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GOOD HEALTH

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THE RELATION OF DIET TO HEALTH.

BY NORMAN KERR, M. D., F. L. S., LONDON.

WHEN man was created, the Almighty pronounced the accomplished work "very good." There is no structure on earth more beautiful than the human body. Bone, blood, muscle, sinew, and nerve make up an organism, which in power and adaptability, is without a rival in creative effort. This wonderful frame, formed in a "heavenly mold," is composed of body and brain, of soul and spirit. When these latter are incased in the former, there is a living body; when they are divorced, life has given place to bodily death.

Decay and death are the appanage of humanity. Like other living things, we are born, we grow, we die. From our beginning we steadily, but surely, advance to our ending. This period of rise, progress, and fall is our life on earth. The destiny of the spirit after the body dies is no part of my theme. The mystery of the spiritual hereafter, though of tremendous import to humankind, is beyond the scope of my argument.

Our earthly sojourn begins with our birth, and terminates with our death. This terrestrial existence is our common lot. We all must die. To avoid death is beyond our power; but we are able to some extent to shorten or prolong the life of our material and mortal part. We have the opportunity of hindering or stimulating the activity, of lowering or heightening the tone, of our immaterial and immortal part.

Let us look at the latter first. The brain is the organ of thought. Through the brain we are conscious of external things and of internal feelings. Its function is perceptive, reasoning, intellectual. This brain function is greatly dependent on healthy brain life. That is to say, the condition of the cells of which the brain is composed, largely affects the work of that organ. If any portion of the brain substance or of its covering membranes is diseased, the brain itself cannot perform its office as well as if no disease were present. If, for example, the brain is thoroughly under the influence of an anæsthetic, such as chloroform, whatever injury is inflicted on us, or violence done to us, we cannot feel it.

Again; a diseased state of certain parts of the brain or its membranes is often the cause of perverted sensation. In short, though mind may triumph over matter, the intellect remain clear under many unfavorable bodily

diseased states, the activity and range of the higher brain functions are limited by many unhealthy cerebral conditions.

As with the mental and moral, so with the material and corporeal part of man. Vital processes are greatly influenced by the condition of the vital organs. For instance, the state of the stomach renders digestion difficult or easy, retards or promotes this important office of the human economy, on which the health, comfort, and happiness of the individual largely depend. The lives of many illustrious and intellectual men have been made dreary, a prolonged torture to themselves, and a constant misery to all around them, from the morbid gloom, suspicion, and irritability engendered by dyspepsia. The stomach must be in a state of sound health to allow the natural, thorough, and pleasing assimilation of food. So with every organ of the body.

To preserve the healthfulness of tissue and organ, it is of the highest importance to ascertain the conditions, habits, and articles of food and drink best suited to the integrity of vigorous cell life. Fresh air, exercise, warmth, and light are all eminently favorable to cell vitality and energy. A calm and equable temperament, without anxiety or worry, with an adequate supply of proper, nutritious food, with healthful occupation as a safe outlet for superfluous vigor, would unite with the purity and power of cellular structure, accidents excepted, to promote a healthy, happy, and long life, ending in painless old age.

The most practical and yet disputed questions appertaining to health, longevity, and happiness are those which concern eating, drinking, and the use of tobacco. As regards eating, the plainer and simpler the food the better. All the elements which go to build up and maintain strength of muscle and vigor of intellect are to be found in what is called "vegetable" diet. I am not of the opinion that the flesh of slaughtered animals is to be boldly condemned as unwholesome. On the contrary, it is nourishing and digestible with many. But it does not suit every person, and it is unsuitable in hot climates. When partaken of, it should be eaten in moderation, and at only one daily meal.

