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Nature's Laws, God's Laws; Obey and Live.

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Physical Evils of Intemperance.*

THE question is often put to the friends of temperance reform, Why does not the work of reform progress more rapidly? The query also arises, Why are not the advances made more permanent? There has been a great deal of speculation on this subject. It seems to me that the real reason of the failure to accomplish greater results is that we do not get down to the root of the matter. One great difficulty has been in the style adopted by our temperance lecturers. There is a chance for a reform in this direction. Most of our temperance lecturers have rather catered to a desire on the part of the people to hear something amusing and to get something ridiculous out of the drunkard. It seems to me that drunkenness is something that we ought not to laugh about. It is something which should receive our most earnest and serious consideration. Another reason why temperance reform has not been more successful is that an attempt has been made to appeal to the emotions, not to the judgment and reason of individuals.

There are numerous arguments that can be drawn in favor of temperance from the economical and emotional side. It is an easy thing to show that intemperance leads the drunkard down mentally and morally. It is very easy, also, to show that it is the most frequent cause of poverty, extravagant expenditures, and wastefulness; and yet these are not arguments which tell. They cannot really be considered as sound arguments. People love extravagant things. In fact, the great bulk of what we spend is for luxuries. The real necessaries of life cost but little.

But there is a solid foundation for argument against intemperance. This argument rests on the physical evils of alcohol. If we can show to any man that alcohol is a dire poison, that every drop is destroying the vital elements of his system, that it is leading him to an early grave and sure destruction, then it ought to have some weight in leading him to renounce its use. There are very few who would take a large dose of strychnia or belladonna, or any other well-known poison. Now, if we can show that alcohol belongs to the same class to which these poisons do, certainly people will be convinced of its deadly nature. I shall labor this afternoon to show the effect of alcohol.

In order to know what alcohol does to the human body, we must know, in the first place, what the human body is. The human body, as we look at it casually, seems to be one homogeneous mass; but when we examine its parts under the microscope, we find that its structure is wonderfully delicate and minute. Instead of being one homogeneous mass, it is made up of the most delicate tissues. The body is really made up of very few materials, just as a large house may be composed of a few such simple materials as wood, iron, brick, and mortar. The component elements of the body are known as tissues. The most abundant of all the tissues is the muscular tissue. The muscles form that part of the body which moves the limbs and gives rise to all other motions. When we look at a muscle through the microscope, we see that it is made up of little fibers so small that five hundred can lie side by side in the space of a single inch.

There is another curious structure which enters very largely into the formation of the body, which is known as the nerve tissue. There are two kinds, nerve fibers and nerve cells. The nerve cells are like batteries, and the nerve fibers like telegraph lines. When the cells act, nerve force is produced and an impression goes down the nerve fiber as a current of electricity runs over the telegraph wire, and we act out what we think. Every time we think, each time we breathe, every time our heart beats, millions of these cells

* A lecture delivered before the Reform Club of Ceresco township by the editor. Phonographically reported by Fred. Scott.

have to act. All the activities of the body originate in nerve cells; hence they are indispensable to life.

Now let us learn a little about alcohol. It is an artificial product, not a natural element. God never made it. Many argue that alcohol is something made for man by God, and therefore ought to be used by man; but this is not so. Alcohol is never produced by Nature. You can never tap a tree and get alcohol out of it. You never find alcohol bubbling from some spring by the wayside. There is no natural production of alcohol in any way.

Alcohol was never made in the pure state until about a thousand years ago. The ancients never had distilled liquors. They were discovered by the Arabs, who were great chemists at that time, and discovered the means of making alcohol by distillation.

Many argue, again, that since alcohol can be made from the grains, such as barley, corn, wheat, etc., it must be good. It is a fact that alcohol does not exist in any of these. Alcohol is a product of death and decay. Any process which produces fermentation will produce alcohol. Thus it is that all bread that is raised contains some alcohol. It is calculated that about twenty loaves of baker's bread contain as much alcohol as a pint of beer. This fact was utilized by a baker in London who obtained enough alcohol from his bread to pay for baking it. In this he was very successful until a neighbor baker set up a sign, "Bread with the rum in it," when he soon lost his trade.

What is the effect of alcohol on the human body? Suppose we saturate a cloth with alcohol and place it upon the skin. In a little while you find that it has almost raised a blister. Suppose you put a spoonful in the mouth. In a short time you will feel a prickling in the tongue, when it will become numb and lose its power to taste. That is the reason why the sense of taste in old topers is so obtuse. When it comes in contact with the mucous membrane, it destroys its sensibility. Suppose you swallow the alcohol. Is its effect on the stomach any less? Is the mucous membrane of the stomach less sensitive than that of the mouth? Certainly not. Being protected from the air it is much more delicate and liable to injury; but it is a curious fact that it has very little sensibility to pain.

I have a series of charts here which illustrate the effects of alcohol upon the stomach. Chart No. 1, which I now show you, represents the stomach in a healthy state. There we see the mucous membrane of a rosy color. You may ask how it is possible to tell how the human stomach looks. Mr. Edison, the inventor of the talking phonograph, proposes to inclose an electric lamp in a small glass bead about the size of a pill, and by causing the patient to swallow this he will illuminate the inside of the stomach, so that any one can look down into it. This has never yet been done, but in several instances, by gunshots or other accidents, openings have been made into the stomach by which it has been possible to look in and see all that was going on there. A man by the name of Alexis St. Martin had a large opening torn through the abdomen into the stomach. The wound healed, leaving a large opening through into the stomach.

Dr. Beaumont, a celebrated physician, spent a great deal of his time watching processes which took place in St. Martin's stomach. He had a fine opportunity to look into his stomach, and he discovered a great many curious things. These charts were made from drawings of St. Martin's stomach as seen by Dr. Beaumont. He tried all sorts of experiments. Among other things he tried the effect of whisky. Chart No. 2 shows the appearance of the stomach after he had taken a small drink of whisky. The mucous membrane, which was before of a uniform rosy hue, is now striped and streaked with crooked red lines. These are the congested blood-vessels. Sometimes you see a nose that looks very much like that. The blood-vessels are all dilated. That all comes from taking a moderate drink of whisky, and this represents the stomach of a moderate drinker.

Chart No. 3 shows how a man's stomach looks after he has been on a spree. The stomach, before striped with congested veins, now presents a mottled appearance. That is where the whisky has destroyed the mucous membrane. Although Dr. Beaumont could look in and see that St. Martin's stomach was in this condition after he had been on a spree, he himself would know nothing of it, and would say that it did not hurt him in the least.

Chart No. 4 shows the stomach after a regular debauch of several days, which, I am sorry to say, St. Martin was in the habit of taking very frequently. The whole stomach is black and gangrenous.

Now look at chart No. 5. Each one of these red patches is an ulcer, an open, discharging sore. That is the condition of the stomach when the use of liquor has been continued for a long time.

No. 6 represents a cancerous stomach. You can see how it is distorted with the disease.

No. 7 shows the same disease progressed a little farther. The stomach is now reduced

to a mere narrow canal. This disease is absolutely incurable There is no hope for a man in this condition.

No. 8 represents the stomach of a man with *delirium tremens.* The mucous membrane is black with gangrene. Some three years ago I was called out to see a man with delirium tremens. It began with violent vomiting and retching. He could not retain even a drop of water on the stomach. It was a whole week before a particle of food could be made to remain on his stomach.

Thus we see that alcohol ruins the stomach completely.

(*To be Continued*)

Medical Education of the People.*

BY T. N. REYNOLDS, M. D.

In view of the fact that there is still in the world the most extraordinary misconception with regard to the true functions of medicines and medical men, it may not seem wholly unfit that we should somewhat briefly advert to it here.

As it existed among the people in earlier times, it amuses us now perhaps more than it surprises us; and when we recognize it still here and there among those in lowly favored circumstances of life, it usually makes little or no impression upon us; but when we so often see it among the refined and cultured of our time we are sometimes led to inquire why it is. But this misconception is not confined entirely to the laity or to the crude charlatan, but more or less pervades the educated and legitimate medical fraternity itself; and it is no uncommon thing to see, among the younger members of our profession, men confidently attributing to medicines particular cures that they never produced. And even the older practitioners, with quite an abiding faith, sometimes prescribe remedies that serve little more than to mutually satisfy the mind of the patient and the doctor that the necessary and essential thing has been done in the premises.

This undue credit to the effect of the drugs prescribed, when it occurs among medical men, probably arises mostly from the habit and routine of always prescribing in certain approved manners in certain kinds of cases; and when improvement takes place, forgetting to allow sufficiently for the healing power of time and Nature herself.

As it occurs in the masses of the laity, however, when they throw themselves unreservedly upon the mercies of some of the many artful impostors of the day, or, almost regardless of the man, cling to some of the schools of medicine or forms of treatment with an ardor that often amounts to fanaticism, it seems to arise from the fact that there is still in man an inherent tendency to rely alone on some mysterious or supernatural intervention in behalf of his physical as well as his spiritual welfare. Men in a great measure seem not ready to act upon the idea that while there may occur at times special and supernatural intervention in behalf of our spiritual welfare, it is nevertheless probable that the greatest amount of mental enjoyment is only obtained by the greatest amount of willing obedience to those social and moral laws of life which produce it. So with regard to our physical being: men largely rely upon medical aid and supernatural protection, and neglect to observe and conform to those natural laws which regulate and govern the functions of our organism in health and in disease.

With medical men, the hope to at last hit upon the lucky remedy or successful plan has in all ages led to the adoption, at times, of many absurd modes of treatment that have been discarded after more careful observation and riper experience; sometimes to excessive dosing and too heroic treatment; and sometimes to the other extreme, as in the high dilutions once generally indorsed and still sometimes used by some of those who pursue what is called the homeopathic plan.

When, then, there are in the minds of those who devote themselves specially to the science and practice of medicine so many absurd notions with regard to it, and so much faith in much of it that is not warranted in fact, it is not a wonder that the masses, and even the educated portions of the laity, should treat us now and then, as they do, to such sublime exhibitions of their faith in some particular drug, plan of treatment, or school of medicine, while they evince often only very little knowledge or concern as to the proficiency or character of the man himself prescribing it.

As nothing but hard-learned experience and frequently disappointed hopes in his scientific prescriptions will ever thoroughly convince the young practitioner of their frequent inutility, so nothing but the proper kind of education on these matters will ever convince the people of their frequent too great confidence in the efficacy of drugs alone.

To this end, the study of anatomy, physiology, hygiene, and particularly the laws of life, with the influence thereon of habits, conditions, and surroundings, should enter largely into, and be assiduously carried all

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the way through the education of the young, even if it be to the exclusion of almost no matter what other branch besides. And if the use of drugs be referred to at all in their education, it should be with an especial care that they be taught the facts as they are; that the essential and useful drugs are really few, and their administration rarely necessary; that in the aggregate in the world it is probable enough that more harm is being yearly done by their indiscriminate and unskilled use than there is good done by their timely and judicious employment.

Physicians can do much more than is usually done in this direction by their individual influence in practice. Each physician should constantly endeavor to establish in the minds of his patrons the fact that they should seek intelligent opinions and skilled advice more than prescriptions. And even at an occasional risk of losing patronage, when medicine is not required at all, he should dare to say so, and give the right advice instead. Doctors should be educators more than physic-mongers. Whatever time the occasion demands should be taken to fully explain the trouble for which persons present themselves, and the best regulation of living to be adopted under the circumstances; and for this opinion and advice alone, when kindly given, they should and generally will expect to pay.

Physicians should endeavor at all times to divest their practice of every appearance of mystery; and in this connection they should certainly abolish the common practice of retiring from the family and holding private conversation after having seen a patient in consultation. They should rather insist on some members of the family or persons most concerned being present when conversation may not advantageously be had with the patient; otherwise such mysterious movements and awe-inspiring manners tend not at all to enlighten, but very much to becloud the minds of many people, and leave them a more ready prey to the quack, who can as well, and always does with effect, imitate those and all kindred mysterious ceremonies.

Physicians can, with the utmost politeness to each other and the very kindest consideration for the opinions of each, discuss conditions and agree on treatment in the presence of some of those concerned; and it is the people's right to see and know exactly what their physician thinks and does in their case either alone or in consultation.

If imposition and quackery are ever removed or lessened at all, it will be in exact proportion to the amount of correct information and thorough enlightenment the people may obtain on this entire subject; for it can never avail very much that a few educated and honorable practitioners labor to bring the comparative few whom they reach up to a reasonable and correct estimation of the practice of medicine, while the masses remain unable to discriminate between the imaginary and what is real in it, or between the artful and unscrupulous pretender and the genuine medical man. As long as there is a general and popular demand for the different forms of quackery, there will always be found an ample supply; and legislation, though necessary and good as far as it goes, can never entirely prevent it. The early and continued education of each individual on the subject is the only successful remedy.

And since none can see and feel so well as physicians the need of the people with regard to it, it becomes us and would seem our direct and humane duty to interfere, and move to the extent of our opportunity in establishing if possible somewhat of a medical education in all the common schools throughout the country. This is perfectly practicable, and probably would be nowhere unfavorably received.

Let the people become properly and generally enlightened on the medical subject, and we will not see them cajoled and carried away with extravagant advertisements and pretentious modes of cure, nor even hear them ask much more concerning a physician, "Is he a homeopath, or an allopath?" but only hear them inquire of him, as they should of one assuming that capacity, "Is he simply an educated, trained, ingenious, industrious, and in every way competent and upright medical man?"

Sporadic Cholera.

BY W. B. SPRAGUE, M. D.

