

PUBLISHER'S DEPARTMENT.

OUR FRIENDS CAN TRY TO SECURE us new subscribers by calling the attention of those interested in hygienic matters to the fact that the magazine is sent from 1st October, 1890, to December, 1891, for One Dollar to all parties whose names are sent in without delay. Fifteen copies of the HERALD OF HEALTH for One Dollar are certainly cheap enough. In no other publication can such valuable information upon the care and preservation of health be obtained.

OUR PREMIUM SETS.—Sets of Dicken's and Scott's works can still be obtained at one dollar each; we will for a short time longer also send the Leather Stocking Tales for 60 cents per set, but the supply of these volumes is rapidly running out. Those who want these works should lose no time in sending for them.

QUESTIONS OF INTEREST ANSWERED.

SUET OR MILK PORRIDGE FOR INVALIDS.—One tablespoonful suet, two tablespoonfuls flour, one teacup of milk, a little salt; mince the suet very fine; mix milk and flour till smooth, then put into a pan; add suet and a pinch of salt; boil very gently for ten minutes and serve hot. This is very good and nourishing.

IVY POISON.—The juice of the stems and leaves of the common wild balsam with spotted orange colored flowers, known as "jewel weed" and "touch me not," is reported to have proven a sure cure for poisoning of the skin by the poison ivy or oak.

BARLEY WATER.—Two tablespoonfuls of barley, two quarts of water, one tablespoonful of sugar. Wash the barley well; put the barley and water into a saucepan and bring it to the boil; then boil very slowly for two hours; strain it, add sugar, and let it cool. Barley water is very cool and nourishing.

FOR DISINFECTING PURPOSES.—*To J. T. G's* question as to the best method of continuous disinfection we recommend highly the Sherman "King" Vaporiser, already noticed in these columns. We can obtain for him a most effective machine at a cost of five dollars.

SOME CAUSES OF DEAFNESS.—Dr. Francis Dowling, in a paper which he read at a recent meeting of the Cincinnati Academy of Medicine, stated that "between the ages of 10 and 40 at least one person in three is subject to partial deafness. The great majority of cases of impaired hearing date from childhood and its diseases. At least one-fifth of the cases of impaired hearing are hereditary, and are largely owing to a too close consanguinity of the parents. Deafness is more prevalent among males than among females, owing to the fact that the male is more exposed to the vicissitudes of climate. There is much more deafness in America than in Europe, and this is due to a more general use of scientific instruments, such as telephones, where one ear is used to the exclusion of the other."

ONE RESULT OF EMBALMING.—On more than one occasion chemists and physicians have shown that the present fashion of having bodies roughly embalmed shortly after death throws serious difficulties in the way of chemical analyses in cases of suspected poisoning. In a recent number of the *Boston Medical and Surgical Journal*, a physician relates a case in which a young married woman died with symptoms resembling those of arsenical poisoning. Before a post-mortem examination could be made the undertaker, as a matter of routine, introduced into the body a large quantity of a preserving fluid containing arsenic, so that the chemist's examination was fruitless and his report valueless.

CHOLERA INFANTUM GERMS.—Prof. Vaughan, of Michigan University, thinks that he has discovered the origin of cholera

infantum. It is, according to his theory, the result of a poison generated by germs in the alimentary canal. He has extracted and tested in his laboratory the specific poison in question, and hopes to be able to produce an antidote with which the patient may be inoculated. He calls the poison tyrotoxon, and finds it in cheese and all products of milk.

THE FOLLY OF NIGHT WORK.—A great many people think they economize time by working into the night. A great mistake. In the morning the body is so worn out that you cannot do your work properly. This results even if the sleep has been long, for it takes some time for the body to recuperate after a strain, if it ever wholly catches up. There is never a loss when the body is consigned to the tender mercies of sleep.

OATMEAL DRINK IS MUCH RECOMMENDED to those who are undergoing great bodily labor. Boiling water poured on oatmeal and flavored with lemon peel.

HAIR THAT IS BRUSHED REGULARLY night and morning, if only for a few minutes at a time, will require less frequent washing, and meanwhile will be clean and glossy. Too much washing renders the hair harsh and dry.

DANGER OF BABY RINGS.—An old New York specialist of children's diseases, whose book of baby patients contains as many names as the public records of a small town, considers the baby ring an idiotic species of woman's vanity. "I am opposed to them and always have been, for the reason that they shackle the child. If the mother tends to the infant there is no danger to be apprehended, but it is not safe to leave a baby and a gold ring alone with a nurse girl. In a convulsion I have seen children bruise and tear themselves with a ring, and I also know that ornaments of this sort often worry and distress the little ones. They may do no harm, but they can do no good, and for that reason off with the finger-ring and away with the bib and shoulder pin until the nursing child is old enough to enter a complaint against the cruelty and discomfort of maternal vanity."

CHAMPOO AT HOME.—Soap bark is a splendid substitute, says the *Chicago Times*, for the professional shampoo. To use it, buy a five

cent package at any drug store, and, putting a heaping teaspoonful in a bowl, pour two quarts of boiling water on it, and when pleasantly cool comb the hair from the face into numerous little partings, and scrub each with a shampoo brush well soaked with the decoction. In this way the scalp can be cleansed, and lastly the head rinsed in clear, tepid water, and dried gently. The latter is imperative. To rub into a tangle destroys the hair. It should be pressed between the folds of a towel, and then fanned. There should be no attempt at brushing or combing until the hair is absolutely dry, and then the process should begin at the bottom and work upward, the antipode of the prevalent method, which breaks and pulls "each individual hair" inordinately.

INFLAMMATION OF THE STOMACH.—In reply to subscriber would state that diet should be of the plainest kind, avoiding all indigestible and irritating food. The best authorities recommend whole and cracked wheat, rice, oatmeal and fruits containing comparatively little acid. Exercise, sleep and meals should all be taken with regularity. If subscriber has nearly destroyed the lining of his stomach with drugs and wrong living, he will have a pretty hard road to travel in the pursuit of health. Pluck and strict attention to hygienic living may pull him through. We have heard Dr. Water's flesh brush well spoken of.

THE HERALD OF HEALTH.

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THE
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No. 10.

THE HYGIENIC TREATMENT OF CONSUMPTION.

No. 3.

MICRO ORGANISMS OR BACTERIA AS A CAUSE OF THE DISEASE.

(SPECIAL FOR HERALD OF HEALTH).

It is hardly ten years (1882) since Koch, the great bacterialist, announced to the world that he had discovered a parasitic organism in the matter expectorated from consumptive persons, and that it was the true cause of this plague of civilization. I was working in the biological laboratory of Dr. Heitzman at that time, and many were the discussions had among the physicians there about it, Dr. Heitzman maintaining stoutly that the newly discovered organism, if it existed, was a result rather than a cause. Specimens were obtained from Koch's laboratory, and sure enough there they were in rich abundance. They are not, however, visible in the expectorated matter put under the microscope as it comes from the lungs, and it becomes necessary to treat it in a certain way with aniline dyes to stain them blue in order to bring them before our vision. The theory that they are the veritable cause of the disease, and that there would be no consumption but for it, has been quite generally accepted by many physicians, and

some of them are treating it in accordance with this theory by preparations

INTENDED TO DESTROY THEM

in the lungs, as the inhalation of carbolic acid vapor, hot air, etc. It is safe to say that the true hygienic treatment of consumption has been delayed by reliance on these means.

Before going into a discussion as to consumption being caused by bacteria, it will not be out of place to give a brief account of them. What are bacteria? or, as I prefer to call them, micro organisms, and what is their object or place in nature? To this I reply, they are, so far as we know, the lowest and smallest living organisms of which we have any knowledge. They belong to the vegetable kingdom, at least botanists classify them as vegetable, but without chlorophyl, the green coloring matter common to vegetables. They seem to have some of the characteristics of both plants and animals, and if there was any other suitable division of nature for them we might place them there. They multiply by division, and by spores, and under favorable conditions multiply rapidly, so that a single one might become many millions in a few days if it had a chance to do its best. Of course it never had a chance to do its best, but it does

QUITE WELL ENOUGH.

If we could ask these organisms what was their main object in life, and they could answer, they would probably say, to feed and to multiply. They do these two things, and they do them effectually. Indirectly, however, they accomplish a great deal more; and if we could interrogate Nature as to their object we should receive quite another reply. Nature would tell us that their chief good consists in the fact that they cause the rapid decay of those substances which are dead. If it were not for them the fallen leaves and trees in the wood, and the dead upturned trees also, would continue in the form in which they fell, and be reduced to their primitive elements only by the slow process of oxydation. The micro organisms, by the aid of heat and moisture, attack them, and they are soon rotten and become fit for food again for other plants. They do not always wait for things to die before

they attack them, but do so whenever they can gain a foothold, as they are able to do in feeble plants or animals.

A feeble organism is less perfectly protected against them than a strong one, but even a strong one may yield to them in large numbers or under certain favorable conditions. But

MICRO ORGANISMS, LIKE HUMAN BEINGS,

are not all alike. Some are friendly, so to speak, and do us no harm. The common atmospheric ones do not probably cause disease. The dangerous ones, like thieves and murderers, only are to be feared. Those which cause diphtheria, scarlet fever, small-pox, measles, etc., are most pernicious in their depredations on human beings.

And now we come to the question, Is consumption caused by a variety of these minute microscopic organisms, or does it come in as soon as some weakness is manifested in the lungs only to expedite their decay? These are important questions.

THE EVIDENCE UPON WHICH

the advocates of the theory that consumption originates from a special germ base their arguments upon experiments made upon animals, a method to which the opponents of vivisection vigorously object. Nevertheless, it is the only evidence they have to offer. When Koch found his bacilli in the sputum and in the tubercle from the lungs of consumptives he at once attempted to produce the disease in animals, notably the guinea pig, rabbits, cats and dogs, etc., by inoculating them with the germs taken from consumptives. In this he was remarkably successful. The experiments were made with the greatest care. Some of the animals were inoculated with other material, and some kept without being inoculated at all, so as to have negative as well as positive proofs. Every effort was made to exclude sources of error. Some of the experiments consisted in making a series of cultures of the germs

IN STERILIZED BLOOD SERUM.

That is, of laying a piece of the tubercle on the surface of the blood serum and keeping it at a proper heat, and excluding other germs, and allowing those in the tubercle to multiply in the serum; from this serum germs were implanted in other like prepared

serum, and so on till five or more cultures had been made, that is, germs had been grown whose progenitors, so to speak, for five or more generations had come from a consumptive's lung, but none of the intermediate ones had. Animals were inoculated with these germs, and they in every case developed consumption. These experiments were repeated by competent persons in different parts of the world with results, if not quite so uniform, yet nearly so. There were sufficient failures to cast some doubt upon the theory.

IN SOME CASES CONSUMPTION DEVELOPED

when other material, or none at all, was used. But these failures have not prevented the very general acceptance of the belief that consumption is due to a germ which gains access into the lungs, finds a suitable soil there for its growth and multiplication, and in the end destroys these organs.

The way in which the micro organisms are introduced into the system is purely a matter of speculation. Several ways are suggested: First and most prominent, inhalation from the air, where they exist to a greater or less extent, according to climate, soil and other conditions. They find their way into the air through the expectoration of consumptives, which become dried and, carried by the wind everywhere, they must be almost universally present in the atmosphere of populous regions, and probably bad breaths are drawn into the lungs in greater or less numbers. Second, by our food, especially through flesh and milk from diseased animals—domesticated cows are as liable to this disease as man. They abound in our dairies, and their milk is sent to market with other milk. When unfit for dairy purposes the cows go to the shambles and their flesh is sent to the market and eaten in large quantities. When it is even improperly cooked by a person whose digestive organs cannot digest these parasites, they are carried into the circulation and find

A LODGMENT IN THE LUNGS,

where they are believed to multiply and cause disease. Sound or robust persons are not injured either by breathing them or by eating them, unless in very large numbers; but the weakly and predisposed are. When a person has a cold or bronchitis the lungs

are often in a condition to take up the germs and furnish them a place to develop.

All this is, in the main, theoretical. We have no positive proof of it as the result of experience; we can only say it looks reasonable, it is possible, it may be so. The human mind is so constituted, so biased often in favor of a theory that looks plausible, that the enthusiastic say and believe it is so. This is a serious source of error, and errors once firmly fixed in the mind often continue for generations.

THE OPPONENTS OF THE GERMS THEORY

as a cause of consumption have not been idle. There are many forms of the disease quite distinct, they say. If caused by germs, this would be but one form. In about 10 per cent. of the cases no bacteria are found. If caused by them this could not be the case. They would then exist in every instance; there would be no exceptions. The germ theory takes no account of heredity, but the children of consumptives are more liable to it than others; if it were caused by a germ this would not be the case. One person would be as liable as another, other things being equal. Experience teaches us that this is not so. And again, if the germ theory were true the disease would be contagious. Every effort has been made to prove that it is sometimes conveyed from one person to another, but we really have no well attested evidence that such is the case, and, the evidence that it is

NOT CONTAGIOUS IS ALMOST OVERWHELMING.

One would think if contagious, the physicians and nurses in hospitals for consumptives, persons who are almost constantly exposed to it for years, would contract it, but they do not; or that a case in a household would infect more or less of its members, but this is rarely the case, and when observed may be explained in other ways. The almost constant appearance of the microorganisms in the tissues and expectorated matter of the consumptives, the opponents of the germ theory account for by the fact that they are always present in decaying matter, or matter not able to maintain its vitality for want of vigor, and this is why they are found in the lungs of the consumptive. There is prepared a soil suitable

for them, and they take possession of it. They may aggravate the disease, accelerate the

BREAKING DOWN OF LUNG TISSUE,

and hasten death, but they are not the immediate cause. These and other similar arguments against the germ theory have had their weight, and if they have not disproved it they have modified it so that now its advocates admit that the tubercular bacillus is harmless, except where there is a predisposition brought about by inheritance, or acquired by overwork, under-feeding, lack of physical development, and confinement in close, unventilated rooms, which we all know is a frequent cause of consumption.

DR. KOCH'S OWN VIEWS

at the present time are best shown by a brief statement from his recent address before the International Medical Congress at Berlin. He says :

“ The time had passed when the specific microbes of certain infectious diseases could be regarded as harmless or accidental parasites. Methods of culture and inoculation experiments left no room to doubt the causal relation of special micro-organisms to certain specific diseases. That this discovery had hitherto led to no striking therapeutic results argued nothing against bacteriological study. It had already given rise to many measures of undoubted utility, such as sterilization of milk, disinfection of morbid excretions, filtration of water, etc., and had furnished a sure method for diagnosis of certain diseases, such as tuberculosis and cholera. The fact that we had hitherto failed to discover the specific cause of rabies, pertussis, yellow fever, and other diseases, was no argument against bacteriological methods as at present employed. It was very possible that the causes of these diseases belonged to a different order of micro-organisms, and could not be discovered by our present methods of research. In favor of this view was the fact that the micro-organism of malaria was a plasmodium belonging to the protozoa, and not to the vegetable kingdom. The speaker believed we were just entering the second stage of bacteriology, where we should have to do with protozoa as disease-producing germs.

“Referring again to the practical results of bacteriology, Koch said that it had hitherto furnished means only for the prevention of disease, but had not helped us to cure disease already established. He thought, however, we were on the eve of practical therapeutic developments based upon this science. It was not his custom to publish his investigations until they were completed, but he would make an exception this time. He had not only succeeded in conferring upon guinea pigs, which are known to be peculiarly susceptible to tuberculosis, perfect immunity against that disease, but had also discovered means of arresting the growth and multiplication of tubercle bacilli after inoculation. If he should be equally successful in preventing and arresting tuberculosis in man, it was not too much to hope that means would be found for successfully combating other diseases.”

AS YET WE HAVE NO KNOWLEDGE

as to how the system is to be made proof against the germ. If it is to be done by vaccination, then we prophesy it will be worthless; if by fortifying the system through a wise hygiene and the maintenance of a high standard of health, then it is no discovery of Koch's, for this journal has stoutly maintained this to be the only way ever since it has been published.

M. L. HOLBROOK, M. D.

HOW AND WHEN WOMAN SHOULD REST.

The following from an article contributed by Evelyn Thorp to a metropolitan journal should be read and studied by every woman into whose hands this number of the *HERALD OF HEALTH* falls:

The generally prevalent opinion is that women rest far more than men. No notion could be more erroneous. Men work harder, with more concentration of energy on the task in hand; but when they rest, how do they do it? Observe a tired business man in the repose of home, or relaxing every muscle in the relief of his Summer vacation. He lounges in his back-tilted chair, folds his arms, speaks little, draws long contemplative puffs from

his cigar, his mind as much a beatific blank as he can make it. Now observe the average tired woman under analogous or equivalent conditions. She has probably attired herself in a gown that is too tight or too heavy, that oppresses her wearied limbs; she has taken some useless piece of fancy work in hand as a "relaxation;" and her mind is following the flight of her tongue which is discoursing feverishly of the deceptiveness of servants, dressmakers and children. The man, at the end of an hour of the sort of repose he grants himself, is rested; the woman, at the end of the same time, is more tired than when she sat down. The farther we get from the standards of a prospective culture, intellectual and physical, the more we are impressed with this absolutely stultified feminine ignorance as to what rest, "restful" rest, means. To a farmer's wife to "lie down," except

IN CASE OF EXTREME ILLNESS,

is a thing that in a certain occult way carries a flush of shame with it. Women of her class believe in "keeping up" till they drop. And physicians know that when they so "drop" it is generally for good and all. The rest given and taken by the most hard-worked hack horse many such women deny themselves day in and day out for months, for years. To every person there is allotted a certain amount of strength according to his or her constitution. This expended, nature draws on her reserve force. Every output of this reserve force consumes nerve tissue as surely and palpably as combustion consumes wood. Yet in the face of this obvious fact women continue in the large majority of cases to live on this reserve force with a blind improvidence and indifference as to the inevitable end that seem little short of criminal, and that certainly are amazing when one considers how dear are youth and its freshness to women's hearts. It is a saying of a well-known medical man who has been in charge of a sanitarium for many years that "Every woman, however robust, should lie down and rest comfortably, body and mind, for a half hour every day, and when she feels she can least easily take the time then, most especially, should she do so."

REST OF BODY AND MIND.

Now, how is this rest—which gives nature a chance to recruit her waste tissues, which keeps freshness and bloom to the cheek, firmness to the contours of the face, brightness to the eye—to be obtained? What hygiene certainly teaches more and more is that women must rest systematically—as systematically as they would go through a course of gymnastics or a regime of diet—if they wish to gain or keep beauty of face and form. The “rest cures,” emphasize continually the fact that all and every exertion is made at the expense of nerve force. In treating patients suffering from nervous prostration and kindred troubles, it is impressed upon them that they cannot even extend an arm casually without literally losing a certain amount of vital energy. For three weeks they are made to lie in a condition of utter passivity of body and mind, while the wasted forces slowly recruit.

AT THE END OF THAT TIME

the patients are “built up” on nutritious food and finally sent back to the world and their friends rejuvenated, refreshed, all the beginnings of wrinkles smoothed away, a new lease of youth in their hands. Now this prescription, and this alone, is, in moderated doses, the one to accept with regard to rest. If a woman is physically and mentally wearied and unstrung, let her never, under penalty of losing youth and bloom long before the needed time, attempt to “stave off” fatigue. Strong coffee or the stimulous of some new form of excitement may cheat her into the belief that she did not really need rest, and the result of her ignorant outrage to the demands of nature may not be then and there apparent. But let her be quite assured that for each and every such mistake committed she pays with an accelerated gray hair, an incipient furrow, one more nail in the coffin of that precious gift of youthful beauty that, at the best, vanishes all too soon. Rather let her treat every such warning of nature with immediate respect. The position in which to attain perfect repose and relaxation of all the muscles is a totally recumbent one, with the arms stretched out. This would be the position of the body of

A MAN WHO HAD BEEN DROWNED.

