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LABOR.

LABOR is life! 'Tis the still water faileth;
Idleness ever despaireth, bewaileth;
Keep the watch wound, for the dark rust assaileth;
Flowers droop and die in the stillness of noon.
Labor is glory!—the flying cloud lightens;
Only the waving wing changes and brightens;
Idle hearts only the dark future frightens;
Play the sweet keys, wouldst thou keep them in tune!

Labor is rest—from the sorrows that greet us;
Rest from all petty vexations that meet us;
Rest from sin-promptings that ever entreat us,
Rest from world-sirens that lure us to ill.
Work—and pure slumbers shall wait on thy pillow;
Work—thou shalt ride over care's coming billow;
Lie not down wearied 'neath woe's weeping willow;
Work with a stout heart and resolute will!

Labor is health! Lo! the husbandman reaping,
How through his veins goes the life-current leaping;
How his strong arm, in its stalwart pride sweeping,
True as a sunbeam the swift sickle guides.
Labor is wealth—in the sea the pearl groweth;
Rich the queen's robe from the frail cocoon floweth;
From the fine acorn the strong forest bloweth;
Temple and statue the marble block hides.

Droop not, though shame, sin, and anguish are round thee,
Bravely fling off the cold chain that hath bound thee;
Look to you pure heaven, smiling beyond thee;
Rest not content in thy darkness—a clod!
Work for some good, be it ever so slowly;
Cherish some flower, be it ever so lowly;
Labor!—all labor is noble and holy;
Let thy great deed be thy prayer to thy God.
—Living Age.

FOUR DEGREES OF DRUNKENNESS.—There is a Rabbinical tradition that when Noah planted the vine, Satan attended and sacrificed a sheep, a lion, an ape, and a hog. These animals were to symbolize the gradations of ebriety. When a man begins to drink, he is meek and innocent as the lamb; then becomes bold as the lion; his courage is soon transformed into the foolishness of the ape; and at last he wallows in the mire like the hog.

Dyspepsia.

If there is any one disease that should excite our sympathy and pity for the sufferer more than another, it is dyspepsia. So long as the food is well digested, the patient may be agreeable, cheerful, and hopeful; but let there be but a slight degree of irritation in the stomach of the confirmed dyspeptic, and a low-spirited condition is immediately induced, which may vary from slight dejection and ill-humor to the most extreme melancholy. At times, the patient misconstrues every act of friendship, is irritable with those who desire to help him, while he exaggerates slight ailments into heavy grievances.

A humorous sketch of these dyspeptic miseries and their consequences has been drawn by Sydney Smith, in his customary style. He says: "Happiness is not impossible without health, but it is of very difficult attainment. I do not mean by health merely an absence of dangerous complaints, but that the body should be in perfect tune—full of vigor and activity. The longer I live the more I am convinced that half the unhappiness in the world proceeds from little stoppages, from a duct choked up, from food pressing in the wrong place, from a vexed duodenum, or an agitated pylorus. [The duodenum is the first nine or ten inches of the small intestine. The pylorus is composed of a circular band of muscular fibers which surround the outlet of the stomach. It is by the contraction of these fibers that the contents of the stomach are retained during the process of digestion, hence its name pylorus or gatekeeper.] The deception as practiced upon human creatures is curiously entertaining. My friend sups late; he eats some strong soup, then a lobster, then some toast, and he dilutes these esculent varieties with wine. The next day I call upon him. He is going to sell his house in London and retire into the country. He is alarmed for his eldest daughter's health. His expenses are hourly increasing, and nothing but a timely retreat can save him from ruin. All this is the lobster: and when over-excited nature has had time to manage this testaceous incumbance, the daughter recovers, the finances are in good order, and every rural idea is effectually excluded from the mind.

"In the same manner old friendships are destroyed by toasted cheese, and hard, salted meat has led to suicide. Unpleasant feelings of the body produce correspondent sensations in the

mind, and a great sense of wretchedness is sketched out by a morsel of indigestible and misguided food."

The dyspeptic when suffering from irritation of the stomach is no more like himself when well than a kernel of corn is like a potato. He says and does things exactly contrary to what he says and does when well. This makes him appear fickle and unreliable, yet he cannot help it. Surely, such a person should be pitied.

To properly understand the causes of dyspepsia it is essential that the digestive processes be understood, for dyspepsia is simply indigestion.

Digestion consists of a series of processes by which alimentary substances, when introduced into the digestive canal, undergo certain changes. The object of it is to convert them into two parts, the one a reparatory fluid destined to renew the perpetual waste occurring in the structural organism; the other, deprived of its nutritious properties, to be rejected from the body. The first of the digestive processes is insalivation of the food. This can be well done only when the food is thoroughly masticated. The saliva, which is a digestive fluid, is secreted by six glands so situated in connection with the lower jaw that the movement of the jaw in masticating the food accelerates the secretion of the saliva. If the food is not thoroughly masticated, the saliva will not be well mingled with it, and this is important, as it is the function of the saliva to digest the starchy portions of the food.

Another reason why the food should be well masticated is, that it cannot be digested until after it has been reduced to a state of very minute subdivision, and if this work is not accomplished in the mouth by mastication, it will have to be done in the stomach by the process of squeezing and rolling it about, and this is a very severe task for the stomach to perform. We thus see the importance of having good teeth.

After the food has passed into the stomach, it comes in contact with the gastric juice, which is the principal digestive fluid. The gastric juice is produced from the blood by certain secreting cells, called gastric follicles, which are situated in the mucous membrane or inner coat of the stomach. These cells are very small, the largest of them being only the one-hundredth of an inch in diameter, and about the one-twentieth of an inch in length. Each of these cells is surrounded by minute blood-vessels from which the gastric juice is produced. When food is received into the stomach, the gastric follicles are set at work by the nerve centers of the organic nervous system, and the juice oozes out, and stands on the inner surface of the stomach like drops of sweat on the skin. The stomach is composed largely of muscular tissue, there being three sets of muscular fibers, one set being longitudinal, another circular, and the third oblique.

As soon as the food is received into the stomach, these muscular fibers are caused to contract in such a manner that the food is turned over and moved about until all parts of it come in contact with the mucous membrane, and receive the gastric juice, and are by it reduced to a fluid state. If the food has not been thoroughly masticated before entering the stomach, longer time is required to reduce it to a fluid state, and much more gastric juice is secreted than would otherwise be required, thus overtaxing the secreting cells and wearing them out.

The gastric juice is not simply a solvent fluid like water, and its function is not simply to dissolve the food. It has properties that no other substance possesses, hence no other substance can supply its place. This fluid not only dissolves the solid portions of the food, but it changes or transforms the food thus dissolved into an altogether different material from what it was when simply in a state of solution. What is singular is, that this gastric juice has the property of transforming many different kinds of food into precisely the same kind of substance, called chyme, so that we find mankind capable of subsisting upon a great variety of food. What may appear as still more singular is the fact that this change that takes place in the food is not accomplished by a chemical union of the gastric juice with the food, for no such chemical union ever occurs. This fluid is simply mixed with the food, and its presence causes the minute atoms of the food to re-arrange themselves into a peculiar form of association or grouping. It matters not whether the food is vegetable or animal, whether it be composed of fruits, grains, esculent roots, tubers, succulent plants, or flesh-meats, the simple presence of a proper amount and quality of gastric juice causes the atoms of all these different varieties of food to arrange themselves into the same form of groupings, so that the chyme derived from one kind of food is precisely like that derived from another kind. After the food has thus been changed into chyme—a white or milky substance—it passes from the stomach into the small intestines, the first portion of which is called the duodenum, where it is mingled with the bile from the liver, also with a secretion from the mucous membrane of the intestines and with the pancreatic juice, which is secreted by the pancreas, a gland that lies behind the stomach. The pancreatic juice divides the oily portions of the food into a state of minute subdivision, thereby accelerating their passage or absorption and final expulsion. The bile changes some portions of the oily matter into a saponaceous—soapy—mass for the same purpose. Throughout the entire intestinal canal the mucous membrane contains more or less secreting cells that pour out a fluid which assists in the work of converting food into a fluid suitable to be transformed into flesh. After the food is suitably changed by

the digestive fluids, it is taken up by the absorbent vessels—the lacteals principally—and after passing through certain glands contained in the mesentery—the fatty membrane that connects the folds of the intestines—it passes through a duct in which the lacteals terminate, and thence into the veins, through which it is carried to the heart, thence to the lungs, where it is aerated and becomes fully organized blood.

As previously stated, dyspepsia signifies indigestion. Now whether or not our food is properly digested depends, as already shown, upon many circumstances, and the lack of any of these may be the cause of indigestion. The food must be well masticated. The digestive fluids must be secreted in proper amounts and of proper quality, the stomach must be strong, and its gastric follicles all healthy, and the intestines must be in the same condition. The absorbents must be active, and there must be full and free breathing. These processes call into activity a vast number of muscles and other organs, all of which must act with integrity, otherwise indigestion will result.

CAUSE.—It will be readily seen from the foregoing remarks that whatever hinders any of the digestive organs from properly performing their functions becomes a cause of dyspepsia. Probably there is no one disease, concerning the cause of which there exists so great a uniformity of opinion in the minds of medical men, as dyspepsia. They all agree that errors in diet and errors in exercise are almost the sole causes of this disease. The principal errors in diet that cause this disease are the following: Food taken in too large quantities; food of improper quality, especially greasy food; food highly seasoned or mixed with condiments; and food taken at irregular times. Or dyspepsia may be caused by food imperfectly masticated, through carelessness or hurry, or because of bad teeth, etc.; or by food taken into the stomach at too short intervals, not allowing the stomach sufficient time to rest. The drinking of too much fluid while eating is also a cause of dyspepsia. In addition to these errors, the want of bodily exercise, sedentary habits, inordinate intellectual exertion, care, anxiety, excessive physical exercise, the frequent use of drugs, especially narcotics, smoking, tobacco-chewing, snuff-taking, and the use of alcoholic drinks, tea, and coffee, are each and all causes of dyspepsia; for they weaken the digestive organs and occasion the secretion of gastric juice that is deficient in amount or in quality.

SYMPTOMS.—These vary in different individuals. A dyspeptic may manifest any of the following symptoms: Pain or uneasiness in the stomach, tenderness and a feeling of all-goneness at the pit of the stomach, as some express themselves, foul breath, coated tongue, and unpleasant taste in the morning, capricious appetite, which at times refuses food, and at other times is unsatisfied even

after a hearty meal, or there may be an entire loss of appetite; sensation of pain or a sense of weight and fullness in the upper portion of the abdomen, the formation of gas in the stomach or intestines, burning pain in the stomach—heart-burn—cramp in the stomach, frequent eructations of gas or water from the stomach, habitually constipated bowels, chronic diarrhoea, or those conditions alternating. There may be nausea, or vomiting, palpitation of the heart, irregularity of the pulse, headache, and occasionally dimness of vision. If the stomach is greatly distended with gas, the breathing will be difficult.

TREATMENT.—Break away from every false habit; eat plain food, cooked in a simple manner, discard all rich food, grease, fat, or oil, eat sparingly, masticate the food thoroughly, eat regularly, and not oftener than three times in twenty-four hours; drink neither tea, coffee, nor other drink with meals; use no alcoholic drinks at any time; take all the exercise in the open air that can be taken short of fatigue; breathe full and free; sleep much, and at regular hours; and always retire early. If the stomach refuses to retain food, it should have rest for twenty-four hours, then begin feeding with a single spoonful of milk. After a half hour, give another spoonful, and so on; after a few hours increase the amount, or add a little sifted oat, wheat, corn, or barley-meal gruel, and increase the amount no faster than the stomach can retain it. Take the mild baths, such as the dripping-sheet, the spray-bath, the sponge, sitz, or half-bath, twice a week.

Take the dry-hand-rub every morning, and gently percuss the abdomen and chest with the closed fist, every hour through the day for ten minutes at a time. Horseback riding is excellent for those afflicted with this disease. Sun-baths should be taken daily. Hot fomentations on the stomach two hours after eating will aid digestion.

M. G. K.

Leprosy in California.

Of such beings there are said to be at least two hundred in San Francisco to-day. I saw a dozen or more of them yesterday during an hour's walk of exploration in the Chinese quarter. The physician who has been most active in endeavoring to call public attention to the presence in the community of this awful curse is Dr. Charles O'Donnell, a regular practitioner, who has seen this disease before in the Sandwich Islands, and there learned to view it with dread and horror.

Under Dr. O'Donnell's guidance, I visited the Chinese quarters. We went through but a small portion of it—the block above Dupont street, on Jackson, in which the Chinese theater is located; but we saw enough to, at least temporarily, satisfy my curiosity. We were after lepers. "I will show you any stage or form of the disease you

desire to see," was the doctor's reply; "there are two hundred of them within gunshot of here." A little above Dupont street he plunged into an alley, or, rather, a crevice between two buildings. The Chinese love to economize space. They delight in being crowded. Through the thick smoke which filled a den about seven feet long, five feet wide, and six feet in height, I could dimly discern the figure addressed as John. He was cooking rice. In a few moments he came shambling to the door. He would have been a nice chairman for a committee on personal attractions. Tumors, like hill-locks, supplied the place of dimples, and there were ravines in spots where protuberances might have been expected. His skin looked thick, dark, red, scaly. "Show us your arms, John," said the doctor, pantomiming. He might as well have talked to a wooden man; but the vigorous pantomime was effective. John's arms were worse than his face. "Now your legs, John"—with more pantomime. John's face was positively pretty by contrast with his legs. If his calves were ever half as big as his ankles now are, John must once have been a powerful fellow. He is more than the average size of his race, so there is more field for the operations of the leprosy, which seems thoroughly Chinese in its power of utilizing all available space. He has such big tumors that he seems rather proud of them, and makes signs that he has others, still more magnificent, on hidden portions of his surface. We lose interest in the contemplation of his charms, and retire; but, before doing so, lay some money on his door-steps.

A little further up the street we enter another building and go through to a court-yard in the rear. Here, at night, the odoriferous Mongolians pack themselves together like sardines. In day-time, if not at work, they lie here and smoke opium. So three of them are engaged in one den, at which the doctor stopped to inquire for the object of their search. Opium smoking may produce delicious sensations, but it certainly makes a villainous smell. "Yes, there is another case just beginning," exclaims the doctor, in a tone of triumph, fumbling away at a Chinese woman's hair, and exhibiting a great, swollen, scale-forming splotch covering her right temple. Both she and her companion seem rather uneasy, possibly mistaking us for policemen in plain clothes—a race of beings much dreaded by them—and very readily direct us to another leper, some doors further along the gallery.

This leper is an old and very miserable one. He appears to be sixty years old. He has passed from the bloated, puffy stage to one of horrible emaciation. His lean, old face has a painfully monkeyish look. His arms and legs have no more flesh on them than the shanks of a healthy canary. With difficulty he totters out of the dingy kennel to be inspected. With piteous, imploring gestures and tones he begs for medicine from the doctor,

whom he recognizes. Alas! no medicine can avail him. Ere long he will cease to want it.

Leaving this swarming, filthy house, we cross the street to a Chinese grocery, where the doctor expects to find another specimen. This grocery is a queer place. Its stock-in-trade is of a character which would puzzle anybody but a Chinaman. Strange vegetables, grown only in a Chinese garden, are piled up here and there. Baskets stand about filled with dried fishes—very small ones, like our minnows. There are piles of dried cuttle-fish, hideous things, with flat, white bodies as big as a man's hand, and a lot of dry, twisted, tangled tails straggling out from one end. There are strange nuts and queer preserves. Every article in the store seems to have some peculiar, abominable smell of its own. The grand total is a compound, complicated, overpowering, permeating, and stupendous stink—the champion stink of the world. But we do not come here to see gorgers, or smell them. The white man's stomach soon begins to protest against this atmosphere, and we move on. The doctor offered to show me "fifty more cases right around here," if I wished to see them, but it seemed to me as if I did not yearn for any more leprosy. A few lepers are interesting, but in time they grow monotonous.

The experience of all peoples among whom it has existed in Egypt, China, the Sandwich Islands, and elsewhere, has resulted in the unqualified affirmation that it is contagious. A few physicians, and still more unprofessional persons in this country, protest that it is not, except under peculiar circumstances. The argument is a common one. "We have had the leprosy here in California ever since we have had the Chinese; why, if it is contagious, has it not spread among the white people?" There is a primary error here in the assumption that it has not. The fact is that it has. A man named Elkridge died here a few months since from this disease. Another died of it not long since in the Alameda Hospital. Judge Asher Bates, a man who held the highest place in the esteem of the people in San Francisco, died but a few weeks since, and it has been affirmed to me that this horrid pest was the cause of his demise. I know of one case now in progress here, a white man, who is suffering with leprosy; and I only refrain from giving his name by request of the physician who has him in charge. Could the truth be known about the spread of leprosy among the white population, it would be appalling. But it cannot be as yet. Those afflicted with the disease suppress the fact until the last moment possible.—*Graphic*.

A PHYSICIAN, on presenting his bill to the executor of an estate of a deceased patient, asked, "Do you wish to have my bill sworn?" "No," replied the executor, "the death of the deceased is sufficient evidence that you attended him professionally."

Alcoholic Medication.—No. 3.

BY RALPH E. HOYT.