THE more common name for this affection is *cholera morbus*, but this name has the defect of a double origin, both the Latin and the Greek, while it has no special significance more than the term *cholera* alone. Therefore, to distinguish it from *epidemic* or *Asiatic* cholera, the name *sporadic cholera* has been adopted. The word cholera is supposed to have originally meant "a flow of bile," the term bile being applied by the ancients to various fluids of the body. For want of a more significant word it is still retained. It is impossible to distinguish *sporadic* from *epidemic* cholera when the latter prevails, except by the greater severity and fatality of the epidemic form, and its occurrence with-

out any apparent cause other than its presence in the vicinity.

This disease is more prevalent during the months of August and September than at any other time in the year. We find a reason for this by ascertaining the causes. Unripe fruits, green and uncooked vegetables, partially decomposed food of any kind, iced water, iced cream, in fact anything that greatly interferes with digestion, may cause it by producing fermentation of food in the stomach and the formation of irritating acids, etc. These irritate the lining membrane of the alimentary canal, and cause the vomiting and purging which are symptomatic of this disease. A sensation of faintness or nausea and diarrhea generally precede the more violent symptoms for a few hours. Then, generally in the night, there is an oppression in the epigastrium and violent vomiting and purging, first of the foods last eaten, then of bilious matter, and finally of a more or less clear fluid, a transudation from the fluid portion of the blood. This is often expelled in large quantities. The vomited matters and dejections are acrid and offensive, and sometimes irritate the passages extremely. Insatiable thirst, a pale and shrunken appearance of the features, and small pulse, follow, caused by exudation of the fluid portions of the blood into the alimentary canal. The surface of the body is cold and there is a general collapse of the whole system. The more sensitive the alimentary tract, the more severe the attack will be. This accounts for its greater severity among children and especially among infants, in whom it is known as *cholera infantum*. The disease is rarely fatal with adults, but is exceedingly so with infants.

As "an ounce of prevention is worth a pound of cure," the strictest attention should be given to the diet and to avoid taking food while the body is in a greatly heated condition. All ices, fruits and vegetables that are not fully ripe or perfectly developed, and partially decomposed foods, should be scrupulously avoided. Children should not be allowed to use milk from cows that are fed on slops, as this is a very frequent cause of the difficulty.

The indications for treatment are to remove the irritating matter from the alimentary canal, to sustain the bodily temperature, and to support the vital powers until danger is past. No irritating foods should be allowed to come in contact with the irritated membrane until it is restored to its normal condition. An emetic of warm water should be administered promptly if there is any indication that the stomach contains decomposing food, and if this fails to produce a thorough evacuation, ipecacuanha may be tried as the next mildest emetic. Copious enemas of warm water should be given in connection with the emetic. In order to relieve the excessive thirst, allow the patient to swallow little pellets of ice. Hot fomentations should be applied to the abdomen while a warm sitz or leg bath is being administered, the choice to be governed by the position which gives the patient most relief. If he is too weak to sit, use a hot pack to the legs. If the heart's action is greatly reduced, it should be stimulated by electricity, or in case it is not possible to have this applied skillfully, a little wine, brandy, or coffee should be administered. In some extreme cases it will be necessary to give a mild opiate to relieve the irritation and check the discharge.

Infants will need modifications of this treatment. Warm enemas, the hot blanket pack or warm full bath, and cooling drinks, with a little stimulus in severe cases, should constitute the treatment.

Temperance among Soldiers.

It was at one time generally believed that the use of alcoholic liquors was positively necessary and beneficial to all men, and especially soldiers and sailors on active duty. Physicians recommended such beverages, and regular daily rations of rum were provided in all armies and navies. These notions are still entertained by many persons, and very generally there is a want of correct information on the subject. It is very common for soldiers of all classes to indulge in the use of alcoholic beverages; and during the war we witnessed daily their prevalent and injurious use among the volunteers in our city. A few words of advice on this topic may be of great benefit.

By close observation and many experiments, it has been found that the tissues and the blood of drunkards, as well as those who continually tipple in beer and whisky, but do not get drunk, are generally in a state of degeneration. Alcohol passes into the blood and retards the elimination of waste and injurious matter from the body, and thus it tends to produce disease, especially fever. French physicians have determined that the blood of a man who drinks a pint of brandy per day is never free from alcohol, and they assert that its presence in the blood exerts a most prejudicial effect upon nutrition. A man in ordinary health, they assert, requires no alcohol; it is only useful in a medicinal sense, taken in moderate doses.

It was long supposed by the British physicians that spirituous liquors imparted to soldiers in India a power to resist the depressing influences of a tropical climate; hence it was a regular practice to provide each soldier with a ration of spirituous liquor before partaking of breakfast. This custom led to the demoralization of the army, by affording a temptation to general drunkenness, which led to the increase of crime and disease. This has resulted in the abolition of the spirit rations in the entire Indian army, with a manifest improvement in the health and morals of the soldier. An experienced Indian medical officer states that the use of spirits in warm climates tends to make men furious and produce delirium tremens, and he recommends the total absence of wines and spirits in the army. Colonel Dawes, of the Bengal Artillery, states that his experience in India has led him to see into the terrible evils of the use of spirituous liquors among soldiers, even in moderate quantities. He has witnessed the best men become useless from an indulgence in liquor; while, on the other hand, he has seen men of bad characters converted into able-bodied, hard-working, courageous soldiers by abstaining from drinking spirits. When the Thirteenth Regiment of Light Infantry was beleaguered in Jellalabad for five months, during which they could obtain no spirituous liquors, they were remarkably healthy and cheerful, and behaved with great courage and good temper. After the garrison was relieved, they then obtained plenty of liquor, and the result was much insubordination and disease. Major General Wylie, of the Bombay army, testifies that when the soldiers were quartered in districts where no spirituous liquors could be obtained, no crimes were committed, their health was good, and discipline admirable; but whenever they obtained and were supplied with a great deal of spirits, ill conduct and disease prevailed to a frightful extent.—*Scientific American.*

The Wrongs of the Stomach.

In some of the early literature is to be found a dialogue between the Body and the Soul, in which each accuses the other of their mutual perdition, recapitulating the offenses which have produced it. Something similar might be written, with good effect, dividing the imaginary conversation between, let us say, the Stomach and the Man, and making an attack of gout the subject of their recriminations. The man might accuse the stomach of having done its duty so badly that he is tormented with a burning fire in his extremities, which will let him neither eat, drink, walk, nor rest. The stomach might plead justification, and say that she had lighted the said fire as the only means of getting a moment's rest from an intolerable task-master.

Again the man might complain that he had lost all enjoyment of life, that his spirits were depressed, his mind gloomy, his appetite gone, his once fine muscular system reduced to flabby indolence; that his food did him more harm than good, so that it had become a misery to eat, and that every meal was followed by a leaden oppression which rendered life an insupportable burden. The stomach, having listened to all this, delivered in a tone of angry accusation, would reply: "My case is just as bad as your own. Once upon a time, before you took to evil courses, I was as healthy a stomach as you could meet in a day's march; I went through my work regularly, and did it so cheerfully and so well that, like some unreasonable masters when they get hold of a willing servant, you seemed to think I could do without rest and didn't care even for an occasional holiday. Then you heaped burden after burden upon me. Before I had well digested your breakfast for you, you thrust a dinner upon me large enough for three stomachs. Not satisfied with that, you wound up the day with a supper, drenching me all the time with ale, wine, spirits, tea, coffee, rum, more wine, and more spirits, till I thought you had taken leave of your senses; and when I heard you groaning in your sleep, starting up every now and then as if apoplexy had broken into the house, and was going to carry you off, I said to myself: 'Serve him right if it did.' And in this way you went on year after year, treating all my remonstrances with contempt. I gave you headache after headache; I tried to call you to reason with half a dozen attacks of influenza; gave you a bilious fever; made you smart with rheumatism; twinged you with gout till you roared. But all to no purpose. You went on making me digest till the work broke my back, and now I can digest no longer."

This reproach might be made even pathetic by a description of the stomach watching its hard tasks come down to it from the regions above between dinner and bed-time. First comes a plate of soup and bread, and a glass of sherry; "I can manage that," says the stomach. Then a plate of fish with more bread and more sherry; "and that," adds the stomach, "though these sauces do n't quite agree with me." Then come beef or mutton, or both, and stout; then game and sherry; then a dish of tart. "Confound

this pastry," says the stomach, "it gives me more trouble than anything else; but if the master will only stop here, I think, if I put forth all my powers, I can get even this rubbish out of the way." But she has hardly taken this hopeful view of the case, when down come cheese, celery, apples, oranges, nuts, figs, almonds, and raisins, port, sherry, claret, and a tumbler of hot Hollands and water.

"Good gracious! was there ever such a mess?" exclaims the stomach; "what can the man mean? Does he think one pair of hands can manage all this?" Still the willing slave goes to work, when presently there is a rush of hot tea from above, with a thin slice of bread and butter. And when the stomach, with infinite labor, has got the hodge-podge into some sort of homogeneous shape, and is preparing to take a nap after her exhaustion, lo! a deviled drumstick rushes into its laboratory, two deviled kidneys, a bottle of stout, and three tumblers of hot brandy and water.—*London Review.*

A Drunkard's Brain.—Hyrti, by far the greatest anatomist of the age, used to say that he could distinguish in the darkest room, by one stroke of the scalpel, the brain of the inebriate from that of a person who lived soberly. Now and then he could congratulate his class upon the possession of a drunkard's brain, admirably fitted, from its hardness and more complete preservation, for the purpose of demonstration. When the anatomist wishes to preserve a human brain for any length of time, he effects that object by keeping that organ in a vessel of alcohol. From a soft, pulpy substance, it then becomes comparatively hard; but the inebriate, anticipating the anatomist, begins the indurating process before death—begins it while the brain remains the consecrated temple of the soul—while its delicate and gossamer-like tissues still throb with the pulse of Heaven-born life. Strange infatuation, thus to desecrate the God-like! Terrible enchantment, that dries up all the fountains of generous feelings, petrifies all the tender humanities and sweet charities of life, leaving only a brain of lead and a heart of stone!—*Scientific American.*

How People Get Sick.—An exchange offers the following very cogent reasons why people get sick:—

"Eating too much and too fast; swallowing imperfectly masticated food; by taking too much fluid at meals; drinking poisonous whisky and other intoxicating drinks; keeping late hours at night and sleeping late in the morning; wearing clothing too tight, so as to retard the circulation; wearing thin shoes; neglecting to take sufficient exercise to keep the hands and feet warm; neglecting to wash the body sufficiently to keep the pores open; exchanging the warm clothes worn in a warm room during the day for costumes and exposure incident to evening parties; starving the stomach to gratify a vain and foolish passion for dress; keeping up constant excitement; fretting the mind with borrowed troubles; swallowing quack nostrums for every imaginary ill; taking meals at irregular intervals."

Unwholesome Air in Bedrooms.

MANY persons complain of always getting up tired in the morning. This is very often due to defective ventilation of the bedroom, or from using an undue amount of bedclothes and bedding. Feather beds are too soft and yielding, and partially envelop the sleeper, thus producing profuse perspiration. The habit of lying too much under blankets is also very pernicious, by reason of the carbonic acid exhaled by the sleeper being respired. Again, it is a common error to suppose that, by simply opening a window a little at the top, a room can be ventilated. People forget that for proper ventilation there must be an inlet and an outlet for the air. In bedrooms there is often neither, and if there is a fireplace it is generally closed up. Again, it is a mistake to suppose that foul air goes to the top of the room. Certainly the heated air goes to the top, but the chief impurity, the carbonic acid, falls to the bottom. There is nothing so efficacious in removing the lower strata of air as the ordinary fireplace, especially if there is a fire burning.

The usual defect in ventilation is the want of a proper inlet for the air. If the window be open, the cold air, heavier, pours down into the room, causing draughts; if the door be open, or ajar, the same thing occurs. The perfection of ventilation may be obtained in any room with a fireplace, by simply providing proper inlets for the air. By means of upright tubes the heavier external atmosphere ascends vertically through the tubes, like the jet of a fountain, displacing the warmer and lighter atmosphere of the room, which finds its exit up the chimney. The tubes should communicate with the outer air on a level with the floor, and should be carried vertically upward in the room for about four or five feet.

A constant supply of fresh air is thus insured without the slightest liability to draught, as the current goes directly upward until it strikes the ceiling. It is then diffused downward, mixed with the heated air of the ceiling. The same principle can be carried out in any room with a sash window, by cutting out two or three holes an inch wide and three inches long in the wood-work of the upper sash where it joins the lower one. The columns of air ascend directly upward, just inside the window, and mix with the heated air in the upper part of the room. If this system were universally carried out, we should hear less of rheumatism and chills caused by sitting in draughts.—*Sel.*

When Does the Sin Commence?—To drink deeply—to be drunk—is a sin; this is not denied. At what point does the taking of strong drink become a sin? The state in which the body is when not excited by intoxicating drink is its proper and natural state; drunkenness is the state farthest removed from it. The state of drunkenness is a state of sin. At what stage does it become sin? We suppose a man perfectly sober who has not tasted anything that can intoxicate; one glass excites him, and to some extent disturbs the state of sobriety, and so far destroys it; another glass excites him still more; a third fires his eye, loosens his tongue, inflames his passions; a fourth increases all this; a fifth makes him foolish, and partially insane; a sixth makes him savage; a seventh or an eighth makes him stupid,—a senseless, degraded mass; his reason is quenched, his faculties are for the time destroyed. Every noble and generous and holy principle within him withers, and the image of God is polluted and defiled. This is sin, awful sin; for "drunkards shall not inherit the kingdom of God." But where does the sin begin? At the first glass, at the first step toward complete intoxication, or at the sixth, or seventh, or eighth? Is not every step from the natural state of the system toward the state of stupid intoxication an advance in sin, and a yielding to the unwearied tempter of the soul?—*John Bright.*

Paralysis Caused by Cosmetics. — One cause of acquired deformity, says Dr. Carbally, is the slow poisoning of the system by certain metallic poisons. Chief among these are the salts of lead, and one of the most characteristic deformities produced in consequence of poisoning by these salts, is what is commonly known as "wrist-drop," caused by the use of villainous cosmetics. The use of cosmetics has within a few years become so very common, even among the better class of society, that I have deemed it my duty to place these cases before the profession, that, knowing their injurious effects, they may guard their patients against thus voluntarily poisoning themselves through ignorance. This deformity, incompletely developed, can be seen every day upon the streets of the cities, for there is many a fashionable lady who suffers from it in consequence of her own folly. Her hands are held in a peculiar, yet fashionable position, a sort of kangaroo style, and many ladies fancy that they are imitating the fashion admirably, while they are simply obliged to carry their hands in this position because the extensor muscles are not strong enough to hold them up. The polish they put on their faces has manifested itself in producing partial paralysis of the extensor muscles of the forearm, and the fashion has been introduced to accommodate the deformity.