It is the position the body takes when all the nerve force is drawn

out of the limbs, leaving them limp, and concentrated in the nerve reservoir at the base of the brain. When unusual fatigue of mind or body has been gone through, throw the body on a lounge or bed, lie flat and still with the limbs thus limp and out-stretched and the head rather low. Have a darkened room and keep the brain from "fidgeting"—resolutely putting away any insistent thought. Reserve one-half hour out of a busy day for this absolute repose of every nerve and muscle, and have it a law of the household that neither visitors nor children nor servants nor any outside claim or demand shall in any way interrupt or interfere with this brief period of retirement. It may take a little determination to enforce this law at first and to keep it oneself, but it is an unfailling experience that women who do this have uniformly more restful sleep at night, quieter nerves at all times and a degree of healthful freshness which remains to them through the years. A short sleep may do if one fall into it naturally, but the rest itself will be equally refreshing in most cases. There are times when necessary periods of prolonged mental and physical strain supervene no rest can be taken.

WHEN THESE PERIODS OCCUR

there is but one thing to be done, prolong the period of subsequent rest accordingly. Go to bed, resting, if need be, several days. Rest thoroughly, at any cost. Now, there is a large number of otherwise intelligent women who would look upon any such practice as an encouragement to sloth. For their peace of mind let it be remarked that the hygienic laws of resting will go hand in hand with a paradoxical recommendation made by hygiene with equal force: That work usually, when work is to be undertaken, should be done with the fullest expenditure of energy possible. To drag through the hours neither healthfully getting rid of stored-up vitality, for the relief of the nerves, nor healthfully resting to form new vital forces, is to have sallow cheeks and dull and sunken eyes. To work hard and then rest well is to look young and to keep young—to have strong and well-pitched nerves and muscles, and, as a corollary, bloom and brightness of contours and of color.

THE GRIP AND HOW TO AVOID IT.

THE grip has again broken out in Europe, and we are likely to have another visit from this disagreeable complaint the coming winter. In the current number of *Demorest's Monthly*, S.W. Dodds, M. D., of St. Louis, whose reputation as a hygienist is well known throughout the country, contributes an interesting article on the grip, from which we take the following sensible notice :

“ We must never forget, in these investigations, that there are just five great depurators in the human body—five doors, so to speak, through which the impurities of the system are carried out; and the largest of these ‘doors’ is the skin, or rather, this great depurator consists of millions of little windows or openings. Close these and life would very soon become extinct; obstruct these, weaken their action, and sickness will speedily follow. The activity of the skin is of far greater importance in the vital economy than most persons seem to think. Our good health depends upon it, whether we know it or not; and much debility and suffering come from neglect in this respect. A simple sponge bath daily, or at least every other day, the water cool or tepid, and the sponging followed by good vigorous hand-rubbing, would go a long way toward the maintenance of health and the reduction of doctors’ bills.

ANOTHER THING

that many are careless about is in permitting the temperature of their sitting-rooms to rise entirely too high; instead of keeping them at 68° or 70°, they are often as high as 80° or upward. Women, especially, are inclined to have their rooms too warm. This comes partly from their not taking exercise daily in the open air; they get sensitive from being housed-up too much. Another reason why they feel the cold more, and complain of being chilly, is because of the unequal distribution of clothing. As a rule, women are overclad from below the waist to the knees, and underclad on the extremities. A little attention to this matter would be a great source of comfort, and also prevent much mischief. Still another trouble comes from bad ventilation; impure air is even worse than hot air, and both together are the worst of all. Many attacks of pneumonia are due to

THE EFFECTS OF FOUL HOT AIR.

“The conditions that I have just named are, to some extent, present every winter, and just to that extent do we have influenza and pneumonia ; but, fortunately, these conditions are not usually present in such force as to produce an epidemic. Those most likely to suffer from influenza are either the feeble ones, or those who are gross in their habits ; and in either case the recovery is apt to be slow. The symptoms are so well known that I need hardly refer to them, the sneezing, headache, backache, general aching of bones, languor, fever, depression—these are the prevailing diagnostic symptoms ; and the treatment is essentially the same as for bronchial pneumonia.

“PERHAPS I CANNOT DO BETTER,

in this connection, than to quote the late R. T. Trall, M. D. A tepid ablution, frequently repeated (according to the general feverishness) and followed by the dry-blanket envelope, when the body feels chilly after the bath, is what he prescribes. He also uses the chest wrapper wrung from warm or hot water, and well covered with a dry one over it ; this when the lungs are considerably affected. Besides the above treatment, he employs the hip and foot baths for their derivative effect, particularly when the abdominal viscera are disproportionately disturbed. Generally the bowels require to be moved by free injections of tepid water at the outset ; and when there is considerable nausea, with retching, the warm-water emetic should be administered. The general regimen is the same as for simple fever : a little cooling fruit or fruit juices, plain bread or toast, and not too much of it, gruels, barley water, etc. For drink, pure water, sour lemonade, and bits of ice, if they are needed. A lemon-ice, not too sweet, is sometimes relished. In severe cases, there should be frequent fomentations to the lungs, these followed by tepid sponging, with cool compresses if there is much fever. Where the patient is feeble, less treatment must be employed ; and it must be administered in such a way that prompt reaction will follow.

“ IN MOST CASES

mild derivative treatment is excellent ; as foot-baths, shallow sitz-baths, etc. The treatment over the lungs, as compresses, fomen-

tations, etc., should not be made too continuously ; leave them off for a time, and let the skin react. It is a good plan, often, to remove the wet compress from the lungs now and then, dry with a hot crash towel, and then put a warm flannel in its stead. Where the case is complicated with pneumonia, this form of treatment is particularly grateful.

“ AFTER THE PATIENT IS FAIRLY CONVALESCENT all active treatment should be discontinued ; very little is required at this stage except good nursing, and to see that the patient does not over-eat. When he begins to get around, he will have to be careful in many ways ; a little undue exposure or overwork will affect him unfavorably. Where the patient is constitutionally weak, it will be some time before he feels quite well.”

TREATMENT OF BRIGHT'S DISEASE.

A GREAT deal was likewise said at the Berlin Congress about the treatment of Bright's disease, but there was nothing very new in it all. The opinion still seems to be that animal food, bouillon and vegetables containing a good deal of potash should be forbidden, whereas a milk diet and green food should be recommended. Mr. Grainger Stewart, of Edinburgh, called attention to the influence of climate on patients suffering from Bright's disease ; exposure to cold and dampness are to be particularly avoided ; *sejour* in a malarious district has the most deleterious effect on them. Their diet should consist principally of the hydrates of carbon, and a milk diet is indispensable. The milk can be made more appetizing and of easier digestion by adding to it a little lime or seltzer water.

THERE IS NO DRUG

that is capable of effecting a cure. Mr. Rosenstein, of Leyden, is of opinion that the principal advance we have made in the treatment of chronic Bright's disease is connected with the preponderance that has been given to hygienic and dietetic means over pharmaceutical substances. We know of no drug that has any certain influence on albuminuria ; we have only at our disposition remedies capable of

WARDING OFF CERTAIN COMPLICATIONS.

Mr. Rosenstein calls attention also to the fact that the abuse of milk diet often entails gastric disorders, and that, on the other hand, the diuretic effect of milk troubles the patient's sleep. He closed by protesting against the use of calomel, which several physicians had recently proposed.

Bright's disease, one physician claimed, is far from being incurable. The secret in the whole affair, he says, is this—that there is no single universal method of treatment, and that the therapeutical course to be followed depends entirely on the individuality of each patient.

EDITOR'S STUDY.

HUMID ATMOSPHERE FAVORS TRANSMISSION OF TYPHOID FEVER GERMS.—To determine the relation between the humidity of the atmosphere and the transmission of the typhoid bacillus a physician recently experimented as follows: A current of dry air completely devoid of germs was conducted through a vessel containing a beef broth culture of the bacillus, and into a second vessel containing sterilized beef broth. The second vessel remained sterile. The result was the same when a dry atmospheric current was passed over pumice stone saturated with a culture of the typhoid bacillus. When moist air was passed through the same vessels a very different result was obtained. The sterile beef broth culture was found, after the lapse of a quarter of an hour, to be thickly planted with the bacilli. In nature, says the medical journal which reports the foregoing, this state of humidity is supplied by mist or fog, and statistics show an increase of typhoid fever in Paris during the months of October, November, December and January. The most general mode of propagation of typhoid fever is by the contamination of the soil or water, but there are cases in which it is manifested by pulmonary localization. The germ may penetrate into the bronchial system in spite of every means of defense possessed by the organism.

ONE THEORY ABOUT HEADS AND BRAINS.—Dr. Starr, of London, says that it is impossible to draw any conclusion from the size or

shape of the head as to the extent or surface of the brain, and so as to the mental capacity. It is absurd to judge of the brain surface by either the size of the head or the extent of the superficial irregular surface which is covered by the skull, without taking into consideration the number of folds or the depth of creases. "For a little brain with many deep folds may really, when spread out, have a larger surface than a large brain with few shallow folds" Phrenologists will probably dispute this theory.

THE INJURIOUS EFFECT OF RAILWAY WHISTLES UPON THE HEARING.—An eminent Glasgow aural surgeon, Dr. Thomas Barr, has communicated to the British Medical Association some valuable data concerning the injurious effects of railway whistles upon the hearing. In railway whistles the arrangement for regulating the pressure of steam passing through from the boiler to the whistle is not usually sufficiently delicate. If the boiler should be under high pressure the whistle is very much louder and shriller than when it is under low pressure. So that when a passenger train is leaving a station for a long run, and having therefore its boiler under high pressure, the whistle is unnecessarily loud and shrill, just when those qualities are least required. Dr. Barr urges upon the attention of the association the adoption of lower pitched whistles, with proper regulators, so as to lessen the present jarring of sensitive ears and nerves.

A WISE PRECAUTION.—A firm of chemists in Birmingham, Eng., place upon all poisons sold by them directions as to the antidote which should be applied in cases where the poisons are taken accidentally or intentionally by human beings. An English chemical journal gives an instance where this precaution was the means of saving life. A woman poisoned herself and then informed her husband that "she had done it." A medical man was at once sent for, but in all probability the woman would have been dead before he arrived but for the fact that her husband chanced to read on the label which accompanied the poison the instructions; "Give a mixture of chalk and water, milk and magnesia or carbonate of soda and water until medical aid can be procured." The result is that the would-be suicide is alive to-day.

THE MORTALITY OF WIDOWERS FROM PHTHISIS.—In a paper on tuberculosis in Belgium, MM. Destree and Gallmaerts come to the conclusion, as the result of their investigations, that, in comparing the mortality from phthisis of bachelors, married men, and widowers, the last are very much more subject to this disease than either of the other classes. The same statement holds good for all ages, and it is, they say, also true that widows are more liable than single women to die of phthisis. The authors do not think this is to be explained except by direct contagion of wife to husband or husband to wife. They cannot think irregularities and excesses indulged in by widowers can be answerable for it, for advanced age does not seem to make any difference. They would ascribe it to infection occurring during married life, the disease claiming its second victim some time after the death of the first.

WAGGING THE TONGUE IN SLEEP.—Many persons, of all ages and both sexes, in perfect health cannot hold their tongues when asleep. This habit is due to indigestion or to cerebral irritability. The remedy is an early meal before going to bed, taking half a pint of cold water before putting the head on the pillow, and always sleeping on the right side—never on the back. In case of premature wakefulness a copious draught of water usually induces sleep.

EFFECTS OF ELECTRICITY AND OZONE ON MILK.—It is well known, says the *London Times*, that during thunder storms milk tends to grow acid. An Italian, Prof. G. Tolomei, has lately tried to throw some light on the nature of this action. He experimented with electricity on fresh milk in three different ways—first, by passing the discharge of a Holtz machine between two balls of platinum inserted nearly two inches apart in a bottle containing milk; second, by sending a battery current between two strips of platinum at the bottom of a U tube holding milk; and, third, by subjecting milk in a test tube to the action of a strong battery current through a silk-covered copper wire wound spirally round the tube. In each case the acidulation was delayed, not hastened. Three equal portions of milk from the same milking, thus treated, began to grow acid on the seventh, the ninth, and the sixth day respect-

ively ; while milk not treated with electricity was manifestly acid on the third day. The electrified milk (unlike milk that has been heated to a high temperature, then cooled) coagulates naturally, or by action of rennet, just like ordinary milk. Having thus seen that electricity could not be the direct cause of acidification of milk, the professor next tried the effect of ozone, and found it distinctly acidifying. In one case the surface of a quantity of milk was brought close under the two balls of a Holtz machine, and the milk soon became acid in consequence, the sooner if the discharge was silent (not explosive), in which case more ozone formed. In another case ozonized oxygen was made to bubble up through a quantity of milk, which in a few hours was completely acid and soon coagulated spontaneously. Prof. Tolomei is of opinion that oxygen probably also promotes lactic fermentation (a point which has been disputed). If milk keeps longer in wide, shallow vessels, that is probably due, he thinks, to the cooling produced by evaporation, which is favored by a wide open surface.

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

WOMEN AND THE HOUSEHOLD.

CONDUCTED BY HELEN FLETCHER.

COLD COMES THROUGH THE FEET.—A noted medical author observed : "No doubt much of la grippe comes through the feet. Thin-soled shoes, or thick soles, standing on ice or snow or cold wood until the sole attains the same degree of cold as that on which it rests ; then cold feet, cold legs, cold abdomen, cold lungs, cold in the throat, in the head ; the eyes, the nose, the mouth speaking witnesses, testifying to the body resting on the feet and the brain resting on the body that a plain violation of every reasonable rule of health has been permitted, to be paid in penalty of suffering and pain ; of lost time, of care and anxiety of friends, it may be of death—is not this and this result sufficient warning?"
—*Machias Union*.

THE ROSE BATH NOT SO EXPENSIVE.—It is a luxury far off, desirable but unattainable, so says the practical mind ; but not so. This luxury of the ancients can be obtained by the nineteenth century maiden at a cost second to nothing. The bath of roses can be made as follows: The warm water, in quantity amounting to the usual requirement of the bath, is first softened by stirring into the tub finely sifted oatmeal, into which also is added half a pint of glycerine; lastly put into it two drops of attar of roses. If the massage treatment be available, use it by all means; if not, let a coarse towel and hard rubbing serve the purpose of the massage system. This bath is simply fine, as it softens the skin and blends perfume into each line of the body. After all, to obtain it is a simple thing, too; the two drops of attar of roses being the greatest expense of all.

HOW TO MAKE HOME ATTRACTIVE.—If every wife, mother and sister fully understood how little it takes to make home cheerful and lovely, they would never consider the time spent in so doing as lost. The furnishing of a home should not represent dollars and cents to any great account, but it should be made homelike and attractive. Let there be flowers, plants, books, papers and

music, not for mere show, but for use. One of the prettiest home rooms I ever saw was entirely free from expensive furniture. There was always a dot of some sweet smelling blossoms on the table, and a few books and papers scattered around, a few easy chairs, two or three good engravings, but no one entered that home without exclaiming, "How homelike! how attractive!"

FASTING FOR HEALTH.—A well known woman physician says she keeps herself in perfect health by occasional days of entire fasting. Her stomach rests meanwhile, and the system uses up the clogging material on hand in the body, and is ready to start over new when the mistress of the machine begins to add fuel once more. A writer in the English Illustrated Magazine is positive that mankind eat more than is good for them. For gout, rheumatism and kindred chronic ailments a celebrated London physician prescribed less eating and drinking and charged his patient twenty guineas. The writer remarks further: I venture to believe that all society would gain by diminishing the consumption of meat. Queen Elizabeth ordered a fish diet on Wednesdays and Fridays, not for any ecclesiastical reason, but (ostensibly at any rate) to encourage the fish trade and to diminish the demand for flesh. That interference with the market was not wise; but I think that the adherents to the vegetarian society will do good if they persuade multitudes to learn the value of whole meal bread, and oat meal, and vegetables, and fruit, and not rely so exclusively on beef and mutton. The poor especially might find in porridge and lentil soup and well cooked vegetables a far cheaper, more wholesome and more sustaining diet than the often unsatisfactory, coarse and even unwholesome scraps which they buy from the butchers at a far greater cost.

HELPS IN CLEANING.—For cleaning windows and mirrors, one of the best things is plain soft water and chamois leather, having a dry chamois leather as well to polish with afterward. This process will not answer near the sea, because of the salt in the atmosphere. For polishing furniture, beeswax and turpentine is very good; but plenty of elbow grease is essential. The walls of each room should be well brushed; a duster should be tied over a broom

and then passed up and down. The duster must, of course, be shaken from time to time. Wash the frame of mirrors or pictures with a very soft shaving brush and cold soft water. No soap must be used. To dry, daub it over with a very soft towel or old piece of linen until all moisture seems removed. To wash china, such as Dresden, Coalport, etc., use a very old soft shaving brush and hot soft water and yellow soap. Dry in the same way as the picture frames. The shaving brush gets into every little crevice, and is a very valuable little instrument for china washing. Curtains should be taken down and shaken and brushed well. In most houses those curtains used in the winter are put away at the time of spring cleaning, and others of lighter texture are put up in their places. This is an excellent plan, as the hot summer sun fades dark curtains very much, and, on the other hand, the lighter ones look so much fresher, and are an immense change. The dark curtains should be very neatly folded, and a piece or two of camphor put between the folds before putting them away. If, however, they are faded and require dyeing, they should be sent when taken down, so that they will be ready to put up again when the cool autumn breezes make us appreciate the return of cosy-looking curtains.

A VALUABLE HINT.—Housekeepers do not always understand that a chicken, after the animal heat leaves the body, is not fit for food in less than twenty-four hours. During this time the muscles are stiffened by the rigor that succeeds directly after the departure of animal heat in all animals, and are tougher than they are at any time previous. In many parts of the South cooks kill and dress poultry with great rapidity, and plunge the pieces of chicken, while they are still warm with animal heat, into the frying kettle. This secures the tender, succulent dishes of fried chicken which are justly the pride of the old Virginia cook. An equally good and tender dish of chicken may be attained by keeping the fowl till the muscles relax, and it is in prime condition for food. In fact, only by the rapid process of frying can a chicken be cooked done before the muscles stiffen. This the Southern cook knows, and she never attempts to fricassee or roast a fowl that has not been hung at least twenty-four hours.—*New York Tribune.*

FOR HOUSEWIVES TO TRY.—In a bulletin issued by the division of entomology department of agriculture, Dr. C. V. Riley, writing of insect pests of the household, after describing various species of cockroaches, says: "In the latitude of Washington and further south the croton bug eats everything which contains paste, and consequently wall paper, photographs, and especially certain kinds of cloth book bindings, suffer severely from their attacks. In a recent number of *Insect Life* will be found an account of severe injury done to certain of the important files in the treasury in Washington, the bindings of many important public documents being disfigured and destroyed. In the office of the United States coast and geodetic survey they have become an intolerable nuisance by eating off the surface and particularly the red and blue paint from drawings of important maps. But I need not elaborate further upon the damage which they do. How to kill them and prevent this damage is the question. Without condemning other useful measures or remedies like borax, I would repeat here what I have already urged in these columns, viz., that in the free and persistent use of California buhach or some other fresh and reliable brand of pyrethrum or insect powder we have the most satisfactory means of dealing with this and the other roaches mentioned. Just before nightfall go into the infested rooms and puff it into all crevices, under base boards, into the drawers and cracks of old furniture—in fact, wherever there is a crack—and in the morning the floor will be covered with dead and dying or demoralized and paralyzed roaches, which may be easily swept up or otherwise collected and burned. With cleanliness and persistency in these methods the pest may be substantially driven out of a house, and should never be allowed to get full possession by immigrants from without. For no other insect have so many quack remedies been urged and are so many newspaper remedies published. Many of them have their good points, but the majority are worthless.