THAT the medical fraternity are the greatest stumbling block in the way of temperance reform, I have no more doubt than I have that whisky will intoxicate or opium stupefy. And yet, while it is painfully evident that a large majority of the doctors are theoretically and practically on the wrong side of the temperance question (whether they will acknowledge it or not), it is gratifying to know that there is here and there a medical gentleman who has the ability and disposition to treat the matter in a common-sense way, and place alcohol in the category of things to be perpetually kept out of the human system. True, many of those who discard alcohol administer other poisons equally as bad. I am speaking now of the relations of the medical fraternity to the temperance question. I have not one word to say in defense of druggery of any kind. The whole drug system is an unmitigated curse to society, and the wonder is that any sensible, reasoning being can believe in it. But it is *Alcoholic Medication* which I am now discussing, and, for the present, I shall leave general drug medication to be ventilated by others who are better qualified for the task. The number of physicians who have banished alcohol from their practice is not so large as we could wish, but it is steadily increasing, and, better still, *the people* are beginning to investigate the question for themselves, and to do more of their own thinking with reference to the laws governing their physical being. I herewith present a few facts tending to show how widely the leaven of truth has permeated the medical fraternity, so far as this subject is concerned:—

Doctor Andrew Comb, Sir John Clark, and two thousand other English physicians, publicly renounced Alcoholic Medication.

Dr. Edward Johnson, of England, says: "I assert that spirits are in every instance, as articles of diet, pernicious, and, as medicines, wholly unnecessary."

Dr. Morgan, President of the Bath (England) Medical and Surgical Association, says: "I am utterly ignorant of any disease, acute or chronic, that cannot be cured (?) without intoxicating drinks."

Dr. Higginbotham, in a paper read before the British Medical Society, says: "During my long practice, I have never known a disease cured by alcohol. On the contrary, it is the most terrible producer of diseases, and may be considered the bane of medicine and the seed of disease."

Dr. John Fathergill, of Darlington (England), says: "The total rejection of ardent spirits as medicine would prevent the ruin of many constitutions, and the loss of innumerable lives which are now sacrificed to their use."

Prof. Miller, of Edinburg, Scotland, says: "Alcohol cures nothing; it covers up a great deal."

Dr. Guthrie, of the same city, says: "If you want to 'keep' a dead man, put him in whisky; if you want to kill a living man, put the whisky into him."

Prof. Von Moleschott declared that: "Alcohol does not effect any direct restitution, nor deserve the name of an alimentary principle."

Dr. Edward Smith, F. R. S., says: "Alcohol is not a true food, as it neither warms nor sustains the body by the elements of which it is composed."

Dr. Markham, of the *British Medical Journal*, says: "None of it (alcohol), so far as we know, is assimilated or serves for the purposes of nutrition. It is therefore not food, in the eye of science."

Dr. Vierordt, in his "Physiology of Respiration," maintains that: "The expiration of carbonic acid, after the use of fermented liquors, is considerably diminished, and does not return to its normal quantity for the space of two hours."

Dr. Beaumont, of Bradford (England), said, in 1845: "If, indeed, the effect of alcohol is to carbonize the blood—and of this there can be no reasonable doubt—then its influence must be analogous to fever itself."

Prof. Lehman says: "We should *forbid* the use of spirituous drinks."

Dr. Beaumont, in his work on digestion, states that: "The whole class of alcoholic liquors, whether fermented or distilled, may be considered as narcotics."

Dr. E. Smith, in the *British Medical Journal*, said, in 1861: "I venture to assert that alcohol has no power to increase nervous force, but that on the contrary, its direct action is to *lessen* nervous force, and that, in fact, it is a poison of the nervous centers."

But, to come nearer home, our own Dr. R. T. Trall, formerly of New York, now of Philadelphia, one of the ablest and most profound medical philosophers of this or any other country, and a health reformer of whom the world may well be proud, has probably expended more time and labor in the investigation of this subject than any other man living. He treated patients alcoholically, I believe, during the first ten years of his practice, and renounced the fallacy forever; and for many years past he has been bravely battling against the monster evil. In 1862, he attended the World's Temperance Convention in London, and delivered before that body, an address wherein he discussed the question of Alcoholic Medication in a masterly manner, and showed up the fallacies and evils of the system so plainly that no candid mind, of average intelligence, could fail to see them. Dr. Trall declares that no substantial progress can ever be made in the temperance reform, while alcohol is so generally used as a medicine.

Dr. Gilman, of New Hampshire, published an article in the *Boston Medical and Surgical Journal*, in which he assumed and proved that alcohol in no way supported vitality; that its apparent "support" was nothing more nor less than fever produced by the poison, which, instead of sustaining the patient, only prostrated him the more.

Dr. Muzzy, of Boston, in a prize essay, declared that the sick room was the last resort of the demon, intemperance. He also said: "It is the duty of medical men to banish alcohol entirely from their practice."

Dr. Thomas Sewall, Professor of Anatomy and Physiology in Columbia College, Washington, says: "So long as men are permitted to use alcohol as a medicine, so long we shall have invalids and drunkards among us. Only let our profession take a decided stand upon this point, and intemperance will soon vanish from our land."

Dr. Charles Jewett, of Massachusetts, in the National Temperance Convention held in Cleveland, Ohio, in July, 1868 (to which the writer was also a delegate), declared that the idea of alcohol being necessary or useful as a medicine was "all a humbug."

I might give scores of quotations similar to these, but those given will suffice for the present. They show that even a portion of the medical fraternity—"old school" men too, in many instances—appreciate the absurdity of trying to discriminate between alcohol as a beverage and alcohol as a medicine.

In my next, and last, article of this series, I shall have something to say concerning prohibitory laws, license laws, and temperance societies.
Chicago, Ill.

The Drug Doctors Begin to See Light.

For hundreds of years, the doctors have treated the sick as though disease was an entity which the doctor was to fight with drugs, and, if possible, to destroy, using the patient's body for a battle ground. Of late, however, a change seems to have come over the spirit of their dreams. An occasional ray of light seems to break into their minds, if we can judge anything from the tone of articles from the pens of various members of the medical fraternity that occasionally appear in the *New York Medical Journal*.

In the August number of the REFORMER, under the head of "The Natural Cure of Disease," we gave lengthy extracts from a lecture published in the January number of the above-mentioned journal, in which a prominent and influential allopathic physician endeavored to show to an association of allopathic physicians, that the healing power all lay in nature and not in art, and that the one great danger before physicians was, that they, by giving drugs when there was no benefit to be received from them, would thereby thwart the ef-

orts of nature and unintentionally do the patient harm. And so well was the lecture received, that it was deemed worthy of publication in the leading medical journal in the country.

In the August number of the same journal, we find an article entitled, "The Restorative Force of Nature in Delirium Tremens," by Ely Van De Worker, M. D., of Syracuse, N. Y. After giving a detailed account of the usual modes of treating this distressing disease, and the disappointment which physicians and friends so often meet when drug treatment is resorted to, and admitting that cases often prove fatal from the use of medicines, which in all probability would have recovered had no medicines been given, and after stating certain doubts as to the correctness of the theory concerning the use of medicines in this disease, he says:—

"These doubts upon the routine treatment of delirium tremens I had long entertained, but not in sufficient force to lead me to cut adrift from the usual mode of medication in this disease. It was not until last January, when I saw another treatment carried out in the Onondaga Penitentiary, that I determined to try my ideas in the first case of uncomplicated delirium tremens which might come into my hands in private practice. The treatment at the institution named was simply no treatment at all. This did not occur, I am sure, from any want of kindness or attention on the part of the officers of the penitentiary—for I can personally testify to the uniform kindness with which sick convicts are treated—but from the fact that no medical officer is usually present except upon stated days. Thus, when the medical officer makes his rounds, he may find a case of delirium tremens has just been released from the 'Octagon,' a cell set apart for these cases, perfectly cured, the prisoner having been admitted three days before; or, that a case two or three days old is still confined in the 'Octagon.' The institution being a penitentiary for short-term prisoners, it is consequently a penal inebriate asylum mainly. A great many cases have therefore been presented at the prison, a large proportion of them receiving no treatment beyond a dose of salts to unload the bowels. A fatal case of disease, I am told, never occurred in the prison. Some of the unfortunates have suffered in that prison the third attack of the disease. Mott Yates, an 'old offender,' as he is called, has had two attacks during my term of service, both occurring immediately on his admission. On the first attack I saw him under (not Mott's first attack), he had just been removed from the 'Octagon' perfectly quiet and without any tremors, in fact, well. He had not been given any medicine. On the second attack, about two months after the first, I saw him the morning after his admission. The mania was most active, the tremors of the muscles marked, the pulse was rapid and full. I took the hint from his first treatment, and gave him a large dose of salts (Epsom). He drank this

willingly. This was all the patient had in the way of medicine. On the third night he was quiet, and in the morning walked in the gallery, and on the fifth day was working at his trade (tailoring), without a complaint to make to me while on my rounds. There was one thing which struck me as remarkable in the cases thus non-treated, and that was the rapid convalescence of the patient; there was no period of prostration, mental and physical, which we usually observe as the sequela. There was also little impairment of the digestive function, the patients taking kindly to the prison dietary."

After making the foregoing statements, the doctor says that the plan of doing nothing except to relieve the bowels of any accumulation of feces that may exist in them, "demonstrates the fact that, after the lapse of a varying period, the disease has a tendency to terminate spontaneously in sleep." He then cites other cases in which he followed the new method with invariable success.

It was the uncertainty of the results of drug medication in this disease that led the doctor to doubt the propriety of giving drugs in its treatment, and the fact that, of the many cases presented at the above-mentioned prison, none proved fatal, although they had no treatment, that led him to leave all such cases to the unaided efforts of nature. Now, if the doctor, and all other doctors also, would only be as observing with regard to other diseases as he was in this, we think that they would come to the same conclusion that we have, viz., that in almost all respects the entire theory and practice of medicine is wrong. Our reasons for so thinking are these:—

1. The method of treating the sick with drugs is constantly changing. At one time, a specified class of diseases are treated in one manner, say by depletents; after a time, it is discovered that this plan is wrong, and that the drugs injure more than they cure. Then the exact opposite course is pursued. After a time, the same discovery is made concerning this plan, and some other plan is adopted.

2. The mortality is not diminished by the use of medicines; in fact, the more doctors there are, the more deaths occur; and the more new medicines are introduced, the more people are afflicted with chronic diseases.

3. In the majority of cases treated with drugs, those who recover have more or less chronic difficulty, and many are invalids for life, not as the result of the original disease, but as the result of taking drug poisons into their systems.

4. Of every disease to which flesh is heir, and from which it is possible for man to recover, a far greater proportion recover of those who take no medicines than of those who take medicines.

5. Of all those who recover from disease without the use of medicines, we have yet to hear of

the first one in whom the sequela was unfavorable.

6. Those who practice the hygienic method of treating the sick, discarding all drugs and medicines of every name and kind, using only the hygienic agents, are uniformly successful.

M. G. K.

Damp Cellars.

A PHYSICIAN lately said to me that cellars under houses were nuisances, because of the dampness and impure air which they contain, which must affect the air in the house, and consequently, the health of the inmates. But a properly ventilated cellar is a benefit to any house. A house without a cellar, walled or underpinned all around, often has damp, foul air under it, which is beyond reach or control; but with proper care, the air may be kept pure under a house with a cellar.

But the usual method of ventilation, of having small windows at the top of the cellar, is insufficient. The heaviest, and often the most impure, air remains at the bottom, unmoved even by a current of air passing from one window to another. Of course the dampness is not removed, and fevers are often the consequence.

The following is a sure and easy remedy: Provide a pipe, similar to stove-pipe, or otherwise as convenient, from two to five inches in diameter. Place the lower end open within a few inches of the bottom of the cellar, and run it up through the floor and into the stove-pipe in the usual T fashion. This creates a draft and circulation from the very bottom. In warm, damp weather, if the draft is not sufficient to remove all dampness, occasionally start a quick fire in the stove, which will increase the draft. By this means, the entire air in the cellar may be kept constantly moving and changing, and accumulations of foul air will be impossible.

Don't throw this aside and forget it, but try it.

J. H. WAGGONER.

A PAPER is in circulation among the leading physicians of New York, for signature, favoring legislative enactment for the suppression of trade in intoxicating liquors. In London, three hundred medical practitioners signed a paper of like import, alcoholic drink in their opinion, being wholly unnecessary for medical purposes.

"THERE is no country in the world," says Dr. Frail, "in which bad teeth are so common as in the United States, and no country in which people swallow hot coffee with one breath and ice water with another." He condemns the deleterious practice of using, excessively, ice-cream and soda-water, which, according to the doctor, contain fusil oil and poison, and are simply death to the teeth.

Quacks and Quackery.

WHERE dyspepsia and the long train of obscure disorders attendant thereupon prevail to so formidable an extent as in this country, it is not very surprising that quacks and quackery should thrive. The manifold complications of disease arising from indigestion are precisely those which most frequently baffle the regular medical practitioner, and set his compounds, his learning, and his skill, alike at defiance. The most approved treatment of such complaints, and that most obviously dictated by common sense, is rather hygienic than medicinal. The true secret of success lies in a judicious and timely observance of the laws of health, rather than in the wholesale swallowing of pills and potions.

Both physician and patient, however, are too often disposed to place more reliance upon the latter than upon the former; and certain old-world practitioners are still to be found in some communities who regard a blue pill at bed-time and a black draught in the morning as the sovereign panacea for most of the thousand-and-one bodily ills which flesh is heir to.

The patients, especially, have great faith in the efficacy of drugs. If the physician merely directs the observance of hygienic measures, such as regular exercise, fresh air, and frequent baths, the chances are that his advice will be neglected, and the correctness of his diagnosis called in question. A dyspeptic is generally ready enough to believe that his disease is mortal, and that none but the most heroic remedies and most radical treatment can be of any avail in staving off the advent of the grim tyrant; but if he is told by his physician that his is not a case for medicine, and that there is nothing the matter with him which a change of habits will not effectually remove, he is apt to conceive a very unfavorable opinion of that physician's skill. To such a patient, his friends might well quote the language of the servants of Naaman the Syrian: "If thou hadst been bidden to do some great thing, wouldst thou not have done it? How much rather, then, when it is said unto thee, *Wash and be clean.*"

A great variety of causes contribute to make the people of America particularly susceptible to such disorders as those above alluded to. It would here be out of place to enter upon anything like an elaborate inquiry into, and exposition of, those causes; but the restless, feverish habits of life; the continual, never-ceasing exertions to acquire the almighty dollar; the preference for pastry and unwholesome confections as articles of food; and the stimulating atmosphere which is almost universally prevalent, may be mentioned as the principal of these causes; and these alone are amply sufficient to account for the actual state of affairs. Patent medicines are sold throughout the length and breadth of the land to a prodigious extent.

One of the most royal roads to wealth for a man who knows no more of the nature of disease or the structure of the human body than an Esquimaux knows of the Greek particle or the Shemitic plural, is to copy a receipt from last year's almanac, and ostentatiously advertise the harmless compound manufactured therefrom as a specific for all diseases under the sun. The names of scores of American quacks might be cited, each of whom has realized hundreds of thousands, and in some cases even millions of dollars in this way.

In traveling by rail through the United States or Canada, it is next to impossible to look out of the window of the carriage without being enjoined to "Try Corey's Ointment." This injunction, or some other of a like nature, is rudely, but distinctly, painted on every fence, bridge, and large stone, along the line of every railway on which it has been my destiny to travel—and that does not leave out many lines between Hudson's Bay and the Gulf of Mexico. Perhaps the nostrum most frequently recommended along the line of the Union Pacific and its connections is "Helmbold's Buchu." Along the Grand Trunk, the "Great Shoshonees Remedy" seems to come in for the largest share of attention.

This system of advertising might be supposed to effect the printers injuriously; but, as a matter of fact, the revenues of the newspapers, more especially in country places, are very materially augmented by advertisements of patent medicines. The fact of a patentee's having caused a recommendation monopoly to be smeared upon every fence in the Union would not induce him to expend one dollar the less in advertising in the newspapers. I have read that a celebrated New York quack devotes the enormous sum of \$200,000 a year to advertising expenses alone, and I think the statement not at all unlikely to be true.

The ingenuity of the advertisers is sometimes such as to suggest the idea that they might have realized a fortune in a more legitimate and honorable way. In some instances a few startling words, which cannot fail to attract attention, are selected as a groundwork; and these words are displayed conspicuously. The body of the advertisement, expounding the virtues of the nostrum, in small type, is then worked in in such a manner as to form a connection with the words displayed.—*Sel.*

A TALL Yankee, standing six feet three inches in his stockings, was suddenly attacked with symptoms of a fever. Having a violent pain in his head, his wife, to afford him relief, was about to apply draughts to his feet, when he asked:

"What are you putting them on my feet for?"

"Why," says she, "to try to draw the pain out of your head."

"The—!" says he, "I would rather it would stay where it is than to be drawn the whole length of me."

There Is Death in the Bedroom.