Drunkenness.—An English office—the Accidental Death Insurance Company—declares that "there is one risk only which the company declines to insure, and that is the vague and uncertain risk of drunkenness. They will not insure the drunkard at any price, nor will they continue the insurance of any who fall into that state. The drunkard not only continually meets with accidents, but his constitution fails to repair an injury, and so renders his risk a burden upon the society."

More Air.—We often hear people say they want "change of air," when in reality it is not a change of air they want, but a more plentiful supply; and if more of them would put on sufficient clothing and throw open their windows, they would find a change for the better that would be surprising. At this season of the year, when every breeze is pregnant with exhilaration and health, there is no excuse for shutting out fresh air or endeavoring to stifle the inmates of a household by closing every avenue. Better run the risk of a draught than inhale the same air over and over again. It is not the excursion to some distant port which makes the excursionist better; it is the fresh air—the almost perfect ventilation—one gets that tones up and invigorates the whole system; and we contend that the same results would follow if free ventilation was permitted in our homes. Somebody has justly said that "a good many things have gone out with the fire on the hearth." Besides losing the many social ad-

vantages that were centered in the old-fashioned open fireplace, we have also lost an admirable system of ventilation; and to make good this loss, as far as possible, it is necessary that a continuous stream of fresh air pass through every house. It is always better to let down the upper sash of a window than to raise the lower one; and whenever possible the sash should be slightly lowered at night, so as to admit a single current of air in our sleeping-rooms.—*American Builder.*

Freaks of the Fungi.—The fungus is a kindly friend, says the London *Athenæum*, and a fearful foe. We like him as a mushroom. We dread him as the dry rot. He may be preying on your roses, or eating through the corks of your claret. A fungus has eaten up the vine in Madeira; the potato in Ireland. A fungus may creep through your castle and leave it dust. A fungus may banquet on your fleets, and bury the payment of its feats in lime. Fungi are most at home upon holes of old trees, logs of wood, naked walls, pestilential wastes, old damp carpets, and other such things as men cast out from their own homes. They dwell also in damp wine cellars, much to the satisfaction of the wine merchant when they hang about the walls in black, powdery tufts, and much to his dissatisfaction when a particular species, whose exact character is unknown, first attacks the corks of his wine bottles, destroying their texture, and at length impregnates the wine with such an unpleasant taste and odor as to render it unsalable; more still to his dissatisfaction when another equally obscure species, after preying upon the corks, sends down branched threads into the precious liquid, and at length reduces it to a mere *caput mortuum.*

Juvenile Smoking.—Among smokers in general it rarely happens that the habit is commenced at a middle or late period of life. Most men who smoke at all have contracted the habit between their fifteenth and twenty-fifth year; and like all other habits, good or bad, contracted at such a time, it is one which is difficult to eradicate. There is no valid excuse for juvenile smoking. A man pleads habit, the soothing effect of tobacco, and so on. But a boy smokes because he sees others do so, and because he looks upon smoking as a manly practice. He knows that it does him no good; indeed, in the majority of cases, boys know that their first attempts at smoking made them very ill, and the tolerance of the effects of the tobacco was obtained only after long practice and many disagreeable sensations. The mental power of many a boy is certainly weakened by tobacco smoking. The brain under its influence can do less work, and the dreamy feeling which is produced tends directly to idleness. For all reasons it is desirable that our rising generation should be abstainers from tobacco.—*Dublin University Magazine.*

Sanitary Rhyme.—According to the Erie *Despatch*, the following doggerel, on a postal card without signature, was sent to Dr. Germer, health officer of that place:—

"Dear Doctor, pray come take a smell,
On———street, rear of———hotel;
The kitchen yard, where odors foul
Would dim the optics of an owl,
Perched nightly high upon his roost,
In wisdom wrapped, serene, forsooth;
His plaintive hoot and dismal cry,
Would note the essence of the sty,
And call for Germer. Vere vas he?
De bresident ov de Sanitaree."

"The Spirit" in Ginger Beer.—As many temperance men are in the habit of drinking ginger beer under the impression that they are still "keeping the pledge," by abstaining from alcoholic liquor mixtures, it may perhaps be as well to tell them the real truth, that all good ginger beer contains a notable portion of spirits. The more the beer is "up," the more certain is it that alcohol is present. It is well known that ginger beer is made with sugar, ginger, etc.; and that it is "set" to ferment before it is bottled; now, it is during the fermentation of the sugar that spirit is produced, and, to show its presence, it can be easily separated by distillation.—*Septimus Piesse.*

Sensible Advice.—Professor Silliman, of New Haven, recently closed a Smithsonian lecture by giving the following sensible advice to young men: "If, therefore, you wish for a clear mind and strong muscles, and quiet nerves, and long life, and power prolonged in old age, permit me to say, although I am not giving a temperance lecture, avoid all drinks above water and mild infusions of that fluid; shun tobacco, opium, and everything else that disturbs the normal state of the system; rely upon nutritious food, and mild, diluted drinks, of which water is the base; and you will need nothing beyond these things, except rest, and due moral regulations of all your powers, to give you long, happy, and useful lives, and a serene evening at the close."

—Quiet consciences give quiet sleep.

LITERARY MISCELLANY

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THE LESSONS OF NATURE.

Of this fair volume which we World do name,
If we the sheets and leaves could turn with care,
Of Him who it corrects, and did it frame,
We clear might read the art and wisdom rare;

Find out his power which wildest powers doth tame,
His providence extending everywhere,
His justice which proud rebels doth not spare,
In every page no period of the same.

But silly we, like foolish children, rest
Well pleased with colored vellum, leaves of gold,
Fair dangling ribbons, leaving what is best,
On the Great Writer's sense ne'er taking hold;

Or if by chance we stay our minds on aught,
It is some picture on the margin wrought.

—*William Drummond* (1585).

A Lesson for the Times.

NUMBER THREE.

BY MRS. E. G. WHITE.

We are often pained as we see the little moral power possessed by the professed followers of Christ. When tempted on the point of appetite, few will firmly stand the test. Many turn from light and knowledge, and sacrifice principle to indulge their taste. They eat when they have no need of eating, and at irregular periods, because they have no moral strength to resist their inclinations. As the result of this gratification of taste, the abused stomach rebels, suffering follows, and a weary taxation of the friends of the sufferer.

Many indulge appetite at the expense of health and the powers of intellect, so that they cannot appreciate the plan of salvation. What appreciation can such ones have of the temptation of Christ in the wilderness, and of the victory he gained upon the point of appetite? It is impossible for them to have exalted views of God, and to realize the claims of his law. Many of the professed followers of Christ are forgetful of the great sacrifice made by him on their account. The Majesty of Heaven, in order to bring salvation within their reach, was smitten, bruised, and afflicted. He became a man of sorrows, and acquainted with grief. In the wilderness of temptation he resisted Satan, although the tempter was clothed with the livery of Heaven. Christ, although brought to great physical suffering, refused to yield a single point, notwithstanding the most flattering inducements were presented to bribe and influence him to yield his integrity. All this honor, all these riches and glory, said the deceiver, will I give thee if thou wilt only acknowledge my claims.

Could we at this time have entered the heavenly courts, and seen with what intense interest the holy angels watched the conflict of their loved Commander with the fallen foe, we should see greater significance in this long fast of Christ than it is now possible for us, with our darkened senses, to comprehend. Christ, the Commander of Heaven, was emaciated by long fasting; and his human nature fainted when the conflict was ended. The Son of God appeared to be dying from hunger and the effects of his warfare with Satan. But angels lifted his fainting head, served him with nourishing food, and ministered unto him. Never will so severe a test be brought to bear upon man, as that which the Captain of his salvation endured before him.

There was great rejoicing and triumph in the heavenly courts that Satan, who had deceived even the heavenly angels, and drawn a third part of Heaven into his rebellion, had been vanquished at every point by the Prince of Life. Hosannas rung through Heaven that Christ had repulsed the fallen foe, and resisted every temptation upon the point of appetite, redeeming Adam's disgraceful failure by his own triumph.

Christ has given us an example of temperance in his own life. Where so many professed Christians fail, and are led captive by appetite and inclination, the Saviour was firm. Oh! what salvation would there now be for the race if Christ had been as weak in moral power as man? No wonder that joy filled Heaven as the fallen chief left the wilderness of temptation a conquered foe. Christ has power from his Father to give his divine grace and strength to man—making it possible for us, through his name, to overcome. There are but few professed followers of Christ who choose to engage with him in the work of resisting Satan's temptations as he resisted and overcame.

Professed Christians who enjoy gatherings

of gaiety, pleasure, and feasting, cannot appreciate the conflict of Christ in the wilderness. This example of their Lord in overcoming Satan is lost to them. This infinite victory which Christ achieved for them in the plan of salvation is meaningless. They have no special interest in the wonderful humiliation of our Saviour, and the anguish and sufferings he endured for sinful man, while Satan was pressing him with his manifold temptations. That scene of trial in the wilderness was the foundation of the plan of salvation, and gives to fallen man the key whereby he, in Christ's name, may overcome.

Many professed Christians look upon this portion of the life of Christ as they would upon a common warfare between two kings, and as having no special bearing upon their own life and character. Therefore, the manner of warfare, and the wonderful victory gained, have but little interest for them. Their perceptive powers are blunted by Satan's artifices, so that they cannot discern that he who afflicted Christ in the wilderness, determined to rob him of his integrity as the Son of the Infinite, is to be their own adversary to the end of time. Although he failed to overcome Christ, his power over man is not weakened. All are personally exposed to the temptations that Christ overcame; but strength is provided for them in the all-powerful name of the great Conqueror. And all must, for themselves, individually overcome. Many fall under the very same temptations wherewith Satan assailed Christ.

Although Christ gained a priceless victory in behalf of man in overcoming the temptations of Satan in the wilderness, this victory will not benefit man unless he also gains the victory on his own account.

Man now has the advantage over Adam in his warfare with Satan; for he has Adam's experience in disobedience and his consequent fall to warn him to shun his example. Man also has Christ's example in overcoming appetite and the manifold temptations of Satan, and in vanquishing the mighty foe upon every point, and coming off victor in every contest.

If man stumbles and falls under the temptations of Satan, he is without excuse; for he has the disobedience of Adam as a warning, and the life of the world's Redeemer as an example of obedience and self-denial, and the promise of Christ that "to him that overcometh will I grant to sit with me in my throne, even as I also overcame and am set down with my Father in his throne."

The great trial of Christ in the wilderness on the point of appetite was to leave man an example of self-denial. This long fast was to convict men of the sinfulness of many things in which professed Christians indulge. The victory which Christ gained in the wilderness was to show man the sinfulness of the very things in which he takes such pleasure. The salvation of man was in the balance, and to be decided by the trial of Christ in the wilderness. If Christ was a victor on the point of appetite, then there was a chance for man to overcome. If Satan gained the victory through his subtlety, man was bound by the power of appetite in chains of indulgence which he could not have moral power to break. Christ's humanity alone could never have endured this test; but his divine power, combined with humanity, gained in behalf of man an infinite victory. Our Representative in this victory raised humanity in the scale of moral value with God.

Every man born into the world with reasoning powers has the opportunity, to a great extent, of making himself whatever he chooses to be. The blessings of this life and the blessings of the immortal life, are within his reach. He may build up a character of mental and moral worth, gaining new strength at every step in life. He may advance daily in knowledge and wisdom, conscious of new delights as he progresses, adding virtue to virtue, and grace to grace.

His faculties will improve by use, and the more wisdom he gains, the more he will be able to acquire, and his intelligence, knowledge, and virtue will thus continually increase and develop into greater strength and beauty.

On the other hand, he may allow his powers to rust out for want of use, or be perverted through evil habits, lack of self-control or of moral and religious stamina. His course then tends downward; he is disobedient to the law of God, and to the laws of health. Appetite conquers him; inclination carries him away. It is easier for him to stand still and be dragged backward by the powers of evil, which are always active, than to struggle against them, and go forward. Dissipation, disease, and death follow. This is the history of many lives that might have been useful in the cause of God and humanity.

We are free moral agents. We may obey the law of God, and secure eternal gain and lead others into the path of right, or we may transgress the law of God, and bring the penalty of disobedience upon us. There is glory above us that we may reach; and there is an abyss of wretchedness below, into which we may plunge. It requires less exertion to consent to go backward and downward than to urge our way forward through every obstacle. Thus many go down through inaction, who might be bright and shining lights.

Children's Rights.

"WHY not, mamma? Why can't I have it?" said Christie Field, as she stood twisting her handkerchief around the top of her mother's chair, fidgeting, pouting, half-crying, and wholly out of temper.