MOTHERS AND THE NURSERY.

(CONDUCTED BY MRS. F. C. PRESSLER.)

INDIFFERENCE TO THE HEALTH OF CHILDREN.—I am often surprised at the seeming indifference or the real callousness of many mothers regarding the illness of their children. Within a year the question has been asked of three different mothers, "How is your little one who has been ill?" And the reply has been substantially the same in each case: "Oh, he is pretty sick, but it is nothing serious; he will get over it." The repetition of this phrase has struck home and has awakened thought. Will the child get over it? Is it not doubtful whether the young stomach which has been so badly disordered that the little patient has had to lie in bed for days will ever entirely be what it would have been without this illness? Do not the severe attacks of bronchitis and pneumonia which afflict so many children leave an abiding mark behind them? Is not the case very much like that of the cracked or mended bowl? It may serve a good many purposes still, but it can never be so strong nor so useful as it was before it was injured. The fact is that parents expect their children to be ill. They are astonished if a year passes without more or less serious invalidism among them. It is probable that some indisposition in an ordinary family of four or five persons or more is inevitable; but if there be a wise mother in charge this illness ought seldom to be serious enough to keep the patient in bed. Utter prostration usually argues a long course of improper living beforehand. It has too long remained unrecognized that the human body is a machine, and that its normal method of activity is in a regular routine. Children should eat as nearly as possible the same sort of food—not necessarily the same articles, but about the same proportion of nitrogenous and other foods, every day at regular hours, and never at other times. They should go to bed and get up at the same hours daily, the ventilation of their sleeping apartments, the regulation of their bathing, clothing and all the physical operations which maintain health should be arranged with as accurate method as is practicable, always avoiding the cast-iron

system. There is no need of much nor hard illness in an ordinary family, and unjust as the assertion may sound, there is bad management in the household where it is otherwise. To tell the truth, the carelessness, the ignorance or the weak indulgence of mothers is at the bottom of three-fourths of the ill health and mortality that is so shockingly prevalent among children. These mothers become used to sickness in their families, hardened to its enormity, and they really do come to think that it is a small thing. "He will get over it." The chances are ten to one that he does not get over it, but that he feels it more or less to the day of his death, which is hastened because of it.—*Kate Upson Clark in Burlington Hawkeye.*

INFANTILE DON'TS.—Even the baby is the victim of reform. Methods employed twenty years ago are intolerable in the nursery of to-day. The infantile don'ts are almost as numerous as the etiquetical negatives. Among the approved are :

- Don't rock the baby.
- Don't let him sleep in a warm room.
- Don't let him sleep with his head under the cover.
- Don't let him sleep with his mouth open.
- Don't "pat" him to sleep.
- Don't try to make him sleep if he is not sleepy.
- Don't let him nap in the afternoon.
- Don't let him be kissed.
- Don't let him wear any garment that is tight enough to bind his throat, arms, waist or wrists.
- Don't have ball buttons on the back of his dress.
- Don't have clumsy sashes on the back of his dress.
- Don't cool his food by blowing it.
- Don't feed him with a tablespoon.
- Don't use a tube nursing bottle.
- Don't change the milk you started with.
- Don't bathe him in hot or cold water.
- Don't bathe him more than three times a week.
- Don't allow a comb to touch his head.
- Don't let him eat at the family table.—*Toronto Globe.*

LIME WATER AND MILK.—When the stomach is intolerant of food it is the general practice of physicians to order lime water to be given with milk, and if they are rightly given they are almost always well borne. But unless duly instructed as to the necessary proportions of each, the majority of people are quite sure to make the mistake of not using enough lime water. It is of course only of value as an antacid, and it is but very slightly alkaline. As compared with the bicarbonate of soda, an ordinary dose of the same is equivalent to six ounces of lime water. So a tablespoonful of the latter in a cup of milk—the scanty proportion used by many in sickness—is really of no value. To obtain an action of any moment it is necessary in giving milk and lime water to have the mixture contain the latter in proportion of at least one-third. Very often where they are in equal parts the milk is vomited up in hard, sour curds, in which event, if the mixture has not been given too freely, it is best to use a stronger antacid. Bicarbonate of soda is a good substitute, and about a teaspoonful should be dissolved in a large cupful of water, and that solution be added to the milk in place of lime water.—*Boston Herald.*

TEACH A BOY CARVING.—Carving is a most important art in a boy's education. From the time he is old enough or large enough to wield a carving-knife and fork, he should be allowed to grace the paternal seat, at times, even if it is disastrous to the turkey to the table, to the dining-room and the lives of the rest of the family. It is better that he should struggle with the family turkey, where he is expected to disgrace himself, than to disgrace a turkey, an elegantly appointed table, decorated walls, dinner dresses, and then commit suicide, or want to, at a dinner-party, where he is unexpectedly called upon to supply the place of an absent host.—*Chicago Herald.*

A BOY'S IDEA OF HIS FATHER.—At ten years of age a boy thinks his father knows a great deal; at fifteen he knows as much as his father; at twenty he knows twice as much; at thirty he is willing to take his advice; at forty he begins to think his father knows something after all; at fifty he begins to seek his advice, and at sixty—after his father is dead—he thinks he was the smartest man that ever lived.

THE ANTI-CIGARETTE LAW has gone into operation in New York, and henceforth all boys in the State under sixteen years of age have to smoke the pernicious baby cigar surreptitiously. The police are empowered to make arrests of young smokers who violate the law. Although there is a strong public opinion against the cigarette, there is some objection to the law mentioned, because of its paternalistic nature. But the minor must be prevented from injuring his health until he comes to the age of reason, just the same as the minor is protected by the liquor laws where they are enforced. Cigarettes contain creosote, arsenic and opium, and many young men have paid for immoderate indulgence in them with their lives.

OVERSTUDY AND UNDERFEEDING.—The real danger to health from study in this country, we are inclined to think, is not in colleges and advanced institutions—which, as we know, provide exercise—but in public schools and high schools, which do not. We believe these, if investigated, would show a shocking disregard for health. The stairs alone in the tall buildings put up by school committees for normal schools are enough to kill young women. Overstudy and bad feeding do the rest. Out of ninety girls in a New York public school questioned in the course of an inquiry by an association of collegiate alumnae twelve had eaten no breakfast, and six of these had brought no lunch. In a class of forty girls from sixteen to twenty years an average of one-tenth came without breakfast, and school girls' lunches have been for a generation a jest to the thoughtless and to the observant the cause of endless illness.—*Philadelphia Press*.

HEALTH INVENTIONS AND APPLIANCES.

EDISON'S ELECTRIC CURE FOR RHEUMATIC ENLARGED JOINTS.—Among the subjects of interest presented at the recent International Medical Congress at Berlin, was a paper by Thomas A. Edison, giving an interesting account of his experiments in the treatment of gouty concretions by electricity. He learned that the salts of lithium were used in such cases internally with the theory of forming the urate of lithium, which was soluble and could be dissolved and excreted from the body, and that the difficulty met

with was the practical one of getting the salts in the system. It occurred to him that the principle of electric endosmose, or the principle by which the transmission of solutions through a membrane is accelerated by the steady application of a current of electricity, could be successfully applied in such cases. He made an exhaustive series of experiments with this end in view, first to prove that the transfusion of one solution to another could be accelerated by the electric current, and after that had been successfully established on the living patient. The first subject that he took was a perfectly healthy man, and the continuous electric current, as strong as he could bear, was passed through him for two hours daily. The patient's hands were immersed in two jars, and these connected with the poles of the electric current. In the positive jar was a solution of the salts of lithium, and in the negative jar a solution of common salt. The result showed that the fluid excretions were strongly impregnated with lithium. Another patient was then taken who was suffering from an aggravated form of gouty concretions. The finger joints were swollen to an enormous size, those of the little finger measuring nearly three and a half inches in circumference. This patient was treated precisely in a similar way as the former, except that the current was much stronger and the treatment was for six hours daily. After fourteen days the reduction of the size of the finger joints was great, and the pains that had been constant in the fingers before the treatment were entirely absent. Mr. Edison closes his paper with this statement: "From these experiments I think it fair to conclude that satisfactory use can be made of the principle of electrical endosmose in this class of cases." The paper was received with the manifestation of much interest by the congress.

PUBLISHER'S DEPARTMENT.

OUR FRIENDS CAN TRY TO SECURE us new subscribers by calling the attention of those interested in hygienic matters to the fact that the magazine is sent from October, 1890, to December, 1891, for One Dollar to all parties whose names are sent in without delay. Fifteen copies of the HERALD OF HEALTH for One

Dollar are certainly cheap enough. In no other publication can such valuable information upon the care and preservation of health be obtained.

QUESTIONS OF INTEREST ANSWERED.

THE PULSE.—*J. C.*—As far as we can understand, there is nothing the matter with your pulse. In health the pulse reaches its height at noon and is at its lowest point at midnight. It is more frequent in a standing than in a sitting position; and slower yet in recumbent posture. The natural pulse of the adult man is from 60 to 70 per minute; of the adult woman, about ten higher. In the new-born infant it is from 130 to 140; in old age, from 50 to 60. In disease, says Dr. Danielson, there are great deviations. It has been known to be as low as 17, as in profound coma, and as high as 200 a minute in hydrocephalus. We have also the strong and weak pulse, the full and small, hard and soft, rigid, tense, wiry, thready—all which have to be learned by careful observation.—For human food olive and cottonseed oils are far superior to lard, or to any other animal fat. Olive oil has held that rank in the estimation of scientists and medical men from the earliest period of recorded history. It is only of late years that analysis by chemists, experiments in diet by eminent physicians, and practical use by skillful housekeepers have combined to demonstrate that in every respect and for all uses the oil of the cottonseed is equal to that of the olive.—We can procure for you an excellent work on phrenology at \$1.00 for bound edition, and 40 cents for paper.

ANOTHER METHOD OF GETTING FAT.—Suppose *J. W. F.*, who asks for a process of fattening, tries the following: One of the drivers on the Wheat street line is getting fat on sweetened hot water. He weighed 153 pounds. He had his dinner sent to him every day, but was troubled for some time as to what he should drink, as he did not use coffee. He tried hot water tea, but that did not suit him, so he began to take a small coffee pot full of sweetened hot water at every meal. He liked it so much that he continued

its use, and would now miss it as much as an inveterate coffee drinker would miss his morning cup of Java. The driver began to fatten, and now weighs 213—sixty pounds more than he weighed before he began drinking hot water.—*Atlanta Journal*.

SKIN GRAFTING.—More or less successful attempts have been made to graft nearly all the different tissues of the body, including skin, bone, teeth, muscle, nerves, eyes, mucous membrane, etc. Dr. W. G. Thompson now reports a successful experiment in brain grafting, a small piece of the brain of a cat being made to grow on the brain of a dog.

SELTZER WATER AS AN ANAESTHETIC.—Seltzer water is used as a local anæsthetic by Dr. Voituriez, of Berlin. Two or three siphons of the water produce insensibility of the surface to be operated on, the effect lasting about five minutes and being due to the carbonic acid in the seltzer.

MEDICUS.—Subcutaneous injections of ammonia represent a new remedy for acute alcoholism. It is directed to inject under the skin a mixture of one part with two to six parts of water. Two or three minutes after the hypiodermic and erysepelalous redness is observed around the puncture, and the next morning some soreness. It is claimed that the patient, comatose from alcohol, recovers consciousness within three minutes after such an injection.

THE HERALD OF HEALTH.

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THE
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No. 11.

HYGIENIC TREATMENT OF CONSUMPTION.

No. 4.

BY M. L. HOLBROOK, M. D.

PREVENTION OF CONSUMPTION.

IN the early history of mankind, when the intellect was shrouded in darkness and superstition prevailed everywhere, diseases were ascribed to every imaginable source except the true one. Even among uncivilized races this is the case to-day, and among civilized ones there are those who still ascribe them to supernatural causes, as the punishment of an angry god on his people for their sins. So long as a supernatural origin is believed in, preventative medicine can have little play. An Indian medicine man would frighten off the evil spirit that afflicted his patient by noises and by incantations, and a more civilized man would fast and pray to his God to

SHIELD HIM FROM EVIL

which he had brought upon himself by violation of the laws of his being ; but a rational man will seek the true causes if he could discover them. It is the province of hygiene to do this, and its rapid advance during the present century is one of the surest evidences of human progress that we can possibly have, and of the beneficent results of the study of science and its application to human welfare. From this standpoint how shall we pre-

vent consumption—cure it before it exists? Shall it be by magic and the incantations of superstitious races? Shall it be by pleading with our heavenly Father that He will not inflict on us the punishments properly due for our sins? or shall it be by obedience to those laws of our being which He has instituted for the government of our conduct? Let us rather pray that we may find out what these laws are, and obey them so far as in our power.

THE PREVENTION OF CONSUMPTION

might very properly begin before birth. If we could choose our ancestors we would even go back several generations and find those who were strong, hardy, industrious, and whose instincts were perfect and intelligent; but not being able to do this we must do the best we can. Children should not be begotten when the constitution is exhausted by excesses of any kind. The prospective mother should live a rational, healthful life, and not an idle, dissipated one. If there is any hereditary taint it may be overcome in the children by living rightly, by keeping the health up to a high standard by good food, abundance of fresh air, and as much out-of-door life as is possible or needful. Mothers who confine themselves indoors in bad air—other conditions being the same—have the most feeble children. The children born in cities where such conditions prevail have the highest death rate, and those that survive infancy have the poorest constitutions. Those who

LIVE IN MALARIOUS REGIONS

are often so injured by malarious air that almost as bad results follow. Those who are underfed or poorly nourished cannot give birth to hardy offspring. Even a person not quite so robust, who lives a normal life and is much out of doors, may become the parent of healthier children than one who has a good constitution but lives in confinement and a vitiated air. Excessive child-bearing must also be avoided, for it leads to degeneration and is a cause of consumption. Just what excessive child-bearing is must be determined by each one separately. Two or three might exhaust one mother more than eight or nine, or even a dozen, another.

AFTER THE CHILD IS BORN

it must have rational care and be given a good chance in the race of life. The art of caring for children ought to be mastered by every parent, and mothers should not trust altogether to their instincts or to what is told

them by others as ignorant as themselves, or even by a little reading, but make the subject a profound study. They should be well fed, always have abundance of fresh air and light, be suitably clothed, and their physical culture properly attended to. As they grow into youth, there should be no over-crowding, no exhausting cares, but every opportunity given that they may grow physically, as well as morally and intellectually, nor should there be any idleness. Idleness gives opportunity for morbid development and every species of bad habits. Employment is essential, it is only our shunning that injures. I can only hint at the ideas I have on this subject. Those interested will find help in other treatises devoted specially to the subject.

I NOW COME TO SOME OF THE SPECIAL

suggestions for preventing consumption in those who have grown up and have some tendency to it, either through some ancestral taint or acquired since birth by errors in life through ignorance or other means. One of the first things to be prevented is the taking of colds. As already explained, they are indirect if not direct causes of consumption; and so every cold prevented is so much gained, while every one taken is a positive injury if not a danger. The best methods of preventing colds must be learned. Those who live much in the open air are less liable to them than those who debilitate their constitutions by over-heated rooms and deteriorating habits. This then may be laid down as a rule, that to prevent a cold one should exercise out of doors as much as possible.

THE NEXT METHOD TO BE EMPLOYED

is the cold morning bath with friction. The bath rightly employed hardens and toughens the skin. It is through the skin that colds are brought on. When one is overheated and excited, or when one is delicate and sickly, the chill from exposure acting on the nerves terminating in it lowers the tone and vigor of the nervous system and results in a cold. The full philosophy of the subject is complex and need not be entered into here. The cold bath, which should be of short duration, only long enough to wet the surface, should be followed by thorough friction with a dry sheet thrown around the body and with the bare hand till there is a glow and a redness of the skin that insures a good result. Especially should the friction be thorough over the chest and back and on the feet. An extra foot bath at night with thorough friction will be an additional benefit. We take

COLD THROUGH THE FEET

becoming chilled as often as other parts of the body. So, too, on the back of the neck and over the shoulders should the rubbing be thorough. This is another point where the nerves seem sensitive to cold. We all know the evil effects of a draft on this part, but the evils are greatest on those who have not educated the skin to bear them by the bath and friction. Sometimes a glass of water as hot as can be borne after the bath insures a good reaction, or some suitable exercise out of doors which is not very severe will produce the same result. One must learn to use his own judgment in this matter. If a large quantity of cold water and little rubbing are used, then more harm than good will result. It is not so much the former as the latter that does the good.

UNFORTUNATELY THERE ARE PERSONS

who do not seem to bear cold bathing well. Whether the fault is in their methods or in their constitutions, or both, I will not stop to inquire. We have a substitute method for these in the use of the hair glove ; or, if this is too severe at first, the linen one, and friction over the skin till it is well reddened and warm. It answers nearly all the purposes of the bath, and may be taken for five or ten minutes on rising and on retiring, with the best results. In nearly or all cases of persons with a tendency to consumption and when the disease is actually present, the skin if not actually diseased is exceedingly delicate and weak, and I cannot understand how doctors have kept on treating it so long with no reference to this organ. With the exception of a few, and these mainly who have had thorough training in hygienic medication, they have generally ignored the skin as an unimportant organ. If by emphasizing this point I can call attention to it, I shall feel myself rewarded.

I HAVE SEEN SUCH EXCELLENT RESULTS

in preventing colds and consequently consumption by attention to the skin that I speak confidently. I have known persons liable to these diseases often having three or four every year, and by this practice escaping them for years at a time, or, if not entirely escaping them, suffering so slightly as to make them practically insignificant. I feel confident my advice on this subject will be useful to others. Most people bathe for cleanliness only. The greatest benefit from the bath is in toughening and fortifying the skin and fitting it for fulfilling its functions perfectly.

Another means of preventing a cold is by fortifying the nervous system

against them by vigorously exercising the will power whenever there is need of it, as for instance, when one is exposed to a cold, a draft, or other injurious influences. The effect in this direction keeps up the circulation and the supply of nervous energy, which are so essential in such circumstances.

IF A CHILL ACTUALLY COMES ON

drink at once a pint or more of water as hot as can be borne, take a hot foot bath, and go to bed and get warm and comfortable as soon as possible.

I hardly need to mention that care is necessary to avoid sleeping in damp sheets, in new rooms before the walls have become dry, in standing in the cold with wet feet, and especially in eating a very heavy, indigestible meal after becoming exhausted by overwork or exposure. Overloading the stomach with indigestible food is a frequent cause of colds. It is far better to wait a little before eating if one is very tired.