YES, dear reader, unless great care is taken to keep the bedroom, bed, and bedding, sweet and clean, you will find there is death in the bedroom. Read the following from the pen of Sylvester Graham :—

“Concerning beds, I cannot speak the whole truth without greatly reprobating a strongly cherished custom of society, for I am compelled to declare that feather beds are, in every respect, objectionable, and that they possess not one redeeming quality, not a solitary virtue, to save them from the general bonfire to which they ought immediately to be consigned. Is it claimed that they are soft and warm, and therefore conducive to human comfort? It is true that feather beds are absolutely softer than straw, hay, moss, or hair mattresses; and it is true that they do not so rapidly conduct the heat from our bodies, and therefore are considered warmer; but it is also true that they so relax and debilitate our bodies, and so effect our nervous systems and our caloric functions, that we feel our feather beds to be harder, and to be less conducive to the healthy and comfortable regulations of our bodily temperature, than our beds of moss. And hence, when we become fully accustomed to hard beds, if our habits are in other respects correct, we do not require so much clothing by night nor by day, in cold weather, as when we are accustomed to sleep on feather beds.

“There are the most intimate and important anatomical connections and functional and sympathetic regulations between the external skin of the body and the mucous membrane which lines the alimentary and respiratory cavities, etc.; and that, through these and other media, the external skin holds very direct and powerful relations with all the internal organs and functions of the system. In consequence of these relations, feather beds not only relax and debilitate the external skin and impair all its functional power, and make it more susceptible to cold and to all the changes of the weather, and to the action of all insalubrious causes and influences, but they also relax and debilitate the whole system, and serve to impair every one of its physiological powers and interests.

“The lungs and digestive organs are powerfully affected by everything that is detrimental to the external skin. So that, by habitually sleeping on feather beds, we are more predisposed to dyspepsia, with all its train of evils, and to pulmonary disease of every description. Indeed, there is probably not a single disease with which the human system has been afflicted that we are not more strongly predisposed to, and which, when actually existing, is not in some measure aggravated by the use of feather beds. I repeat, therefore, that they have not one redeeming quality, and ought, with as little delay as possible, to be utterly and forever dis-

carded by every human being. They cause more evils than it is convenient or ever proper for me to enumerate on this occasion; while, on the other hand, they do not in reality minister to the comfort of mankind in any manner.

“The whole external skin of the human body is, in some measure, a breathing organ, and is continually exhaling a vapor loaded with excrementitious matters, and held in an aeriform state by the heat that passes with it from the body. Feathers, being non-conductors, not only retain much of this heat about the surface of the body, but also retain so much of the gaseous and other perspired substances as to keep the body surrounded by a very impure atmosphere while in bed. This impure atmosphere penetrates into every part of the bed; and besides this, there is always more or less of dead animal matter belonging to the feathers, which is continually undergoing decomposition, and forming unwholesome gases and offensive odor. So that a feather bed, if the utmost pains are not taken to prevent it, soon becomes so completely saturated with its own impurities and those received from the human body that it will give to the whole room, and even to the whole house, a very disagreeable and unhealthy odor; and when the bedroom is small and not well ventilated or properly cleansed, the very walls become in a few months so deeply stained with the impurities, that it is almost impossible by repeated cleaning and whitewashing to destroy the offensive smell, even in years. And when every measure is taken to keep a bedroom clean and sweet, if it contains a feather bed it will always have a disagreeable smell to those who have a pure olfactory sense. In every respect, therefore, feather beds are unworthy of a place in the habitations of civilized beings.

“Mattresses made of hair, if the hair has been thoroughly cleansed, are incomparably more favorable to health and purity and comfort than feather beds. Mattresses made of moss, manilla grass, husks, straw, hay, palm leaf, etc., are still more conducive to the highest and most permanent well-being of the human body. For it should ever be remembered that, always and of necessity, in proportion as we, by the artificial means and circumstances of civic life, bring our bodies into that condition which renders soft beds indispensable to our immediate comfort, we diminish our physiological powers, increase the uncertainty of health, and abbreviate the duration of life; and the evil is always increased by an indulgence in the thing for which we thus create a demand. Bodily development, symmetry, vivacity, agility, and vigor and mental cheerfulness, activity, clearness, and power, and moral purity, and elevation, and happiness, are all best promoted by a hard bed.

“It is of much importance that the clothes of the bed should be properly regulated as to quantity and quality. Too many bed-clothes render

sleep less sound and refreshing, and serve to relax and debilitate the body, and in every respect to impair the physiological powers of the system; while on the other hand, the want of sufficient clothing in cold nights, by suffering too great an abstraction of animal heat from the surface of the body, impairs the soundness of sleep, and renders it much less refreshing and invigorating; and where the want is great and continued, the evil consequences are often very serious. Be it remembered, however, that all my remarks concerning beds, bed-clothes, etc., are made with reference to man as a member of civic life, and as an inhabitant of a climate which renders the use of artificial means necessary for the proper regulation of the temperature of the body. For undoubtedly, if clothing were not necessary for the regulation of the temperature of his body, sleep would be more perfect and refreshing and invigorating without any than with it.

“There is a kind of bed-clothing becoming very common in our country, which ought never to be used except from necessity, where other kinds cannot be had; I mean those articles made principally of cotton-batting or wadding, and called *comfortables*—a very great misnomer, for they are in reality very *uncomfortable* things. They have nearly the same effect on the body that feather beds do, relaxing and debilitating the whole system. Indeed, people in delicate health can tell by their feelings when they are lying under one of these articles; for they render respiration less free, and cause a general sense of oppression and weariness, which often amounts to a painful sense of lassitude; and, hence, as a general fact, sleep is less sound and refreshing, and more disturbed by unpleasant dreams, when this kind of clothing is used. Woolen blankets are incomparably better articles of clothing for beds than such *uncomfortable comfortable*s; for while blankets are sufficiently non-conductors to retain the heat, they are not so utterly impervious to the air and to the exhalations of the body; yet, it is better, as a general rule, that the woolen bed-clothing should not come in immediate contact with the skin. In cold weather, cotton sheets are probably the best that can be used, and in hot weather, linen is preferable.

“An impure atmosphere is continually formed around the surface of the body while in bed and enveloped in clothes which completely prevent anything like a current of air or the atmospheric motion which, during the day, is produced by our voluntary action and other causes. This impure atmosphere penetrates into the bed and into all the bed-clothes, and, as it were, completely saturates them. If we go from the fresh morning air into a sleeping room at the moment when an individual is rising, we shall have a very strong olfactory perception of the impurities which issue from the bed; and if that bed be soon made without

airing, and the room be not freely ventilated, the very walls of the room, as we have seen, will, in a short time, become strongly and deeply tainted with the offensive and unwholesome odor.

“When we rise in the morning, therefore, the bed should be thrown open, and, as soon as may be, the bed-clothes should all be taken off and thrown over clothes-horses or chairs, and the bed shaken up, and the windows open, so that the whole may be thoroughly aired before the bed is made; and they who persist in using feather beds should very frequently lay them out in the open air and hot sun, that the impurities, which are constantly accumulating in them, may be fully driven off; and it will be still better if, as often as once in four or five years, the feathers be subjected to the cleansing process of baking.

“On retiring to rest at night, everything worn during the day should be taken off and hung on pegs, clothes-horses, or on the backs of chairs, or elsewhere, so that they can be well aired during the night, and give off the impurities they have received from our bodies during the daytime. Not a single article of clothing worn by day should be kept on during the night; but flannels, and all other under-clothes, should be taken off and hung up; and after the whole surface of the body has been briskly rubbed with the flesh brush, a coarse towel, or the hand, a loose, flowing bed-garment should be put on, so that the body and limbs shall be entirely free from all ligatures and compressions, and there shall be nothing to prevent the most perfect freedom of respiration, circulation, and voluntary motion. This bed-garment may be made of cheap cotton, and therefore can be afforded by every one. When this garment is taken off in the morning, it should always be hung up where it can be well aired.

“Besides thus freely airing the bed-garment and bed-clothes every morning, they should be frequently changed and washed, that they may by all means be kept as clean and sweet as possible. The bedstead should also be kept perfectly clean in every part, and free from every impure thing, animate or inanimate. The floor of the bedroom should be washed frequently; and as often as twice in a year, the walls should be whitewashed or cleansed with hot soap suds. They who neglect these things cannot reasonably expect to enjoy the best of health, nor need they be surprised if they are occasionally visited with typhus and other fevers and complaints.

“It is exceedingly desirable that all bedrooms should be large, and so situated and constructed that they can be well ventilated, and most especially the family room, or that in which the parents and small children sleep. Opposite opinions are entertained by different writers on hygiene, in regard to the propriety of sleeping with the bedroom windows open. Some think it a salutary practice, and others think the contrary. One thing

is certain, however, open chambers, where the house is merely clapboarded on the outside, and not ceiled or plastered on the inside, are far more healthy bedrooms than those which are closely ceiled or plastered. Indeed, it should always be understood and remembered, that both when we are sleeping and when awake, the pure air cannot have too free access to our whole bodies, provided we are kept sufficiently warm, and are not exposed to too strong a current. If bedroom windows are open during the night, a screen should always be placed before them so that the sleeper is never exposed to a current of air. Where the bedrooms of a house open into a common hall, it is, perhaps, better to open the windows of the hall and the bedroom door than to open the windows of the sleeping room. It is very desirable that there should be a fireplace in every sleeping room for the purpose of ventilation, but not for fire, except in sickness; for it is exceedingly unfavorable to health to sleep in a room where a fire is kept during the day, unless it is well ventilated before we retire to rest, and during the night.

“BEDS, ETC., OF CHILDREN AND AGED PEOPLE.

“It is of very great importance that all these circumstances should be strictly attended to in relation to the sleep of children and youth. They who desire to have the bodies of their children fully and vigorously developed, without distortion, without disproportion, without feebleness in any part, must not suffer them to sleep on feather beds, nor in unclean bedding, nor in confined and ill-ventilated rooms. Let their beds be hard, and everything about them clean and sweet. Feather pillows should also be avoided. Pillows made of moss or fine hay, or even straw, are incomparably better for children than feathers. Parents need not fear that such beds will feel hard to their children. When they become accustomed to them, they will never desire softer couches, and they will sleep upon them with most refreshing and invigorating soundness. But if their bodies are buried up in feathers every night, they will be enfeebled, their nervous excitability will be increased, they will be far more likely to take cold, they will be more predisposed to disease of the spine, rickets, etc.; their lungs, digestive organs, and in short their whole systems, will be debilitated and rendered more liable to become diseased. Too many children ought not to be put to sleep in the same bed, nor in the same room, nor is it well to accustom children to sleep with old people. In strict physiological truth, it is decidedly best, not only for children, but for adults, for everybody in civilized life, or where beds or bed-clothing are used, to sleep alone, or but one in a bed.

“Great care should be taken to keep the bedding and bedrooms of aged people as clean and sweet as possible. As the vital powers of their

bodies suffer an abatement of energy, it is the more important that everything unfriendly to life should be avoided, and that every circumstance in which they are placed should be salutary. It is desirable, therefore, that for these as well as all other classes of people, the bedrooms should be large and airy.”

There is one point to which Dr. Graham did not refer that I wish to call the reader's special attention to, and that is, the habit that many persons have of leaving the unemptied night vessel standing in the sleeping-room through a portion of the day, if not the entire day. As a physician, it has been my lot, when treating children, to visit the family bedroom of many a mother who would feel insulted were an intimation dropped that she was not a neat housekeeper; yet the moment I entered the room, I needed not the sense of sight to tell me that the night vessel still remained unemptied. The effluvia that arises from urine after it has stood a short time in the open air is not only offensive to the smell, but it is absolutely poisonous and fever breeding. Many a case of putrid, typhus, or typhoid fever, owes its origin to this one cause alone. The night vessel is used for water on retiring, and in more than one-half of the sleeping rooms that it has been my lot to visit—and they number many hundreds—the vessel is not provided with a cover, and all night long it throws off its poisonous gases for the sleeper to take into his system with every breath.

Thousands of scrofulous children die yearly who would have lived on in health had it not been for the fact that they were compelled to sleep in bedding that was saturated nightly with their urine, and simply dried without washing. Not only this, but hundreds die yearly of consumption whose premature death was wholly owing to emanations from the night vessel. Surely, unless care is taken, there is death in the bedroom. The importance of this subject is seen more fully when we remember that we spend, or at least should spend, nearly one-third of our entire lives in the bedroom.

M. G. K.

Sick headache almost always depends upon an ill condition of the stomach from over-eating, and may be promptly relieved by drinking a teacupful of water, a little warm, every five minutes, until the stomach is so full of water that a feather or finger in the throat will give it effectual discharge of all the stomach contains.

If it is simply a nervous affection, sit in hot water for fifteen minutes. The philosophy of the action of the water is that it draws the excess of blood, which oppresses the interior organs, to the surface.—*Hall's Journal of Health.*

HUNGARY is now suffering from a severe epidemic of cholera; so is Constantinople.

To Correspondents.

HARD WATER.—C. H. F. writes that his well and spring water is so hard that thick scales soon form in the kettle in which it is boiled. He wishes to know, first, if it is injurious to use it; secondly, how he can change it to make it wholesome.

Ans. 1. Yes; all hard water is more or less injurious, there being a constant liability of the precipitation of earthy matter contained in the water, thereby forming gravel in the kidneys and stone in the bladder. Those using it are more liable to fevers than those using soft water.

2. When the water contains lime, as hard water usually does, it may be made to precipitate the greater portion of the lime by boiling it, the scale that forms on the vessel being composed of the earthy substance; therefore, such water is softer, consequently, more wholesome after boiling than before. The process of boiling deprives it of its air, however, and this makes it taste insipid; yet this lack does not effect it so far as its being wholesome is concerned. If after boiling the water it is passed two or three times through a filter, it becomes aerated as before. The better way is to store rain water and filter it.

GOITER AND LUNG DIFFICULTY.—Mrs. A. C. S. writes: 1. I have goiter in my throat, and it is beginning to pain me considerably. It has been growing for the last four years. 2. I have occasionally a dry cough and pain in my left side and under the shoulder-blade. I expectorate a yellow matter, which smells very bad. Last fall I had bilious fever and took drugs, and have not felt well since. I had always been healthy previous to that time. I live principally on unbolted wheat-meal bread, vegetables, milk, butter, and coffee, and use a very little meat. Fruit is so expensive that I cannot afford to buy it. What shall I do?

Ans. 1. Apply cold to the tumor on your neck. A stream of ice water or a piece of ice applied to it for ten or fifteen minutes two or three times a day will promote absorption. It should be bathed often with cold water and well rubbed with the naked hand. Goiter is often occasioned by the use of hard water. Use soft water. 2. Your left lung is affected. You should wear a wet compress, or a wet towel folded several times over it. Cover it with a thick dry cloth, so as to exclude the air. Keep the feet dry and warm, the head cool, wear the garments loose about the waist, and breath free and full, exercise daily in the open air, and make use of a greater variety of food. Use oat-meal, split peas, rice, etc. Exchange your butter and coffee for fruit, for you can spare anything else better than that. Butter and coffee are neither of them food; both are injurious.

LEPROSY.—W. W. asks: 1. What conditions of

the human system, or of climate, cause disease to assume the form of leprosy? 2. Are those who live in accordance with the laws of health liable to take the disease when taking care of leprosy patients?

Ans. 1. Leprosy is caused by the use of improper and insufficient food, personal uncleanness, intemperance, and excesses of all kinds, as well as by a residence in malarial districts, or in damp and ill-ventilated dwellings. 2. The disease is not generally considered by medical men to be contagious. Whether it is or not, it is always safe to live in strict observance of the laws of health, and do duty whatever it may be, leaving the consequences with Him who rules the universe, resting assured that not a sparrow falls to the ground without his notice.

SWOLLEN TONSILS.—I. A. W. writes: I have a boy five years old, whose tonsils are so swollen as to press against his palate and cause him trouble. Shall we have the tonsils removed?

Ans. If the swelling is recent, and the tonsils are not hardened, but simply congested or inflamed, apply cold to the throat, and let him gargle ice water occasionally. Bathe him three times a week in water comfortably cool, and attend well to his general health. If the swelling is of long standing and the tonsils have become hardened, he should be placed on an abstemious diet for a few days at a time, and should have his throat bathed several times a day for five or ten minutes in very cold water. Bits of ice should be held in the throat as often as possible. He should have a thorough hand-rubbing every morning. If this does not overcome the difficulty in a few months, they can be cut away by a skillful surgeon.

PILES, PROLAPUS OF THE BOWEL.—M. M. K. : Your child probably has prolapsus of the bowel. If so, it should be replaced. This is readily done by placing the child on its face, then raising the hips so as to about half lift the child. Lower and raise it thus a few times. If the bowel does not recede, it must be replaced with the fingers. Oil them first, and be careful not to injure the part. Keep the child in a horizontal position for a few days. Apply cold wet cloths to the anal portion of the body, and give a cool or cold shallow sitz-bath of two or three minutes' duration, and a tepid bath two or three times a week. Feed the child on that kind of food that will keep its bowels just as they should be.

BRAIN WORRY.—I. G. writes: I have been seventeen years in business here and never lost one day from illness. But this summer I have had violent pains in my head, more particularly in the front part. Two years ago I put more cash into real estate than I could well spare from business. I now find that when I am pressed for money, or have domestic trouble and excitement, these all bring a constant pain in the head, and I feel so muddled that I am almost incapacitated for busi-

ness that day. I have a strong constitution and belong to a long-lived family.