"Christie! how often have I told you not to ask me why?" said Mrs. Field sharply. It is quite enough for you to know that I say you cannot have it. Do stop shaking my chair, child!"

"But mamma, you said in the summer that I might have a cloak trimmed with fur this winter, and so many of the girls have got them, and I think you might keep your word!" said Christie.

Her mother turned and looked at her in surprise.

"Why, Christie! I think you forget to whom you are speaking," she said sternly. "Leave the room instantly. Go up stairs and stay until you can behave yourself."

Bursting into a flood of passionate tears the child ran out of the room—slamming the door after her.

Mrs. Field rose from her chair, intending to call her back to reprove her for this exhibition of temper; but just then a gentle voice checked her.

"Lucy dear," said Aunt Susan, "I don't believe the poor child meant to do that. She has been trying very hard to control herself."

"Trying to control herself?" said Mrs. Field in an astonished tone. "I think you are mistaken, auntie. She is a passionate little thing, and distresses me by her bursts of temper." Mrs. Field sat down again with a despairing sigh, and went on with her work.

"I have been watching her, Lucy, all this time," said Aunt Susan after a pause; "and I could see that while she was fairly quivering with excitement and eagerness, she was controlling herself bravely," ("much better than you were doing," Aunt Susan might have added, but she did not) "but at last her strength gave way."

"She was very impertinent," said Mrs. Field rather shortly, but in the silence that followed this remark she looked up, and her eyes fell upon Aunt Susan's face. A sweet, kindly old face it was, with deep, thoughtful dark eyes, and waves of silver hair under a snowy cap. Now Aunt Susan looked sad and troubled, and Mrs. Field's conscience smote her.

"O aunty," she exclaimed suddenly, "you don't know what a trouble that child is. She used to be a sweet, docile little thing, and minded me without saying a word; but of late she is always asking, 'Why can't I?' 'Why mustn't I?' and there is no peace with her. She is so persevering, and so determined to know the reason for everything! I don't know what to do with her."

Mrs. Murray smiled as she answered, "Well, Lucy, I never thought 'perseverance' and a determination to 'know the reason' for everything were such bad traits. And it seems to me that Christie, being old enough now to understand the reasons for most of your commands, has a right to know them."

"A right!" said Mrs. Field in a surprised tone.

"Why yes, dear, a right. Children have rights, though they are not much respected by grown people. A mother's rule over her children should be after all a 'limited monarchy.' Limited by good sense and a strict regard to 'children's rights.' Now Christie, being a sensible, reasonable child, has a right to be treated accordingly. Forgive me, dear, for saying so, but I think you should have told her why you were obliged to retract your promise of the furred cloak. To her it seemed a mere 'change of mind,' if not a deliberate unkindness."

Mrs. Field was looking down now, and working very rapidly and with flushed cheeks.

"It did not seem worth while to go into an explanation about it," she said in a low tone.

"I always found, dear, in the long years that I had my many children around my knees, that it was 'worth while' to take any trouble to save them from a heart-ache. And surely a few words of firm, kind explanation would have been less trouble than the scene you have gone through."

"Yes, oh yes!" said Mrs. Field with a sigh. "But then it is not always convenient to give your reasons to a child. There may be something it is not proper it should know. For instance, Christie flew into a passion a few days ago because I would not let her go to see little Kate Barton. I could not tell her that it was because Mrs. Barton is a poor, miserable drunkard, and the child might see her at her worst. You know it is not generally known. We who are her husband's friends have never spoken of it, though we know it is true."

"I know you could not tell her that, but if you were in the habit of giving her good reasons for most things, she would trust you when you said, 'I have a good reason for this, Christie, though I do not think it right to explain it to you.'"

The conversation ended here, for Mrs. Field put down her work and went up stairs. She went to the door of Christie's little room,

and paused a moment. The sound of sobs reached her ear. As she opened the door, Christie raised her flushed face from the pillow where it had been buried, and then dropped it quickly again.

Her mother knelt down by her and softly laid her hand on her head.

"Christie dear," she said gently, "I want to tell you something. I meant you to have as pretty a fur-trimmed cloak as I could find in the city, but your father has had a great deal of money to pay for your poor Aunt Christie, whose husband died you know last fall, and so I had not as much as usual to spend for our clothes. You see I have no new cloak either. I don't want my little girl to think I would break a promise or be unkind to her."

Christie raised herself up, looked at her mother a moment, and then threw her arms around her neck.

"O mamma, do forgive me!" she sobbed. "I was so bad! Please forgive me!"

Mrs. Field kissed the little flushed face, and assured her that she was forgiven. But still Christie's sobs went on.

"Don't cry so, dear," said the mother tenderly. "It is all right now."

"No, no, mamma! you don't know," said Christie at last. "I kept saying to myself, 'Mamma is so mean, I won't love her any more.' But I *do* love you, mamma."

Tightly were the little arms clasped around her mother's neck, and now the mother's tears were falling too.

"Mamma, will God forgive me for being so bad?" said Christie, through her sobs.

"I hope he will forgive both of us, dear; for I was not as kind to my little girl as I should have been," said Mrs. Field. "And Christie dear, I trust you not to say anything about your Aunt Christie's troubles. It would not be kind to speak of the money your father gives her."

"No, no, mamma, I won't indeed," said the child.

It was all right between Christie and her mother now, and Aunt Susan's kindly eyes shone with pleasure as she saw how much good her words had done.

But presently another little cloud arose.

Christie went one day to Aunt Christie's to "take tea" with Bess and Mattie.

"See what pretty little spoons and sugar tongs we have, Christie," said Mattie, as they were setting the table.

"Why," said Christie, "these are just like mine that I haven't seen for so long! where did you get them?"

"Aunt Lucy gave them to us," answered Mattie. Then Christie took them up and looked at them.

They *were* hers, for there was the straggling "C. F." that she had scratched with the scissors point on the sugar-tongs. Christie put them down without saying a word, but her little heart swelled with a sense of injustice, and her pleasure in the tea-drinking was gone.

"Well, Christie, did you have a nice time?" said Mrs. Field, as the little girl entered the sitting-room.

"No, ma'am, not very," said Christie in a low tone.

Mrs. Field looked up.

"Why, what's the matter?" she asked, as she saw Christie's lip trembling and her eyes full of tears.

The tears came in a flood then, and Christie sobbed out,

"It's—it's my spoons. Mattie says you gave them to her."

"So I did," said Mrs. Field. "Why, Christie, I didn't think you cared for those old things, and Bess and Mattie have so little."

"But they are *mine*," said the excited child, and then, as Mrs. Field looked at her reprovingly, she dashed out of the room and ran up stairs.

"Such a temper," sighed Mrs. Field.

"'Children's rights' again, Lucy," said Aunt Susan.

"Now, aunty, must I let the child be selfish and greedy?" began Mrs. Field. But Aunt Susan said with her gentle smile,

"No, dear. Teach her to be generous by encouraging her to give, but teach her to be just by respecting her rights of property. 'It is my own to do what I please with,' let her say with confidence, but teach her, too, that 'it is more blessed to give than to receive.'"

"Christie," said her mother that night, as she came into the child's room to kiss her good night, "I am sorry that I gave Mattie your spoons. I will get you another set if you want them."

"O mamma, I don't care about them much, but I just wanted to"—

Christie stopped with a flush on her cheek.

"To do what you pleased with your own," said Mrs. Field, smiling. "Well, dear, I was wrong to give away your things. I will not do it again. You may do what you please with them all."

"O mamma! And may I give away just what I please?" cried Christie, sitting up in bed in her excitement.

"Yes, you may indeed."

"Well, then, I want to give Bess one of

my doll's trunks. She has n't any. May I? And oh, I can give Mattie that velvet chair that her doll fits in so nicely. May I, mamma?"

Selfish and greedy, indeed! With a full heart the mother kissed the beaming little face, and went out to tell Aunt Susan the result of her experiment.

"I shall respect my 'children's rights' in future, dear auntie," she said when she had told the story.

"But those are not all the rights they have," said the old lady, smiling.

"What else?" asked Mrs. Field.

Mrs. Murray was silent for a moment.

"Mrs. Kingsley was here to-day, you remember," she said presently, "and Christie came into the parlor. Do you remember rebuking her for her awkwardness in tangling her foot in the lace curtain? And then you told Mrs. Kingsley that Christie was getting dreadfully round-shouldered. And when Mrs. Kingsley spoke of Harriet's proficiency in music, you said that Christie neglected her practicing so that you were sure she would never learn to play. Now, I saw the child growing more and more uncomfortable and embarrassed all this time, till presently she slipped out of the room, and a few minutes afterward I saw her crying as I passed her door. She is a shy, sensitive child, and she suffered intensely through your rudeness."

"O auntie!" said Mrs. Field, flushing deeply at the last word.

Mrs. Murray offered no apology. She went on quietly with her knitting. In a little while Mrs. Field spoke again.

"Dear Aunt Susan," she said falteringly, "I am sure you must think me a very bad mother."

"No, I do not, my dear. You are a most loving and self-sacrificing mother, but you do not always remember that your child has *a right to be treated like a lady.* You should not mortify her by unnecessary rebukes and personal remarks in the presence of others. You love your children dearly, Lucy, but you sometimes forget the admonition, 'Be pitiful, be courteous.' And you do not always obey the command, 'Provoke not your children to wrath.' I hope I have not offended you, dear, by my plain speaking."

Mrs. Field got up and came over to her aunt. Her eyes were full of tears as she bent to kiss the old lady's serene brow.

"No, dear auntie, I am thankful to you for your kind warnings," she said. "I might have gone on doing my children great wrong but for your little lectures on 'children's rights.' Pray for me that I may never 'offend one of these little ones,' again."

Books in Olden Times.

THE Chinese have a literature dating back more than 3500 years. The *Book of Changes*, one of the revered Chinese classics, made its appearance 1150 B. C. The books of this nation were made for many centuries of bamboo tablets. About 300 B. C. the present style of writing with a brush was introduced, silk having taken the place of the tablets. Two thousand years ago the imperial library of China consisted of 3123 volumes of classics, 2705 on philosophy, 1318 of poetry, 790 on military affairs, 2528 on mathematics, and 868 on medicine. Printing in China was invented near the close of the sixth century, nearly 900 years before it became known in Europe. In ancient Rome the literary needs of the people were abundantly supplied by the pen. Professional scribes were numerous, and papyrus paper was cheap. Books were made faster than they could be sold, to the great disgust of some of the noble Roman authors. The scribes whose manual labor produced these books were educated slaves, and so efficient in their craft that type and presses could hardly have made books more common. Long before the Christian era the poet Horace complained because his books were in the hands of everybody.

The form of ancient books differed with the materials from which they were composed. Tablets and leaves of metal and lead were of the same square form as our books to-day; when flexible materials like papyrus and parchment came into use, it was found convenient to make them in the form of rolls. The internal arrangement of books has undergone many modifications since the earliest times. At first there was no division of words, all the letters in the line running together. Gradually the separation took place, and by degrees, in the course of time, a work was broken up into sentences and paragraphs, and punctuated.

The immense libraries formed in ancient times are proofs of the abundance of books and the general condition of literature in the various countries of Asia and Europe. The famous Alexandrian library, founded nearly 300 B. C., contained 700,000 volumes; the library of the King of Pergamos, 200,000; and there were numerous libraries, public and private, in Rome, Athens, Samos, and other cities in Greece, Egypt, Spain, and Italy, numbering from 10,000 to 50,000 volumes. The library founded by Constantine at Constantinople contained 120,000 volumes, and that at Cairo is said by Arab writers to have held 1,600,000 volumes. There were other great libraries in Bagdad, Tripoli, and

Fez. Under the Moors, Spain possessed 60 public libraries, the principal one, that at Cordova, containing 400,000 volumes. Most of these collections were destroyed in the wars which devastated the various countries and cities where they existed, the remnants which escaped owing their preservation to being concealed in convents and monasteries. —*Sel.*

The House Fly.

If in its winged condition it is one of the most disagreeable features of dog-days, and people wonder why flies were ever made at all, it should be remembered that flies have an infancy as maggots, and the loathsome life they then lead as scavengers cleanses and purifies the August air, and lowers the death-rate of our cities and towns. Thus, while stables and piggeries and filth are tolerated by city and town authorities, the young of the house fly and the flesh and blow fly, with their thousand allies, are doing something toward purifying the pestilential air, and averting the summer brood of cholera, dysentery, diphtheria, typhus and typhoid fever, which descend like harpies upon the devoted towns and cities. It may be regarded as an axiom that where flies most abound there filth, death-dealing and baneful, is most abundant, and filth-diseases such as we have named most do congregate.

When the fly leaves its pupa case it pushes away the front end of the case, which opens like a lid, by means of the distention of the membranous front of the head, which may be seen pushing out and in as the fly walks rapidly about. This bladder-like expansion is evidently distended with air and in connection with the air-tubes within the body, so that it may serve the temporary purpose of enabling the fly to disengage itself from its pupa-case. When free from its prison the fly walks or rather runs nervously about, as if laboring under a good deal of mental excitement, and quite dazed by the new world of light and life about it, for as a maggot it was blind, deaf, and dumb. Now its wings are soft, small, baggy, and half their final size. The fluid that fills them, soon, however, dries up, the skin of the fly attains the colors of maturity, and it soon flies off with a buzz suggestive of contentment and lightheartedness born of its mercurial temperament. That the fly not only throws off in its buzz, songs of the affections, love ditties, but also may vary its notes accordingly as it is elevated or depressed in spirits concerning more trivial and less absorbing matters, we are assured by Sir John Lubbock, who says that the sounds of insects do not merely serve to bring the sexes together; they are not merely "love songs," but also serve, like any true language, to express the feelings.