The common habit of indulging largely in flesh meat is producive of much disease. The blood is laden with impurities, the brain becomes gross, the vital functions are disturbed, the vital organs are impeded and embarrassed. Rheumatism, gout, dyspepsia, and a host of physical and mental ills are the outcome of excess in animal food. On the other hand, ample stores of innocent, sustaining, and invigorating nourishment are to be found in a non flesh dietary. Though there are exceptional cases which seem to disagree with the entire exclusion of the flesh of animals as food, the great majority of mankind would be stronger, healthier, and happier, if they were vegetarians. The various articles of this non-flesh diet must be judiciously selected, due regard being paid to the idiosyncrasies of the individual and to his environment. The man who lives and works hard in the open air requires very different food from him who leads a sedentary life. If these precautions be attended to, I have no hesitation in expressing the strong conviction that the general adoption of "vegetarianism" would conduce to muscular strength, mental vigor, and moral power.

Tobacco,—what of that? This substance is in extensive use all over the world, and seems to be a source of pleasure to multitudes of our fellows. This pleasure is, however, fleeting, and the tobacco-habit often, in the long run, secretly, yet surely, sows the seeds of premature decay of mind and body. Tobacco is a cardiac depressant. It weighs down the heart, by its powerful action on the nervous system. Tobacco is a poison which many may indulge in to a good old age, with apparent impunity, but which has been the real cause of the untimely end of not a few human lives. The digestion is often impaired, and the eye-sight weakened. While this noxious narcotic enfeebles the virile powers, its chief deleterious influence is on the heart and circulation, vision, and digestion. A perfectly healthy life must be a life without what the poet Spenser called "the divine weed."

The most deadly of all the mischievous articles with which human beings have delighted to injure themselves, is, after all, that group known as intoxicating beverages, with their allies,—opium, chloral, chloroform, ether, and similar substances. We may class all these as anæsthetic narcotics, which steal away the senses, and inwrap man in a temporary oblivion. Disturbance of function, interference with vital processes, overtaxing the vital organs, impaired sensibility, mental confusion, and moral perversion are common to them all, but alcoholic intoxicant drinks excel the rest in their lethal effect on body and brain. While with opium, chloral, and the other anæsthetic narcotics, though the mental mischief appears even more acute than that produced by alcohol, this latter holds the field far beyond all other substances in riddling almost every organ and tissue of the body with fatty degeneration, with textural alteration and tissue degradation. The blood, the stomach, the liver, the kidneys, the heart, and the brain are all apt to bear within them the marks, visible after death, of alcoholic poisoning.

Worse than all this physical destruction, is the truly lamentable perversion of the *moral*, especially as regards the sense of truth and the power of control. More than any other demoralizing poison, does alcohol breed falsehood and deceit. Inebriate lying is more characteristic of the alcoholic than of any other form of inebriety. Inhibition, or self-control, is more speedily and effectually broken down by alcohol than by any other narcotic. Probably one leading factor in this predominance of a tendency to moral evils in alcoholic inebriants is the paralyzing potency of alcohol. Inebriety becomes, in a large proportion of cases, a true disease, which may be transmitted from one generation to another, like any ordinary unhealthy inheritance.

Terrible and fatal has been the destroying march of alcohol upon earth,—more deadly than war, more mortal than famine, more destructive than pestilence. Intoxicating liquors have decimated the ranks of humankind, have driven to premature death multitudes without number; and still the career of this arch destroyer runs gaily on. Cherished by the good, patronized by the cultured, fostered by the State, sanctified by the church, these body and soul polluting, though totally unnecessary, substances, are accorded an honored place in private and public esteem. How long this drink superstition will continue to flourish will greatly depend on the enlightenment of the public in regard to the poisonous character of all alcoholic intoxicating liquors.

HINDOO HYGIENE.

BY REV. E. C. B. HALLAM.

THE Hindoo's ideas of rules for the preservation of health are, at the most, very crude. He is intensely conservative, and is a firm believer in his "forefathers." Probably his hygienic notions are the same as those which prevailed in Abraham's day. It would be strange, however, if the Hindoo of former ages had utterly failed to hit upon some useful health-habits.