Ans. Yours is a case of brain worry. The brain can stand any amount of work provided there are regular habits in all respects; but it can stand but little worry before it gives out. Sell off real estate sufficient to relieve you from all worry about money matters, if you have to sell it below its value. As for domestic trouble and excitement, you should indulge in neither. Probably you devote too much time to business and not enough to recreation. Narrow up your business until your cares are no more than your brain can carry, for health is better than riches. Study to make your home a happy one, for a happy home is the happiest place on earth. Never get excited, but take time to think calmly at all times. These three things are essential in your case. Observe these, and you need no doctor. Fail to observe these, and all the doctors in Christendom can do you no good. In addition to the foregoing, bathe two or three times a week, and live mostly upon a vegetable diet, avoiding condiments of all kinds.

ERYSIPELAS.—W. B. A.: Yours is a case of erysipelas. You should take one or two packs each week, or take sitz-baths and dripping-sheets. Apply fomentations over the liver once or twice a week. Use acid fruit, such as cranberries, lemons, etc.

Bedford's and Cazeaux's works on midwifery are the best.

TETTER.—A. M. E.: Your lady friend has tetter or salt-rheum. She should diet very carefully, using only fruits, grains, and vegetables. These should be in good variety and well prepared. She should abstain from tea and coffee and all condiments, exercise daily in the open air, be regular in all her habits, and should keep her bedroom well ventilated night and day, and keep it sweet; the bedding should be aired daily. She should bathe three times a week, and wear a wet girdle covered by a dry one, two or three nights in the week.

S. F. of Allegany Co., N. Y.: You have the dyspepsia. See first article in this number of REFORMER.

WIND COLIC.—A mother asks if beans eaten by a mother will cause wind colic in a nursing babe.

Ans. Yes, if they are not digested without causing disturbance in the mother's system; but if they are properly digested, they will not. You must eat less of them at a time.

2. Of what kind of vegetables can a mother eat without this result?

Ans. Every kind of wholesome vegetable that grows, provided they are well digested. There are few stomachs, however, that digest many kinds of vegetables properly. Some stomachs digest one kind readily, while others digest other

kinds more easily. Every mother must ascertain for herself what she can use.

3. What causes dandruff on a babe's head, even when daily washed?

Ans. A weak liver, which fails to deplete the system properly, will often occasion dandruff in children, as well as in adults. The child will outgrow it if it is fed on food free from grease and condiments, and is bathed and dressed properly.

M. G. K.

Unaired Rooms.

I PASS some houses in every town whose windows might as well be sealed in with the walls for any purpose they have but to let in the light. They are never opened, summer or winter. In winter it is too cold; in the summer the flies stray in, or, if they are netted, the dust sifts through the nets. Now, I can tell a person who inhabits such chambers when I pass him in the street, there is such a smell about his clothing. I always wish for a sniff of cologne, or hartshorn, or burnt feathers, or something of the sort, to "take the taste out." A house that is never aired has every nook and corner filled with stale odors of cooked meats, boiled vegetables, especially cabbage and onions, which, as the weeks go by, literally reek in their hiding-places.

Who has not wished sometimes to hang a new servant's clothing out of doors some frosty night until it should be thoroughly aired? But I have seen the fine ladies come sweeping into church with their velvets and silks, when said velvets and silks gave unmistakable evidence of having been housed in just such shut-up chambers. Oh! what a tale that odor of pork and cabbage tells about the lady's style of housekeeping! The very garments of the children tell the same story of uncleanness. It is bad to have unwashed clothes, but there may be an excuse for it. But what excuse can there be for unaired ones, when air is so cheap and free? There is death in such unaired chambers. Better a swarm of flies, or a cloud of dust, better frost and snow in a room than these intolerable smells.

Dear girls, the first thing in the morning, when you are ready to go down stairs, throw open your windows, take apart the clothing of your beds, and let the air blow through it as hard as it will. There is health and wealth in such a policy. It helps to keep away the doctors with long bills. It helps to make your eyes sparkle, and to make your cheeks glow, and to make others love your presence. Girls who live in close, shut-up rooms can only be tolerated at the best in any circle.—*Sel.*

NEVER speak ill of another behind his back. Always speak of others as you would were they present.

DR. TRALL'S
Special Department.

DISCUSSION ON DISEASE AND REMEDIES.

To the Point.—Dr. Curtis to Dr. Trall.

HE is a fortunate man who can always write just what he means and mean just what he writes. We always aim at this; but Dr. Trall beats us in the full success.

He says positively:—

“1. We mean just what we say.

“2. We say just what we mean.

“3. We never falsify an opponent's position.”

You say, “We have never said that disease is an effort to cure disease.” (HEALTH REFORMER, p. 240.)

Ans. You call fever a “functional derangement,” and say (Cyclopedia, vol. i., p. 295), “Functional derangements constitute ninety-nine hundredths of all the diseases of society.” In your Pathology, you call all fevers and inflammations *diseases*.

A correspondent says: “I have taken the REFORMER for a year, and frequently notice the expression, ‘drug disease,’ but have never seen any explanation of what a drug disease is. Please explain.”

You reply: “A drug disease is the effect of a drug medicine or poison. Thus, intoxication is the effect of alcohol; narcosis, of opium [True]; vomiting, of ipecac; inflammation, of mercury; &c., &c.” (No.) The stupidity is produced by the narcotic drugs; the vomiting and the inflammation, by the vital force, as he justly says elsewhere, “by the action of the organs to expel offending agents, or remove bad conditions.”

“When a poison is taken into the stomach, the vital powers feel an attack upon the citadel of life, and prepare to act defensively.” And this defensive act is always febrile, inflammatory; for you rightly say: “A febrile paroxysm is the manifestation of the *vital struggle* to defend the organic domain against some morbid cause, or to expel some injurious matter.” (12, 13) and p. 74, vol. ii. “Fever is an abnormal disturbance of most all the bodily functions.”

Put these together, and, if they do not mean that disease is an effort of the vital force to cure itself, I cannot imagine what they mean.

Again, you say: “Substances chemically incompatible with the body's structures, *act upon, corrode, and destroy*, some part or portion of some constituent of some solid or fluid,” etc. “Substances physiologically incompatible exhaust, irrecoverably, some portion of the vitality itself.” (Cyc., vol. ii., p. 14.) This is all true; but how it is made to mean that “drugs do not act on the

body, but the body on them,” the great fundamental principle of all your hygieo-therapeutic discoveries, is beyond my comprehension. The above contradictions constitute a “muddle” that “befogs” and “puzzles” me exceedingly.

When you say: “Disease is never a positive entity,” “but *always* an *abnormal state*,” I understand and approve; but fever, vomiting, inflammation, diarrhea, coughing, &c., being *acts*, not states, and produced by the vital force to remove abnormal *states* or agents, I do not see how they can be called *disease*, unless the “simple absurdity” be admitted, that “disease is an effort of nature to cure disease.” You continue:—

“2. We have never said that everything that is not used to build up tissue acts injuriously.”

The REFORMER is not before me; but this is what I understood to be the meaning of the statement of the difference between “food and hygienic agencies,” and “drug poisons,” that the former were all “usable” by the system; and the latter were non-usable by it—the purposes of use indefinite.

“3. We have never condemned ‘all medication.’ We only condemn drug medication.” HEALTH REFORMER, p. 240.

Looking, now, after what you call “drug medication,” we find it means medication with “things not usable” in the system. So we have got back to the point in the circle of your argument from which we started—viz., the meaning of what you say, and the saying of what you mean—no wiser than we were before you said or meant it.

Respectfully,

A. CURTIS.

Point-no-Point.—Dr. Trall to Dr. Curtis.

DR. CURTIS has *almost* made a point. It reminds us of a certain place, somewhere on the coast of the northern seas, which has such a dubious relation to the mariner's compass that the sailors have denominated it, “Point-no-Point.” In all our discussions with the physio-medical professor, we have used language very precisely, and have many times explained to him the sense in which we employed it. And however any proposition may be stated in words, it is the right of every one to explain his own positions, and the duty of his opponent to accept the explanation without cavil or quibble. Many years ago, Dr. Curtis undertook to argue against the theories we advanced. In this he failed. Now he only undertakes to criticize. In this, he has measurably succeeded, and shall have all the credit he deserves. He has found a sentence in a book we wrote nearly a quarter of a century ago, which seems to contradict what we now teach. Verily, the man must be desperate to make such a point.

We give Dr. Curtis the full benefit of his discovery by frankly admitting the contradiction.

And then what? The world moves. We have learned something in twenty or thirty years. We now disbelieve and controvert some things which we believed and taught in the days that are past and gone.

But, after all, Dr. Curtis' point only amounts to the little end of nothing; for the contradiction is only apparent, not real. In discussing the nature of disease and the *modus operandi* of medicines, in the "Hydropathic Encyclopedia" (Dr. Curtis quotes the "Cyclopedia"—an evidence of his careless way of doing things), the propositions are stated in accordance with the common opinion, and words are sometimes used in the ordinary medical sense. But the meaning is explained on the very page from which Dr. Curtis quotes, and the true theory—that which I now advocate—is fully explained and illustrated in the succeeding pages. If Dr. Curtis will read those pages as carefully as he should read everything he undertakes to controvert, he will discover that his discovery only exists in his own imagination.

But now, having reduced this dreadful point to nothing at all, we propose to show him that it is as much less than nothing as it is possible for him to conceive. The word "act," which Dr. Curtis quotes, is applied to *chemical agents and poisons*. Our discussion relates to *medicines!* We admit this is an exceedingly small point to make on our part. The word was improperly used. It should not have been there, even if we did immediately explain it away, for the reason that careless students, like Dr. Curtis, may be misled. And we justify this *dodge* of noticing its application to poisons instead of medicines only as it meets a senseless cavil with a ridiculous quibble. There is nothing in either but—a point.

Dr. Curtis ought to know that, by detaching sentences from their connections, and by quoting statements without the accompanying explanations, any book may be made to *seem* to be at variance with itself. Some critics have quoted from the Bible one hundred and forty-four flat contradictions. But others, who take text, context, and subject, together, think there is no contradiction at all. In our discussions with Dr. Curtis, we are content to accept his propositions just as he *now* presents them. Our readers know little and care less what he thought or wrote many years ago. And if he will kindly accept our statements just as we present them in the present tense, he will find facts and arguments enough to deal with without wasting his valuable time and precious ink in cavils, quibbles, and points.

With regard to the other quotations which so "muddle and befog" our learned friend, they are all right when the hygeio-therapeutic key is applied to their solution. The trouble with Dr. Curtis is, he can't get the hang of the key. But, as it only required the old astronomers about twelve hundred years to comprehend the law of

gravitation, by which the problems of the planetary worlds are solved, there is hope that the doctor may yet get hold of the law of vitality, which explains all the problems of health, diseases, and remedies—if he can only contrive to live long enough. May his shadow never be less while we live and move and have our being; for so long shall we never cease to work, and hope, and pray, that his splendid talent, instead of being wasted in criticizing the language of the past, shall be devoted to the investigation of the ideas of the present, and the prospects of the future.

The Theory of Fever.

THE very fatal epidemic of yellow fever which has lately prevailed at Shreveport and some other southern cities, has elicited, as is customary in similar cases, various and conflicting opinions on the part of medical men, concerning its nature and treatment. The only article we have read on the subject which has common sense for a basis, is that communicated to the *New York World* by Joseph Treat, M. D. And even this contains a fallacy which might be fatal in practice. Dr. Treat says:—

"Advancing science resolves all fevers into essentially one pathological condition, demonstrating, both as theory and as fact, that black, spotted, putrid, scarlet, or even yellow fever, is the same generic and general physical state as nervous or bilious fever, requiring for cure only proportionately more prompt and vigorous treatment. In either of these cases, or in the added ones of small-pox and malignant erysipelas, a fever is only a great heat, which being immediately and finally reduced, the patient at once recovers—not more by the efforts of nature than by the very means employed in the heat reduction. The cure thus becomes a matter of reasoning, of common sense, and adaptation of methods to an end. Insure cool, fresh air by keeping doors and windows all open; at Shreveport or Memphis it would be better to have the patient out of doors, in the grateful shade. See that this air gets sufficiently to the body; if necessary, strip off every garment, so that the last obstruction may be removed; and if this is not required, change the sheet or personal garment three or four times a day, for one fresh-aired in the sun. Drinking cold water often and largely enough will soon reduce the temperature even to chill; then wait till it rises again, when more should be drank: or if cold water is not acceptable, drink it with the chill taken off; or at last drink warm or hot water, but in the same way, often and largely. Even the hot water will burst open the pores and compel perspiration, besides washing the fever out through the kidneys, increasing the urine till it is as colorless and free from fever as the water drank, and till it is passed off nearly as often as the water is drank. The

same water-drinking will tend to relieve fever by helping to open the bowels, which must be moved by an enema of warm, soft water, if necessary, every half day while the disease lasts. If drinking produces vomiting, that will be precisely what is needed, relieving the system in still another way; and at any time, putting your hand in warm or hot water and rubbing the patient over with it, leaving the wet to dry without wiping, will most wonderfully evaporate his heat and cool him; and all the rubbing you will give him with your dry hands, even if it be for hours together, will only and most rapidly work fever out of him. All these things put together, according to discretion and need, are more than enough to cure any possible patient."

"Advancing science" has not advanced much if this is what it now teaches, for the doctrine that fever is a "great heat" dates back some thousands of years. The doctrine is true only of the hot stage of the fever. And the practice recommended is applicable only to the hot stage. But the cold stage of a fever is as much a part of the disease—as essential a factor in the general pathological state—as is the hot stage; and this fact must be recognized, or the physician may blunder disastrously in treating it.

There is a singular incongruity in the treatment recommended by Dr. Treat. He tells us that cold water in sufficient quantity will reduce the "great heat," but if cold water is not acceptable, hot water may be given. If fever is simply preternatural or excessive heat, when this is "reduced to chilliness" by cold water, that ought to be the end of the malady. But not so. The "great heat" rises again. The disease is cured, but it comes on again. Where does it come from?

Now, fever is neither a "great heat" nor a great cold. It is simply a simultaneous disturbance of all the bodily functions, attended with paroxysms of cold, hot, and sweating stages. In some fevers, the hot stage is prolonged for hours or days; in others, it lasts only a few hours or less, while in some cases it is only imperfectly or not at all developed. The true principle of treatment consists in regulating the temperature of the surface; reducing it when excessive, and increasing it when deficient. The hygienic physician is neither a cold water nor a hot water doctor; but he employs cold or hot water to *balance the circulation*, just as either may be better adapted to any phase or stage of the fever.

Drawing the Enemy's Fire.

ONE of our English correspondents who has read the HEALTH REFORMER, "The Hygienic System," "Tobacco-Using," and some other anti-drugopathic publications, has undertaken to controvert some of the errors of the popular medical system through the columns of the *English Mechanic*

and *World of Science*. This has led to a discussion in which several medical gentlemen take part. Our friend has advanced the fundamental proposition of the hygienic system that "there is no chemistry in living structure." This seems to have operated in the camp of allopathy as a stone does in a hornet's nest, and one of them—Dr. W. H. Stone—blackguards across the Atlantic in the following style:—

"The letter of 'Beta' on Medical Matters has filled me with amazement, not to say awe; for he states in its first sentence that there is no chemistry in the vital organism. Is it possible that this mighty revolution in science and physiology has occurred, and that the medical profession, in its gross ignorance, is still unaware of it? Have all the corporations of learned men in Europe malignantly combined to deny the author of this tremendous discovery the fruits of his labors?—to be still undecorated, unbaroneted, un-F. R. S.'d? This is passing sad! It was so with Columbus and Galileo; now 'Beta' is added to the melancholy catalogue of the uncomprehended.

"So, in bitterness of heart, I read on, to the effect that 'Beta' believes 'one of the greatest scientific blunders ever made is that which gives to alcohol the power to act and to increase vitality. Why it should act in the human system any more than in the decanter is to me a perfect mystery.'

"O sublime modesty of real genius! He confesses there is a mystery—even to him.

"Then, as I still read, suddenly turns up 'Dr. Trall, of America;' and I said, 'O great man, with the wide address, who are you? If only America is big enough to hold you, who am I that I never heard your name?' Quoth Trall, of America: 'Iron, in all its forms and preparations, occasions a feverish condition of the system and an inflammatory state of the blood. It is an irritant, a stimulant, a blood-destroyer, a nerve-exhauster, a poison—as is alcohol.' Peccavi! Peccavi! I never knew all this before; and now, so perverse is my degraded nature, I don't believe it.

"But soon light breaks in upon me, in the form of biographical details concerning Trall, of America. He has a medical college, and a hygienic home, and never uses drugs of any kind, alcohol included.' Noble Trall! Poor chemists! Does he also never perform out of America, like his distinguished compatriots? But Trall, of America, condescends to enlighten us as to the results of his practice, and appears in *propria persona* on the scene. 'I,' says Trall, 'have never failed to cure an acute disease when I had the case from the start, and no medicine of any kind was given.' 'I,' says Trall, 'have never lost a case.' So, unable to reckon up the benefits conferred on mankind by Trall, of which the last paragraph of 'Beta's' letter is a most open advertisement, I merely took to counting the number of times this aggressive and egotistical vowel crops up. In

about 40 lines there are 22 I's. O Argus-I'd sun of Esculapius, come from your bright home beneath the setting sun, to show us how to do it; for, at present, we heartily coincide with your concluding sentence, which runs thus: 'What doctor on earth, no matter of what school, can truthfully make a similar statement?'