The life of the house fly may, then, be summed up as follows: It lives one day in the egg state, from five days to a week as a maggot, from five to seven days in the pupa state,—in all, from ten to fourteen days in the month of August—before the winged adult period. It is often asked how long-lived a fly is. Most of the flies which are born in August live for a month or six weeks, and die at the coming of frost, either of cold or from the attacks of fungoid plants. A few probably winter over, and survive until midsummer, and thus maintain the existence of this useful species, to which civilized man owes more than he can readily estimate, and with which he can dispense only when the health of our cities and towns is looked after with far greater vigilance and intelligence than is perhaps likely to be the case for several centuries to come.—*American Naturalist.*

How We Treat Our Brains.

Almost daily I am in contention with parents and guardians, schoolmasters and schoolmistresses, clergymen and professors, youths and maidens, boys and girls, concerning the right way of building up the young brain, of ripening the adult brain, and of preserving the brain in age. Grievously ill do we take in hand to deal with this delicate member, and well is it that innate development overruns our schemes and brings the variety of natural good out of the monotony of human folly. It is dimly felt by society that the reign of bone and muscle is over, and that the reign of brain and nerve is taking its place. Even the Gibeonites now have the hydraulic ram and the steam felling-machine; the spectacled general of forces fights in his tent by click of battery and wire, and his lieutenant hoists an iron-clad by the touch of two buttons upon his waistcoat; the patient earth forgets the tread of horse and ox, and is ploughed by steam; and ere long, no doubt, our ministers will wind sermons out of barrel-organs, and our morning egg will be broken for us by a water of dynamite. Hence it comes that all classes are for "education"! The village grocer's son goes to a "theological college," and sits up by night over his "Evidences" with green tea in his blood, and a wet cloth about his brows. The gardener's daughter pulls roses no more, and has become a pupil-teacher; she is chlorotic at sixteen, and broken-spirited at twenty. The country parson's

son goes to a civil service or a navy "coach," is plucked in his teens, and is left to begin life again with an exhausted brain and an incurable megrim; nay, even the sons of peers are putting on the armor of light, and are deserting the field for the counting-house. To meet this demand, colleges of all kinds and degrees spring up—middle-class seminaries, theological colleges, colleges of science, university boards—even the old universities themselves are stirring from their scholarly ease, are sending out missionaries *in partibus*, and are cramming the youth of twenty counties in the art of making most show with least learning. All this, in a way, no doubt, must be and should be; but so sudden a *volte face* cannot be made without a wrench, and it is my desire now to see where the strain will tell, and how to perform our social evolution with the least injury to persons.—*Popular Science Monthly.*

Air and Ocean.—Interesting Items.—The air is made up of a mixture of two gases, oxygen and nitrogen, and it always contains considerable watery vapor and carbonic acid. In his new work on chemistry, Prof. Youmans states that if all the air were reduced to its average density at the earth's surface, it would extend about five miles high, and that if the above constituents were arranged in layers one over the other, we should have first, at the bottom, a bed of water all over the earth's surface five inches deep; next a layer of carbonic acid thirteen feet deep; next above, a layer of oxygen gas about one mile deep; and above this a layer of nitrogen gas about four miles deep. This will help the memory. Sea-water contains about four ounces of salt in every gallon. Estimating the ocean to average two miles in depth, the salt, if separated into a solid bed, would line the bottom of the entire ocean to a depth of one hundred and forty feet.

A Mountain of Tin.—Tasmania, or Van Dieman's Land, the large island to the south of Australia, is rapidly becoming noted for the quality and extent of its tin supplies. Four years ago the value of its exports of tin and tin ore was $35,000, while last year they amounted to nearly $1,500,000. One of the most productive regions is the Mount Bischoff district, but this has now been eclipsed by the discovery of a tin mountain at Mount Heemskirk, on the west coast. The "wash-dirt" is some twenty feet thick, and produces about 25 per cent. of tin; but the existence of solid seams of the metal, traversing the mountains in veins several feet in depth and width, has been demonstrated. Some "nuggets" weighing several hundred-weight each have been found, yielding nearly cent. per cent. of pure metal. Mixed with the tin, too, is a small quantity of gold, about ten ounces to the ton, not sufficient in itself to render it worth seeking, but adding considerably to the tin miner's profits.—*N. Y. Tribune.*

High-Sounding Titles.—Of the Chinese emperor, every one, even those of his own chamber, stands in the greatest awe, and on no pretext does any one address him save with the use of all his grand and glorious titles. It is the etiquette in the Chinese court for the emperor's physician to apply the same titles to his diseases as to himself, and accordingly they talk of "His high and mighty stomachache," "His imperial and god-like dyspepsia," and "His eternal and never-ending diphtheria."—*Sel.*

Surnames.—The use of surnames was not general in England till after the Reformation. Washington's ancestry settled first at Herbert, and the individuals were known as John de Herbert, that is John of Herbert, Thomas de Herbert, etc. Afterward one branch of the family moved to Wessington, when they were known as "of Wessington," or "*de* Wessington," and this became corrupted into the family name of Washington. So late as the beginning of the eighteenth century, some families of Yorkshire had no fixed surnames. Even at this day it is said that few of the miners of Staffordshire bear their fathers' names, but are only known by some sobriquet.—*Sel.*

Finding Fault.—It is the easiest thing in the world to find fault. It is easy to say that nobody is honest. It is easy to say that the church would be all right if the minister would preach and do as he ought. But it isn't so easy to look on the best side, to see that there are hundreds of faithful preachers, thousands of honest, sincere men and women, countless acts of justice, charity, and humanity which outweigh all the grumbling of all the grumblers, so that it is really only the finest dust in the balance. Let us be fair and cheerful. The world is not all wrong. Everybody isn't a rascal. Our neighbors are not trying to cheat us. Even the growlers are not half as disagreeable as they seem.—*Sel.*

—There is no man so bad but that he secretly respects the good.

Popular Science.

A New Septic Organism.

MR. DALLINGER has discovered a new and very peculiar microscopic organism which exists in connection with the decomposition of certain substances. The greatest diameter of this little creature is one four thousandth of an inch. Notwithstanding its minute proportions, it is possessed of what appears to be a head, bearing a long filament, resembling an attenuated proboscis, and two other delicate filaments on either side. By means of these appendages it swims very rapidly, and is also able to anchor itself to the particles of decomposing matter on which it feeds, or to any other object.

The way in which these minute organisms increase is very curious. By careful observations the discoverer found that each one may be seen every now and then to split in two longitudinally, each half becoming as perfect as the original individual. After a time this process ceases. The filaments are drawn in and the organism becomes simply a little round mass resembling a white blood corpuscle, which also has the power of locomotion but can only travel in a straight line. After a time this round mass encounters another individual like those above described, which it swallows up, the two becoming so intimately combined as to appear like a single individual. After the lapse of a little time this composite creature separates into a large number of minute specks, each of which soon develops into a perfect organism. Another curious fact observed by the discoverer was that the perfect individuals are destroyed by a temperature of 142°, while the minute specks which represent the organisms in their infantile state may be subjected with impunity to a temperature of 250°.

Primary Colors.—It is now demonstrated beyond chance for doubt that the old theory which made red, yellow, and blue the primary colors, was an erroneous one. Young, Helmholtz, and other scientists, have proven that the true primary colors are red, green, and violet. Yellow may be produced by the combination of red and green colored rays, and blue by combining green and violet. Orange and blue produce white, as does the combination of red, green, and violet. This seems a direct contradiction of the well-known results obtained by mixing pigments of various colors, but it is true, nevertheless, and is even substantiated by the seeming contradiction referred to.

Ancient Monsters.—Prof. Marsh still continues to exhume monstrous specimens of the uncouth giant reptiles that roamed the wilds of the continent ages ago. Among the most recent finds was a reptile sixty feet in height which walked upon its hind limbs like a kangaroo. Skeletons of mammoth flying reptiles are also found in immense numbers, one of them measuring forty feet from tip to tip of its wings.

A Whistling Beetle.—Gosse, in his "Romance of Natural History," says: "During our ride home (in Tobago), I was startled by hearing what I fully imagined was the whistle of a steam-engine; but I was informed it was a noise caused by a beetle that is peculiar to Tobago. It is nearly the size of a man's hand, and fixing itself against a tree, it commences a kind of humming noise, which gradually quickens to a whistle, and at length increases in shrillness and intensity, till it almost equals a railroad-whistle. It was so loud that, when standing full twenty yards from the tree where it was in operation, the sound was so shrill that you had to raise your voice considerably to address your neighbor. The entomological productions of the tropics struck me as being quite as astonishing in size and nature as the botanical or zoölogical wonders. There is another beetle, called the razor-grinder, that imitates the sound of a knife-grinding machine so exactly that it is impossible to divest one's self of the belief that one is in reality listening to some 'needy knife-grinder,' who has wandered out to the tropical wilds on spec."

—Dr. Müller, a scientist engaged in studying the insects of Brazil, reports the alleged discovery in that country of a strange animal of immense size, that burrows in the ground, scooping immense ditches, and throwing up such quantities of earth in its travels as to sometimes obstruct the channels of rivers. It is called the Minhocao.

THE

HEALTH REFORMER

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J. H. KELLOGG, M. D., EDITOR. TERMS, $1.00 A YEAR.

Among the Microscopists.

ACCEPTING the invitation of the secretary of the local society at Indianapolis, we had the pleasure of participating in the National Microscopical Congress held in that city, Aug. 14 to 17. Here we met professional and amateur microscopists from all parts of the United States. Even San Francisco was represented, together with the principal cities of the East.

The exercises of the congress consisted chiefly in the reading and discussion of papers, most of which related to the optics of the microscope, and micrometrical measurements. The discussions sometimes waxed very warm, but were held within proper bounds by the admirable management of Prof. Ward, editor of the *American Naturalist.*

The afternoons and evenings were chiefly spent in the examination of instruments and accessories, and the viewing of objects illustrative of the papers previously read. Among the most interesting specimens shown were a series of beautifully mounted slides showing the different members of a family of fungi, shown by Rev. Mr. Hervey. Dr. Ward presented a number of unique and interesting specimens consisting of the ashes of leaves, which displayed in a very remarkable manner the minute structure of the various leaves from which they were made.

Microscopy is the most friendly of all the sciences toward hygiene. It is, indeed, through the aid of this wonderful instrument that many of the most important discoveries relating to human life and health have been made. Without it we should never have known anything of the trichinæ, and very little of the natural history of the tapeworm. Numerous other parasites which make human beings their victims would have continued their depredations unobserved. The doctrine of disease germs, the promulgation of which has probably done more than any other one thing to cause the introduction of precautionary measures against such diseases as cholera, typhoid fever, yellow fever, and a variety of other serious maladies owes its existence to the discoveries of the microscope.

The microscope has also been the active agent in the detection of numerous adulterations of various sorts. In addition to this, it shows the effects of various poisons and other damaging agents upon the human system. It makes evident to the dullest mind, through the eye, the effect of alcohol upon the blood. It displays the effects of this insidious drug upon every tissue of the body, exposing its devastating work. The cause of temperance has no stronger ally than the microscope. It preaches more eloquent sermons than the most powerful of temperance orators. We never think of attempting to give a temperance lecture without it.

And so we say that the hygienist and the microscope ought to be on the most friendly terms. If there was a man with a microscope and a few specimens of trichinæ in every community, pork-eating would soon fall into disrepute.

The congress ended in the formation of a permanent National Association, which meets next year at Buffalo.

Hygiene in Indiana.

HAVING two or three days on our hands between the close of the Microscopical Congress at Indianapolis and the opening session of the annual meeting of the American Association for the Advancement of Science, at St. Louis, we improved the opportunity to

stop over two days at Kokomo, Ind., on our way to St. Louis, where we found a large camp-meeting in session, and had the pleasure of meeting numerous friends, and not a few who were interested in the cause of hygiene. The interest in the subject was deemed sufficient to warrant the devotion of a meeting to hygiene and reform, and, accordingly, a very respectable audience gathered in one of the large tents on Sunday morning, as a heavy storm was impending, and notwithstanding the uproar caused by the wind and the rain, which made an almost deafening noise upon the wide-spread canvas of the tent, the audience gave good attention to remarks on the true principles of health reform.

While here, we were waited upon by a committee from the city of Kokomo, who informed us of the existence of an organization of hygienists in the county, and gave us a pressing invitation to meet the friends of reform residing in the city, Sunday afternoon. We readily accepted the invitation, and on Sunday afternoon were most agreeably surprised to meet a goodly number of very pleasant and intelligent people, assembled in the parlors of Mrs. Dixon. We were greeted with a neat address of welcome by Mr. Trueblood, and heartily enjoyed ourselves for about an hour in giving an informal talk upon the encouraging prospects of the cause as viewed from various standpoints. We also took pleasure in showing to the friends, by the aid of our microscope, a very excellent specimen of trichinæ, together with sundry other interesting specimens. The time passed very quickly and pleasantly, and before we were aware, the afternoon and evening were gone, and we reluctantly parted from our newly found friends, and Dr. Gifford kindly took us in his carriage back to the camping ground.

We were greatly taken by surprise in finding this large number of persons interested in reform, and associated in an organization, holding meetings at stated intervals, and annual conventions. Dr. Gifford, who is located near the city, conducting an invalids' home, informed us that when he came to the place, many years ago, there was scarcely a believer in hygiene in the whole county. We understood that it was largely through his influence that so many have entered into this reform.