On arriving in India, one of the first things which impresses a person from the Western world is the regularity which characterizes the habits of the Hindoo. He rises early, and goes through just about the same routine, and in the same order, every day, both with regard to his domestic and business habits. This, of itself, is valuable from the hygienic standpoint, though it is extremely doubtful whether or not he has any idea of health preservation, in this regularity. He eats only two meals, and takes them each day at about the same hours. He seldom eats between meals, except it be in the case of the well-to-do, who usually indulge in a few sweetmeats or drink as a sort of lunch; but this also is taken, as a rule, with the same punctilious regard to time. Whether or not this regularity in his habits is adopted with a view to promote health, it cannot be denied that it is, as far as it goes, conducive to health. Nature is herself regular, and loves regularity in us; and, other things being equal, will not fail to reward it with good health.

The Hindoo has a scrupulous regard for cleanliness, as he understands it. To begin with, his teeth must be thoroughly cleaned every morning before eating. *En passant*, this is a habit that might be imported to advantage, into not a few circles in the Western world. This he does with a home-made tooth-brush,—a little twig about six inches long, broken from a tree or shrub as he passes along to the tank or river where he intends to bathe.

A HINDOO MOTHER.

He selects a kind of wood that is yielding, and not too hard. He chews about an inch of one end until the long fibers loosen, when it forms a very respectable apology for a tooth-brush. He squats at the water-side, vigorously brushes his teeth with this extemporized brush, using water freely, until they are thoroughly clean, if not white. It would be impossible to make them white in most cases, as they are so stained with a kind of dye which is chewed with betel-nut.

Having satisfied himself in the matter of teeth-cleaning, he proceeds to take his morning bath. This is indispensable. The Hindoo would think it grossly improper to eat anything until his teeth are cleaned and his body is well washed with water, except in cases of sickness; then water is considered a very dangerous element to tamper with. The writer has often asked native Christians to join him in an early breakfast, when, these many ablutions not having been performed, it was considered a sufficient and courteous reply to say, "I have not washed my teeth, sir."

The writer will not dare to say, however, that hygienic ideas enter very largely into the Hindoo's notion of the indispensable necessity for a morning bath. He has often seen the bath taken in a stagnant pool, which, to us, would be simply repulsive. And the bather, when expostulated with as to the inadvisability of bathing in such a puddle, would justify himself by saying: "It is water, and water purifies everything." So that water which is itself impure, is supposed to remove impurities from the person. In justice, however, let me say, that this is done only when purer and sweeter water does not happen to be within easy reach.

Bathing, among the Hindoos, would seem to be both a hygienic and a religious act. In the northwestern provinces, the women are extremely particular in the matter of an early morning bath. They may be seen going down to the Ganges in groups, singing in honor of their favorite gods, all the way to the river brink. On arriving, they descend into the water, and form a circle facing each other; they then bow their heads toward each other.

and mutter various incantations, which they have memorized, and then separate, each taking her bath. They put on dry garments, and return to their homes, singing as before. With reference to the females in high life, a Hindoo writer says: "Our ladies bathe their bodies and change their clothes twice a day,—in the morning and in the afternoon,—neglecting which, they are not permitted to take in hand any domestic work." In addition to his daily bath, the Hindoo will bathe his person as often as he has been exposed to pollution, by contact with others of a lower caste than himself, at markets, bazaars, and religious festivals.

A HINDOO GARDEN.

While it is clear that in all this the Hindoo

has an eye to propriety and purity, he also takes into account bodily cleanliness and consequent health, inasmuch as he insists upon his children's submitting to the same, though they have no idea (*i. e.*, the very young children) of physical pollution by contact, and therefore need no ceremonial cleansing.

That this practice of bathing is conducive to health, there can be no question; and it is very certain that the general health of this people would not be as good as it is, were all this neglected. It would be more beneficial, if the practice of anointing the person from head to foot, with a pungent oil, prior to bathing, did not prevail. The Hindoo has the notion that contact with the *kacha pani* (raw water), without such anointing, would induce cold. The pores are therefore closed beforehand, lest the equilibrium of *sardi garam* (cold and heat) should be disturbed.