I NOW COME TO A MORE IMPORTANT PART

of the subject, that of enlarging the chest and developing the lungs. In a majority of consumptives there is less lung capacity and less strength in the muscles of the chest than in others. They take in less air at each respiration. Respiration is more feeble and there is a sluggishness of action in the chest. These are just the conditions which favor the development of micro-organisms in the lungs. Where respiration is full and complete they do not thrive. The tubercles which develop in the lungs are most frequently first found in the apices of these organs, just the place where respiration is most imperfectly performed. It is important that the chest be enlarged in early life, when its enlargement is most easily effected in every youth who has any tendency to consumption. It is not difficult to accomplish this, and there are many methods, some of which are suitable to every case. The first method costs nothing except a little time and effort, and consists in daily and frequent deep-breathing, or inhaling air into the lungs so as to inflate them to their fullest capacity. It should be practiced from half an hour to an hour every morning before the person is out of bed. Throw aside the pillows so as to let the head and shoulders fall on a line with the spine, and slowly inhale air till the lungs are full, and then exhale it again to as great an extent as possible. Rest a moment, and then repeat the exercise at the same time. When the lungs are full stretch them and the

CHEST TO THE FULLEST EXTENT.

It is well when the lungs are thus filled to hold the air in them for a moment and percuss the chest over the lungs gently, so as to still further promote the entrance of the air into every air cell. The bedroom windows should be wide open and fresh air abundant. If the weather permits, it is often agreeable to perform the exercise out of doors on the porch or veranda, because there the air is better. This exercise is so gentle that it does not strain the heart or exhaust the nervous system or produce weariness. Indeed, it benefits the heart as well as the lungs, for it gives more room for it to enlarge and have free play. The percussion over the heart promotes nutrition in this organ by increasing the circulation in the coronary arteries. Deep breathing may also be secured by climbing hills and by running for a short distance with the lungs filled and holding the breath. In such cases, however, there is a greater strain on the heart, and more care is required.

ANOTHER METHOD OF ENLARGING THE CHEST

is by the use of the Indian club exercises. This method is an excellent one, and is well adapted to the young and middle-aged. It is better that the person take a sufficient number of lessons from a good teacher, so as to learn how to do the exercises with precision, accuracy and system, rather than to try to go through them imperfectly and without interest, as would be the case if an effort was made to learn them without a teacher. The club exercises develop the muscles of the chest and arms and enlarge the lungs in a most remarkable manner. They train both sides of the body alike, and this is of great importance, for we have a great many motor centres in our brain and our spinal cord which we neglect thoroughly to educate. Such is the case particularly with the centres which serve the movements of the left hand and the left side of the body. Perhaps, however, fathers and mothers will be more ready to develop the natural powers of the left hand of their children, giving them thereby two powerful hands, if they accept that, as I believe, the health of the brain and spinal cord would improve if all their motor centres were fully exercised; and I may mention right here that in a majority of persons who have a tendency to consumption there seems to be some defect, some weakness in those nerve centres that control respiration and the complete expansion of the lungs. There does not appear to be sufficient

nerve force to make the machinery of respiration move vigorously, but by suitable physical training this mental defect may be overcome.

THE INDIAN CLUB EXERCISES,

if judiciously used, offer a good means of securing this result for both sides of the body and the nervous centres in both hemispheres of the brain. The club exercises also compel the upright, manly position of the body, the importance of which should not be overlooked.

It may as well be mentioned in this connection that the excessive use of the clubs which some enthusiasts are inclined to tend to develop muscles of the arms and chest too large, and this should be guarded against. All excesses in physical training should be avoided. Moderation in all things is a rule which cannot be too strongly impressed on those for whom these chapters are being written.

ANOTHER MEANS OF ENLARGING THE CHEST

and strengthening the constitution is by rowing. It has some advantages and some disadvantages over the Indian clubs. The advantages are that it is a most delightful exercise, stimulating the nervous system in a way that no amount of practice at any indoor method of training can. What is more delightful than to sit in a neat, trim boat, either with or without a companion, and propel it along the surface of the water, now fast, now slow, now to the right or the left, watching the ripples made by the oars, the flashes of light from the waves, the circles of tiny waves created by the drops of water that fall from the oars as they are lifted from the bosom of the stream or lake? Or, if it be rough, what delight one can take in guiding the boat safely over stormy waves and even billows as they rise and fall one after another in rapid succession. Many and many a time has my own heart been filled to overflowing with adoration for the Author of Nature and for Nature itself when in my boat I have been riding serenely and happily over the waves, and so I speak from long personal experience, and not from any theory the outgrowth of fancy or speculation. The disadvantages to be mentioned are that the exercise cannot be practiced at all seasons of the year, nor is it easily available every day or in every part of the country. Only those who are fortunately situated can enjoy the fullest use of the oar and the boat.

THESE, WHETHER MALE OR FEMALE,

should use it for all that it is worth, and indeed, the fact that it cannot be

used at all times makes it more delightful when we can take advantage of it. We can then rest from other artificial exercises which may have become monotonous by continuous use, and take to this form, which, especially for the young, is never wearisome.

Some precautions may be necessary to those who are very susceptible to moist air. The air over the water is more highly charged with vapor than over the land. That is a disadvantage, and those to whom moisture is injurious must choose that part of the day when the sunshine will counteract its injurious effects.

It has been objected that girls and young women cannot take advantage of rowing as boys can and to some extent this is true, but I have taught a good many young women to row in rather rough water and they certainly enthusiastically enjoy the exercise and evince skill and carefulness not always seen in boys, and I believe they may be as greatly benefited by this mode of training as their brothers, providing they are properly dressed about the waist, so as to allow the most perfect freedom of motion to the muscles of the arms, shoulders, back and abdomen. If they will not dress themselves suitably then they might as well let the exercise alone.

I have not space in this article to give suggestions regarding the manner of using the oars so as to produce the best effect with the least exertion. These will be given in a little book I hope soon to publish on the subject of these papers.

A JAPANESE MEAL.

DR. E. P. THWING, OF BROOKLYN.

THE people here usually eat at morning, evening, and at noon. The quality and variety of the dishes depend upon the position and ability of the family. So also the style of table service. Commonly chop sticks are used and each one has his tray and bowl. These may be coarse and cheap or elegantly lacquered and ornamented with inlaid ivory and gold. There may be but one table about which all sit, or several, with but one person at each. The family sit on the floor, that is, on the matting, which is soft and clean. The size of rooms and houses is indicated by

the number of these stiff pieces of matting, perhaps 30 inches wide by 60 long. Cushions, tatatami are often added. Spoons are used to dip, but not to put to the lips.

At about 7 A. M. the morning meal is eaten. A soup of beans is first served. Among the poor a kind of coarse bean is used, boiled months before and kept dry in barrels. These are mashed and made into a soup, often without salt or condiment, though other vegetables may be added to the soup. It is drunk from a bowl, and perhaps

A PINT IS USED AT A MEAL.

The soy bean ranks first in value and in extent of use. It is nearest to meat in nutrient qualities, rich in nitrogen and fat. It is green, black, reddish or white in color; kidney shaped, spherical or ellipsoidal, and has from 35 to 38 per cent. protein.

After the bean soup comes rice. Japanese rice is the best in all Eastern Asia, according to Rein, and has a higher value than that of Java or India. I read last week of hungry people here refusing Chinese rice during the present famine, so strongly attached are they to their own production. A viscount and his family at Tokyo have introduced the Chinese rice into use in their household to attack the prejudice. Rice is boiled in steam or water. It is the one prominent article of food, so here they say Asagozen, morning rice; Hiru-gozen, noon rice, and Yu-gozen, evening rice; instead of breakfast, dinner and supper. Salted vegetables are used to give it a relish.

AT NOON FRESH FISH

is used, sometimes raw, oftener, perhaps, broiled or boiled; beef or chicken and boiled vegetables, with eggs, raw or cooked. Shitaji is a liquid sauce used on the fish. At supper, dried fish, cut and salted, or small fish whole, with rice is served. In the East there is not so much of drinking at meals as with Western nations. Some well-to-do families take tea, fruits and sweets at 3 or 4 o'clock. Candy and cakes, persimmon, orange, strawberry and peach are used. The culture of small fruits is little known, but missionaries like Dr. Nevius, Moderator of the recent Shanghai Conference, have done much in teaching natives how to produce fruit of the best quality and flavor. Bread is beginning to be used by those Japanese who can afford it, but even "rice is a luxury to hundreds of thousands of poor mountaineers and given to the sick, but seldom to healthy adults." Such families are glad to get millet and

barley. As "salary" once meant salt, wealth here has been reckoned by rice in the census returns. The feudal lords taxed men according to the number of koku of rice, each being 182.5 liters weight, worth about four dollars. In China, instead of saying "How do you do?" you say, "Have you eaten rice?" Besides the common rice we have okabo or mountain rice, and a glutinous variety with black hulls.

A TOUGH DOUGH IS MADE

from its meal, useful as paste. Little cakes filled with bean meal and sugar are made from it and relished as food, without being baked.

I came to Japan last year during the rice harvest and returned hither from India and China just at the beginning of the barley harvest. The appearance of the fields and of the patient, cheerful toilers there will never be forgotten. The beautiful teeth I have seen in the East, and especially in Japan, are suggestive of simple and wholesome food, as are the feet and the chest, to which the hideous shoe and corset of Western fashion are strangers, are suggestive of a more physiological way of dress. Distant be the day when the follies of the West shall—with other importations from over the sea—come to corrupt what remains of purity and health in this simple-hearted, industrious, progressive, delightful people.

YOKOHAMA, July, 1890.

**SOME OF THE PECULIAR CHARACTERISTICS OF
OLD AGE.**

THERE is a man 107 years old in the Home for Aged and Infirm Hebrews in this city. One of the female inmates died two years ago, at the age of 102. Out of 150 inmates there are 10 who are over 90 years of age, and between 35 and 40 who are over 80 years old. During the past three years the average age of those inmates who have died has been $78\frac{1}{2}$ years. The opportunity thus offered for the study of the characteristics of old age has been the occasion for some decided opinions as to the status of old people and their expectation of life, which were expressed by Dr. S. Newton Leo, the physician in charge of the Home, to a *Sun* reporter the other day. Dr. Leo said :

"IT MUST BE REMEMBERED

that our subjects are many of them decrepit, infirm, paralyzed, suffering

from organic disease of a chronic nature, and their lives have been marked by pecuniary misfortune. That they live so long is due to generous diet, amusements, freedom from care, fresh air, and the benefit of modern medical advancement in the treatment of the diseases of the aged. Observation of many hundreds of these old people leads to the conclusion that those who have reached the age of 60 years, with no hereditary disease and no marked organic lesion, barring accident or epidemic, can fairly count on an additional fifteen years of life. In fact, I would rather insure a class of advanced age in the condition I have described than many who are now insured at the age of 25 to 40.

“MANY PEOPLE ARE OLD

at a very early age owing to various diseases and habits of life. A person who is, say, 25 or 30 years of age, is exposed to the various epidemic influences and the accidents and outcome of the peculiar life which our system of civilization has begotten. There is hardly a probability of their living the same number of years again. But a person of 60 has escaped the probability of suffering by many vicissitudes and accidents. While old people are subject to certain senile affections, such as asthma, or bronchial troubles, they are less subject to fevers and various types of acute disease which are more often fatal. Some people are old at 20; others are young at 60. Various changes take place in the tissues and organs when people grow old. Senility generally occurs in men between 50 and 60 and in women about ten years younger. With age all the organs waste, notably the brain, the spinal cord, and generative organs, while there is an impairment of the digestive and other organs. The bones become thin and deficient in animal matter. The hair drops out. There is an alteration in the contour and color of the countenance. There is degeneration due to defective nutrition. There is a marked loss of elasticity. The heart beats become weak and frequently intermittent. The respiration becomes enfeebled. There is a less complete oxidation of the blood. Eventually the sense organs receive impressions imperfectly. The

HIGHER MENTAL QUALITIES FAIL.

“In contradistinction to all this is the interesting fact staring us in the face that all these progressive deteriorations of structure and functional capacity mutually adapt themselves and manifest themselves in an old age, which may be as healthy as that of maturity or childhood. A healthy

man of 70 may be more elastic and clearer in mental capacity than a younger man. Many diseases that prevail at middle life are not likely to occur in old age.

“IT IS INTERESTING TO NOTE

the action of the heart in old people. It is a wonderful fact to reflect upon that, when a man has reached the age of 100 years, his heart must have beat over four billion and a hundred and fifty million times without stopping. Extreme old age has been aptly compared to a second childhood. It requires delicate nourishment, a warm temperature, a healthy circulation. The nutritive functions must be stimulated. When the loss of teeth has removed the power of chewing food, nourishment must be strengthened by animal juices. The food must be such as can be easily assimilated. The second childhood often goes back to the food of first childhood, such as milk and nitrogenous preparations.

“IT IS A MISTAKE TO SUPPOSE

that the mental faculties of healthy old people become so impaired that they are unable to enjoy the surroundings and occurrences which formerly claimed their attention. Some of the finest works of art have been produced by men well on in years. In every walk of life the greatest achievements have been made in literature, science, and art by men well past the meridian of existence. I know it is alleged that this is a young people's world, but there is a good deal of truth in the old saying that young people think old people are fools, while old people know that young people are fools.

“IT IS ONLY OF LATE YEARS

that the diseases of old age have been taken up and made a special study by eminent physicians in all parts of the world, and by the aid of medical skill and modern appliances many afflictions of the aged hitherto deemed incurable can now be ameliorated, if not cured. In one institution in this city there is an old lady who was formerly a popular vocalist in Vienna, and now at the age of 72 she is still able to sing her old songs with sweetness and pure intonation. We have an old man of 80 who is still a good watchmaker. I can take you to an artist of 70 who still paints landscapes of beauty. A hale and hearty man like the sturdy Bismarck gives us a deserved veneration for a healthy old age. If you go to the theatre you will find that old people are among the most intelligent auditors.

" THERE ARE SOME NATIONALITIES

that enjoy greater longevity than others. People who live in the country, in mountainous districts and colder climes are generally long lived. Great Britain, Germany and the United States seem to be favored in this respect. In France they are not so well favored. But wherever old people are it is the part of self-interest, as well as of humanity, to conserve and utilize their hoards of experience. It is a great economy of time to know how things may best be done, and to know where others have failed, and one of the most valuable lessons we learn from the aged is to make haste slowly."

WASTE OF FOOD IN AMERICA.—In the use of food the Americans are lavish and even wasteful. In calling attention to this fact, J. R. Dodge states that Great Britain consumes an average meat ration not over two-thirds as large as the American; France scarcely half as large; and Germany, Austria and Italy still less. The average consumption of meat in the United States is probably not less than 175 pounds per annum. Of other civilized nations, only Great Britain exceeds 100, and many scarcely average fifty pounds. The consumption of the cereals in this country, by man and beast, is three times as much in proportion to population, as in Europe. For the past ten years the average has been forty-five bushels for each unit of population, while the usual European consumption does not greatly vary from sixteen bushels per annum. While all this is not used as food for man, no small part of it contributes to the meat supply. In the consumption of fruits the difference between this and other countries is marked. Small fruits, orchard fruits of all kinds, and tropical fruits, as well as melons of many varieties are in profuse and universal daily use in cities and towns, and in the country the kinds locally cultivated are still cheaper and more abundant. The consumption of vegetables is not excessive.

EDITOR'S STUDY.

TOO MUCH SHADE.—In a recent number of *The Sanitarian* Dr. W. T. Parker protests against thick planting of trees very near the house. Not only do they prevent the free access of air and of sunshine or even light, but they also injure the character of the soil as suited for permanent occupation. "A soil," says the writer, "loaded with roots and densely shaded is unfit for man to live upon constantly. Vegetation produces a great effect upon the movement of the air. Its velocity is checked, and sometimes in thick clusters of trees or underwood the air is almost stagnant. If moist and decaying vegetation be a coincident condition of such stagnation the most fatal forms of malarious diseases are produced. A moist soil is cold, and is generally believed to predispose to rheumatism, catarrh and neuralgia. It is a matter of general experience that most people feel healthier on a dry soil. In some way which is not clear a moist soil produces an unfavorable effect upon the lungs. A moist soil influences greatly the development of the agent, whatever it may be, which causes the paroxysmal fevers."

REMOVING MOTES FROM THE EYE.—The following is a simple and expeditious way of removing specks from the eye. The only instrument needed is a wooden toothpick or match, made sharp at the point. Hard wood, however, is preferable. The sufferer stands in a good light and rests his body and head against a door post or some fixed object. With the thumb and a finger the operator holds the eyelids sufficiently apart to see plainly the front of the eye and also to prevent winking. If the speck be on the corner it may be very difficult to see it, and it can then only be found by changing the direction of sight until a favorable position is secured. The most difficult part of the business is to have the inexperienced person fix the sight on some object and hold the eye perfectly quiet. If this can be done only for a few seconds the operator approaches the mote with the point of the stick, still holding the eyelids, and with gentle passes and gradual advances soon touches the speck and brings it away. The transparency of the eye makes it necessary to approach the surface with care, or it will be reached before it is expected. If the mote be hidden underneath the upper eyelid the eyelash should be gently raised while the upper part of the lid is held downward with the stick. When turned the stick is withdrawn and the lid is held in

this position by the eyelash. Where iron is worked particles of metal are sometimes allowed to remain in the eye for several hours, when they seem to rust fast and cannot be removed by a stick. In such cases the point of a penknife blade, made quite sharp, is used, and if it is magnetized, so much the better.

MEN WITH LOW FOREHEADS.—Here is a gallery of "low foreheads" warranted to astonish the knowing ones who never see virtue except in bald fronts. Look up the portraits of Grant, McClellan, Logan and Sheridan among soldiers; Holmes, Stedman, Howells, Grant White, Curtis, Parton, Twain and Warner among authors; the late Chief Justice Waite and Matthew Arnold among recently deceased notables, and see how the growth of their hair subjects them to be slandered by their shallow pates. On the other hand look at the full face portraits of the average baldheaded man, and see how his affliction glorifies his intellect. When you find a man whose hair grows down over the bend of his profile forehead, while yet leaving it "high" to the eye, you have got hold of a thinker who is also a man of action, such as Beecher, Booth, Ruskin, Lincoln. The dome shaped forehead usually marks the idealist, and the square shaped brow the practical man of affairs and wit.—*St. Louis Post Dispatch.*

J. W. PATTERSON THE TALLEST MAN known in the world excepting the Chinese giant, Chang, stands seven feet seven inches in his stocking feet and is twenty-seven years old. He owns considerable property in Oklahoma, and as soon as he returns from the east will begin the erection of a fine residence. A couple of months ago his wife presented him with a pair of strapping boys of which Mr. Patterson is immensely boastful. Mrs. P. is larger than the average woman, being nearly six feet high and weighing over two hundred pounds.

DESCENDANTS OF GREAT MEN.—It is a singular fact that great men seldom leave direct descendants. Napoleon, Wellington, Washington all prove this rule. Shakespeare left only two daughters, whose children died without issue. Probably the nearest relative to the great poet now living is one Thomas Hart, a resident of Australia, who is said to be the eighth in descent from Shakespeare's sister Joan. Walter Scott's line ended with the second or third generation.