We were especially surprised to find in Indiana the only organization of hygienists in the United States, since we had been led to believe that the people of the Hoosier State were greatly behind on this subject. We are very glad to be obliged to change our mind on this point. We wish the friends of reform whom we met at Kokomo abundant prosperity in their efforts for the cause of true reform, and we shall be pleased to accept their cordial invitation to meet them again at some future day.

A Plague-Stricken City.

OUR sanitary authorities have long prided themselves upon the supposed truth of the assertion that sanitary science had now reached a point of such excellence that anything like a repetition of the devastating plagues of a century ago is impossible. The truth of this assertion, it seems to us, depends wholly upon whether or not the means for the prevention of infectious diseases, which are well known to sanitarians, are thoroughly and efficiently employed. There can be no doubt that a vigorous application of the principles of sanitary science will efficiently stamp out any and every infectious malady. According to newspaper reports, the city of Grenada is just now the scene of an affliction certainly not much less terrible than those which visited large cities of the Old World at intervals during the Middle Ages. It is stated that so many have been stricken down with yellow fever that there are scarcely enough well ones left to care for the sufferers and bury the dead. All who are able to leave the city have fled for their lives; all business is stopped; scores have already died, including the mayor and other prominent citizens.

The cause of this terrible calamity, which might, half a century ago, have been attributed to Providence, is no mystery. The few facts which have been made public are wholly sufficient to account for the occurrence of this dreadful malady. It seems that it originated in the opening of an old sewer, which inundated the city with floods of foul gases and poisonous germs. Upon the breaking out of the disease, it appears that most of those who were able to do anything were so paralyzed

with fear and consternation that little or nothing was done toward the removal of the cause of the malady, since a correspondent writes that there still may be seen all about the city stagnant pools reeking with filth and sending up volumes of putrid odors and the poisonous germs which feed the disease. If the report be true, such stupidity seems intolerable. From Grenada the fever is spreading, and now a large share of the cities of the South are in daily expectation of an outbreak of the disease.

Diet for Dyspeptics.

We do not purpose to offer here anything like an exhaustive treatise on this subject, which is certainly one of the broadest in medical science, but only a few suggestions.

Dyspepsia is well known to be a disease which presents a larger variety of symptoms than almost any other malady. This is undoubtedly due to the fact that every organ in the body necessarily suffers when the digestion is impaired. When the food is not properly digested, through any disability of the digestive apparatus, the blood necessarily becomes impoverished, and hence the universal suffering in the vital domain. Every organ becomes weakened, every function impaired.

The first thing to be aimed at in the treatment of nearly all cases of this disease is improved nutrition. In general it will be found, upon careful interrogation of the patient respecting his dietary, that he is taking food unsuitable either in quality or quantity. A careful adaptation of the dietary to the individual's condition is the first measure of treatment which should be adopted. This fact is too often overlooked, and the physician tries in vain to mend the disordered function by medicaments of various sorts, which at best only palliate the difficulty and frequently aggravate the real disease. The advice which many physicians give to their dyspeptic patients, "Eat what you have a mind to," is most pernicious.

Often not less unsatisfactory are the efforts of the patient to cure himself by a "starvation" diet. The "hunger cure" so warmly advocated by Dr. Shew and others many years ago, was long since exposed as a dangerous expedient except in very exceptional cases. The patient needs food which is wholesome and nourishing in quality, and he needs all he can digest in quantity.

Another great error into which many fall is the supposition that what is good for one dyspeptic is necessarily good for all others; that there is a certain dyspeptic dietary which all sufferers with disordered digestion must adopt. Nothing could be more erroneous. There are several very distinct classes of dyspeptics, each class requiring a dietary distinct and differing from each of the rest. The following brief suggestions will help to determine what the diet should be in any particular case:—

A patient whose most prominent symptoms are "sour stomach," "heart burn," and the usual accompanying symptoms, has inability to digest starch and saccharine substances, with a sluggish condition of the stomach. He must carefully avoid the use of sugar and sweets of all sorts, together with acid fruits. Fruits and vegetables, or fruits and milk, must not be eaten together; warm bread, together with cake, pies, and all sorts of pastry, must be utterly discarded. A diet which will be the most likely to give the stomach little trouble will be made up chiefly of dry toast, nicely browned (best made of Graham flour), and soft-boiled eggs or fresh meat rare boiled, a little beef tea free from fat, and milk with lime-water in proportion of one-fourth. Drinking at meals must be carefully avoided. The drier the food, the better. It should, of course, be masticated very thoroughly.

In cases of dyspepsia in which the distress comes on some hours after the meal, as in the night, preventing sleep, and accompanied by great nausea, and vomiting of very offensive matters, the patient is probably unable to digest well most kinds of animal food. He had best abstain from flesh altogether, and take a diet composed chiefly of grains and dry farinaceous articles of food. Oatmeal porridge eaten with well-toasted bread or hard crackers constitutes an excellent dietary for such a patient.

Many dyspeptics are unable to digest fats of any sort, and must be very careful to exclude them from their dietary. Butter, fat meats, shortened pastry, crackers, and other

foods containing fats, must be abstained from religiously.

By a simple regulation of diet, nearly all dyspeptics can be cured. Of course, it is necessary that all the rules of health relating to digestion should be carefully observed. Meals must be taken with regularity, and food must be eaten in proper quantity.

Man Growing Weaker.

THERE has long been a prevalent opinion that the race is growing constantly weaker in physical vigor, though evidently advancing in mental culture and attainments. Each generation looks back to the preceding as superior in longevity, fortitude, endurance, and physical strength. We continually hear about the wonderful feats of physical prowess performed by our grandfathers, and the remarkable endurance of our grandmothers. Of late years, writers upon sanitary science have been trying to prove the efficacy of sanitary reform by showing an increase in the average longevity of the race wherever sanitary rules have been applied.

The fact, as stated, is undoubtedly correct; but, as we have repeatedly pointed out, the increased average longevity does not indicate a corresponding increase in the physical stamina of the race, since it is only produced by the following causes:—

1. The prevention of destructive plagues and pestilences, such as in former times often depopulated whole cities in a few weeks' time.

2. The prolongation, by better care, of the lives of the aged, infirm, and feeble.

By these means the average longevity has been temporarily increased, while in reality the physical vigor of the race is diminishing. The very effort to keep alive the infirm and feeble, who would naturally quickly succumb to less favorable conditions, itself results inevitably in the deterioration of the race as a whole, so that the gain is not so great as would at first appear.

We are pleased to be able to quote, in confirmation of the views which we have maintained, the following paragraphs from the *Medical and Surgical Reporter*:—

"There are signs of the early failure of many varieties of the race. The fate of the natives of this continent needs no prophet to predict it. The Tasmanians have disappeared, to the last man. The Australians have greatly diminished. The New Zealanders and other Southern Pacific tribes are going with fearful rapidity.

"It is claimed that races of greater vitality take their place. But what we call vitality may be deceptive. Modern art has probably added little to bodily vigor. Statistics tell the other way. All it does is to protect age and keep alive the invalids. This is what makes the mortality tables more cheering. There is much reason to believe that the general physical vigor of even the Aryan race is on the decline. One of the evidences for this discouraging conclusion, advanced by a well-known American zoölogist, is the relative length of the period of old age in the individual man. In youthful races the individual does not attain old age till very soon (relatively to the entire life) before death. The relative duration of old age grows longer and longer as the race grows older, until, in races which are about to pass away, it becomes nearly equal to half the entire interval between birth and death, soon after which the race dies out."

"It Don't Hurt Me."

"IT don't hurt *me*," is the rejoinder most frequently made when individuals are remonstrated with regarding the use of tea, tobacco, or liquor, or respecting the continuance of any other hurtful practice. The drunkard says, "Liquor does not hurt *me*." Says the tobacco-user, "Tobacco does *me* no harm." Says the young lady who eats mince-pie and pickles, mustard and pepper sauce, rich pastry and confectionery, visits theaters, attends fashionable parties, and indulges in fashionable suppers, when remonstrated with for the reckless manner in which she squanders her health, "Oh! it's so charming, and it does n't hurt *me*."

It is easy enough for all these persons to see that the things they do are fatally injurious to other people, though they will not admit any such influence in their own cases. The drunkard sees every day of his life the ruin to body and soul, for both this world and the next, which liquor works; and he

calls his chum a fool for getting drunk and wasting his time as well as his health. The young lady sees many of her young lady friends dropping one after another into early graves, while others survive for a time only to mope out a miserable existence, with ruined constitutions—health, beauty, and happiness sacrificed at the shrine of fashion; yet she still persists that the commission of the very same follies does her no harm. So do most of us, in one way or another, every day of our lives, commit the most absurd and inconsistent actions. Notwithstanding the spirit is willing to obey the dictates of reason and common sense, the flesh is weak, and we are continually yielding to habit and depraved desires.

One of the best lessons which any human being can learn is that in most particulars he is but a counterpart of every other member of the human family; that he is amenable to the same laws as his fellows. Nature never grants any indulgences, and never pardons any infraction of her laws. She is an inexorable judge, and demands the full expiation of every transgression of her regulations, no matter who the culpit may be, high or low, rich or poor, king or peasant.

Origin of Malaria.

FOR a number of years a strong suspicion has been entertained by physicians that malaria is of vegetable origin. This suspicion has been chiefly based upon the discovery, claimed to have been made by Dr. Salisbury, of Ohio, of certain cryptogamic plants, the spores of which, when taken into the system, produce the disease known as ague, together with all other malarial disorders. Dr. Salisbury even claimed to have found the poisonous germs in the blood and the discharges from the body of persons suffering with this class of disorders.

The *Microscopical Journal* reports that the discovery of Dr. S., though it has not been fully accepted by physicians in this country, is fully confirmed by the recent discoveries of two Italian physicians, who have not only found the germs which produce the disease in their native soil, growing in connection with the decay of certain fungi, but have traced them to the individuals suffering with malarial disease, and even found them as minute colored granules in the blood, liver, spleen, and other parts of the system particularly affected by this class of disorders. The question seems now to be pretty well settled.

Brain-Work.

THAT brain-work is by no means so unhealthful as many people imagine, is easily proved by the fact that vigorous brain-workers are among the longest lived of the race. Numerous instances illustrating this fact might be cited. That of the eminent poet, Mr. Bryant, recently deceased, is a most excellent example.

The London *Standard* recently published the following sensible remarks on this subject, as quoted in the Philadelphia *Press*:—

"When we hear that a man has killed himself by excessive brain-work, we feel that we should like to have the witnesses in court, in order that we might rigidly cross-examine them. What sort of work was it? Was it brain-work pure, or was it mixed up with anxiety, worry, and excitement? What were the man's habits? Did he indulge overmuch in what are called stimulants? Did he deprive himself of a just allotment of sleep? If all these questions could be asked and answered, we suspect it would be found that the man who is supposed to have died of excessive mental energy, died rather of want of fresh air and exercise, of too much fire-water in one form or another, of horrible financial embarrassment, of late hours, and excitements other than those which pure work breeds in the human brain."

Consumption Communicable.—Two eminent French physicians have been again investigating this subject, conducting numerous experiments for the purpose of determining with certainty whether consumption may be contracted by eating the flesh of an animal whose lungs are diseased. Their decision is very positive that the disease may be communicated in this way. If we add to this the fact that horned cattle are in this country very subject to this disease, we have another means for accounting very readily for the

alarming prevalence and increase of this much-dreaded disease.

The results obtained in France confirm the experiments and conclusions of Dr. Bell, of New York City, a year or two ago.

Catarrh and Deafness.—One of the most frequent causes of deafness is chronic catarrh, which extends from the nasal cavity to the Eustachian tube and thence to the ear drum. Such cases require local treatment, both to the ear and to the original seat of the disease. Probably there is no better plan for home treatment than this :—

Several times a day, three times at least, snuff up into the nostril very thoroughly a solution consisting of a teaspoonful of common salt and twenty drops of carbolic acid to a pint of water. Gargle the same in the throat very thoroughly several times a day. In some cases a solution consisting of five to ten grains of bromide of potassium or chloride of ammonium to the ounce of water, used as a gargle, is more efficacious than the first solution.

As local treatment for the ear, there are two things to be done : 1. Frequent inflation of the ear by holding the nose tightly while attempting to blow through it ; 2. Filling the external canal full of very warm water, warm as can be borne, and retaining it for some time, tilting the head to one side, so as to retain the water, and putting in a plug of cotton wool before restoring it to its natural position. This should be done several times a day. The inflation cannot be practiced too often, and the application of hot water should be very persistent.

Alcohol and Cold.—One of the last arguments resorted to by the supporters of alcohol as a beverage, is that this agent supplies fuel to the body, thus saving the tissues and contributing to the production of heat. The utter fallacy of the argument is sufficiently shown by such facts as the following, which is quoted from the *Medical Press and Circular* :—

"The late Arctic expedition, under Sir George Nares, furnishes us with some facts of a suggestive and striking character. There were six total abstainers among the number of explorers ; five adhered to their resolutions and principles ; the scurvy did not attack them ; the sixth was induced to take alcohol during a temporary attack of illness ; he subsequently suffered from the scurvy. The total abstainers were living under the same conditions as the other members of the crew. They were equally exposed to hardship, and deprived of lime juice. The question then suggests itself, If all the men alike were without lime juice, and under similar conditions, in their journey over the ice, how happened it that the teetotalers escaped the scurvy, while the alcoholists contracted it?"

Pork and Beans.—These two articles, so long associated together as a favorite dish with the working classes, and extolled for their strength-giving properties, are now charged by a German journal with occasioning an epidemic of jaundice in a regiment of soldiers. The proof in the case was conclusive. As the pork and beans were eaten together, they were, of course, together held responsible for the disease ; but from the fact that beans alone have never been known to produce any such disturbance, while pork is a notable cause of "biliousness," we should not hesitate to charge the jaundice to eating the pork, rather than the beans. Another item for pork-eaters.