Is it such a crime in not losing any case of acute disease that one must have a volley of epithets sent at him across the ocean? Is it so wicked to tell of the way in which no patients are lost that one must be stoned, as though he was not worthy to live among gentlemen? It is not professional we grant. It is the custom of medical men to lose ten to twenty cases in a hundred. That keeps up the trade of druggery. But to lose none, and more yet, to advertise such a business, is not it perfectly awful and "aggressively egotistical"?

Lest our readers should think we are wasting ink on an ill-mannered blackguard, we assure them that this Stone doctor is an allopathic physician in good standing in society and with his professional brethren. He occupies, moreover, the responsible position of physician to an honorable Mechanics' Association. Besides all this, he is a writer of some presumption, if not ability, in literary and scientific journals. And nothing would afford us more pleasure than to discuss our matters of difference with him, provided he would advance facts instead of assertions, employ arguments instead of epithets, and relegate slang and rant to rowdies and loafers.

What Is Health?

LET me tell you that when I speak of health, I do not mean not being sick. I divide people into, first, the sick folks; secondly, the not sick folks; thirdly, the almost healthy folks; and fourthly—and they are the elect—the folks that are healthy. What I mean by "health" is such a feeling or tone in every part of a man's body or system that he has the natural language of health. What is the natural language of health? Well, look at four-month-old puppies, and see. Look at kittens, and see. Look at children from the time they are three or four or five years old. Look at young men, when they are at school and at the academy. They cannot halloo enough, nor run enough, nor wrestle enough, nor eat enough. They are just *full*. It is buoyancy. It is the insatiable desire of play and of exertion.

The nature of the human constitution, in a state of health, is to be a creative instrument or agent; and the necessity in a man to be creating outside of himself is one of the noblest tokens of health. When one has been kept at work, and under the yoke, he has played off his surplus energy in the various channels of his business activities. We do not expect a man to bound and caper about, for the simple reason that he has

other legitimate channels to work off his steam in. But let him get a vacation. He goes to the White Mountains. He has three or four days of unearring rest, and nights of long sleep, and then he awakes to the stimulus of the mountains. "Well," he says, "I feel like a boy again," which is only another way of saying, "I feel my health." His system is not perverted. He is rested in all his parts, and that vast amount of energy and vitality which he generates, but which in the city was worked off in professional labors and social relations, is now being collected again; the measure of the instrument is filled, and it pours over. A man in health is a fountain, and he flows over at the eye, at the lip, and all the time, by every species of action and demonstration.

I have often seen what are called over-shot wheels, where they have a very small and weak stream. They get a wheel of large diameter, and the buckets are made in a peculiar form, sloping from the mouth up. Then comes a little trickling stream, which pours down into the big buckets its slow accumulation of water-weight, and it begins to turn the wheel very moderately and gradually, and so it goes. That is about the condition in which average men are working—just enough to turn an over-shot wheel. But, if you have a great, full, strong stream, the mere impact of which on the wheel is enough to turn it, then the wheel is made under-shot, and the water comes dashing against the breast and bottom of it, and around it turns, promptly and rapidly. The miller says, "What do I care? I have got the whole stream. There is no use in economizing water; I will let it flow;" and the water runs all the time. There are very few men who can afford to run on an under-shot wheel. Almost all men are economists of their resources, because they have not this real, high health.—H. W. Beecher, in *Christian Union*.

A Parable.

A CERTAIN man going up from youth to manhood, fell among grog-shops, where he was stripped of his money, his character, and his friends, and left poor and half dead with disease. And by chance there came down a moderate drinker that way, and when he saw him he passed by on the other side. And likewise a friend of temperance came where he was, and when he saw him, he passed by on the other side. But a temperance man, as he journeyed, came to where he was, and when he saw him he had compassion on him and went to him, and wept over him, and besought him with tears to repent and reform. And he persuaded him to sit upon his own beast, Total Abstinence, and brought him to his family, and they took care of him. And in the morning he spoke kindly to him, and offered up prayers for him, and departed.

Which of these was neighbor to him that fell among grog-shops?

The Health Reformer.

Battle Creek, Mich., November, 1873.

Overeating.

IN view of the many and direful evils arising from the pernicious practice of overeating, and of the alarming extent to which the practice prevails in this and other civilized countries, it will not be disputed that too little attention has been paid to this subject by writers upon hygiene.

The statement may be somewhat astonishing to many, but it is sustained by medical authors of extensive observation and research, that nine-tenths of all the evils under which the people of this country suffer, are attributable to this one cause—overeating. Thousands of farmers and mechanics, whose occupations are the most favorable to health and longevity, break down at middle age, when they should be in their prime, attributing their physical bankruptcy to overaction, when it is solely due to overeating.

But while this subject is one which vitally concerns all classes of society, it also has a special bearing upon those who have made some attempts at reform, and have adopted the vegetarian system of living. Perhaps no one thing has brought more disgrace and reproach upon the vegetarian system than this evil habit, and in this way: A person becomes convinced of the truth of the principles of vegetarianism, and at once begins to follow out their teachings. In so doing, he soon finds that as his appetites and tastes become normal, his simple food is received with a relish before entirely unknown; and eating affords him an amount of gustatory enjoyment which he has never before experienced. As a very natural result, he soon finds himself inclined to linger a little longer at the table than formerly. His diet being composed of simple, unstimulating food, his tastes have become natural, and he finds it impossible to satiate his appetite, so that, although he continually increases the quantity of food taken at each meal, he still leaves the table with a good appetite and a keen relish for even more food. After passing along in this way for a few weeks or months, constantly overloading his stomach, the person begins to feel some of the premonitory symptoms of dyspepsia. Sour stomach, heartburn, and indigestion are the almost invariable consequents of each meal. Alarmed at his symptoms, he begins to doubt the truth of the system which he has adopted, and, may be, abandons it altogether, declaring that vegetarianism has made him a dyspeptic, that it is a false theory and will not bear the test of actual experiment. Thus the system is condemned, whereas the whole fault was in the individual.

Such cases as this are not of rare occurrence; and the above is a fair statement of the experience of

scores and even hundreds who have adopted the only true system of living. Hence, the necessity of attending seriously to this subject in order that such disastrous results may be prevented.

Any substance which can serve no useful purpose when taken into the body is a poison, and like all other poisons must be cast out as soon as possible. Every particle of food, then, which is taken into the stomach after enough has been already received to supply the wants of the system, is unusable, and is, consequently, no more nor less than a poison. It is a clog to the vital machinery, and thus renders the proper digestion of any portion of the food an utter impossibility; hence, no portion of the body can be properly nourished, as the nutrient material has been improperly prepared.

The inquiry may be raised, How much should a person eat? Of course no definite rule can be laid down which shall be a correct criterion for every person under all circumstances, as different individuals, and the same individual under different circumstances, require different quantities of food. Each person must judge for himself. It should be borne constantly in mind, however, that the great danger is that too much will be eaten, rather than that too little nourishment will be taken.

Those engaged in mental labor need to use especial care to avoid excess in this direction. Persons who are constantly engaged in active, physical exercise may overload the stomach habitually for a long period with apparent impunity, although such a course will doubtless end at last in unhappy results; but the individual who is engaged in intellectual pursuits is obliged to economize his stock of vitality in every way possible, in order to enable him to endure the enormous drain which is constantly made upon it. Hence it is, that, although a man whose labor is chiefly mental requires a larger amount of nutritious food, he cannot safely indulge in so large a quantity of food as can the man whose labor is of a physical nature.

The danger of eating too little is very slight compared with that of erring in the opposite direction. Indeed, the quantity of food required to maintain the body in a healthy condition is much less than is generally supposed. Intelligent and reliable writers upon dietetics assert that an adult man may subsist for any length of time, and without any organ of the body suffering in the least from imperfect nutrition, upon a single pound of wheat meal per day, with a sufficient amount of pure water. This statement may seem incredible to those who are in the habit of stowing away in their stomachs two or three times that amount at each meal, or, as in some cases I have known, five times the quantity mentioned; but it has been amply demonstrated by experiment, and may be considered to be reliable. The Chinese laborers or coolies, in their native country, subsist and

thrive upon a very small quantity of rice, and are a very powerful class of men when not weakened and enervated by the use of opium. A small quantity of gruel made from oat or barley meal, together with a little black bread, constitutes the exclusive diet of the laboring classes of several European nations, who, notwithstanding their frugality, are remarkably robust and hardy. The writer of this article, a strict vegetarian, has lived for months at an average expense, for provisions, of six cents a day. His diet was not stinted, but was composed of a good variety of nutritious fruits and vegetables and grains, the price of which was no more than ordinarily cheap. Although engaged in severe mental labor from fifteen to twenty hours each day, he found himself well nourished, all the wants of his system amply supplied, and his appetite fully satisfied.

The evils resulting from excess in eating can scarcely be overestimated. Indeed, startling as the statement may seem, it is nevertheless well supported, both by experience and by reliable authority, that it is far safer for a person to disregard the *quality* of his food than to indulge in excess in *quantity*. In other words, food of inferior quality and not the best calculated to nourish the system, taken in proper quantity, is far less injurious than the very best food, prepared in the best possible manner, taken in too large quantity. A person, then, who adopts the vegetarian system, thinking to make a reformation in his manner of living by so doing, and who then constantly overloads his stomach, even with the best of food, has only rendered his condition worse than before, and consequently is in greater need of making a reformation.

Every person, by a little attention to the matter, can easily determine the quantity of food which is adequate to meet the demands of his system. A few trials at least will settle the matter, as nature will always give evidence of having been ill-treated when the stomach has been overloaded, by a sense of fullness in the region of the oppressed organ, or by dullness and stupidity of the intellectual organs, which may be accompanied with headache. Some or all of these symptoms will not fail to remind the offender of his transgression. When a person finds, by any of these indications that he has eaten too much, the best thing he can do is to fast for a meal or two. This will give his digestive apparatus an opportunity to rest and thus recover its strength and tone. He must be exceedingly careful, however, that he does not overeat at the subsequent meal, and to prevent himself from so doing he must call to his assistance all the power of his will, and also of his moral organs.

But while too much cannot be said against the pernicious practice of overeating, it may be well to caution those who might be so inclined against erring in the opposite direction. If too little nourishment is taken, the body will suffer as inevitably

as though too much had been taken. Either extreme will result in the improper nourishment of the system. Both extremes should consequently be carefully avoided, and each individual should learn to eat just the amount which his system requires, and no more nor less.

Temperance in eating is as essential as temperance in any other direction; and the temperance movements of this and other countries will never succeed in accomplishing their object until they turn their attention toward the reformation of gluttons as well as drunkards. J. H. K.

Means which Shorten Life.

DELICATE NURSING AND TREATMENT IN INFANCY.

THERE is no surer method of rendering the vital thread of a being from its origin short and perishable than by giving it, during the first years of life, which may be considered as a continued generation and expansion, a very warm, tender, and delicate education; that is, by guarding it from every breath of cool air; burying it for at least a year among pillows and blankets, and keeping it like a chicken in a real state of hatching; not omitting, at the same time, to stuff it immoderately with food; and, by coffee, chocolate, wine, spice, and such like things (which are nothing else than poison), to irritate it beyond measure, and to render its whole vital activity too strong and violent. By these means its internal consumption is from its birth so accelerated, its intensive life is so early exalted, and its organs are rendered so weak, tender, and sensible, that one may assert that, through two years' treatment of this kind, an innate vital capacity of sixty years may be reduced one-half; nay, as experience unfortunately shows, to much less, without reckoning those evil accidents and diseases which may besides be the consequence. The premature expansion of our organs and powers is by nothing so much hastened as by such a forced education; and we have before proved what an intimate connection there is between rapid or slow expansion, and a longer and shorter duration of life in general. Speedy ripening carries always along with it* speedy destruction. This, certainly, is one great cause of the dreadful mortality which prevails among children. But men overlook those causes which lie nearest to them, and assume rather the most absurd, in order that their minds may be at rest, and that they may have as little to do as possible.

PHYSICAL EXCESS IN YOUTH.

“As youth is the period of growth, of forming and collecting the powers of the future man, every

*One of the most remarkable instances of the prematurity of nature was Louis II., king of Hungary. He was born so long before the time that he had no skin. In his second year he was crowned; in his tenth he succeeded; in his fourteenth he had a complete beard; in his fifteenth he married; in his eighteenth he had gray hair, and in his twentieth he died.

kind of excess calculated to weaken or exhaust the vital powers should be carefully guarded against. There are certain active properties which belong to this period, such as muscular motion, which can hardly be carried beyond the bounds of health. But the excesses most to be dreaded are those which spring from a too early anticipation of the future man, in which the imagination and the feelings play a conspicuous part. Youth, it cannot be too often repeated, is the time for storing strength, both physical and moral; and every act which can in any way impede or frustrate this all-wise intention of nature, will tend to lay the foundation of a weak and imperfect body, and shorten the days of its possessor. Among the passions of the future man, which, at this period, should be strictly restrained, is that of physical love; for none wars so completely against the principles which have been already laid down as the most conducive to long life; no excess so thoroughly lessens the sum of the vital power; none so much weakens and softens the organs of life; none is more active in hastening vital consumption; and none so totally prohibits restoration.

"I might, if it were necessary, draw a painful, nay, a frightful, picture of the result of these melancholy excesses; but I refrain, in the hope that this simple caution will be sufficient. To my youthful readers, I will simply say, *Be wise in time*. Experience may appear a harsh, but, nevertheless, she is a just, monitor."—*Sel.*

Why Are Americans Dyspeptics?

It has been truly said that man is a creature of habit, and if there is any one direction in which this saying is more applicable than in another, it is that which points to the dietetic habits of civilized nations. This saying is especially true of the American people. There is probably not another nation on the face of the earth where the people have so many artificial wants, and so many injurious habits in eating and drinking, as our own nation. The reason is obvious. Here, labor of all kinds is remunerative, and the so-called good things are easily obtained. In European countries, the laborer is compelled, by reason of low wages, to subsist, both himself and his family, upon the barest necessities of life, hence he has not that opportunity for creating artificial wants and false dietetic habits, that is afforded in our country where the laborer is able not only to provide the necessities, but also many of the so-called luxuries, of life.

If we compare the average health of the laboring classes of America with that of the same class in the East, we shall see that the standard of health is much lower here than there; and the same is true of the wealthier classes also. Why is this? Is it because the climate of this country is more unfavorable to health than that of Europe? or is it

due to a difference in the habits of the people? A careful examination of the matter will convince any candid person that the origin of very many of the diseases of our people is owing to their unhygienic habits, and that the reason why the standard of health is lower in America than in Europe is, the habits of the people are more unhygienic here than there.

Thousands of girls belonging to the laboring classes come from Europe to this country yearly. They are, generally, strong and healthy on their arrival here, but in a few years many of them lose their health, sicken, or die prematurely. This might, at the first view, be considered as sufficient proof that the climatic influences of this country are less conducive to health than those of their native land; but when we take a closer view, and inquire into their habits, we find that the greater number of these girls were reared with simple habits, and on a plain diet, composed almost wholly of vegetable substances, and that they spent much of their time in the open air, performing out-door labor, and, as a consequence, they possessed almost perfect health while thus living. After arriving here, they engage as servants in the families of well-to-do people, and partake largely of rich food, to which they have heretofore been wholly unaccustomed. They consider condiments, rich gravies, flesh-meats, tea, coffee, highly seasoned cakes and pies, as among the most desirable things to be obtained, and they use them so freely that their stomachs, livers, etc., are soon worn out by overwork, and many of those who, in their native land were so robust and healthy, find themselves, after a few years' residence in this country, miserable dyspeptics.

These emigrants are not the only cases that are thus affected by the use of improper food. Like causes produce like effects; and it matters not whether the individual is rich or poor, of high degree or of low degree, nor of what nationality or clime, if he pampers the appetite with highly seasoned food, or uses improper food of any description for any length of time, disease will surely follow.

It is proverbial of the American people that they are a nation of dyspeptics. Why are they such? There can be but one answer to this question. It is because they do not control their appetites. The ease with which the so-called luxuries of life can be obtained in this country is a very great temptation to their use; and that which at first is taken only as a luxury, to afford temporary pleasure to the vital instincts, soon perverts those instincts and becomes a necessity, and its continued use occasions disease.

The use of flesh-meat as an article of diet is many times an occasion of disease, even if it is not used to a very great extent. It is often the case that animals whose flesh is used as food were diseased before and at the time they were slaugh-

tered, and this diseased flesh cannot but occasion more or less disturbance in the system of those who partake thereof. We are aware that there are men, great and learned, who claim that the flesh of diseased animals can be eaten with impunity; but we demur at this claim for the reason that disease is vital action put forth for the purpose of removing from the system of the diseased animal or person some substance that is within the system, which is not only unusable in renewing the perpetual waste occurring in the tissues; but which is also incompatible with the integrity of the vital domain. Now if an animal is diseased, it is evident that such matters exist within its organic tissues, and if human beings partake of such flesh, it is evident that they are taking into their systems the causes of the disease in the animal, and it is certain that these causes would be very liable to occasion disease in the person receiving them.