FEW MEN WHO ARE SUFFERERS FROM ILL HEALTH or disease endeavor to secure patents on remedies which they discover. On the contrary they are

generous and prodigal in the distribution and spread of their knowledge. Here is a suggestion from a man who has been frequently tormented with rheumatism: "I find that I get quicker and more permanent relief by means of Russian baths than by any other treatment. Those who are not accustomed to the baths should be rather cautious at first, but after several trials one should take the steam just as hot as he can stand it on the afflicted part of his body. The relief is at once perceptible. A case of rheumatism taken in hand early, that is, before it settles down to real business, is fairly tractable. One should not let it get a firm hold on him. An eminent physician, to whom I spoke about my treatment, commended it highly and said that he had seen admirable results come from the use of Russian baths." There you are, sufferers from rheumatism. Take the suggestion and welcome.—*N. Y. Tribune.*

RED FACES AND THEIR CAUSE.—An acquaintance of mine, a farmer, a man of much book culture, is in town this week and we went to the theatre together. He insisted upon my eating a soft shell crab with him after it was over, and as the performance had been a long and trying one, I assented. As I sat there nipping off the deliciously crisp legs of the gentle crustacean lying on my plate, I said to my bucolic friend:

"Ned, what impressed you most at the theatre this evening?" "The red faces of your men," was his reply, and as I took a look at him to see whether he was in earnest or not, he added: "I mean what I say, the red faces of your men. It is the result of your barbarous custom of eating a heavy dinner at the end of the day, at the very moment when you are about to enter upon the period of distraction and recreation which ought to follow the day's labor. The consequence is these men come to the theatre literally gorged, the blood streaming in lusty rills to their brain and suffusing their faces, a condition which renders close attention to a play almost an impossibility, nay, a real danger. The only reason why your women haven't red faces too is that their vanity restrains their appetites; they prefer to go hungry rather than make such spectacles of themselves. Take my word for it, it's all wrong. The array of red faces is to me a pitiful sight. It means the high road to apoplexy, rheumatism, locomotor ataxia, etc., etc.—*Gilsey's Letter.*

LONG LIFE AND TEMPERANCE.—P. T. Barnum talks as follows about the way to reach long life and happiness: There are but few general rules that can be definitely followed in all cases, but the one golden watchword

of a long life, which is as safe as it is efficacious, is moderation. Moderation in all things—diet, exercise and work. I have been benefited by good heredity, but I don't credit all my long life and health to it. I am a total abstainer from tobacco and all spirituous and intoxicating liquors, and to this fact I largely attribute my prolonged good health. Evil, to my mind, can be the only result of indulgence in drink and the drinking habit. As in the use of narcotics, so it is with drink. The desire which impels the use goes on increasing with age. Drinking, when continued even to no very large extent, tends to blunt the sensibilities and transforms the one who indulges the habit in some way not favorable. He will, at any rate in my opinion, lose a few of his finer perceptions. An habitual drinker not only does not "astonish his stomach" with water, but after a while he loses the sweet and natural relish for it.

THE USE OF ALCOHOL AS A MEDICINE.—Dr. Grosvenor, in the *Buffalo Medical Journal*, gives the following concise summary of his views respecting the medicinal use of alcohol :

1. Grave responsibility rests upon the medical profession in the use of alcohol as a medicine, on account of its deleterious influence upon the system and the liability of the patient to contract the habit of using it as a beverage.
2. Alcohol being an acrid narcotic poison, the bottle containing it should be labelled "Poison," as a reminder of this characteristic and a warning to handle it with care.
3. Alcohol containing none of the compounds which enter into the construction of the tissues, cannot properly be termed a tissue-forming food.
4. The evidence in favor of the existence of a heat-generating quality in alcohol, is not sufficient to warrant the belief that it is a heat-producing food.
5. As a narcotic and anæsthetic, alcohol has a limited sphere of adaptation, and is much less valuable than several other narcotics and anæsthetics.

CHLOROFORM AND HEART AFFECTION.—Dr. Arthur Neve states in the *British Medical Journal* that in 3,000 operative cases chloroform has been administered in his presence, and not a single fatal case has occurred. The cases in which serious danger has threatened might be counted on the fingers of one hand. None of these cases was due to any heart affection ; it was a question of arrested respiration.

FRAUDS IN FOOD PRODUCTS.—A committee appointed by the state of New Jersey some time ago to inquire into the alleged adulteration of food analyzed 623 articles offered for sale and found only 320 of this number to be pure. The “canned goods” passed the test all right. Of the others, however, 60 per cent. were adulterated. The butter sold as butter was butter, but the oleomargarine, in several cases proved to be not good oleomargarine, but bad butter. Of twenty-four samples of coffee analyzed only eight passed inspection, but the greatest frauds were found to have been perpetrated in the manufacture of so-called “ground spices.” The pepper was made of charred buckwheat hulls and cocconut shells, with an addition of cayenne; the ginger of corn meal, turmeric and cayenne, and the mustard of corn meal, a little real ginger, turmeric and cayenne. The lemons were artificially colored. They had been picked green and subjected to a sulphur bath to yellow the skins. The “blood oranges” had been syringed with aniline dye in order to give the pulp the requisite sanguine hue. It is gratifying to learn in connection with the orange fraud that its inventor, an Italian, underwent ten years’ penal servitude for his commercial trick, but the swindle for which primarily he is responsible still exists.

OUR RULES FOR GOOD HEALTH.

1. Be regular in your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don’t go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in the open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don’t worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

WOMEN AND THE HOUSEHOLD.

NOTHING TO DO?—How can a man say that a woman has nothing to do? In one year she gets dinner 365 times, washes the dishes 1,095 times, gets the children ready for school twice a day for 180 days, gets the baby to sleep 1,400 times, makes about three hundred calls, and, as she wishes for something she hasn't every minute, she wishes sixty things an hour, or 262,800 things in a year. Who says that a woman has nothing to do?

SINGLE BLESSEDNESS.—If I had to decide for my daughter whether, in view of her greater happiness, she should marry or remain single, I would find the task difficult, says Olive Thorne Miller. In marriage the ordering of her life is taken in a great measure out of her own hands; she must bend to circumstances; she is modified by the influences which have surrounded her husband all his life; she takes to herself in his relatives a new set of kindred, who may or may not be agreeable to her. The single life is much less complex, and it offers her what poets have sung and heroes died for—*independence*. But, she points out, a woman will rarely enjoy her state of single blessedness unless she is prepared for it in training and is allowed to be independent if she remains at home.

DON'T BELIEVE IN PASTRY.—The best known woman in Dryden, N. Y., is Miss S. S. Nivison, M. D., who for the past twenty-five years has been sole proprietor of the Dryden Springs. She manages two sanitariums; the Hammontown, N. J., in winter, and the Dryden Springs place in summer. Miss Nivison has been in possession of the Dryden place since 1865. It contains sulphur and iron springs, which she considers the best medicines in the world. Dr. Nivison believes in the doctrine of brown bread, butter, milk, fresh fruits and eggs, one meal of meat a day, plenty of fresh spring water, prodigal indulgence in pure air tonic, abundant sleep and the Quaker system of mental repose. "Pastry, hot bread, fried meat and ice water," she thinks, "kill more people in a year than shipwrecks, railroad accidents and gunpowder."

INVENTIONS BY MASSACHUSETTS WOMEN.—Massachusetts has more inventive ladies than any other part of New England. Helen Marr, of Boston, has invented a patent dressing case and washstand combined. Mrs. Carpenter has a metal halter for hitching horses on the street, and Miss Mary

Barber, another Massachusetts girl, has a patent pie-lifter by which you can take a pie from the baking pan without burning your fingers. One of the best cutting machines for trimming the leaves of books is the patent of a Massachusetts lady named Semple, and it is used by the leading publishers of the country. Lots of money has been made in ironing boards, and a Boston girl named Parker has a kitchen table and ironing board combined which can be folded up and packed away in a trunk. There are patent beds by Massachusetts ladies, patent corsets, patent griddle greasers and a hundred and one other new ideas put into merchantable shape. — *Washington Letter*.

WOMEN WHO KILL FLOWERS.—It is a peculiar fact that some women kill flowers within twenty minutes after they are adjusted to the corsage, says the *Chicago Herald*. Others will wear them for hours, and they will look as fresh as when they were first pinned on. A florist said: "Women wear flowers sometimes because they are vain, not because they love them. Flowers are alive, and it kills them to lay near the heart that has no love for them. They droop and mourn themselves to death because they know there is nothing in common between themselves and the wearer. They are like little children—they love those who love them, and their best, brightest beauty is given to the woman who pins the bouquet on through her love for the flowers." A physician said: "Certainly, some women can kill flowers within a very few minutes. It is a sure indication that a poisonous vapor is escaping from the body to a great degree. It may be the result of disease or it may be that bathing and proper care of the skin are neglected."

PERMANENT MANNERS.—Very few young people realize the immense charm of gentle, courteous home manners. It is not only that it is right and the duty of every Christian gentlewoman and gentleman, but it is infinitely lovely and attractive to see girls and boys showing in their own homes, to their own people and in their every day life, the same courtesy and the same consideration that they exercise in society. There is a species of vulgarity about company manners, just as there is in all veneer; and there are many young people who consider themselves well bred who would scorn to wear sham jewelry, and would think false pretence of any kind bad form, yet who keep their graciousness for the world and spoil the home atmosphere by their touchiness and rudeness. Not that they mean it; they may really love each other dearly, and in any great matter

would be quick to serve and make sacrifices, but the daily exercise of self-control in little matters, the every day unselfishness, the "soft answer that turneth away wrath," are not theirs, and almost unconsciously the habits of home ill-breeding are formed, and many a mother finds too late that through her carelessness and inattention to details the mischief is done and she cannot remedy it.—*New York Tribune*.

THE YOUNG WOMEN OF TO-DAY.—It is not enough that the young women of to-day shall be what their mothers are or were. They must be more. The spirit of the times calls for a higher order of things, and the requirements of the woman of the future will be great, says a writer in *Ladies' Home Journal*. I must not be misconstrued into saying that the future woman will be one of mind rather than of heart. Power of mind in itself no more makes a true woman than does wealth, beauty of person or social station. But a clear intellect, a well-trained mind adorns a woman, just as an ivy will adorn a splendid oak. A true woman has a power, something peculiarly her own, in her moral influence which, when duly developed, makes her queen over a wide realm of spirit. But this she can possess only as her powers are cultivated. Cultivated women wield the sceptre of authority over the world at large. Wherever a cultivated woman dwells, be sure that there you find refinement, moral power and life in its highest form. For a woman to be cultivated she must begin early; the days of girlhood are transitory and fast-fleeting, and girls are women before we know it in these rapid times. Every girl has a station to occupy in this life, some one place to fill, and often she makes her own station by her capacity to create and fill it. The beginning influences the end.—*Exchange*.

BUTTERMILK AS A SICK-FOOD.—I. Burney Yeo, of London, in *British Medical Journal*, makes some right interesting observations on food for the sick. He says among other things: "I will ask you at the same time to consider the use of 'buttermilk' as an invalid food, not so largely used in this country as in Germany, but calculated, I believe, to be of service in many cases of gastric difficulty. It is highly acid from the presence of lactic acid, and it contains the casein of milk in a very finely divided form. I have known dyspeptic patients to live upon it in comfort for considerable periods at a time, taking only a little thin water biscuit besides."
[Our Southern doctors have known this for years and used it in practice.—*Dixie Doctor*.]

MOTHERS AND THE NURSERY.

(CONDUCTED BY MRS. F. C. PRESSLER.)

THE FLANNEL BAND.—There is no time when it is safe to remove the flannel band, which is not so much an infant's garment as a protection for the little stomach. During the changes of weather the general health, not only of infants and young children, but adults as well will be benefited by a flannel band. In all cases of summer complaint and diseases of the stomach it should be used. Care must be taken that this does not bind the child. After a meal the little stomach becomes distended, and unless the girth-strap is loosened a disagreeable and unwholesome pressure is exerted on the digestive organs, and the result is a protesting crying spell.

UNDERSTAND YOUR CHILD'S MIND.—How often has a parent, a school-teacher, or society, said of some boy or girl, or some young man or woman: "There is not much in them; they will never amount to much," when in time the expression was changed to admiration: "I never thought it of them; they have come out wonderfully; there was more in them than I thought." Books are no test of brains; reading no test of reflection, and ordinary conversation, of bold originality. A horse tightly checked up can never do its best, for every muscle must have free and natural play. So of the mind, it can never display itself if checked up by the shallow thinking of ordinary society. The mind like the body must have growth. The child of 75 pounds is not the same person of 100 pounds. The young man or woman of 125 pounds is not the same person at 150 or 200 pounds. So changed that they are hardly recognized. So of the mind; at 20 years it is not the same mind at 30 or 40. There has been growth and maturity. There has been development that has given originality to what once might have been considered only an ordinary mind. Genius is one thing, but talent, which every one has in a greater or less degree, is altogether another thing. Talent must grow, it must be developed by time. The caged bird, no matter its power or rapidity of flight, cannot compete with one of ordinary flight that is free to use its wings daily. Free exercise gives strength, and

free thought gives strength to the mind. The checked mind is never itself. Rules regulating creeds and belief forced upon it emaculates it. The mind of a child is like polished steel, it shows the impress of purity or impurity made upon it. It will tarnish easily, it will reflect easily. Like putty, it can be moulded into any shape and take on any impression. It is sensitive as the needle is to the pole. The care of the young and growing mind is the greatest responsibility of life; the office of father and mother bear responsibility that reaches up to God and impresses the world around it. The little fellow who told a minister that he was wrong in his theology, was asked how he knew, answered, "mother says you are wrong." That settles it, my little fellow, stick to it because your mother says it; when you get to be a man then tell me what you think. The minister had sense enough to know that he could not, with a mother's influence against him, weaken the child's faith in his mother's assertions. But when the sharp and keen edge of thought begins to cut into their notions, plans, interests and inclinations, they begin to stand alone, think alone, and act alone. In time they take in their real and true individuality of character. Every child should be praised and encouraged, and parents do their children a great wrong by not implanting in them a spirit of self-respect and self-reliance.—*R. M. Orme, in Sunny South.*

A PERSON WHO IS SUBJECT TO BLEEDING FROM THE NOSE should keep some gum in his pocket, and when he feels an attack coming on commence chewing vigorously. Nine times out of ten the increased activity of the facial muscles will avert the bleeding. If he is not able to adopt the preventive let him try it as a remedy, and he will generally find it a success.—*Albany Express.*

STARVING INFANTS TO DEATH.—A New Haven medical examiner makes the somewhat startling statement that on an average he has ten cases a year of babies starved to death. He had one last week of a child dying suddenly, and investigation showed that it had been fed on some patent food, but had starved to death. It is the ignorance of the parents which is at the bottom of the trouble, he says, and, strangely enough, this particular kind of ignorance prevails more among the well-to-do than the poorer classes.

BABIES' NEED OF SLEEP.—A young baby should spend most of its time in sleep. Never allow it to be awakened for any purpose whatever. A child's nerves receive a shock every time it is roused from sleep, which is most injurious to it. Admiring friends should be made to wait until it is awake to kiss it and play with it. After it is nursed at night put it back into its crib, and if it is comfortable it will soon fall asleep. It should never sleep in the bed with an older person. Place the crib with its head to the light, so as to protect the eyes from the glare. A light canopy serves to ward off draughts. Curtains cut off the supply of fresh air, and, except a mosquito netting in summer, should not be used. Until a child is two years old it should spend part of each day in sleep, taking a long nap in the morning and afternoon.—*Ladies' Home Journal*.

BORAX FOR THE BABY'S MOUTH.—Always wash baby's mouth and gums every morning with water in which you have put a pinch of borax. It keeps the mouth fresh and sweet, and prevents that uncomfortable affliction, a sore mouth, with which so many poor babies are troubled when their mouths are not kept perfectly clean.—*Good Housekeeping*.

TEACH GIRLS THOROUGHLY.—Girls should be taught to be thorough in whatever they undertake. "Whatever is worth doing at all is worth doing well" is an old rule of more importance than ever in these progressive days. Teach a girl to do one thing well, and later on she will find that this one talent will gather many unto itself. A smattering of everything is always dangerous, especially in a girl. To learn less and to learn it more thoroughly should be the rule of her education.

ANY DISEASE THAT CAUSES A REFLEX ACTION on the brain, such as teething, indigestion, whooping-cough, fevers and worms, is usually accompanied by convulsions. Should a child have one get it into hot water as soon as possible. Do not even wait to remove its clothing. Have a foot-tub or child's bath-tub nearly filled with water as hot as can be borne. Put the child in it, supporting it with the hands. Add hot water from time to time, so that the temperature will remain the same. The child should remain in the water until the muscles relax, then wrap it in warm blankets and put it in bed.

THE HOT-NEEDLE CURE FOR WARTS.—J. E. Johnson tells the *St. Louis Globe-Democrat*: I have always had warts on my hands ever since I was a boy, and have tried a thousand remedies for them, including all the charms known to the oldest darkey in the country. The only thing that would suppress them, even temporarily, was a red-hot needle. Somebody told me about it ten or fifteen years ago, but I never tried it for a long time, dreading the pain. At last I had a big wart on the knuckle of my left fore-finger, where I was always knocking it against something and keeping it raw and sore. I determined to try the hot needle. So I had a large needle fixed in an awl-handle, heated it red-hot in the flame of a lamp and thrust it through the big wart at one punch. The pain was no greater than I had been enduring from striking the wart against everything I touched, and after the needle had cooled I took it out. The wart began to dry up, and in three or four days I picked it off with my thumb-nail. Since then, whenever one makes its appearance I take a needle to it, and the remedy never fails.

HEALTH INVENTIONS AND APPLIANCES.

A SANITARY CUSPIDORE.—That diphtheria, catarrh and even tuberculosis, as well as many other diseases, are communicated through the sputum of diseased persons is generally recognized, and the prompt disposition of such expectorations is of manifest importance in private sick rooms, hospital wards and sanitariums. In no other way can this be accomplished so conveniently and thoroughly as by the use of a newly invented sanitary cuspidore and spitting cup, which consists of a water-proof and fireproof paper cup, inserted and retained in a metal frame. After using, these cups are easily removed and replaced by new ones, and are best disposed of by burning.

PUBLISHER'S DEPARTMENT.

OUR FRIENDS CAN TRY TO SECURE us new subscribers by calling the attention of those interested in hygienic matters to the fact that the magazine is sent from October, 1890, to December,

1891, for One Dollar to all parties whose names are sent in without delay. Fifteen copies of the HERALD OF HEALTH for One Dollar are certainly cheap enough. In no other publication can such valuable information upon the care and preservation of health be obtained.

THE HYGIENIC TREATMENT OF CONSUMPTION.—Dr. Holbrook's articles on this subject in the HERALD OF HEALTH have attracted widespread attention and interest. The fourth of the series appears in this issue. We will send back numbers and the October issue (four in all) to those who may desire them, postage paid, for forty cents. We have but few left, and first come will be first served.

HUMAN MAGNETISM, by H. S. Drayton, M. D., is in press by Fowler & Wells Co., New York, for early publication. It considers all the latest phases of the subject, including its Nature, Physiology and Psychology, with its uses as a remedial agent, in moral and intellectual improvement, etc. It is a work that is likely to attract a good deal of attention.