Electricity as an Eliminative.—Every year our faith in electricity is being strengthened by new discoveries of its value as a therapeutic agent. Its use as a tonic and as a means of stimulating muscular activity and development is now well established ; and its value in producing increased activity of various internal organs, through its influence upon the nerve centers, is also coming to be recognized and acknowledged. This fact is well illustrated by an account of several cases of paralysis from lead-poisoning recently published by Prof. Semmola, of Naples, "in which he has effected a rapid cure by inducing the elimination of the lead, chiefly in the urine, by the agency of the continued current applied in the region of the ganglionic nervous centers, without any attention being directed to the paralyzed parts themselves. On the second day of the treatment, lead begins to

appear in the urine, and increases in quantity as amendment progresses. In from fifteen to twenty days the blue line on the gums disappeared, and in two or three months the paralysis was entirely cured, without any other means being employed."

Undoubtedly the cure in these cases would have been accelerated by the employment of other recognized remedies; but the cases clearly show what may be done by electricity alone.

Odors of Persons.—Dr. Wm. A. Hammond, of New York, has recently published some curious facts respecting peculiar odors given off from the human body under certain conditions of the nervous system. A young married lady subject to hysteria, exhaled the odor of violets during the paroxysms, which, an exchange thinks, may have "in some measure reconciled her husband to these unpleasant domestic occurrences."

A young lady, a school-teacher, possessed an analogous peculiarity considerably less charming, according to the Doctor's statement, being subject to sick-headache, at which times she evolved "an odor similar to Limburger cheese!"

The Doctor also refers to the "odor of sanctity."

To Relieve Choking.—Dr. Beveridge, a noted British naval surgeon, states that blowing forcibly into the ear of the patient will give immediate relief in cases of choking from foreign bodies in the throat. The act excites so powerful reflex action that the obstruction is expelled from the windpipe. The plan is certainly worth a trial.

Astringents.—It is often of the greatest importance to the physician, and also to others, to know what is the most effective agent for stopping hemorrhage. Cold is acknowledged to be one of the best, but it is not always convenient of application. Indeed, its application is often nearly impossible on account of the location of the hemorrhage. The salts of iron, especially the sesqui-chloride, with alum, tannin, and nutgalls, or gallic acid, have been greatly relied upon. Dr. H. Rosenstein has found, however, by careful experimentation, that none of these remedies cause the vessels or tissues to contract, as does cold, and so are not to be relied upon. Nitrate of silver and acetate of lead, commonly known as sugar of lead, were shown to possess powerfully astringent properties, and are, undoubtedly, the most reliable agents to use.

Lead Poisoning.—A new source of danger from lead poisoning has recently been discovered. It has been found that the enamel with which baby-carts are ornamented consists very largely of lead. When a little of the enameled cloth was burned, the metal would actually run away in drops. Numerous babies have been poisoned through their habit of chewing everything which they can get into their mouths. It is to be hoped that this wicked adulteration will soon be stopped by the passage of appropriate laws with heavy penalties.

Night Air in Cities.—Dr. J. R. Black criticises very sharply Niemeyer's declaration that the air of night in cities possesses a greater degree of purity than that of day. Dr. Black shows very conclusively that what is true of a house is true of a street; namely, that ventilation is an essential for atmospheric purity. Night air is much more quiet, in general, than day air; just as the air of an unventilated house is quiet, while that of one which is ventilated is in constant motion. In consequence of this fact, day air is in some degree purified by constant change, while in the night the stagnant atmosphere of cities becomes loaded with the volatile impurities rising from its filthy streets, gutters, leaky sewers, and numerous other sources of impurities.

Trees in Cities.—The *Lancet* opposes the common practice of planting trees in the cities and towns, as being very unsanitary in that it hinders the movements of the air, which is one of the most valuable means of ventilation.

A Fatal Dose.—The following case, recently reported, ought to be a warning against the careless use of powerful drugs: "A painter, under treatment by Prof. Forget for saturnine paralysis of the extensors, was directed to take strychnia pills, which, pro-

ducing no effect, were successively increased to two, three, five, and six in number. Astonished at no effect being produced by strychnia of good quality, M. Forget made the patient swallow five of the pills in his presence. In two hours he was dead, and the pills that had been prescribed were found behind his bed.

Cause and Cure of Consumption.—The German anatomist, Langenbeck, affirmed, as the result of extensive inquiries, what all modern medical scientists have affirmed, that the great cause of consumption is the breathing of foul air. With reference to the treatment of the disease he said, "If I should go into practice and undertake the cure of a consumptive, I should begin by driving him out into the Deister (a densely wooded mountain range of Hanover) and prevent him from entering a house for a year or two."

—Dr. Campbell, writing in the *British Medical Journal*, recommends as a successful treatment for hysterical young ladies who believe themselves to possess the miraculous power of living without food or drink, the introduction of food by means of a stomach-pump. He contends that force should be employed in the administration of treatment if necessary, and remarks, "With our present knowledge, no more fasting of girls should be permitted to occur."

—It is suggested to use the telephone in examining the heart and lungs, the suggested advantage being that, if necessary, a physician could examine a patient in a distant town without visiting him.

Questions and Answers.

Baldness—Freckles, etc.—A. I. S. asks: 1. What will prevent hair from falling out? 2. What will remove freckles from the face? Is there anything that will remove them permanently?

Ans. 1. The only way to prevent premature loss of hair is preservation of a healthy condition of the scalp. Loss of hair is the result of disease of the hair follicles. If the hair is falling out, it is an indication of the existence of such disease, and prompt measures should be taken to arrest the same. The proper remedy will consist mainly of the following measures: (1) If the hair is long, cut it off quite short. (2) Keep the scalp cool by avoiding warm coverings of all sorts. Take care to expose it thoroughly to the air and light. (3) Give the scalp (not the hair) a thorough brushing with cool water every morning. (4) Improve the general health in as many ways as possible. In many cases of loss of hair, this symptom is only a remote indication of the disease of some important organ. Dyspepsia is a very common cause of premature decay of the hair.

2. There are numerous remedies which will remove one variety of freckles—that in which the colored spots are superficial in character. In another form of the disease, the pigment cells are located so deeply in the structure of the skin that no local applications are of any avail. Some of the remedies recommended for freckles of the first class are very poisonous and so dangerous to use. Corrosive sublimate is one of these. A harmless remedy is a mixture composed of a drachm of borax dissolved in a few ounces of lemon juice, which should be rubbed upon the face twice a day, morning and night. There are numerous other applications also harmless; but this is as good as any, and so we need not mention more. It should be added that there is no remedy which will remove freckles permanently, since the same causes which produced them in the first place will occasion their re-appearance.

Filters.—E. W. B., New York, says that water which is soft when put into his filter comes out hard, and inquires for the cause and the remedy.

Ans. After communication with the manufacturer of Kedzie's filters we are still unable to give anything which seems to us to be a satisfactory answer to this question. The parties to whom we wrote answered to the effect that the filter does its work so perfectly that it removes from the water all elements which have great affinity for soap, which thus injures it for making strong suds, although, in the opinion of the parties referred to, this does not in any way detract from its purifying properties. We mistrust that there is some other reason for the fact stated, which has been frequently observed, and we propose to give it a thorough investigation at the first opportunity, the possible result of which may be the construction of a filter of such material as will not produce such results.

[Numerous other questions received were a little too late for answer this month.]

DIETETICS.

"Eat ye that which Is Good." As a Man Eateth, so Is he.

Chemistry of Potato-Cooking.

SOME German chemists have been investigating the effects upon the potato of various modes of cooking, and the results of their labors show that the mode of cooking so long in common use, by boiling, is very wasteful of the nutritive elements of the vegetable. The potato is none too nourishing at best, and we cannot afford to lose any of its useful properties by improper modes of preparation. The potato contains in considerable quantity a form of food elements known as salts, which are thought to give to it its excellent anti-scorbutic properties, which makes it useful as a preventive of scurvy on shipboard. These elements also contribute very largely to the healthy development of the bones. Deprived of these elements, the potato possesses little more nourishing properties than an equal quantity of starch.

It is found that different modes of cooking affect the potato differently in this regard. Baking or roasting preserves all the elements. Steaming without peeling saves all but a very minute quantity. Boiling without peeling wastes more, but only a moderate amount. Steaming peeled potatoes occasions loss of three times the quantity lost by boiling with the skins on; and boiling potatoes which have been peeled wastes nearly the whole of the important elements mentioned.

Cooks will do well to profit by these facts, which clearly show that the only proper mode of cooking potatoes is to bake or roast them, or to steam or boil them with the skins on. If the skins are half or two-thirds removed, as is often the case, of course the loss will be proportionately great.

Indian Corn as Food for Man.—Corn is the most widely cultivated grain in the world, with the exception of rice. The three great articles of human food are wheat, corn, and rice. Wheat is principally produced in temperate countries, and is not grown to a large extent in very hot regions; rice is the product and food of hot countries only; while corn, though a tropical plant, grows equally well in such temperate regions as have a sunny clime. The warmest regions of the torrid zone produce corn in abundance, giving three crops in a single year; and yet so short is the season required for its development that even the hot sun of Canada's limited summer suffices to bring it to perfection.

As to nutritive matter, corn is only exceeded by wheat and followed by rice among the leading articles of food. Indian meal contains less water than wheat flour, more albumen, four times the quantity of fat, more nitrogen and available carbon, an equal quantity of salts, and is slightly deficient in starch, and still more so in sugar. On account of its lack of gluten it is not well adapted for making bread without a slight admixture of wheat or rye flour; but for cakes, to be eaten soon after cooking, for puddings and the like, it is very palatable. Calculated according to the physiological wants of the system, a week's diet for an adult would only cost about twenty cents, and, excepting split peas, there is nothing approaching corn for economy. Corn meal would be more extensively used among all classes if its manufacture was conducted with as much skill and care as is devoted to wheat and oats, and if it could be obtained pure and sweet; and that man will be a public benefactor who shall devise some method of presenting its nutritious qualities in a palatable and accepted form.—*Boston Cultivator.*

Oatmeal—Liebig has chemically demonstrated that oatmeal is almost as nutritious as the very best English beef, and that it is richer than wheaten bread in the elements that go to form bone and muscle. Prof. Forbes, of Edinburgh, during some twenty years, measured the breadth and height, and also tested the strength of both the arms and loins, of the students in the university, a very numerous class, and of various nationalities, drawn to Edinburgh by the fame of his teaching. He found that in height, breadth of chest and shoulders, strength of arms and loins, the Belgians were at the bottom of the list, a little above them the French, very much higher the English, and highest of all the Scotch and Scotch-Irish from Ulster, who, like the natives of Scotland, are fed in their early years with at least one meal a day of good oatmeal porridge.—*Sel.*

—Old cheese is one of the most injurious of dietetic abominations. The notion that it aids digestion is a monstrous fallacy.

FARM AND HOUSEHOLD

Devoted to Brief Hints for the Management of the Farm and Household.

—A horse-power is the work required to lift 22,500 lbs. a foot high in a minute, eight hours a day.

—A pail of milk left exposed to the scent of a strong smelling stable will imbibe a taint that will never leave it.

Raspberries.—As soon as through bearing, cut off the old canes and tie up the new growth. Three or four new canes to a plant are enough.

Remedy for Rats.—Peppermint is said to be so obnoxious to rats that they will not long remain where it is plentifully used. A farmer drove a horde of rats from his barn by binding up mint with his wheat.

To Remove Ink.—The following methods we have not tried, but they are said to be infallible: "To extract ink from cotton, silk, and woolen goods, saturate the spots with spirits of turpentine, and let it remain several hours; then rub it between the hands. It will crumble away without injuring the color or the texture of the article. To extract ink from linen, dip the stained part in hot tallow; when cool, wash the garment in soapsuds, and the ink will disappear."

How to Get Rid of Stumps. — General Colquitt, of Georgia, in a recent address, said: "To remove stumps from a field, all that is necessary is to have two or more sheet-iron chimneys, some four or five feet high. Set fire to the stump and place the chimney over it, so as to give the requisite draft at the bottom. It will draw like a stove. The stump will soon be consumed. With several such chimneys of different sizes, the removal of stumps may be accomplished at nearly nominal labor and expense."

Saving Noise in the Sick-Room.—One of the most common annoyances to a feeble, nervous invalid is the noise attending the feeding of a coal fire. The harsh rattling of the coals grates upon the poor invalid's nerves most painfully. Here is an easy way to avoid it: Before bringing the coal into the room, divide the coal into little parcels, wrapping each in a piece of newspaper. These can be laid upon the fire, one at a time, without noise, thus saving the patient much inconvenience.

Hygiene of Beds.—Beds should be made of such material as will absorb as little as possible of dampness or impurities of any sort. One of the most important means of keeping a bed in a wholesome condition is thorough airing every morning. Immediately after rising, the occupant should throw open the bed, and the windows of the room, thus securing thorough removal of all the foul emanations from the body which accumulate during sleep. When this is not done, the foul products accumulate, and the bed may become a source of disease.

Rotation of Crops.—An exchange offers the following suggestions, which commend themselves:—

Land will surely deteriorate if it is compelled to produce the same crop year after year. Once in three years is often enough to sow the same kind of grain on the same piece of land. Upon poor, sandy land, red clover should be the leading crop as a fertilizer. Let wheat, oats, and barley follow corn, sowing red clover among the small grains. Do not keep tillable land in pasture for several successive years. Besides the fact that it fails to furnish food, stock are healthier and thrive better upon new pastures than upon old. Let those farmers whose soils are wearing out try an intelligent system of rotation and note the result.