It may be claimed that the flesh of healthy animals never occasions disease. We are ready to admit that it would not be as liable to so do as would the flesh of diseased animals. But the fact that there are very few domestic animals that are not more or less diseased, and that those who purchase their meat at the butcher's stall, have no certain means of distinguishing between that which was healthy in life and that which was diseased, ought to make them very skeptical about using flesh as any part of their diet. But suppose, however, that we could know to a certainty that the ox, or sheep, or other animal, of whose flesh we propose to partake was perfectly healthy; where would be the impropriety of using it? To this we reply that all flesh contains impurities, even when in the most healthy conditions. These impurities are the broken-down tissues of the body and the saline and other earthy substances received into the body with the food and drink. The tissues of all living creatures are constantly changing, and that which wears out is not only replaced with new material, but the worn-out material, together with the saline and other unusable substances that may have entered the system with the food, have to be eliminated from the system.

These effete matters are carried by the lymphatics and venous absorbents and vessels to the proper organs of depuration to be cast out. After the animal is slaughtered, there is quite an amount of this effete matter contained in these vessels, and also among the tissues themselves. It is evident, therefore, that it is impossible to eat flesh without taking into the system these effete matters, and, in so doing, extra work is laid upon the depurating organs; for all matter must be eliminated from the system, otherwise it will become clogged, and congestions, inflammations, or fevers, will surely follow.

It is a well-known fact that very soon after life is extinct in any animal body, the work of decom-

position is commenced. This work is nothing more nor less than a breaking down of the organic tissues in precisely the same manner that they break down while the animal is in life and health, with this exception: after life has become extinct, the breaking down and decomposing processes are carried on more rapidly. It is true that animal flesh contains the necessary elements of food, and that it will maintain life, but it is also true that flesh contains no element of food that is not contained in vegetable substances.

Whatever adaptability animal flesh has as food is not owing to any virtue or quality that it possesses as flesh, but to the fact that it is composed of matter that has received an organism in the vegetable kingdom, which it still retains. The Bible teaches us that man is made of the dust of the ground, and our every-day observation teaches that this is not only true of man, but of all the animal creation also; but how are they thus made? If we examine this subject, we shall find that the ultimate elements of matter, as they exist in the mineral world, are used by the vegetable kingdom as food, the plant being built up therefrom. This is the first step in the transforming process. The second step is to transform the vegetable matter into animal flesh, which is done before our eyes continually. The greater portion of the animal kingdom feeds directly upon vegetable matters. A few species, including man, feed upon a mixed diet of vegetable substances and flesh, but the animals used by them as food belong, as a general thing, to the herbivorous classes, so that all derive their food from the vegetable kingdom, either directly or indirectly. This being the case, how much better it would be for man to take his food directly from the vegetable kingdom, for he who subsists upon flesh takes his food second-hand, and it is well known that second-hand articles are not so well adapted for use as are those which have never been used, and this is especially true of the elements of food. Mineral substances are, by the vital forces of the vegetable kingdom, organized into food elements, and these, after being once used in organizing flesh tissues, become somewhat changed, so that they are not so well adapted to be used a second time.

We have referred to the fact that the American people are a nation of dyspeptics, and that unhygienic habits are the principal cause of their being thus. Now it is true that we use more tea, coffee, and sugar, per head, than do the people of other nations, and just as much spice, flavoring extracts, and condiments as they, and that the use of these things contributes largely to make us dyspeptics. It is also true that we use more than double or even triple the amount of animal food that the same number of the inhabitants in other nations use, and that it is to this excessive use of a flesh diet that we owe many of our diseases; for the broken-down tissues, effete matters, and other impurities

contained in the flesh we eat, serve as stimulants to spur the organs of digestion and circulation into increased activity, thereby weakening their powers and hastening their decay. They also serve as clogs, to be removed by the depurating organs, thereby increasing their labor, and inducing in them congestions, etc. We wish the reader to examine these subjects carefully in all their bearings, for in our opinion they involve the fundamental principles of health reform. M. G. K.

Trying to Be Healthy.

WE notice in our neighboring exchanges announcements that another mineral spring has been discovered—at least it is supposed to be such; for the waters have a nasty taste. This spring is near Pine Bush, Orange Co., N. Y., and it is said the liquid tastes like Epsom salts. Like springs are constantly being discovered, and are always more or less resorted to by people under the belief that if they are sick, they will be made well, and if well, they will be made more healthy still.

This latter fact exhibits a curious feature in most people—we started to say in human nature, but a second thought assured us that it is not a freak of nature. Children and fools—they are proverbial for endeavoring to follow out the rules of nature—cannot be made to believe that a thing which is the most repulsive and distasteful is the most healthful or beneficial. But as soon as most people arrive at the “years of discretion”—what a mockery!—they begin to act as though they believed that, only by opposing nearly every law of nature, can they be healthy, happy, and wise. Those who have sufficient wealth will flock to the springs and watering places throughout the country, sit up nearly all night and attend balls and parties, sleep during the day—if at all—dissipate, and drink mineral water and wine, and finally go back to their homes in the fall, imagining they have been sacrificing at the altar of Hygeia, and if they are not healthy, it is no fault of theirs. Was ever delusion so great? We have known people to complain of feeling unwell, stop work for a few days or weeks, take a laxative at night, an astringent in the morning, smoke cigars, drink this and that all day, play billiards, etc., part of the night, and tell their friends they “didn’t feel good, and were doctoring up a little, you know.” Probably the same parties, if their exchequers permitted, would have gone away to a watering place, and varied the “doctoring up” process by excessive libations of nasty-tasting water.

And probably if the health-seeker has better judgment than the class above mentioned, he is equally unwise in his dietetic affairs. The victim probably imagines that he must eat plenty of meat and grease, with highly-seasoned cookery—

the more salt and pepper the more vigor he thinks it will impart—ending his gorging process with pastry and “rich food.”

What good are mineral waters; what good are vegetables, and fruit, and grain, and pure water; what good are light, and darkness, and fresh air—while people thus set them all at naught? The sun heats their unsound flesh, the darkness of night covers their dissipating tracks, pure air and water mingle with the fumes of tobacco and the poison of decoctions, and food is killed by salt, and pepper, and grease, and the mineral water is drank with about the same reference to utility that another would take a dose of rhubarb for “spring fever.”

And yet people wonder why they are not healthy and happy, and why epidemics rage, and disease is common, and man is cut off before his time.—*Sel.*

Fretful Babies.

BABIES often cry without any apparent reason; but a mother can usually discover a reason if she stops to think about it. And it is worth stopping to think about, no matter if the housework or sewing be delayed a while in consequence. Perhaps she has eaten something which disagrees with its stomach; perhaps it is thirsty, for babies are often thirsty, and will drink a teaspoonful of cold water with the greatest eagerness, and be quiet and satisfied after it. Perhaps its little sock is tied too tightly. More likely than anything else, the flannel band around its bowels—if haply one is there—or its skirt band is pinned too tightly. I know a baby who cries a great deal. I think the chief reason of it is because it has always been dressed too tightly. The mother said to me one afternoon, when the child was so cross she hardly knew what to do, “I’ve a great mind to undress him and put on his night-gown; he is real good then.” So she did, and it commenced to be good at once. Mothers should search for all such possible causes when their babies get fretful. They should not be too ready to attribute their crying to nervous temperament or to hunger, for it is more likely to be caused by the prick of a pin or an overfed stomach than either.—*Hearth and Home.*

Only Once.

FROM “only one word” many quarrels begin,
And “only this once” leads to many a sin;
“Only a penny” wastes many a pound;
“Only once more,” and the diver was drowned;
“Only one drop” many drunkards has made;
“Only in play” many gamblers have said;
“Only a cold” opens many a grave;
“Only resist” many evils will save.

GENIUS unexerted is no more genius than a bushel of acorns is a forest of oaks.

The Frame-Work of the Body.

AMONG the objects of pursuit for the human mind, one especially commends itself as worthy of our contemplation, and that is the knowledge of ourselves. Our all-wise Creator has placed every structure in the body as it pleased him. One tissue or structure cannot say to another, I have no need of thee.

The frame-work of our bodies is composed chiefly of the bones. They give it form and firmness, and keep it upright. They also afford points and surfaces for the connection of ligaments which hold the bones in position, and for the attachment of muscles which move them.

In the skeleton of an adult, there are two hundred and forty distinct pieces of bone. Eight of these form the skull, while fourteen are required in the frame-work of the face, besides the thirty-two teeth. There are six bones connected with the organ of hearing, and one with the tongue.

The spinal column is composed of twenty-four vertebral bones, one sacrum, and one coccyx. There are twenty-four ribs, the first seven pairs of which are joined by cartilages to the sternum, or breast-bone. Each upper extremity contains thirty-two bones, as follows: one shoulder-blade, called the scapula; one collar-bone, called the clavicle; one bone in the upper arm, called the humerus; two in the forearm, the ulna and radius; eight in the wrist; five in the hand; and fourteen in the fingers and thumb. Each lower extremity contains thirty-two bones, as follows: one haunch bone, called the innominatum; one femur, or thigh bone; one patella, or knee cap; two bones in the lower leg, the tibia, or shin bone, and the fibula, or lesser bone of the leg; seven bones in the instep, ankle, and heel; five in the front portion of the foot, and fourteen in the toes, besides one sesamoid bone in the tendon of the great toe, over the last joint. These two hundred and forty bones comprise the complicated frame-work of our bodies. The bones in man are placed under the flesh and skin, thereby adapting him to a variety of movements which he could not otherwise perform. In some creatures, the bones are on the outside of the body, and are called shells, and serve to protect the animal from injury. It is for the purpose of knowing how to procure the perfect development of the bones, and preserve them inviolate that their study is chiefly interesting and important.

The bones in the earlier formative stages are cartilaginous, and if proper conditions are supplied, will develop perfectly in obedience to the laws of organic structures, and there are symmetry and beauty in the physiological character of the body. On the contrary, if these are wanting, and the food is not of a quality to afford material to the blood, to furnish them proper nutriment, and there is a deprivation of proper hygienic agents,

such as pure air and water, sufficient exercise and rest, ample sunshine and cheerfulness, they will be diminutive in size, poor in quality, and liable to disease, readily becoming misshapen and displaced by pressure from surrounding parts, and subject to ulceration and decay. From the same causes also arise scrofula, rickets, spinal curvature, and other distortions, and defective teeth.

The bones of children are very soft and easily bent. Mothers notice this when they nurse their babe only from one breast. The side of the head that lies on the arm becomes flattened unless care is taken to counteract the pressure by laying the child on the opposite side, so that the pressure on all parts shall be equalized.

Children are sometimes taught to stand alone and to walk too young. This bends the bones of their legs, and thus makes them bandy-legged or knock-kneed for life. And without doubt the deformity of many a pelvis is the result of having the diaper fastened too tightly about the pliant hips.

The influence pressure has on the body is forcibly demonstrated by a recent writer concerning the customs of the Modocs. "The Modoc squaws make a beautiful fashion of baby basket. It is of fine willow-work, a little longer than a baby, shaped like a cylinder, with half of it cut away, and the ends rounded. It is intended to be set up against the wall, or carried on the back; hence, the infant is lashed perpendicularly in it, with his feet standing on one end, and the other arching over his head for a canopy.

"In one which I saw, this canopy was supported by standards, spirally wrapped with gay-colored calico, with looped and scalloped hangings between, and the body of it being woven of the finest willows in variegated colors, and the little cub pinioned in it, neat, clean, with his nose wiped, and standing straight up as an arrow. It was quite a fashionable turn-out.

"The little fellow is swaddled all around like a mummy, with nothing visible but his head, so that he can sleep standing. From the manner in which the tender skull is thus bandaged back, it often results that it grows backward and upward at an angle of forty-five degrees, as if it had been compressed between two boards.

"Among the Muckalucs, a closely related tribe, I have seen a man of fifty years whose forehead was all gone, the head sloping right back on a line with his nose."

If pressure applied to the head only a portion of the time will deform the skull as above described, thereby changing the form of the brain and possibly its functional power to some extent, how disastrously corsets and other tight clothing must affect the vital organs placed within the cavity of the chest and abdomen, which have to do all the work of transforming our food into a vital

fluid capable of renewing the wastes that are constantly occurring in the body, without which life would be deprived of its chief blessing, viz., spiritual, mental, and physical recognition.

These facts ought to lead every individual to consider the absurdity of adjusting any garment or fixture to any part of the body that will interfere with its unlimited freedom of action. Intelligent, sensible people cannot admire the deformed, undeveloped head of the Muckaluc, nor the dwarfed, useless feet of the Chinese belle, but who can discover the difference between the lack of good, sound sense exhibited by civilized people in the admiration of wasp waists, which the aborigines of America and the Mongolians of China discard, and that manifested by the latter in admiring the deformities which they inflict upon themselves.

P. M. LAMSON, M. D.

Filters and Cool Water.

IN view of the fact that the water we drink is not unlikely to be crowded with dangerous germs, it seems the part of wisdom to adopt the simple precaution suggested in our heading. A portable filter may be made of common stoneware or earthen jar. The bottom is filled with stones as large as a goose-egg, or is covered with a perforated slate slab, leaving a space to hold a supply of filtered water. A faucet is fitted into a hole bored through the side of the jar, as near the bottom as may be. On the slab, or stone, is placed a layer of coarse gravel, cleanly washed; over that, a layer of cleanly washed sand; then a layer of powdered charcoal, also well washed; still another layer of sand, and then one of coarse gravel, both washed perfectly clean. The remainder of the space is for water. A cover, or a wet cloth, placed over the top excludes dust. If a porous jar is used, the evaporation from the outside during hot weather will keep the contents almost ice cold, particularly if it is kept in a current of air. The same filtering arrangement may be applied to a cistern. At the upper corner is the chamber into which the pipe discharges. The layers of material are gravel, sand, and charcoal. As the filter will need to be taken out occasionally to wash the contents, it is well to make the chamber quite distinct, so that access may be had to it at any time without disturbing the cistern or its contents.—*Sel.*

THERE is a great difference between the two temporal blessings, health and wealth; wealth is most envied, but least enjoyed; health is frequently enjoyed, but the least envied; and the superiority of the latter is still more obvious when we reflect that the poorest man would not part with his health for money, but that the richest would gladly part with his money for health.

What Shall We Eat?

WHEAT-MEAL BREAD VS. STARCH BREAD.

IN the "Philosophy of Eating," by Dr. Bellows, the author gives the following classification of food:—

First—Carbonates; that class which supplies the lungs with fuel, and thus furnishes heat to the system, and supplies fat, or adipose matter.

Second—Nitrates; that class which supplies the waste of muscle.

Third—Phosphates; the class that supplies the bones, the brain, and the nerves, and gives vital power, both muscular and mental.

The following table exhibits an analysis of different kinds of food in their natural state.

Articles.	Nitrates.	Carbonates.	Phosphates.	Water.
Wheat,	14.6	66.4	1.6	14.0
Barley,	12.8	52.1	4.2	14.0
Oats,	17.0	50.8	3.0	13.6
Northern corn or maize,	11.3	67.5	1.1	14.0
Southern corn,	34.6	39.2	4.1	14.0
Buckwheat,	8.6	53.0	1.8	14.2
Beans,	24.0	40.0	3.5	14.8
Rice,	5.1	82.0	0.5	9.0
Potatoes,	1.4	15.8	0.9	74.8
Sweet Potatoes,	1.5	21.8	2.9	67.5
Parsnips,	2.1	14.5	1.0	79.4
Turnips,	1.2	4.0	0.5	90.4
Cabbage,	1.2	6.2	0.8	91.3
Cucumbers,	0.1	1.7	0.5	97.1
Apples,	5.0	10.0	1.0	84.0
Milk of cows,	5.0	8.0	1.0	86.0
Veal,	17.7	14.3	2.3	65.7
Beef,	19.0	14.0	2.0	65.0
Lamb,	19.6	14.3	2.2	63.9
Mutton,	21.0	14.0	2.0	63.0
Pork,	17.5	16.0	2.2	64.3
Chicken,	21.6	1.9	2.8	73.7

It will be seen by this table that, of all grains, wheat is truly the "staff of life."

WHEAT MEAL, OR UNBOLTED FLOUR.

Wheat meal is far more nutritious and fitted to build up the system than superfine flour, which is bereft of about one-half of the tissue-making elements. O. S. Hubbell, M. D.—a distinguished pharmacist of Philadelphia—furnishes the following analysis of the flour and bran which he receives from the mill to which he sends his wheat for grinding: From every 100 pounds of wheat, about 76 pounds of flour and 20 pounds of bran. The flour (he adds) contains, of tissue-making elements (gluten, albumen, &c.), 1.65; of phosphates and other salines, 0.70; total, 2.35 per cent. The bran contains, of tissue-making elements, 3.10; salines, phosphates, &c., 7.05; total, 10.15 per cent. That is, for purposes of nutrition, the bran is nearly *five-fold* richer than the flour, or (being one-fourth the weight of the flour) it has as much value as the flour itself in every bushel.

It is unquestionably true that God made wheat in the best proportions to build up and nourish the system; and man in his folly has separated and rejected that part which contains all the bone, muscle, and fat-making material, viz., the bran.