TO SUBSCRIBERS IN ARREARS FOR 1890.—Many of our subscribers are in arrears for the year 1890, their subscriptions being due in advance. We have sent the magazines in all cases where no notice to discontinue has been given. We do not like to drop subscribers, for it's like parting from old friends, so we make the following offer to all who have forgotten to send in their subscriptions: Send us one dollar and fifty cents, which will pay arrearages up to December, 1890, and we will retain your name upon our lists until December, 1891. In other words, we let you have the magazine for TWO YEARS FOR ONE DOLLAR AND A HALF instead of TWO DOLLARS, the regular price for that period. We make this liberal offer for the benefit of the old subscribers, many of whom have taken the magazine for years. It applies solely to those who are in arrears for 1890, and will be good only until the first of January, 1891.

OUR UNPRECEDENTED OFFER.—For one dollar and thirty cents (\$1.30) we will send you the HERALD OF HEALTH and the *Ladies' Home Companion* for one year, and in addition a copy or reproduction of Munkacsy's famous \$100,000 picture of "Christ Before Pilate." The picture will be mailed postage free. Read the announcement on the inside of first cover. The *Ladies' Companion* is an excellent publication of its kind, and many readers of the HERALD OF HEALTH speak good words for it.

QUESTIONS OF INTEREST ANSWERED.

TO INQUIRERS.—We reply to questions under this heading only when contained in letters. We can take no notice of queries addressed on postal cards.

HYGIENIC TREATMENT ADVISABLE.—*W. H. C.*—You should have the boy examined by a hygienic physician, who can determine by such examination the exact nature of the “fits.” We counsel you to seek such advice as soon as convenient, inasmuch as proper treatment immediately applied may benefit or cure him.

TRY MILK INSTEAD.—We cannot advise you to have anything to do with the phosphorous preparations you name for dyspepsia. Give up tea and coffee for a time, and try milk instead. If not improved write again.

GIVEN TO YAWNING.—The “yawning” *J. F.* complains of is simply indicative of weariness and exhaustion. There is no special significance attachable to the habit. After due rest the tendency passes off.

CRAMP IN THE WRIST.—*F. F. W.*—We doubt if any exercises would help you in the matter of the wrist. Piano practice might help you, or type-writing with a machine.

DEPRESSED IN SPIRITS.—“*Despondency*”—Why not seek some interesting occupation? You don't require medicine. Interest yourself in some pursuit or study. Seek cheerful society, and if you feel low in health try a change of air.

OZONE.—The quantity of ozone varies greatly in different places. There is no rule for its distribution, but it exists in greatest quantities by the sea and in mountain air.

READING DURING MEALS.—“*Journalist*”—To read during meals is commonly reckoned as physiologically erroneous—we won't say as absolutely injurious. The theory is that, as the stomach and other organs require and exert nervous power during digestion, it is better to allow nothing to interfere with their work. We do not say that this can be borne out; but the feeling of satisfaction that follows a meal, and which is often accompanied in good health by drowsiness, probably indicates that a certain amount of nervous exhaustion occurs during digestion. The pleasant chat of a dinner party is probably of value physiologically as supplying a slight mental stimulus, without making too severe demands on brain and nerves. If any evidence exists at all on the subject, we think it tends to discourage reading at meals.

HOW TO COOK OATMEAL PROPERLY.—Nothing is more unpalatable or indigestible than half-cooked oatmeal. As in case of rice, farina, tapioca, sago and fruits, oatmeal must be cooked in a double kettle, keeping plenty of boiling water always in the lower part. To one cup of the meal (thoroughly washed) add six cups of cold water, and boil three hours without stirring. Can be eaten with butter and salt or with cream or sugar. In cool weather this loses nothing by “warming over.” The fortunate possessors of gas or gasoline stoves may put oatmeal on over a blaze just sufficient to keep the water boiling, and not give it another thought for three hours. If wanted for breakfast, it must be cooked night before.

A HOME-MADE ARTIFICIAL FOOD.—Dr. Geo. B. Fowler recommends a method of artificial infant feeding. Put four tablespoonfuls of rice into three pints of water, and boil half an hour; then set on back of range to simmer during the day, water being added occasionally to maintain the original three pints. At night strain through a colander and place on ice. When cold a paste is formed. Three tablespoonfuls of this paste are added to each half pint of milk, and fed during the next day, a fresh supply being under halfway in the meantime. Rice is astringent, so if there be constipation he uses farina, prepared in the same way and proportions. The hydrated starch granules prevent the formation of solid clots of casein. The starch thus treated is easily digested by a child even two months old.

THE HERALD OF HEALTH.

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THE HYGIENIC TREATMENT OF CONSUMPTION.

No. 5

BY M. L. HOLBROOK, M.D.

PREVENTION CONTINUED.

IN continuing this subject of preventing consumption I wish to bring before the reader two methods which are of great practical value. I refer to vocal culture, especially in early life. In vocal culture much benefit is received in developing the voice, making it clear and strong and beautiful, and this alone is a sufficient compensation for all the labor and expense bestowed upon it; but in addition to all this, the chest and all the respiratory organs are greatly enlarged and at the same time benefited. Dr. Morell Mackenzie says on this subject, "so far from injuring the general health the teaching of singing in childhood is likely to prove highly beneficial, especially in cases in which there is a tendency to delicacy of the lungs. By the healthful exercise of these organs in singing the chest is expanded, the muscles of respiration are strengthened and the lungs themselves are made firmer and more elastic. The rare occurrences of pulmonary diseases among singers is well known. Of course it must be understood that the vocal exercises are to be strictly moderate, both as to quality and quantity; that is to say, the lessons must be short, and at the most, only the ten or twelve notes which form the average compass of the child's voice must

be used. On no account should there be the least forcing or fatigue. I think there can be no doubt that vocal training in childhood, if properly carried out, is not only not hurtful but, on the contrary, distinctly advantageous to both."

In giving vocal culture to children, there are no real difficulties in the way, though there may be apparent ones. In the first place children should be encouraged in their sports to use their voices freely. They do it voluntarily and naturally where they are not forbidden, or discouraged in calling, hallooing and laughing. Even the babies strengthen their chests and vocal organs by crying, a process so trying to parents and those who must hear their screams. They may, however, console themselves with the thought that some good results from it, but the youngsters, boys and girls both, love many of the delights of childhood if they are not allowed very great freedom in this direction. This spontaneous activity of the voice and lungs is however only a part of the training to which the young are entitled. Our public schools are now so almost universal that nearly all children can have the advantages of vocal culture of the best kind, provided parents and educators demand it. We might very properly leave out history and some other branches that can be acquired later in life and at home for the delightful art of song. At the present time the methods which have been and are being perfected in vocal music are so great that no school can afford to be without them as a part of the daily drill. I cannot here enter into details as to how vocal training in schools should be conducted. I can only say the method should be thoroughly scientific, so as to interest both boys and girls. The simple teaching of music to children by note, as is the case in most schools, is not sufficient. There is not enough intellectual effort in it to attract pupils. Boys who manage to get at the heart of things by a sort of intuition often have the feeling that such exercises are only suited to girls, and so far as they can they avoid them. You can't offend a boy more than by letting him think he is doing a girl's work. But if in addition to the singing the whole science of music is taught with it at the same time it will interest both boys and girls intellectually. As a mental discipline, teaching the science of harmony, melody, rhythm, etc., it has great

advantages, and the interest felt is never lost. 'Singing by rote may be combined with the scientific method to advantage, but should never be substituted for it.

When we come, however, to those who are older than school children who may have a tendency to consumption, we must adopt special methods. Vocal culture for these may be accomplished in two ways—by the practice of such exercises as are used in training singers, or by those used for readers and speakers. For the best really it is desirable that the person have a teacher long enough to give him a good start in vocal training so he can keep it up on the right line afterwards. A good teacher will give the best position of the body, mouth, tongue, arms, chin, neck and all the organs used in producing the voice, will correct all defects of articulation, incorrectness of organs and show how to produce a clear, strong beautiful tone. In addition he will inspire the pupil with his work so it will be easy to continue it for a long time.

After having made a good start an organ or a piano helps wonderfully to keep the voice in time. The exercises of the scale with any vowel or syllable may be practised daily long enough to exercise the voice and chest thoroughly and keep them in perfect health and strength. This practice will, in most cases where the other hygienic habits are correct, secure those with a tendency to consumption from its attacks quite as effectually as those are secured who have no such tendency, and in some cases better.

It must be explicitly understood that the practice of vocal culture should be kept up for a long time. A little practice now and then is not enough. It is to some extent a life work.

It may be objected that this is taking the work of preventing consumption out of the hands of the physician and putting it into the hands of the patient himself. To some extent this is true; but I am sure no thoughtful physician will object to what I have said, and I know many will commend it. There are multitudes of people who take such rational care of their health that they have little need for doctors, and if we can add to their number a class who tend to the worst of all diseases, I am sure medical men will be the first to rejoice.

MARRYING IN HASTE.—SOUND ADVICE TO PARENTS.

THERE is too much "marrying in haste," followed by the inevitable "repenting at leisure," in this country. In whatever relates to marriage we Americans are the most sentimental, romantic and reckless people under the sun. We do not mean that there is too much marrying in this country, for there is by no means enough marrying of the right sort, but too much of the inconsiderate, immature and prementure sort. Europeans consider marriage soberly, seriously, rather in the light of a social and commercial compact looking to practical amelioration and the continuance of the family. To Americans, says a writer in the *Minneapolis Times*, there is something unpleasant in the businesslike way in which the English approach matrimony, and the ultrautiliation spirit they bring to bear on it from first to last. In this country we do not believe in taking a wife as we would buy a horse, or purchase land; or invest in stocks, viewing her substantial qualities and the amount of value received.

IF EUROPEANS GO TO THE ONE EXTREME

we Americans go to the other. If they are too cold and calculating, we are too warm and inconsiderate. If they make it too much a matter of business, we make it too much a matter of fancy and feeling. That love and sympathy should be the base, and that it is indeed the sole, safe and permanent base of marriage, is scarcely less than a truism. Though the principle may be incessantly violated, its verity is usually accepted even by those who violate it. In this country we believe it practically, and were our insight and self-understanding equal to our belief, we should boast of fewer inharmonious and unhappy couples than any other land. Unfortunately we are apt to forget that something more than what we conceive to be love is essential to matrimony, and we have besides an extraordinary facility for

DISCOVERING LOVE BY MERE SURFACE INDICATIONS.

Our young people are hardly out of school before, having been thrown into each others society, they imagine that all their future happiness hangs on their speedy union. As ignorant of them-

selves as they are of humanity in general, they confound the common instincts of nature with uncontrollable and unchangeable affinities. They flout all advice to proceed with caution; they are not going to wait until all freshness of feeling has gone and their hearts are withered, etc. Steeped in the selfishness of overflowing egotism, judgement consumed in the flame of tumultuous emotion, they are incapable of suspecting that they are simply another precious pair of nature's dupes. They solemnly believe their erotic experience is peculiar, that they feel as men and women never felt before, and will never feel again. They are not to be blamed; they are merely human; most of us have antedated their folly, though we may have escaped the

FINAL PITFALL OF A HASTY MARRIAGE.

It is a pitiable fact that more than half the persons who believe they love one another intensely, and marry under such belief, live long enough to find themselves mistaken. But many American parents deem it quite sufficient for their children to avow, in their salad days, a reciprocal passion, to take them at their word, and hurry them into wedlock. We are a practical people, yet the name of love has a conjuring power with us. Before that monosyllable, common sense seems to vanish. We forget that while love may be ample for itself, it is not ample for marriage—a state in which prosaic facts, stern realities, manifold annoyances, inevitably enter, and play a most conspicuous part. “Do they love one another?” That is the supreme and only test. “If they do, send for the clergyman and bind them fast.” Have they good health? Are they fitted to be parents? Can they sustain each other? Have they anything to live on? Have they any earning capacity? Are they qualified to construct a home that will benefit society or strengthen the state? These are old-fashioned questions, indelicate and impertinent. They are fond of one another;

THEIR FONDNESS WILL BE THEIR SURETY.

Would it might be! But, alas, what daily instances our divorce courts, and, indeed, our own observations, furnish that it is not! We are too sentimental and romantic over what, if it ever goes wrong, sentiment will not aid, and romance cannot cure. If the

American people were a little more careful about marriages beforehand we should have less causes to repent them afterward—we should have less mismated misery, fewer blighted lives, ruined homes, and public scandals.

FOOD FOR VEGETARIANS.

THE subject of vegetarianism invariably crops up in autumn, when the fruits of the earth are at the fullest and richest and when their aspect is most attractive, says the London *Daily News*. Vegetarians have already divided themselves into sects, which may roughly be classed as the broad, the high and the low. Taking the broad as a basis, the field of possible dishes may be regarded as large enough to supply a man with all he needs, if he be not habituated to a very frequent eating of meat.

EGGS AND MILK

are full of nourishment, and any recipes dealing with these may safely be selected from ordinary cookery books, only taking care to substitute butter for dripping. The latter is, of course, a heresy, proceeding as it does from cooked meat. Vegetables fried in butter largely supply the flavor in soups and broths, which the meat eater would at first most certainly miss. But though cereals, grains, pulse, vegetables and fruits may contain the possibilities of full nutriment it must be remembered that a man's constitution and habits, and even those of his progenitors, have to be taken into account.

ALSO THERE IS MUCH SKILL

needed in the preparation of the food in order to bring out the full nourishment from the vegetables. Macaroni is valuable, indeed, to the vegetarian, if he can only get it pure. Whole meal bread should be preferred to white for the same reason. Macaroni made in England is, as a rule, composed of ordinary flour, instead of white meal. This robs it of at least two-thirds of its

value. It should always be thrown into boiling water. The Italians

COOK IT IN THE FOLLOWING WAY:

Fry an onion in slices in some butter in the bottom of a saucepan and when the onion is a golden brown add sufficient water in which these may simmer for two hours. Plunge half a pound of macaroni in a pint of boiling water, and when it is tender drain it, pour cold water over it, drain again, then add it to the stock. When thoroughly hot serve it with grated parmesan. Quenelles of macaroni are excellent. The latter is bottled till tender, then passed through a sieve, mixed with finely grated bread crumbs and well-beaten eggs, with pepper, salt, &c. It is formed into balls, poached in boiling water and served with tomato sauce.

EXCELLENT SOUPS CAN BE MADE

of tapioca, eggs, and cream; tomatoes and rice; apples, celery, cream, and bread fried in butter; chestnuts, butter, and cream; artichokes, salsify, and many other kinds of vegetables. The well known "potage a la bonne femme" is quite a vegetarian dish, composed of lettuce, sorrel, tarragon, chervil, cucumber and cream. Eggs may be largely used in soups as a substitute for cream.

THERE ARE AT LEAST

150 ways for cooking eggs, and if our supply were only as fresh and abundant as it ought to be the vegetarian would find in them an infinite variety. Omelets, with tomatoes, herbs or cheese, are not difficult to make. There is the whole range of puddings, pies and patties open to the vegetarian, if only he remembers to use butter instead of suet or dripping. Nor must he put calve's feet into his jellies. Even gelatine is forbidden to him for this reason

HOW WOMEN CAN IMPROVE THEIR COMPLEXION BY HYGIENIC METHODS.

(BY A WELL KNOWN SOCIETY LADY.)

THE attempt to improve feminine looks and complexion has been heretofore always a matter of external applications. It is

only recently that it has been asserted by specialists in these branches that all genuine improvement must work from within outward. The watch words of the new system are exercise for the skin by means of rubbing and pinching, and enlargement and rounding of the muscles by means of motions scientifically adopted for each specific end. For example: Every one knows that the beauty which delights the eye in a pretty child or a pretty young girl, and that belongs to the earliest youth, is due to the exquisite firmness and roundness of the contours. And these contours come from the fact that the healthy flesh is supported, like a cushion, on full, round muscles. Such muscles make soft plump cheeks and throats without a line. With years the muscles lose some of this fullness and firmness if left to themselves, and the flesh actually falls in here and there. The smooth contours no longer exist in their perfection. Many women try to raise the

LOST ROUNDNESS BY FATTENING UP.

But mere fat never means firm flesh; moreover, it is subject to fluctuations with the state of the health and the cuticle which, in the case of ninety-nine women out of a hundred, never is kept properly healthy through friction, lacking elasticity does not adapt itself, beyond a certain age, to the occasional losses of fat, and hangs in folds about the neck and in wrinkles on the face. Now, obviously what is needed is to begin at an early age to strengthen and round out the muscles of the face and neck, and thus to keep them through specific exercises firm and full. If this be done hollows in the cheeks, at the temples, under the eyes and about the jaws, will be kept a very long time at a distance, and throats and chests which cannot, because of scrawniness, confront the exposure of décollete gowns will soon have depression filled out into a pretty plumpness. To achieve these results is a possibility—no mere theoretic dream. Nothing is required but systematic perseverance and an intelligent application of the exercises devised by professional masseurs and modern teachers of physical culture.

THE APPROACHES OF AGE SHOW

themselves with different women in different ways. But the usual stages are: First, depression about the eyes, and conse-

quently the incipient shadowings of crow's feet. Secondly, depressions and loss of freshness about the mouth. Thirdly, the first symptoms of "spoiling" at the throat—namely, a corded look in the cuticle, which extends from the chin to the clavicles. With other women again the cheeks sink in between the upper and lower jaws forming hollows. In still other cases the flesh sinks in behind the ears and in the corresponding part of the neck. Each and all of these depressions are caused by shrunken muscles; muscles which have become flaccid, or perhaps almost atrophied from never being rightly exercised. Any athlete can extend the girth of his chest or biceps two inches in six months by systematic and proper gymnastic exercise. Is it not logical that what can be done for arms or legs can be done in another way for facial muscles and the muscles of the neck?

EACH AND EVERY WOMAN NOW-A-DAYS

can study the point at which she feels she is likely to fail first, and concentrate the chiefest muscular development there, not neglecting the general exercises meantime. Two additional aids supplement the new practice of social development—pinching and rubbing. The pinching process is familiar to all those who have employed the services of professional masseurs. In the fashionable "rest cure" establishment in Philadelphia, the loss of strength which would naturally be the result of the patient's remaining two, three or four weeks in bed is counteracted by a daily and most vigorous pinching of the whole surface of the body by trained masseurs. This exercises the muscles, stimulates circulation, and is equivalent in its effect upon the system to a walk or horseback ride. As to the value of rubbing, for both muscles and skin, it has always been recognized by every one who has made these subjects a study. The advertiser of every lotion or emollient claiming to improve the complexion or develop the form and fill out hollows, specifies with insistence that the mixture must be thoroughly rubbed in. Nine women out of ten never appreciate the fact that the chief merit of the compound, if it have any, will be that it induces the user to apply more friction to her skin than she would otherwise ever think of doing. The friction, more than probably, would do just as much or more good without the compound. People have

learned the value of Turkish towels and of flesh brushes for the body. Why will they not learn that the pores of the face, being more exposed to dust, require friction just as vigorous?

NATURALLY, A COMPLEXION

that has never been briskly treated in this fashion must be rubbed with a little circumspection at first. A fine towel or a bit of red flannel are best for rubbing, twice a day, or four times, if rapid results are to accrue. By degrees, as the skin gains tone and elasticity from having thrown off the waste matter in its ducts that kept it clogged, sickly and flabby, the friction can increase in energy. The skin becomes, not tougher, but more resistant. If the rubbing is too hard at first, however, it is liable to produce redness and pimples. Even slight friction will do this at times on an unaccustomed skin. But the treatment should be persevered in, nevertheless, and the skin soon becomes extraordinarily fine and smooth. It is said that the first place in which a face usually "spoils" is under the eyes. Hollows form here, and the skin, becoming loose through depression of the muscles, falls into wrinkles or "crow's feet." On general principles it may be remembered that a "bagging" skin inevitably goes into wrinkles. Hence the importance of keeping the cuticle as elastic and in as resistant a condition as possible. On some faces the skin is naturally tighter than on others. Such faces do not wrinkle perceptibly until extreme old age. To return to the hollows under the eyes, the first muscular exercise prescribed is as follows: Draw the mouth hard into the semblance of a smile. Do this before the glass and you will observe that the small mound formed at the top of the cheek by the contraction or drawing up of the muscles obliterates temporarily the incipient furrow that runs from the inside angle of the eye diagonally across to the outer side of the cheek.