Damp Rooms.—Much sickness is the result of living in damp rooms. Brick houses which are plastered directly upon the walls, are certain to be damp, as shown by the appearance of mold on the walls in various places, especially in dark closets, unventilated parlors, and spare bedrooms. A very good temporary remedy is to place in such rooms pans or other vessels containing freshly burned quicklime. It should be frequently renewed. Such rooms should be daily aired very thoroughly, and exposed to the rays of the sun. Mold should be removed from the wall as soon as it makes its appearance.

News and Miscellany.

—It is said that it costs $177,444 a year to supply the American army with tobacco.

—There are 9,000 papers in North and South America. The number in the whole world is 23,000.

—It has been computed that on an average every person has two years' sickness before he reaches the age of seventy.

—According to the Pekin *Gazette*, the telephone was invented by King Fo Whing, who flourished in the tenth century.

—There are in circulation in the United States immense numbers of bogus silver coins, some of which are very difficult of detection.

—A Caledonia man found a man's finger pressed in a plug of tobacco he was chewing. The discovery cured him of chewing tobacco.

—The exact cost of the construction of the Paris Exposition buildings and grounds is now estimated at 45,300,000 francs, or $9,060,000.

—A gunboat has been invented of such construction as to make its sinkage next to impossible. It will float so long as any considerable portion hangs together.

—The first news journal was issued in Rome 2,000 years ago. It was engraved on wood, instead of being printed, and was issued once a year at first, but a daily edition was finally issued.

—The largest of the pyramids is 481 feet high and 693 feet on the sides; its base covers eleven acres. The stones are above 30 feet in length, and the layers are 208; 360,000 men were employed in its erection.

—The price of skilled labor in England is now much less than here. The better classes of mechanics receive only $4 50 a week. Farm laborers receive only $6.00 a month, and factory girls but $1.75 a week.

—The yellow fever continues its ravages in numerous Southern cities with unabated fatality. Memphis, Grenada, and other cities suffering the most, are being vacated, the people being removed to tents in the country.

—It is stated that there are 8,000,000 pupils enrolled in the public schools of the United States. The average daily attendance is 4,500,000. The estimated population between six and sixteen years of age is 10,500,000.

—In the 12th century, carpets were articles of luxury; and in England it is mentioned as an instance of Becket's splendid style of living, that his sumptuous apartments were every day in winter strewed with clean straw or hay.

—Scattered about the earth there are supposed to be 10,000,000 or 11,000,000 of Jews alive. Thousands of these people are rich; some of them own colossal fortunes. Rothschild could buy up the fee simple of Palestine. Goldsmidt might rebuild the Temple of Herod. Montefiore has money enough to cast a golden statue of King Solomon. But of these wealthy Hebrews, not one is willing to become a permanent resident of the land of his fathers!

—A vegetable poison has been discovered in Jamaica, one-thousandth of a grain of which will kill a cat. It is thought that the use of this powerful poison has aided in giving rise to the prevalent belief in witchcraft in the island.

—A kind father of Southboro', Mass., a man well-to-do, took his sick son to a doctor last week, and told him if he could cure the boy for less than the cost of a funeral to go ahead, but if he could n't the youth must take his chances.

—It is claimed that in some sections the lakes and rivers are being depopulated of fish by a new instrument of destruction consisting of a shell of nitro-glycerine which is exploded by a fuse. Every fish is killed within a circle of 160 feet.

—It is not generally known that the majority of the most troublesome weeds have been imported from other countries, the seeds being brought here with garden or field seeds of various sorts, in the wool of sheep, and in various other ways.

—An Esquimaux boy, supplied by Capt. Parry, ate in one day 10¼ pounds of solid food, and drank of various liquids 1½ gallons. A man of the same nation ate 10 pounds of solids, including two candles, and drank 1½ gallons; yet these persons were only 4 to 4½ feet high.

—The rearing of camels has been undertaken as an experiment in Texas, and it is found that they can be raised as easily as horses and cattle. The colts are rather tender for three or four days, but soon become hardy. They feed on the cactus and various kinds of brush, but refuse to eat grass.

—A sensible current of air moves about three feet per second, a gentle wind double, a brisk wind sixteen feet, a strong wind thirty-three feet, a violent wind from sixty-six to eighty feet, while a storm which overturns trees moves 150 feet per second, 540,000 feet in an hour, or at the rate of 102 miles an hour.

—It is estimated that two thousand human beings die every hour. At that rate it would take a century to depopulate the whole earth. But it is estimated that about twenty-three hundred human beings are born every hour, which makes up the loss, and gives a net gain of over two and a half millions a year.—*Mechanic.*

—According to the latest figures, the entire population of the whole American continent is but a trifle over eighty-five and a half millions, while the Russian empire alone contains eighty-six and a half millions. The population of Africa is nearly two hundred millions; of Europe, over three hundred and nine millions; while Asia, the cradle of the human race, has the enormous number of 824,548,500 inhabitants. The entire population of the globe is 1,423,816,800.

Literary Notices.

Postural Treatment of Tympanites Intestinalis. By Prof. E. W. Jenks, M. D. New York: Wm. Wood & Co.

Though a small paper of only four pages, it contains information which may be of inestimable value in the treatment of cases such as the one of which it is a partial record. Its distinguished author has already placed the profession under great obligations to him by bringing to notice several important measures of treatment of various serious difficulties. In the present instance he evidently saved the life of his patient, who was suffering from great gaseous accumulation in the bowels, after an operation for the removal of a large ovarian tumor, by putting the patient in a perpendicular position with the head downward. All other means had been applied in vain. This remedy is applicable to other forms of bowel obstruction, and is so simple that any one could apply it. The profession are under obligations to Dr. Jenks for calling attention to this valuable remedy.

Catalogue of Battle Creek College for 1878. Battle Creek: Review and Herald Steam Print.

The last annual catalogue of this educational institution shows it to be one of the most flourishing institutions in the West. Although less than four years have elapsed since the erection of the college building, yet so rapidly has the school gained in popular favor that its attendance during the last year was five times as great as during the first year, being fully five hundred, including those in attendance at the School of Hygiene, a newly established branch of the college.

With the numerous improvements continually being made, Battle Creek College is destined to become one of the most largely attended educational institutions in the country. Even now its patronage is such as would be considered exceedingly satisfactory for an institution that had the prestige of a score of years. One of the most distinctive features of this school is its exceptional thoroughness. There are few schools in the country that rival it in this respect. Its teachers take a conscientious interest in their work, and a personal interest in students. In addition to this, the school is recommended by the high moral tone that is maintained. None but students of excellent moral character are admitted; and a very careful watchcare is kept over students, flagrant violations of the rules of order of the school being considered as severing the student's connection with it.

"Though founded by S. D. Adventists, yet there is nothing in its course of study or regulations that is in the least sectarian. The Biblical Lectures are before a class of such only as attend them from choice. As regards age, our students have ranged from 7 to 45. Many middle-aged persons who have neglected their education in early youth come here to retrieve the past; and this they do without suffering embarrassment, inasmuch as they always find those of like ill fortune in the same classes to labor by their side. In some cases, parents are in the same classes with their children."

We can heartily commend Battle Creek College as being *the* one to which parents may send their children with the utmost confidence that *all* their interests will be well looked after, and that they will receive the very best advantages for mental and moral culture.

We ought to mention one other advantage possessed by this school, which is not offered by any other in the world; viz., its connection with the School of Hygiene enables it to offer the student such an opportunity to become thoroughly familiar with every branch of hygiene, the laws of life and health, as is offered by no other school in the world. Those who desire to do so can begin a medical course at this school, and spend here their first year more profitably than they could do in any other way if they desire to become thoroughly competent in all branches of the profession.

We should not conclude this notice without complimenting both the managers of the college and the printers of the catalogue on its exceedingly neat and tasty appearance. It is printed on finely calendered and toned paper, and is in every respect well gotten up.

Boston Medical and Surgical Journal. Boston: Houghton, Osgood & Co.

This journal, while it is one of the oldest medical journals in the country, is also one of the best. It is also peculiar in being entirely original. No selected or borrowed article ever appears in its columns. Every number is replete with valuable medical facts. It is published weekly, and ought to be in the hands of every physician who expects to keep fully abreast of the times in his profession.

The Obstetric Gazette. Cincinnati. Lancet Office: Dr. E. B. Stevens.

The first number of this new journal, which we find upon our table, gives promise of an undoubted success as an interesting and useful periodical. The *Gazette* starts out a full-grown journal in its speciality, being exceptionally devoid of the crudities which one expects to find in a new journal of any sort. Such names as those of Prof. E. W. Jenks, M. D., and Prof. Theophilus Parvin, M. D., in its list of contributors, are ample guarantee of the interest of original contributions to the journal.

Publications Received.—New Treatment for Spine Disease; Surgical Uses of the Strong Elastic Bandage; The Display of the United States Government at the Great Exhibition; Temperance Tracts; *The Gospel Banner; The Family Circle; Bee-Keepers' Magazine; The Normal Teacher.*

Items for the Month.

☞ We are pleased to be able to announce that, according to the promise of the publishers, the HEALTH ANNUAL for 1879 is now ready. We had scarcely handed the last lines of copy to the printers before we received a proof of the whole in type.

In its typographical appearance, the ANNUAL is not behind its predecessors; and we have already heard it whispered that the ANNUAL for 1879 is the best one yet. An earnest effort has been made to condense into its pages as much information of sterling, practical worth as possible. It is intended to make the ANNUAL not only a first-class calendar, but a valuable periodical, independent of its merit as an almanac. We are sure that every one who has had a copy of any previous edition of the ANNUAL will be sure to want this; and thousands of new patrons also will want it.

☞ This number has been delayed a little on account of the difficulties attending its preparation while being hurried from place to place by railroad and steamboat. We improve the opportunity to pen the concluding lines while our steamer is taking on a load of merchandise at one of the large cities on the Mississippi. We hope to be back in our "workshop" again in a week or two, recruited for another winter's hard work.

☞ Every one who is expecting to do anything in the line of circulating the HEALTH ANNUAL this year should be making up his mind about ordering. They have heretofore been furnished at marvelously low rates, but this year they will be sold cheaper that ever. Send in orders soon, and don't be afraid of getting too many.

☞ Some people have a curious idea that it is little business to sell almanacs, and so feel above engaging in the disposal of ANNUALS in that way, though they are willing to buy a few for gratuitous distribution. We have three answers to make to all such:—

1. It is the valuable matter in the ANNUAL, and not the calendar part, that people are asked to pay for. There are plenty of almanacs which can be obtained gratuitously at the drug store, it is true; but those publications are invariably the ingenious advertisements of some quack, and in addition to the lies told about the wonderful remedy which they describe, they are usually contaminated with vulgar jokes and low wit. In the end they cost the public vastly more than the small sum charged for the ANNUAL, since they lead so many to expend hundreds of their hard-earned dollars for that which does them no good, and a vast deal of harm.

2. Again, in many countries it is a uniform custom to purchase almanacs. People no more expect to get an almanac without paying for it than they would expect to receive gratuitously any other publication. There are in this country several popular almanacs which have a very extensive sale—though we know of none so widely circulated as the HEALTH ANNUAL—as, for example, "The Tribune Almanac," "The Public Ledger Almanac," "The Farmer's Almanac," "The American Tract Society Almanac," and many others. Hence it is not an uncommon thing for people to pay for almanacs nowadays in this country as well as in others.

3. Lastly, the HEALTH ANNUAL is not an almanac. It contains a calendar, it is true, but this is only to in some degree enhance its value and so give it a wider circulation, while the real subject-matter of the publication is of a quite different character. Hence the change made in the name a year ago gave it a more appropriate title. It is no longer an almanac, but an annual.

Thus it must appear that the objection referred to is without a real basis. Everybody, so far as we have ever learned—and we have heard from a great many—who has undertaken the sale of ANNUALS with real energy and determination, has astonished himself with the result.

SCHOOL OF HYGIENE.—The prospects for the School of Hygiene are excellent. Preparations are being made to make it in every respect a first-class school of its kind. It will begin about Sept. 1, but as the first part of the course is preliminary in character, those who come a little later can get the full benefit of the regular course of instruction.

We wish that all the young men and young women in the land could attend this school. We think it would not only make them better and wiser, but would enable them to be much more useful than they would otherwise be.

HOUSEHOLD MANUALS.—Those T. and M. Societies and others who are preparing for canvassing should not forget the Household Manual. Thousands were used as premiums in this way last fall and winter, and the general testimony was that the Manual is an excellent premium book. Those who want copies for that purpose soon would do well to order at once, so that the publishers may have time to get them ready.

OUR BOOK LIST.

THE following books, published at this Office, will be furnished by mail, post-paid, at the prices given. By the quantity, they will be delivered at the express or R. R. freight offices at one-third discount, for cash. SPECIAL TERMS TO AGENTS.

Plain Facts about Sexual Life. A work which deals with sexual subjects in a new and instructive manner. Printed on tinted paper and handsomely bound. 360 pp. $1.50. Flexible cloth, 75 cents. Pamphlet edition, 50 cents.

Uses of Water in Health and Disease. This work comprises a sketch of the history of bathing, an explanation of the properties and effects of water, a description of all the different kinds of baths, and directions for applying water as a remedy for disease. Bound in cloth, 50 cents. Paper covers, 20 cents.

Proper Diet for Man. A concise summary of the principal evidences which prove that the natural and proper food for man consists of fruits, grains, and vegetables. Pamphlet. 15 cents.

The Evils of Fashionable Dress, and how to dress healthfully. 10 cents.

Alcoholic Poison, as a beverage and as a medicine. An exposure of the fallacies of alcoholic medication, moderate drinking, and of the pretended Biblical support of the use of wine. 20 cents.

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