AN EXPERIMENT.

A French writer informs us that the experiment was recently made of testing the superiority of wheaten-meal bread (unbolted-flour bread) over common starch bread (fine-flour bread). Two dogs, of similar age and apparent vitality, were fed, the one on starch bread and water alone. He pined away and died in less than forty days. The other was fed on wheat-meal flour and water alone, and, at the end of forty days, he had gained flesh—several pounds in weight.

Dr. Bellows states that "animals have been fed on pure starch or sugar, or fat alone, and they gradually pined away and died; and the nitrates, in all the fine-flour bread which the animal can eat, will not sustain life beyond fifty days; but others, fed on *unbolted flour*, would continue to thrive, and fatten, and grow stout and strong, for an indefinite period."

AVOID AND REJECT STARCH BREAD.

It is not only deficient of every element that makes muscle, or bone, or fat, but it lacks the *mucilaginous* substance which is the natural stimulant of the alimentary canal. It is constipating, and at war with everything that tends to build up the system and promote health. It is immaterial whether the quantity of food be reduced too low, or whether the muscle-making or heat-making elements be withdrawn, even though the other be fully supplied. In either case the effect will be the same. The animal or person will become weak, dwindle away, and die sooner or later, according to the deficiency. Food, therefore, containing the right proportion of heaters and muscle-makers, is the best and most economical.

A DETRIMENT AND LOSS.

In Chicago, and nearly all American cities, a large part of the expenses of the table are superfine flour, butter, and sugar, neither of which contains enough of the muscle, or brain and bone-making elements, to sustain life over fifty days, as has been proved by experiments with flour, while butter and sugar will not sustain life a single month without food. Most of our food contains a due proportion of carbonates, and if, with it, we use butter and sugar, thus destroying that correct proportion, they cannot be apportioned to, nor assimilated by, the system, and are, therefore, lost—utterly and entirely lost.

All meats, fat and lean, all grains, and milk, contain all the carbonates needed, or that can be used, to furnish heat in moderate weather. Therefore, all the butter or sugar that is added to either of these common articles of food, as they are used in making cakes, custards, pies, etc., are not only lost, but, by adding too much fuel, increase the tendency to inflammations, embarrass the stomach, induce congestions, obstructions, constipation, and that "living death," dyspepsia, which is fearful on the increase in our country.

To find a good use for superfine flour out of which has been foolishly taken

FOUR-FIFTHS

of its food (taking equal weights), or one-half (by the bushel), is exceedingly difficult, indeed, impossible in health; and it can only be useful in disease, when the irritability of the stomach or bowels forbids the use of their natural stimulants, just as inflammation of the eye makes it necessary to exclude the light.

RECIPT FOR WHEAT-MEAL BREAD.

Bread, light, sweet, delicious, and eminently nutritious and palatable, may be made by mixing good, unbolted wheat meal with cold water, or milk if preferred, making a paste of proper consistence, determined by experiments. Place in a hot oven, and bake as soon as possible without burning. The heat suddenly coagulates the gluten of the outside, which retains the steam formed within, and each particle of water being interspersed with a particle of flour, and expanded into steam, separates the particles into cells, and being retained by the gluten, which is abundant in this natural flour, till it is cooked, the mass remains porous and digestible, and, containing no carbonic acid gas, is wholesome when eaten immediately from the oven, and, of course, equally so when cold. It can be made exactly like starch bread, if desired.

Let suicides eat white starch bread,
 Let wise men shun the same,
 For Satan holds the winning cards
 At this sharp table-game.
 Deception is his keenest blade;
 He makes believe that white
 Is much the nicest tint for bread,
 And thus gets up a fight,
 And kills off thousands every year,
 Thrust through and slain by this *bread-spear*.
 —Chicago Tribune.

Worms in Wells.

We clip from the *Western Rural* the following which was written for that paper by W. J. Beal of the State Agricultural College, Lansing, Mich.:

When worms are troublesome in wells, pump out the water and clean out the muddy bottom; then dig six inches or a foot of the soil away under the platform about the top of the well and pack in, tightly, leached ashes. We have one fixed that way at the college which has worked admirably for a year or so. Before this it was troubled with worms and ground squirrels and toads. The water is now clear and pure, and has never tasted in the least of ashes or lye."

THERE are in Pennsylvania 976 manufacturers of cigars, who turn out upward of 5,200,000 annually, and 36 manufacturers of chewing and smoking tobacco and snuff, the value of whose products reaches annually \$854,000.

THE WISH.

I ASK not golden stores of wealth,
 Nor rank, nor pomp, nor state ;
 Nor nobles' glittering coronet,
 Nor mansions of the great.
 I care not that around my brow
 Fame's laurel wreath should twine ;
 Or that on history's glowing page
 My name may proudly shine.

I envy not the calm retreat,
 From worldly noise and strife—
 The lowly cot, the flower-gemmed path,
 The simple joys of life.

I ask not that in soft repose
 My peaceful days may glide,
 As the light bark is borne along
 The deep, unruffled tide.

But *this* I ask : that while I live,
 I may not live in vain ;
 For I would cheer the aching heart,
 And soothe the mourner's pain,
 Would wipe away grief's bitter tears,
 The poor man's struggle aid ;
 And guide the wanderer back, whose steps
 From virtue's paths have strayed.

Then, whether affluence and state
 Shall be my destined lot,
 Or 'neath the humble cottage roof
 I dwell, it matters not,
 If I, by self-denying love,
 Earth's weary ones can bless,
 And deepen, as I pass along,
 The stream of happiness.

—Sel.

Advantages of Health Reform.

TO SEE the advantages of the system, we compare our past experience with the present. Our diet was like that of anti-hygienists. During the years of our ignorance, we paid doctors' bills sometimes amounting to \$100 per annum, were frequently involved in debt, hired nurses, &c.

For seven or eight years (since we began to take the HEALTH REFORMER), our doctors' bills are nothing at all. Our food is plain and wholesome, and the digestive organs no longer groan under their burden. We do more work, have clearer minds, and better control of the appetites and passions ; seldom have an ache or a pain ; our wounds do not become inflamed, but heal quickly.

We have more time to read, and pray, and meditate ; more time and heart to visit our friends, and more treasure to lay up in Heaven, in the form of regular contributions, and occasional donations, to public and private charities. In short, we have concluded that hygiene is strictly a part of true godliness.

JOS. CLARKE.

REFORMING the world is like patching an old coat, which will soon need another patch ; but if it were not for reformers the world would always be out at the elbows.

A Lesson of Contentment.

"GIVE me your sweet music," said the rose to the nightingale, "that I may enliven the garden with melody."

"Give me your soft light," said the nightingale to the evening star, "that I may flood the woodlands with brightness."

"Give me your strength and motion," said the evening star to the sea, "that I may exert a real power over the world."

"Give me your brilliant colors," said the ocean to the rainbow, "that I may gladden the hearts of men instead of affrighting them with my wrath of storm."

"Give me your ruddy warmth," said the rainbow to the fire, "that I may assist in ripening the harvest field."

Each one replied that it was impossible ; as it was created so it must continue. The rose is a censer of summer perfumes ; but it cannot pour forth a flood of music. The nightingale is a fountain of melody ; but it has not even the brightness of the firefly. The star is an unquenchable lamp of splendor ; but it cannot affright the heart of man with the terror of storm. The ocean is one of the sublimest objects of the world ; but it has not the mild beauty of the bow of promise. And why should man be ever striving for something he does not possess ?

On one is bestowed the power of intellect, on another, the attraction of a loving heart. One can thrill the world with a burst of eloquence ; another can influence the life with a quiet earnestness. The poet can charm it with song ; the merchant can enrich it with commerce ; and the historian enlightens it with the story of by-gone times. And each one is its benefactor so long as he remembers that the Great Master has given him his work to do, and strives to do it as ever in his sight.—Sel.

The Way to Health.

THE only true way to health is that which common sense dictates to man. Live within the bounds of reason. Eat moderately, drink temperately, avoid excess in anything, and preserve a conscience "void of offense."

Some men eat themselves to death, some wear out their lives by indolence, and some by overexertion, others are killed by the doctors, while not a few sink into the grave under the effects of vicious and beastly practices. All the medicines in creation are not worth a farthing to a man who is constantly and habitually violating the laws of his own nature. All the medical science in the world cannot save him from a premature grave. With a suicidal course of conduct he is planting the seeds of decay in his own constitution, and accelerating the destruction of his own life.

Random Thoughts.

This world is regarded by Christians as the theater of preparation for another and higher state of being. The best way to provide for the future is to obtain the greatest advancement and highest perfection that is possible in the present life. The intellectual and spiritual have their foundation in the physical and material being. Says Dr. Palmer, in his address to the Medical Society of Michigan: "Any improvement in the condition of man, to be enduring, must embrace his whole being—physical, mental, and moral; and if the physical, which is the foundation, be defective, the whole superstructure, sooner or later, must totter and fall." With this sentiment I fully concur.

The frequent violation of nature's laws through the excesses of appetite and passion, and the neglect of proper means to supply the constant waste of the body, have a tendency to multiply diseases; and these are increased and aggravated by transmission, and create a necessity for the medical profession. The grand object of this profession should be to mitigate and remove the evils existing in consequence of these transgressions, and to instruct the common people how to avoid them; but, far from this, it increases them tenfold. That this is done mainly through ignorance no one will deny. But the knowledge of nature's laws, though still imperfect, is daily increasing.

"In proportion as we have large conceptions of nature and acquaintance with her varied processes will be our ability to understand the principles of the profession and to perform its duties." Society should demand of the profession, not only the restoration of the sick, but a step farther and higher—the prevention of sickness. The causes of disease are usually under control, and the developmental forces and recuperative powers and the laws of repair are all in favor of the highest degree of health.

Though the profession has brought to light great knowledge of the human system and the laws which govern it, yet because of its introduction of drugs to alleviate the sufferings of humanity, it would be difficult to say if it has not proved a greater evil than the diseases which it seeks to overcome. As the deleterious effects of medicine are obvious whenever they are administered, it is truly strange that the people are so slow to see it. Indeed, many regard their medicines with a feeling akin to worship.

It is quite generally believed that ague will not readily yield to hygienic treatment, or that stubborn cases cannot be cured without drugs; but experience teaches the contrary. Here is a case in point. A lady was taken with ague. Though friends entreated, and the many remedies (?), from quinine down to boneset, were prescribed, she insisted upon using only hygienic remedies, and in a week was restored to health.

Another member of the family about the same time was taken in a similar manner. He thought that water treatment might do for those who had patience to wait the slow process of cure, but he had not. So he procured bottles of highly recommended "ague cure." But the ague, loth to leave him while "so well fed and cared for," shook him for several months. After it reduced him almost to emaciation, and he was apparently not worth "shaking" any longer, he consented to take hygienic treatment in connection with the medicine. The chills were soon broken, and he was restored to a measurable degree of health, and—the medicine got the credit!

It is not now too late to break away from the trammels of tradition. We have schools and colleges for mental and religious instructions, can we not have similar ones to promote physical development and to teach the people how to live to preserve health? This is a subject in which every intelligent person should feel the deepest interest, and be willing to act with reference to; and there should be concert of action. With unerring nature to guide, and the knowledge already in our possession of the necessity of the medical reform, we may have some hope of success.

J. R. T.

Battle Creek, Mich.

Eating without an Appetite.

It is wrong to eat without an appetite, for it shows there is no gastric juice in the stomach, and that nature does not need food, and not needing it, there being no fluid to receive and act upon it, it remains there only to putrefy, the very thought of which should be sufficient to deter any man from eating without an appetite, the remainder of his life. If a tonic is taken to whet the appetite, it is a mistaken course, for its only result is to cause one to eat more, when already an amount has been eaten beyond what the gastric juice is able to prepare. The object to be obtained is a larger supply of gastric juice, not a larger supply of food, and whatever fails to accomplish that object, fails to have any efficiency toward the cure of dyspeptic diseases. The formation of gastric juice is directly proportioned to the wear and tear of the system, which it is to be the means of supplying, and this wear and tear can only take place as the result of exercise. The efficient remedy for dyspepsia is work—out-door work—beneficial and successful in direct proportion as it is agreeable, interesting, and profitable.—*Hall's Journal of Health.*

TRUTH and love are two of the most powerful things in the world; and when they go together, they cannot be easily withstood. The golden beams of truth, and the silken cords of love, twisted together, will draw men with a sweet influence, whether they will or not.

The Date Palm.

THE date has, from time immemorial, been the chief article of food for many millions of inhabitants of the northern borders of the Arabian desert and the lower portion of the Valley of the Euphrates, the seat of the ancient Chaldean Empire. A Persian poem celebrated its three hundred and sixty uses. The Greeks spoke of it as furnishing the Babylonians with bread, wine, vinegar, honey, and ropes of all kinds, and a mash for cattle. The clusters of its fruit, semi-transparent, which the ancients likened to amber, weigh from one to three hundred pounds for each tree. Mahomet is said to have addressed his followers on the subject as follows: "Honor the date tree, for she is thy mother." Palgrave says, "It is almost incredible how large a part the date plays in Arab subsistence; it is the bread of the house, the staff of life, and the staple of commerce."

The date is a sweet fruit, and when mixed with acid fruits, and stewed, the two make an excellent dish. It is used in puddings, cake, and bread, and is also used quite freely without cooking. The fruit is dried in the sun without the addition of sugar.

Keep Warm.

MANY a fatal case of dysentery is caused by the want of a woolen undershirt, or an extra blanket at night. The sudden changes of temperature which occur at this season of the year are very trying to the constitution. People with weak lungs quickly feel the effects of them. Frequently the thermometer falls many degrees within a few hours. Not only the feeble, but robust and strong persons suffer from such great variations of temperature. When the weather grows cold rapidly, the pores of the skin are suddenly closed, and the result is frequently a bad cold, which may hold on all winter and terminate in consumption or a fatal attack of dysentery, or that dreadful disease, typhoid fever.

There are many ready-made coffins at the cabinet shops and undertakers—little, short, tiny coffins—which are going to be filled up soon by children—some of them as sweet and beautiful as anybody's, as your own; and just think of it, these children might be left in their bright homes if only warm shoes and stockings which keep little feet dry, and warm clothes and woolen blankets were more plenty.—*Sel.*

THERE is a difference between happiness and wisdom—he that thinks himself the happiest man, really is so; but he that thinks himself the wisest man is most generally found to be the biggest fool.

THOSE who know least are the most positive.

The Best Doctors.

AN eminent physician on his death-bed comforted his friends who were lamenting the loss of his professional skill to the world, by telling them that he should leave behind him far better physicians than he was; and when they asked him to tell them their names he replied: "Dr. Diet, and Dr. Quiet."

It is well remarked that "The best medicines in the world, more efficient in the cure of disease than all potencies of the apothecary's shop, are warmth, rest, cleanliness, and pure air. Some persons make it a virtue to defy disease, 'to keep up' as long as they can move or bend a finger, and they in some cases succeed in braving it through, but in others the powers of life are thereby so completely exhausted that the system has lost all ability to recuperate, and slow and typhoid fevers set in and carry the patient to a premature grave. Whenever walking or work is an effort, a warm bed and a cool room are the very first indispensable steps to a sure and speedy recovery. Instinct leads all beasts and birds to quietude and rest the very moment disease or wounds assail their systems." And the wisdom that God has given to man should teach him the same lesson, and doubtless would, were it not that by constant stimulants and excitants in various forms he keeps himself blinded to his true condition, and rushes madly on; depending on borrowed strength, until capital and credit are alike exhausted, and physical bankruptcy lands its victim in the grave.

No one but a fool would think to repair a machine by running it, or while running it, and yet many men keep the human machinery in such restless motion that nature cannot get a chance to repair it or restore it to its natural state, and then they purchase slops, stimulants, opiates, drugs, and deadly poisons, and think by turning them down their throats to escape the due reward of their unrighteous modes of life.

Try "Dr. Diet, and Dr. Quiet."—*The Christian.*

DEADENING INFLUENCE OF FASHION.—It is among the children of light employment and unsettled life that we must look for stony-heartedness, not in the world of business; not among the poor, crushed to earth by privations and suffering. That hardens the character, but often leaves the heart soft. If you wish to know what hollowness and heartlessness are, you must seek for them in the world of light, elegant, superficial fashion, where frivolity has turned the heart into a rock-bed of selfishness. Say what man will of the heartlessness of trade, it is nothing compared with the heartlessness of fashion. Say what they will of the atheism of science, it is nothing to the atheism of that round of pleasure in which the heart lives, dead while it lives.—*Rev. F. W. Robertson.*

SUNLIGHT A NECESSITY.—Sun baths cost nothing, and are among the most refreshing, life-giving baths that one can take, whether sick or well. Every housekeeper knows the necessity of giving her woolens the benefit of the sun, from time to time, especially after a long rainy season, or a long absence of the sun. Many will think of the injury their clothes are liable to, from dampness, who never reflect that a temporary exposure of their own bodies to the sunlight is equally necessary to their own health. The sun baths cost nothing, and that is a misfortune, for people are still deluded with the idea that those things only can be good or useful which cost money. Let it not be forgotten that three of God's most beneficent gifts to man—sunlight, fresh air, and water—three things most necessary to good health, are free to all; you can have them in abundance, without money and without price, if you will. If you would enjoy good health, then see to it that you are supplied with pure air to breathe all the time, that you bathe an hour or so in the sunlight, and that you quench your thirst with no other fluid than water.