ON THE TOP OF THESE SMALL MOUNDS

now place the index and third and fourth fingers of each hand and press lightly downward with the tips. Then relax the face at once; again draw up into a smile, then relax; do this with increasing rapidity over and over until the muscles are tired, always maintaining the downward pressure with the finger-tips, but

not so hard but that the contraction of the muscles in the smile will raise them each time. This resistance it is that enables the laughing muscles to develop quickly and satisfactorily. Once developed, there is firm roundness at the top of the cheek and at the angle of the eye instead of hollowness, and the obliteration of the furrow that sooner than any other destroys the youthful contour of a face becomes permanent, not temporary.

IN GOING THROUGH ALL THESE MUSCULAR MOVEMENTS

it is of the first importance to remember to contract the face, in whatever the way indicated, with force. The muscular tissue only develops quickly upon this consideration, just as force is required to wield dumb-bells, or any other weight used in gymnastics. Now, it might be objected, with regard to this first exercise of the laughing muscles, that it is precisely by much smiling that wrinkles become defined, and that, if there be any wrinkles around the outer edge of the eye they will show only the more plainly while the face is contracted as prescribed. But it is exactly here

THAT RUBBING AND PINCHING SUPPLEMENT

the muscular exercise. After exercising as aforesaid, take the fingers of both hands and with slow, regular movements—one hand moving upward from the edge of the nostril and the other downward from the outer edge of the eye—press together and into a little bunch or mound all the loose skin and flesh that lie in the semicircle directly under the eyes. Do this without interruption for five or ten minutes. Wherever there are wrinkles that are quite defined, pinch them out by taking the soft skin over and over again firmly between the index and thumb. These things—the exercise of the laughing muscles, the rubbing and the pinching—should be done twice every day and oftener if rapid results are to be had. After washing the face, rub briskly with the towel, especially about the angle of the eyes and temples, and always use upward motions or outward, toward the ear. Never wipe any part of the face downward. In exercising, never stop until the muscles are tired; but, once fatigued, do not overstrain them.

EDITOR'S STUDY.

CAN COUGHING BE PREVENTED BY WILL POWER?—Dr. Brown-Sequard, in one of his lectures with reference to a check on sneezing, coughing, etc., says: "Coughing can be stopped by pressing on the nerves on the lips in the neighborhood of the nose. Sneezing may be stopped by the same mechanism. Pressing in the neighborhood of the ear, right in front of the ear, may stop coughing. It is so also of hiccoughing, but much less so than for sneezing or coughing. Pressing very hard on the top of the mouth is also a means of stopping coughing, and many say the will has immense power. There are many other affections associated with breathing which can be stopped by the same mechanism that stops the heart's action. In spasm of the glottis, which is a terrible thing in children, and also in whooping cough, it is possible to afford relief by throwing cold water on the feet, or by tickling the soles of the feet, which produces laughter, and at the same time goes to the matter that is producing the spasm, and arrests it almost at once. I would not say that we can always prevent cough by our will; but in many instances these things are possible, and if you remember that in bronchitis and pneumonia, or any acute affection of the lungs, hacking or coughing greatly increases the trouble at times, you can easily see how important it is for the patient to try to avoid coughing as best he can.

THE ACT OF BREATHING.—In each respiration an adult inhales one pint of air. A healthy man respire 16 to 20 times a minute, or 20,000 times a day; a child 25 to 35 times a minute. While standing the adult respiration is 22 times per minute; while lying down, 13. The superficial surface of the lungs, i.e., of their alveolar space, is 200 square yards. The amount of air respired every 24 hours is about 10,000 quarts. The amount of oxygen absorbed in 24 hours is 500 litres (about 744 grams). The amount of carbonic acid expired in the same time is 400 litres (911.5 grams). Two-thirds of the oxygen absorbed in 24 hours is absorbed during the night hours, from 6 p. m. to 6 a. m.; three-fifths of the total is thrown off during the day. The pulmonary surface gives off 150 grams of water daily in the state of vapor. An adult must have

at least 360 litres of air in an hour. The heart sends 800 quarts of blood through the lungs every hour, or about 5,000 daily. The duration of inspiration is five-twelfths of expiration, seven-twelfths of the whole respiratory act. During sleep inspiration occupies ten-twelfths of the respiratory period.—*St. Louis Republic.*

THE VALUE OF SLEEP FOR WOMEN.—Our American girls lay too little stress upon the value of sleep as the best and most wonderful tonic to the human system. It is no uncommon thing for them to be up until midnight or later, and yet arise in time to breakfast with the family at the usual hour, 8 o'clock in the morning. The parents are somewhat to blame in this matter. Many of them have still the old-fashioned idea that lying in bed in the morning is a form of idleness that should not be indulged in, and fathers, particularly, are most apt to feel that their daughters are inattentive if they are not on hand to brighten the breakfast hour and give them a good morning kiss. And it is a hardship, but a necessary one, if we would have our daughters retain their health and beauty. An unusually handsome St. Louis woman, says the *Post-Despatch* of that city, who has at the age of almost 50 years, the fine well-rounded figure and elastic step and carriage of a girl, the delicate, rose hued skin, and the brilliancy of youth in her eyes, says that she has made it a rule to return at 9 o'clock, except on very rare occasions, and then she takes a nap in the afternoon to prevent the ill effects of the late hours which are to follow. Our American women of all classes need more than any other people in the world the rest and refreshment which only sleep can give to overwrought nerves and overworked systems, for nowhere else do the women live under so much physical and mental strain. To some natures sleep does not come easily. In that event, some light exercise should be taken nightly before retiring, directing the blood thereby in proper channels, when sleep will come readily as to a tired child. What women need most, is a knowledge of self, and an intelligent understanding of nature's laws, not a parcel of nostrums, of which they know nothing, and which may be hurtful in the extreme.

TO RELIEVE CONSUMPTION IN AGED PERSONS.—Constipation is a

common trouble of the aged, and a gentle, circular massage of the bowels will be found beneficial. But it is well to know that it is not natural for the bowels to operate as freely or as frequently as in earlier life, and keeping this in mind do not resort to griping purgatives, which but increase the trouble. A cup of water which has been boiled, and allowed to cool till of an agreeable temperature, drunk half an hour before breakfast, will usually produce the desired effect. The constant wearing of an abdominal bandage of pure thick flannel will be a great help in this respect. It also promotes warmth of the entire body, and is a prime requisite in the clothing of the aged.—*Exchange*.

A SMALL TESTING INSTRUMENT.—Dr. Zwardemaker, of Utrecht, has been experimenting with a simple arrangement he has devised for measuring the sensibility to smell. It is simply a glass tube, turned up to enter nostril, and containing a sliding cylinder of a material that allows the passage of odors. The extent to which the cylinder is projected beyond the tube—that is, practically, the amount of surface of it exposed to an odor—would measure the keenness of scent of different people, or the relative strength of odor from different sources to the same observer. Trying one tube in each nostril, each exposed to a different odor, it was found that only one could be perceived. In some cases one odor seemed to equal the other in effect, and then there was no sensation of smell at all.—*Montreal Star*.

THE DEADLY CORSET IN NEW ZEALAND.—Hitherto we have been told that the vices introduced by white men are depopulating the South Sea Islands, but now it appears that white women are responsible for the rapid depopulation of New Zealand. When female missionaries went among the Maoris they insisted that the Maori women should wear clothing. The latter could not be induced to overcome their prejudice against skirts, but discovering that the missionary women wore corsets, they decided that the latter was a garment not wholly devoid of merit. Every Maori woman now goes about her daily work neatly clad in a corset laced as tightly as the united efforts of half a dozen stalwart warriors can lace it. The women are dying off with great rapidity, and the

repentant female missionaries now regret that they ever asked their dusky sisters to consider the question of clothing.

DIFFERENCE IN ANCIENT AND MODERN FEET.—Unquestionably the human foot, as represented by old sculptors, was larger than the modern one, and, in fact, the primitive foot of all people of whom we have any record, either in printing or statuary, was considerably larger than the restricted foot of modern times. The masculine foot, forming an approximate average of four different countries, was about 12 inches long. This would require at least a No. 12 or 12½ shoe to cover it comfortably. The average masculine foot to-day is easily fitted with a No. 8½ shoe, and is, therefore, not above 10 7-16 of an inch. Now, by the old sculptural rule of proportion, a man five feet nine inches in height should have a foot 11½ inches long, or one-sixth his height. It was of no great consequence what size sandal he wore, but he would have required a modern shoe of at least a 10½ for a minimum fit, or a No. 11 for real comfort. For women, allowing for the difference in the relative size of the two sexes, which was about the same then as now, a woman of 5 feet 3 inches in height would have had a foot 10 inches long, requiring a moderate shoe—it ought to be spoken only in a whisper—No. 6 as the most comfortable for that foot, or a No. 5½ as the limit of torture. The reason for the difference between the old classical foot and the modern one is obvious. Restriction is what has done it.—*Shoe and Leather Reporter*.

WHY MOST MEN DIE BEFORE THE END OF THEIR TIME.—Shakespeare says: "Men have died and worms have eaten them, but not for love." Some one else says, very few men die of age. Death is the result of disappointment, personal, mental or bodily toil or accident. We often see the strong man cut down suddenly and the invalid living his four-score years and ten. The fact is that the strong man uses up his strength and the weak one nurses the little given him. The passions certainly shorten life and sometimes suddenly end it. "Choked" with passion is very often not an exaggeration. The lower animals which live temperate lives have their prescribed term of years. The horse lives twenty-five years, the ox fifteen or twenty, the hog ten or twelve, the rabbit eight or

nine, the guinea-pig six or seven. The number all bear proportion to the time the animal takes to grow its full size. Man is the only animal that seldom comes up to the average. He ought to live one hundred years according to the physiological law, for five times twenty are one hundred, but he scarcely reaches an average of four times the growing period. To sum it all up, man is the most hard working and laborious of animals, also the most irregular and intemperate. He is irritable, and often wears out, and is consumed by the fire of his own reflections.—*New York Ledger*.

OUR RULES FOR GOOD HEALTH.

1. Be regular with your habits.
2. If possible go to bed at the same hour every night.
3. Rise in the morning soon after you are awake.
4. A sponge bath of cold or tepid water should be followed by friction with towel or hand.
5. Eat plain food.
6. Begin your morning meal with fruit.
7. Don't go to work immediately after eating.
8. Be moderate in the use of liquids at all seasons.
9. It is safer to filter and boil drinking water.
10. Exercise in open air whenever the weather permits.
11. In malarious districts do your walking in the middle of the day.
12. Keep the feet comfortable and well protected.
13. Wear woolen clothing the year round.
14. See that your sleeping rooms and living rooms are well ventilated, and that sewer gas does not enter them.
15. Brush your teeth at least twice a day, night and morning.
16. Don't worry, it interferes with the healthful action of the stomach.
17. You must have interesting occupation in vigorous old age. Continue to keep the brain active. Rest means rust.

WOMEN AND THE HOUSEHOLD.

CONDUCTED BY HELEN FLETCHER.

THE KEY TO HOUSEKEEPING.—The Germans have a story which the home-loving people love to repeat. A father, when his daughter became a bride, gave her a golden casket, with the injunction not to pass it into other hands, for it held a charm which in her keeping would be of inestimable value to her as the mistress of a house. Not only was she to have the entire care of it, but she was to take it every morning to the cellar, the kitchen, the dining-room, the library, the bed-room and to remain with it in each place for five minutes, looking carefully about. After the lapse of three years, the father was to send the key, that the secret talisman might be revealed. The key was sent. The casket was opened. It was found to contain an old parchment on which was written these words: "The eyes of the mistress are worth one hundred pairs of servants' hands." The wise father knew that a practice of inspection followed faithfully for three years would become a habit, and be self-perpetuated,—that the golden casket and the hidden charm would have accomplished their mission.

SLOVENLY DRESSERS.—The woman who can dress for the street in two seconds and boasts of it has very nearly cured herself of not fastening the belt of her cloak, so that there is not so much fun in walking behind her as there was a few years ago, but a new source of pure delight is opened by the narrow velvet bands which serve as bonnet strings. She never remembers to fasten them, and sails along with the two tape like ends dangling behind her ears and suggesting Asenath's comparison in "Hitherto," until somebody puts an end to the exhibition by telling her of her error, and then the scramble which she makes to finish her toilet is something to see. By the way, why is it that persons who go about the world saying "Beg pardon, ma'am, but you are losing" this, that or the other, never have a pin or hairpin with which to repair damages? They seem to feel that when they have made a

fellow creature uncomfortable they need do no more, and hustle away to say "Beg pardon," etc., to somebody else.

WORK NEVER KILLS.—An old grandma's saying is: "Work never kills." This comforting fact is carried out by the testimony of centenarians, most of whom seem to have been hard working people. The oldest woman in Pennsylvania, who recently died at the age of 105 years, had worked in early life at book-binding and housework, and during her widowhood at professional nursing. Most old women remember with pride the housework which they have performed during their lives, and illustrate the healthfulness of housework as an occupation. Whether the women of to-day, who have undertaken men's occupations, will live as long, the future will reveal.

RACE IMPROVEMENT BY WOMEN.—In a society in which women were all pecuniarily independent, were all fully occupied with public duties and intellectual or social enjoyments, and had nothing to gain by marriage as regards material well-being, we may be sure that the number of the unmarried from choice would largely increase. It would probably come to be considered a degradation for any woman to marry a man she could not both love and esteem, and this feeling would supply ample reasons for either abstaining from marriage altogether or delaying it till a worthy and sympathetic husband was encountered. In man, on the other hand, the passion of love is more general, and usually stronger; and as in such a society as is here postulated there would be no way of gratifying this passion but by marriage, almost every woman would receive offers, and thus a powerful selective agency would rest with the female sex. Under the system of education and of public opinion here suggested there can be no doubt how this selection would be exercised. The idle and the selfish would be almost universally rejected. The diseased or the weak in intellect would also usually remain unmarried; while those who exhibited any tendency to insanity or to hereditary disease, or who possessed any congenital deformity, would in hardly any case find partners, because it would be considered an offense against society to be the means of perpetuating such diseases or imperfections.—*Human Selection*, by Alfred R. Wallace.

MARRIAGE WITH DRUNKARDS.—The efforts to raise the poor and degenerate inebriate and his family are practically of no value as long as marriage with inebriates is permitted. Recently the legislature of the State of Victoria, in Australia, has passed a law which gives the wife the right of divorce if the husband is found to be an habitual drunkard. If after marriage she discovers that he is an inebriate she can also get a divorce. The husband can do the same with the wife if she is proved to be an inebriate. This is a clear anticipation of the higher sentiment which demands relief from the barbarous laws which would hold marriage with an inebriate as fixed and permanent.—*Journal of Inebriety.*

WOMEN LONGER LIVED THAN MEN.—A statistician by the name of Goodwin has found that women survive their husbands and brothers on an average ten years. The names of some great men who died before their wives are cited in illustration—Grant, Garfield, Logan, Sheridan, McClellan, Cox, Fremont, Polk, Davis, Grady, Beecher and others. The statistician has found that New England contains more female centenarians than any other section of the country, and that the cotton belt is least promotive of longevity. The statistics, which are not claimed to be official, certainly correspond with impressions derived from actual life. How many old ladies are seen about the firesides of their children, and how few old gentlemen, in comparison, occupy equal positions in the family circle. One of the premises for longevity, given by Dr. Humphrey of Great Britain, is the capability of the body of much endurance and of quick and complete restoration from fatigue, the nervous system energetic and the intellectual powers correspondingly developed. Most physicians acknowledge the superior nervous force of women and notice the great endurance which enables her to undergo, without flinching, pains and trials which would be a strain upon the strongest masculine physique. Quick reaction from fatigue and trouble is another characteristic of woman, enabling her to support the man dearest to her through the greatest afflictions to which he would often succumb without her aid.

FEMININE INFLUENCE.—When young ladies commit themselves against any social and degrading custom, especially among young men, that custom will begin to disappear. Woman certainly has the “right” to noble companionship and pure air, and it would be a very encouraging sign to see her assert it. But when I see a woman willing to train her children in the blue atmosphere of tobacco smoke without protest, or when I see a young lady walking or riding with a young man who wears a pipe or a cigar in his teeth, and that young lady is willing to swallow the vile fumes that come from his mouth simply for the infinitesimal privilege of his company, I say there is a woman, there is a girl, who cares little or nothing for woman’s rights, or woman’s duties, either.—*Advance.*

HOW TO LEARN TO TALK WELL.—Learn to listen well, and very soon you will find yourself speaking the word in season and surprising yourself as well as others by the quickness with which your thoughts will be well expressed. Read the works of great writers, think them over and conclude in what way you differ from them. The woman who talks well must have opinions—decided ones—but she must have them well in hand, as nothing is so disagreeable as an aggressive talker. Say what you have to say pleasantly and sweetly; remember always that the best thing in life—dear, sweet love—has often been won by that delightful thing, “a low voice.” Be not too critical; remember that every blow given another woman is a boomerang which will return and hit you with double force. Take this into consideration—it is never worth while to make a malicious remark, no matter how clever it may be.

MOTHERS AND THE NURSERY.

(CONDUCTED BY MRS. F. C. PRESSLER.)

SOME FACTS ABOUT THE TEETH OF INFANTS.—The development of tooth germs, from infancy to mature life, is one of the most interesting phases of human growth. Pass the finger along the tiny jaws of the newcomer. Not only is there nothing which presages future teeth, says an exchange, but the jaws themselves seem too delicate and frail to become the sockets for such hard portions of

anatomy. Yet there are 52 tooth germs hidden there, waiting their time, though not all of them could be detected by the most skilful dissection. Twenty of these are for temporary teeth, with which, in due time, the child will begin to gnaw or chew his way through life; the others include the permanent set and the molars, none of which begin to make their presence known until the child is about six years old, and the "wisdom" teeth do not usually appear until about 18. The little pulp-germ grows and develops till it approximates the shape of the tooth it is to become; then it begins to calcify, forming the dentine part of the crown, while the enamel is deposited by an independent process. The surface of the crown attains its full size before the process of the elongation commences. Then gradually it pushes its way outward through the gum, absorbing the tissue as it advances, till the pure white enamel peeps out, to the mother's great delight. The first sight of the incisors usually appears at about the age of five months, and the temporary set of twenty is completed at about three years of age, but there is no uniformity or certainty in regard to the age or which of the four central incisors will first appear. The process of "teething" is almost invariably one of disturbance to the health of the child; he is liable to fret and worry, especially if the outer membrane or skin of the gum proves tenacious and does not readily absorb. In this case it should be lanced—an operation which is humane, in that it relieves the discomfort of the child, and is entirely harmless, as there is seldom any hemorrhage worth the name, and if there should be a slight flow of blood it readily yields to simple treatment. The application of a dust of powdered alum is usually sufficient.

SPICES AND RICHLY SEASONED FOOD tend to produce a craving for liquor. A youth said to his mother, "I thought Mr. and Mrs. — were temperance people. It didn't seem much like it last night at dinner. Nearly everything was hot with spices." Let us mothers be as wise as our children. They know that it has been proved over and over that highly seasoned food creates an inflamed state of the stomach, which is apt to produce a thirst for alcoholic stimulants.

SLEEP FOR SCHOOL CHILDREN.—We all know how much greater is the need of children for sleep than of grown persons, and how necessary for their good it is to be able fully to satisfy this need; but how great it is generally at any particular age of the child is very hard to define exactly. The amount varies under different climatic conditions. In Sweeden, we consider a sleep of eleven or twelve hours necessary for the younger school children, and of at least eight or nine hours for the older ones. Yet the investigations have shown that this requirement lacks much of being met in all the classes, through the whole school. Boys in the higher classes get but little more than seven hours in bed; and as that is the average, it is easy to perceive that many of them must content themselves with still less sleep. It is also evident from the investigations that the sleeping time is diminished with the increase of the working hours from class to class, so that pupils of the same age enjoy less according as they are higher in their classes. It thus appears constantly that in schools of relatively longer hours of work, the sleeping time of the pupils is correspondingly shorter. In short, the prolongation of the working hours takes place for the most part at the cost of the time for sleep.—*Prof. Axel Key.*

CHILDREN ARE NO LONGER TRAINED, as formerly, to affix the “ma’am” and “sir” to every word uttered. Such expressions of deference are now confined to the speech of servants. All that the most rigid school-ma’am can require of her pupils at present is “Yes, Miss Brown,” or “No, Miss Brown.” All that the mother demands is the respectful tone of the child. And “Yes, mother” is much less formal than the old time “Yes, ma’am.” Some older people, clinging to old forms of speech, would do well to remember some of the modern modes of address.

BABIES WHO ARE ALLOWED TO CREEP or play on the floor a great deal are subjected to unavoidable draughts, from which chills and colds will certainly ensue unless the clothing is sufficient. Woolen stockings should be used in such cases all the time; the arms and chest should be well protected by woolen underwear, and a flannel band will keep the bowels warm and avert sudden chills.

AMUSE CHILDREN WHILE TRAVELING.—A lady starting on a long journey with two children placed in her satchel some pieces of cardboard, scissors and leadpencils. After the novelty of car riding had worn off this wise woman produced her treasures. One child cut the cardboard into pieces three-quarters of an inch square, the other printed on each square a letter. The alphabet was repeated many times. Then each formed words from the letters and gave to the other to make out. In this way they amused themselves for hours. The mother might have taken the game from home with less trouble to herself, but well she knew there would be more satisfaction in making it for themselves. Paper dolls were cut and extensive wardrobes fashioned from bright colored paper that had been thoughtfully provided. At the end of the journey the passengers declared the children wonderfully well behaved, and wished they might always travel with such happy little people. The fact was, the children were ordinary children, but their hours had been so pleasantly occupied there had been no opportunity for becoming weary and then disagreeable.—*New York Housekeeper.*

PUBLISHERS DEPARTMENT.

OUR UNPRECEDENTED PREMIUM LIST.—We call especial attention to our unprecedented premium list for the ensuing year. It will be found on the second page of cover of this issue. The HERALD OF HEALTH is fully worth One Dollar a year, and the premium offer is not made with any intention of pushing this magazine, the HERALD keeps and increases its circulation solely upon its own merits. But we have the opportunity of assisting our friends to procure good literature at reduced prices, and we are desirous that they should avail themselves of the chance, therefore, we make the following offers:

We will send the *Ladies' Home Companion* (published at \$1.00 per year), the HERALD OF HEALTH (\$1.00 per year) and a copy of the famous picture of "Christ Before Pilate" for \$1.30.

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one of the brightest lights in literature, under her nom de plume of "Jenny June") together with the HERALD OF HEALTH, for only \$1.75.

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We have secured a large edition of Cooper's Famous Leather Stocking Tales which we almost give away. To every new and old subscriber who sends us One Dollar and Twenty-Five cents we will mail the HERALD OF HEALTH for One Year, and in addition send these famous stories, the series complete in one large, handsome volume, in paper, with illuminated title page, and printed in clear type. This offer is an exceptional one and should be taken advantage of without delay.

Read over the above list, take advantage of it, and induce your friends to subscribe for the HERALD. It will pay you and them to do so.

OUR FORTY-FIRST YEAR.—The present number of the HERALD OF HEALTH completes our fortieth year of publication. For past favors we are more than grateful to our legion of friends. Promises are cheap and easily made, but we are sincere in expressing our determination to make the HERALD OF HEALTH, in future, the best magazine of the kind in the country. We are the pioneers in the field of hygienic reform—in practice as well as in theory—and are resolved to maintain our position in the race. Our friends can materially assist us in the good work, and we confidently rely upon their continued sympathy and support.

QUESTIONS OF INTEREST ANSWERED.

OVERSTRAINED VOICE.—*Singer*.—"Granular laryngitis" has no existence, but "granular pharyngitis" is well known. You could not see "granules" in your own larynx. Overstrain of voice and general weakness cause this trouble. Rest your voice completely for a time. The cautery at a dull red heat is often used in this affection.

EXERCISE NEEDED.—*Commerce*.—No; so long as you are careful to take moderate exercise and avoid stooping-habits you need have no fear. The pains are either muscular or arise from indigestion. Look to your general health and clothe warmly. Glad to be of further service, if need be.

THROW THE BOOK IN THE FIRE.—*Sufferer* writes that he has read a book sent him from a "Medical House" in Buffalo, and that he believes from the symptoms therein described that he has become an incurable victim of disease. We advise him to fling the book in the fire and hereafter to take no stock in quack sensationalists.

USE OF THE TOOTH BRUSH.—*M. A. W.*—The use of the tooth brush in connection with powders, washes or other treatment of the teeth should be gentle. Bleeding of the gums is always a danger signal. It shows that the skin has been broken, inviting the absorption into the system of any poisonous or foreign matters which may be present in the mouth. If the gums are very tender, a soft brush should be used, and used very gently, till they have hardened sufficiently to withstand more vigorous treatment.

ONE CAUSE OF SHORT-SIGHTEDNESS.—*Observer, Louisville*.—Dr. Foster, director of the Ophthalmic University at Breslau, has figured out a connection between tight collars and short-sightedness. He alleges that in 300 cases that have come under his attention the eyesight had been affected by the pressure of such collars upon the muscles of the neck, disturbing the circulation of the blood to the head.

HOW TO STOP HICCOUGH.—*Victim*.—To stop hiccough take a lump of sugar saturated with vinegar.

GETTING RID OF HAIR SCALINESS.—Scaliness or dandruff is a hard thing to rid the head of. It exists everywhere. No head is free from it. To get rid of it you need only to put a small quantity of borax in the water you wash your head with, and that will relieve the scaliness.

STOPPING HEART PALPITATION.—It is not generally known that excessive palpitation of the heart can be promptly stopped by

bending double, with the head downward and the arms pendant, so that a temporary congestion of the upper part of the body is produced. If the breath be held at the same time, the effect of this action is hastened.

ANOTHER FELON CURE.—There is no more painful affliction than a felon. It and the toothache have a close race for supremacy. A very easy way to cure a felon is to mix equal parts of strong ammonia and water, and hold your finger in it for fifteen minutes. After that withdraw it and tie a piece of cloth completely saturated with the mixture around the felon and keep it there until dry.

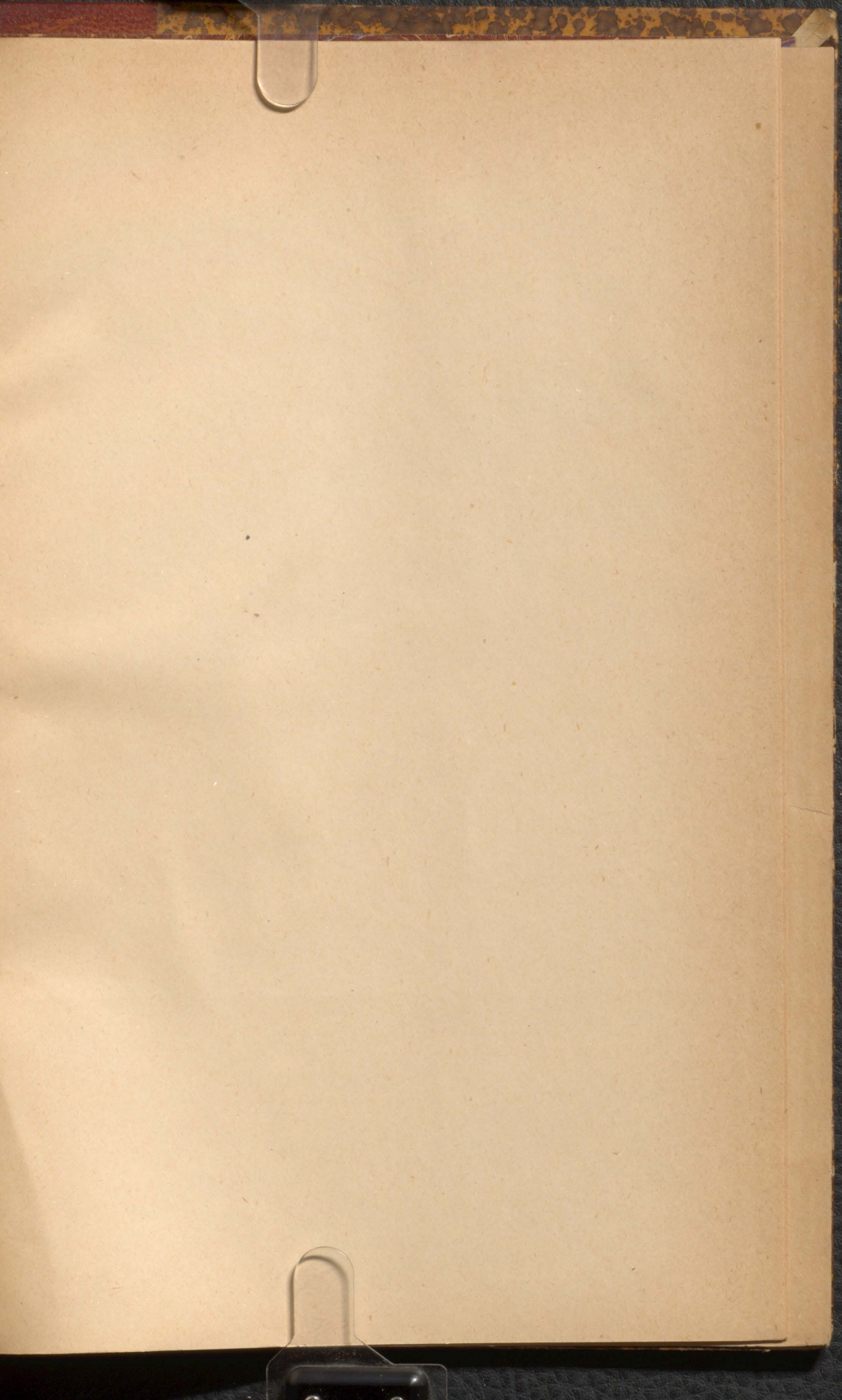
HOW TO EAT OATMEAL.—If oatmeal is eaten in excess of the needs of the body for proper nutrition, it overloads and taxes the system. It must not be eaten partially cooked. Flour, cornmeal, rice and other approved articles of wholesome diet are not wholesome if half cooked. If an excess of sugar or other sweets is used it will disagree with many people, causing indigestion. If eaten with an excess of cream it will not be good for some persons whose stomachs are too delicate to stand rich food. Oatmeal is a good food when not used for overfeeding, when sufficiently cooked and when not used with an excess of cream or sweets. Oatmeal should be eaten without any sweets, using little milk or cream, a little butter and seasoned with salt, as the Scotch do.

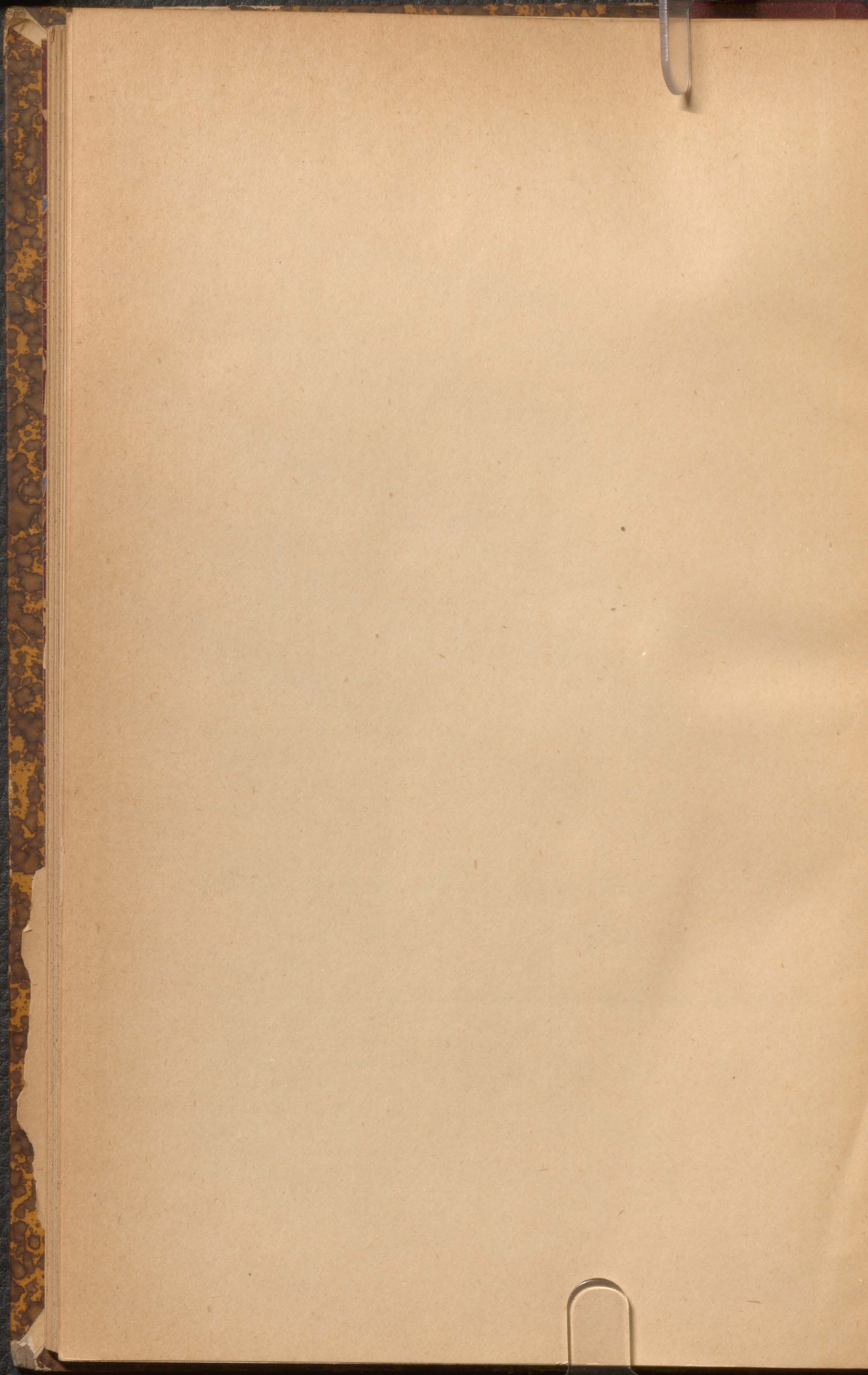
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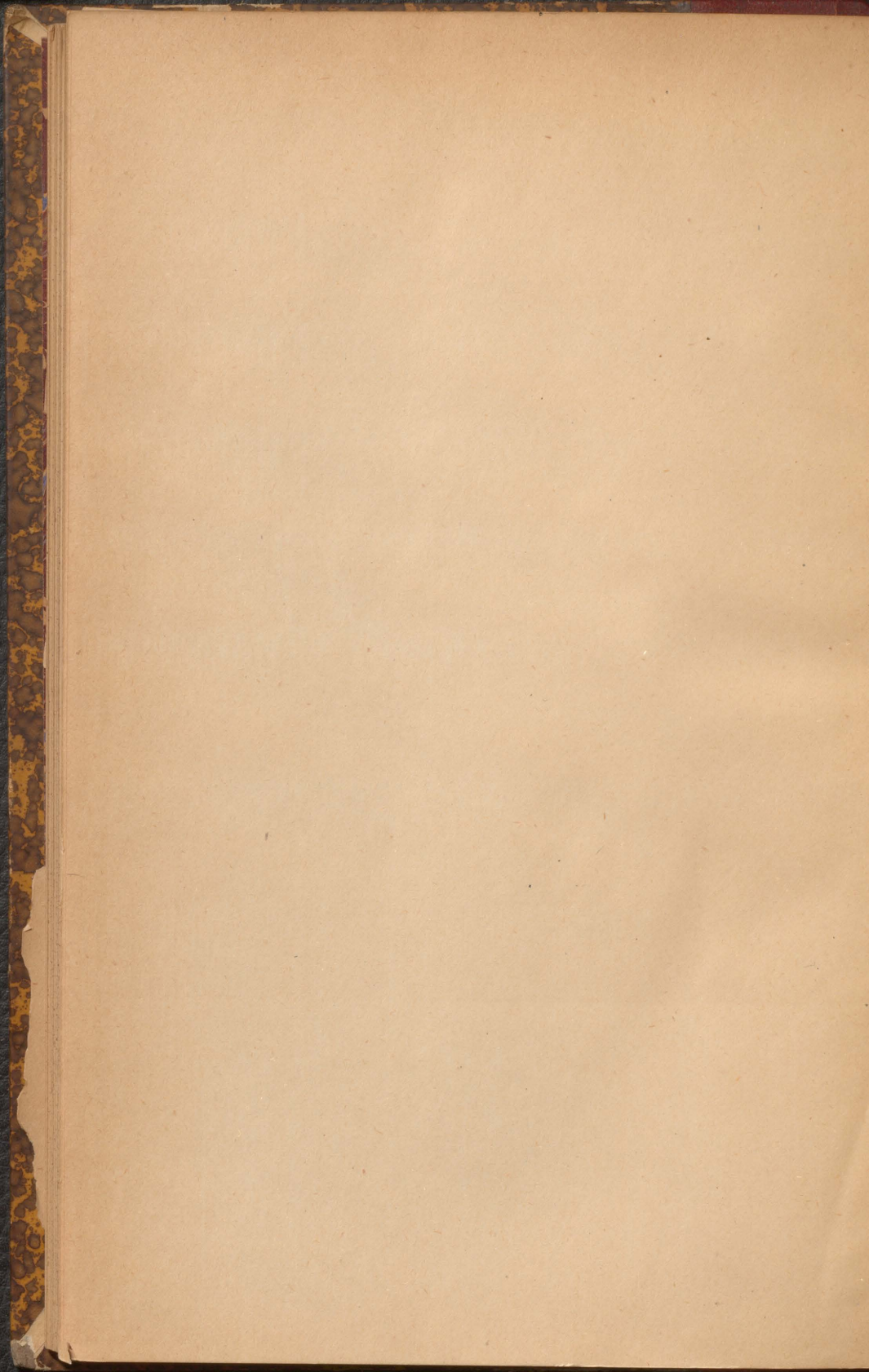
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