LOVE THE BEAUTIFUL.—Place a young girl under the care of a kind-hearted woman, and she, unconsciously, herself grows into a graceful lady. Place a boy in the establishment of a thorough-going, straight-forward business man, and the boy becomes a self-reliant, practical business man. Children are susceptible creatures, and circumstances, scenes, and actions always impress. As you influence them not by arbitrary rules nor by stern example alone, but a thousand other ways that speak through beautiful forms, pictures, etc., so they will grow. Teach your children then to love the beautiful. Give them a corner in the garden for flowers, encourage them to put it in the shape of hanging baskets, show them where they can best view the sunset, rouse them in the morning, not with the stern tune, "To Work," but with the enthusiastic, "See the beautiful sunrise." Buy for them beautiful pictures, and encourage them to decorate their rooms in their own childish way. Give them an inch, and they will go a mile. Allow them the privilege, and they will make your home beautiful.—*Sel.*

ABOUT NIGHT CLOTHES.—In the *Rural New Yorker* of July 26, is "an illustration of a *Neglige Basket*, a useful article for a bedroom as a receptacle for ladies' and children's night clothes." Now it seems to me that the only proper receptacle for a night garment of any kind, after being worn, is a hook or nail where the sun can shine upon it, and the breezes can blow over, and under, and through it; carrying away whatever matter may have been absorbed from the body during the night; that the old way of rolling up a night

dress so tightly that it might be used as a formidable weapon of offense or defense, and tucking it under the pillow, or of folding it up and putting it away in the dark, out of sight, is unclean and unhealthful, and should have long ago become obsolete.

A good deal is said of the manner and fashion and ways of caring for "ladies' and children's" night dresses; but where are the men's? Don't they have any? It is self-evident that no person should wear a garment during the night that is worn during the day; and if a *lady*, with scarcely enough exercise to produce a drop of perspiration, needs a clean, well-aired garment, in which to sleep, how is it with a man who has been hard at work all day in the dust and heat, with the sweat dripping from every pore? If a healthy, active child, to whom sleep comes as easily and naturally as to a pig or a kitten, needs a refreshing night-dress, how is it with the man and father who has spent the day in his pent-up store, office, or counting-room, in exhaustive mental labor, and goes to bed worn out in mind and body and with every nerve unstrung?

Though men have power, wisdom, and ability; though they are strong, helpful, and independent; though they have office and greatness, sit in legislative halls and become M. C.'s, they *do* need and always should have—night-gowns.

What Will You Take?

How often this question is asked by men accustomed to the use of intoxicating drinks. Suppose we put the question in a more practical way? Will you have ten cents' worth of poison? Will you take a pain in the head? Will you take a rush of blood to the heart? Will you take a stab in the lungs? Will you take a blister on the mucous membrane? Will you take a nauseating sickness of the stomach? Will you take redness of the eyes, or black eyes? Will you take a tint of red for your nose? Will you take a rum-bud for your face? Will you take an offensive breath? Will you take a touch of *delirium tremens*? Suppose we change the question a little. Will you take something to drink which will make you more thirsty than you were before you drank it! There would be some sense in asking a man out at the elbows to take a coat, or in asking a bareheaded man to take a hat, or in asking a shoeless man to take a pair of boots, or in asking a hungry man to take something to eat; but it is a piece of insane absurdity to ask a man to take something to drink—that which will not quench thirst. Why should he take something? Will it make him stronger, wiser, better? No; a thousand times no! It will make him weaker; it will make him idiotic and base; it will make him an enemy to himself and a shame to his name.—*Exc.*

Homekeeping *versus* Housekeeping.

THE truest homes are often in houses not especially well kept, where the comfort and happiness of the inmates, rather than the preservation of the furniture, is first consulted. The object of home is to be the center, the point of tenderest interest, the pivot on which family life turns. The first requisite is to make it attractive, so attractive that none of its inmates shall care to linger long outside its limits. All legitimate means should be employed to this end, and no effort spared that can contribute to the purpose. Many houses called homes, kept with waxy neatness by painstaking, anxious women, are so oppressive in their nicety as to exclude all home-feeling from their spotless precincts. The very name of home is synonymous with personal freedom and relaxation from care. But neither of these can be felt where such a mania for external cleanliness pervades the household as to render everything else subservient thereto. Many housewives, if they see a speck on floor or wall, or even a scrap of thread or bit of paper on the floor, rush at it as if it were the seed of pestilence, which must be removed on the instant. Their temper depends upon the maintenance of perfect purity and order. If there be any failure on their part, or any combination of circumstances against them, they fall into a pathetic despair, and can hardly be lifted out. They do not see that cheerfulness is more needful to home than all the spotlessness that ever shone. Their disposition to wage war upon maculateness of any sort increases until they become slaves of the broom and dustpan. Neatness is one thing, and a state of perpetual house-cleaning quite another.

Out of this grows by degrees the feeling that certain things and apartments are too good for daily use. Hence, chairs and sofas are covered, and rooms shut up, save for special occasions, when they are permitted to reveal their violated sacredness in a manner that mars every pretense of hospitality. Nothing should be bought which is considered too fine for the fullest domestic appropriation. Far better is the plainest furniture, on which the children can climb, than satin and damask which must be viewed with reverence. Where anything is reserved or secluded, to disguise the fact is extremely difficult. A chilly air wraps it around, and the repulsion of strangeness is experienced by the most insensible.

There are few people who have not visited houses where they have been introduced to what is known as the company parlor. They must remember how uncomfortable they were while sitting in it; how they found it impossible to be at ease, and mainly for the reason that their host and hostess were not themselves at ease. The children were watched with lynx eyes, lest they should displace or soil something; so that the entertainment of friends became very much like a social

discipline. They must recall, too, how sweet the fresh air seemed out of doors, and how they inwardly vowed in leaving that temple of form and fidgetness, that something more than politeness would be required to entice them to return.

Home is not a name, nor a form, nor a routine. It is a spirit, a presence, a principle. Material and method will not and cannot make it. It must get its light and sweetness from those who inhabit it, from flowers and sunshine, from the sympathetic natures which, in their exercise of sympathy, can lay aside the tyranny of the broom and the awful duty of endless scrubbing.—*Sel.*

Health Habits of Young Men.

A VERY curious and interesting table might be made by a thoughtful physiologist and hygienist, showing each person where his strength goes; and I am not sure that a young man could do a better service for himself than seek counsel of some wise physiologist, tell him frankly all his habits, and have such a table prepared, not only to guard him against excess, but to show him his weak places, and point out where he will be most likely to fail. Some of these tables would no doubt read very much as follows:—

Spent in getting rid of several drinks of wine and brandy, force sufficient to raise thirty tons one foot high.

Spent in digesting a big dinner, which the body did not need, force sufficient to raise twenty tons of matter one foot high.

Spent in smoking cigars, force sufficient to raise ten tons one foot high.

Spent in breathing bad air, force sufficient to raise fifteen tons one foot high.

Spent in cheating a neighbor out of \$30.00 in a business transaction, force sufficient to raise fifteen tons one foot high.

Spent in reading worthless books and newspapers, force sufficient to raise five tons one foot high.

Spent in hesitation, doubts, and uncertainty, force sufficient to raise five tons one foot high.

Total, one hundred and twenty tons one foot high.

Left for practical and useful labor only enough to raise fifty-five tons one foot high, or to do less than one-third of a day's work.

Sometimes there would be a draft on the original capital of considerable force, so there would not be enough to keep the body warm, or the food well digested, or the muscles plump and full, or the hearing acute, or the eyes keen and bright, or the brain thoughtful and active.

Very often a single debauch would use up the entire available power of the whole system for a week or a month.

There is no end of the multitudinous ways in which we not only spend our working capital, but draw on the original stock that ought not to be touched, and the result is imperfect lives, rickety bodies, no ability to transmit to our children good health and long life, much physical premature decay, with all the ends of life unaccomplished. How sad is all this! How terrible to be born into this world and leave it without adding something to its wealth, its virtue, and progress! —*Sel.*

SCIENTIFIC.

The Sun's Envelope.

PROF. CHARLES A. YOUNG'S paper read before the American Association, on a liquid solar crust, led to a very animated discussion. The author is inclined to hold with Fage, Secchi, and others, that the sun is mainly gaseous. At the same time, the eruptions which are continually occurring on its surface almost compel the supposition that there is a crust of some kind which retains the imprisoned gases and through which they force their way in jets with great violence. According to the author, this crust may consist of a more or less continuous sheet of descending rain—that is, a downfall of the condensed vapors of those materials which we know from the spectroscope exist in the sun. The continuous efflux of the solar heat is equivalent to the supply that would be developed by the condensation from steam to water of a layer of about five feet thick over the whole surface of the sun every minute of time. As this tremendous rain descends, the velocity of the falling drops would be retarded by the resistance of the dense gases underneath; the drops would coalesce until a continuous sheet would be formed; and these sheets would unite and form a sort of bottomless ocean resting on the compressed vapors beneath, and pierced by innumerable jets and bubbles. It would have an approximately constant depth, because it would turn to vapor at the bottom as rapidly as it grew at the surface, though probably the thickness of this crust would continually increase at a slow rate, and its whole diameter grow less.

In other words, Dr. Young would regard the sun as an enormous bubble, whose walls are steadily thickening, and its diameter ever lessening, in proportion to the loss of heat. The hypothesis offers no peculiar explanation of the sun's spots, but will agree with any of the current explanations of that phenomenon.—*Popular Science Monthly.*

The Planet Saturn.

DURING the months of September, October, and November, Mars and Saturn are companions as evening stars. It is not difficult to recognize them, although Mars appears less brilliant than in July and August, when he shares with Jupiter the dominion of the western skies, after sunset. The dull-yellow luster of Saturn differs markedly from the red, but more star-like, light of Mars; and, as the two planets draw near to each other late in November (making their nearest approach on the 20th), it will be interesting to observe the contrast between the red and yellow planets of the solar system. Striking, however, as this contrast will be found to be, it is insignificant when compared with the real contrast which exists between the two planets. Mars is the least, but one of the primary, members of the solar family, and although he pursues a course outside of the earth's, he is unlike all the other superior planets in being unaccompanied by any moon; his small orb also appears to have but a shallow atmospheric envelope, while in physical constitution, he apparently occupies a position between the earth and the moon.

Saturn, on the other hand, is inferior only to Jupiter in dimensions and mass, while he is superior to Jupiter, not only in the astronomical sense that he travels on a wider orbit, but in the extent and importance of the scheme over which he bears sway. His orb, moreover, like that of Jupiter, appears to be the scene of marvelous processes of change, implying a condition altogether unlike that of the earth on which we live. It is impossible for us to fully comprehend the distance between Saturn and the earth. The orbit of Saturn, which is elliptical in form, is so immense that in his nearest approach to the sun, he is still 823,000,000 miles distant, while his greatest distance is 921,000,000 miles, and in his nearest approach to the earth he is still 732,000,000 distant from it. The globe of Saturn is considerably flattened at the poles, his equatorial diameter being about 70,000 miles, while his polar axis is nearly 7,000 miles shorter. In volume, Saturn exceeds the earth nearly 700 times, and all the four terrestrial planets—Mercury, Venus, the Earth, and Mars—taken together, more than 336 times. The density of Saturn is less than that of any other known body (comets of course accepted) in the solar system. It is so much less than the earth's that while his bulk is 700 times greater than that of the earth his mass is only about 90 times greater. Saturn is surrounded by a system of rings, the full breadth of which is 36,600 miles, while the full span of the rings, measured across the center of the planet, is 167,000 miles.

The year, as measured to the planet Saturn, has four seasons, as with us; but each of these four seasons is more than seven of our years in length, as the Saturnian year is twenty-nine and a half of our years in length, while the day is but ten and one-half hours in length, as we measure time. * * *

Horse-Hair Snakes.

THESE harmless little creatures, named from their resemblance to horse-hairs, have been regarded by many people in an entirely erroneous light. Strange as it seems that such could be the case, such a view being so utterly impossible in the light of science, it is nevertheless true that hundreds of people have regarded these curious denizens of stagnant pools, water-troughs, etc., as animated horse-hairs. Some have even been so positive as to assert with great firmness that they had actually seen the hairs undergo the change.

But nothing can be more absurd than that a dead, inert horse-hair should, through the action of water, be converted into a living, active snake, capable of growth and propagation of the species.

The truth in the matter is this. The horse-hair snake is a species of *entozoa*; that is, a creature which, like the tape worm, inhabits the stomachs or intestines of some other animal. It is hatched, however, and attains a certain size before entering its living prison. Just how it makes its entrance is unknown; but it is often found in the bodies of small insects. After a time it seems to issue into the outer world again, and is then often found about watering-troughs and other wet places. During a dry time, it will become so dry as to be brittle; and yet when a rain has moistened the earth and created little pools here and there, it will again become as active as ever.

Items for the Month.

A BLUE cross by this paragraph signifies that the subscription expires with the number containing it, and that it is the last that will be sent till the subscription be renewed. A renewal is earnestly solicited.

Who Will Help Us?

ONE more number will close volume eight of the REFORMER, and we are desirous of beginning volume nine with double our present number of subscribers. This we can do if our friends will all assist us. We have just sixty days in which to do this work. Who will help us? All that is required is for each of the present subscribers to obtain one new subscriber, and it really seems to us that every one can do this. How is it, friends? Are you interested in the REFORMER? Do you receive any benefit from reading its pages? Do you consider it a useful journal? You certainly do or you would not continue to take it year after year. Who will help extend the usefulness of the best health journal in the land? Who will send us one new subscriber between this and Jan. 1, 1874? Who will send two? Who, five?

There certainly cannot be one of our readers who has not sufficient influence to induce from one to five of his acquaintances to become subscribers during the next sixty days. Again we ask, Who will help us?

"The Bath, Its Use and Application."

WE have not been able to fill orders for this pamphlet as soon as we expected, as the printers have been so crowded with other work as to be unable to print the covers. We hope that all who have ordered it will be patient for a few days, as we will then be able to fill all orders.

Dr. Trall's Medical Charts for Students.

By permission from Dr. Trall, I have prepared reduced copies of his two large charts, one on Physiology, which treats of healthful vital action, and the other on Pathology, or diseased action. They are two feet by two feet eight inches in size, paper, backed with cloth, varnished, bound, and mounted on rollers. In fact, they are a handsome set of charts for parlor, study, or office. They are invaluable to students, as, commencing with Physiology and ending with Pathology, they point out just the line of study that should be pursued.

Sent by mail, postage paid, for \$3.00 per set.

Address, J. E. WHITE,

Box 1800, Ann Arbor, Mich., or

HEALTH REFORMER,

Battle Creek, Mich.

I have in my possession a set of Dr. Trall's charts published by Dr. J. E. White, and can freely recommend them as of great value to any one who desires to study the human system whether in healthy or dis-

eased conditions. They are more convenient for the student than the larger size, originally published by Dr. Trall at a cost of ten dollars.

DR. W. RUSSELL.

Every student of physiology should have a set.

M. G. KELLOGG, M. D.

Where to Obtain Them.

MANY of the readers of the REFORMER will doubtless be pleased to learn where they can obtain a good quality of oatmeal, pearl barley, etc. We have received the following card which will give the needed information:—

"FERDINAND SCHUMACHER, of Akron, Ohio, has been engaged in the manufacture of Oatmeal, Pearl Barley, Pearl and Cracked White Wheat, Farina, Hominy, Samp, White Wheat and Amber Graham Flour, since the year 1852. These articles he prepares in his three extensive mills from carefully selected grain, with special regard to its hygienic value. A full assortment of all of these wholesome goods, with recipes for cooking, may be obtained FRESH from the mills by application to the proprietor at Akron, Ohio."

We can cheerfully recommend the articles manufactured by Mr. Schumacher as the best in the market.

SUPT. AND PHYSICIANS OF THE HEALTH INSTITUTE.

Battle Creek, Mich.

St. Nicholas for November.

THE first number of *St. Nicholas* has just been issued. Pictorially, it is one of the most beautiful magazines in the country, being enriched by designs from the pencils of Miss Hallock, Sol Eytinge, Miss Ledyard, Sheppard, Stephens, Bolles, Beard, and others.

The reading matter is varied and bright. There are thirty-three articles. Some for the very little ones, some for the oldest of young people, and some for every age between. It contains forty-eight pages of reading matter—the size of the pages of the REFORMER—and twenty-seven illustrations.

It is edited by Mrs. Mary Mapes Dodge, and published by Scribner & Co., New York. We predict for it an extensive circulation, for Scribner never does anything by halves.

THE *Yolo Democrat*, published by Wm. Saunders in Woodland, Yolo Co., Cal., is one of our best exchanges.

A WURTEMBERG physician prescribed thirty grains of carbolic acid, to be mixed with alcohol and water and rubbed briskly upon the skin of two patients suffering from itch. As a result, one of the patients died within an hour, and the other narrowly escaped with his life.—*Phar. Jour. and Trans.*

TOBACCO smokers must look out for their eyes. Proofs are accumulating that blindness, due to slowly progressive atrophy of the optic nerve, induced by smoking, is of frequent occurrence.