In the matter of ordinary precaution to preserve health, the Hindoo's ideas are utterly faulty. He starts with the fundamental error that the equilibrium of cold and heat must not be disturbed, as disease would inevitably follow. He has learned from experience that the head needs protection from the excessive heat in hot weather, and presumes that like protection is needed at other seasons; hence, at mid-day in hot weather, and at night when exposed to damp, the head must be well cared for, whatever may become of other parts of the body.* The feet are of no consequence. They, being always exposed, need no special care at any time. So he reverses our Western maxim, —"Keep the head cool and the feet dry." If a Hindoo has shoes or sandals on his feet, and in his peregrination comes to an unavoidable puddle or water-way, he removes the shoes or sandals, carries them in his hand to the other side, and then quietly replaces them. This can be easily done, as neither shoes nor sandals have any fastenings, and he is not burdened with socks.

His dietetic habits may be said to be both hygienic and unhygienic. That is to say, he lives on food that is simple enough, but he renders it unhealthful by preparations used as appetizers. His staple articles of food are rice, wheat, pulse, and vegetables, with a very little fish occasionally. The rice is simply boiled, but in such a manner as to form a most tempting dish. It is not boiled to a mush, as with us; this the native would not eat: he would call it "mud." When served, it is beautifully white and mealy, each grain standing out by itself, just as our mealy potatoes do when nicely boiled. The wheat is made into coarse meal, from which the bran only is removed, not the shorts; and is mixed with a little water, and salt enough to correct insipidity; but no "baking-powder," and no fat of any kind, are used. This is rolled out into thin cakes, and quickly baked on the round bottom of an inverted iron pan. The pulse and vegetables are mixed with condiments to such a degree as to render them most pernicious, though very tasty. Vegetables simply boiled, as we use them, the Hindoo would refuse to eat, saying, "That is tasteless; it has no spices in it." He considers these condiments conducive to health, as well as appetizing, and will argue strongly in favor of their use.

Now we come to a practice which certainly is, to say the least, a common-sense one. It may be called massage. When a person is taken ill, the very first thing his friends think of is to shampoo the patient. This is done by gently pressing, and at the same time squeezing, the muscles of the body, from head to foot, moving very slowly up and down. The effect is charming. It allays nervousness, and induces sleep. The writer has found it very soothing, especially when suffering from fatigue. This practice seems to be general.

Composition on Physiology by a Small Boy.—The human body is made up of the head, the thorax, and the abdomen. The head contains the brains, when there is any. The thorax contains the heart and lungs. The abdomen contains the bowels, of which there are five,—A, E, I, O, U, and sometimes W and Y.

*The head is, among the common people, never covered, except when exposed to excessive heat or dampness.

CAUSES OF CATARRH.

BY THE EDITOR.

TAKING COLD.—This may seem a very inappropriate subject for this season of the year, when excessive heat is much more frequently complained of than an unpleasant degree of cold. Nevertheless, we think the discussion of this phase of our subject is not out of place, as the season of the year is rapidly approaching in which a very large proportion of persons living in civilized communities will find themselves suffering more or less from this annoying malady, for a "cold" is a disease as much as consumption or typhoid fever is. Furthermore, we should not forget that colds are frequently contracted even during the warm season of the year. What then are the principal exciting causes of that most common of all our bodily afflictions, a "cold"? The various causes of colds may be classified under the following heads:—

1. The disturbances of the circulation by prolonged chilling of some surface of the body.

2. Contagion.

3. Imagination.

Let us consider more at length the particular application of each of these causes.

1. Usually, and in the majority of cases correctly, colds are attributed to becoming chilled, getting the feet wet, having the hair cut, exchanging heavy under-clothing for lighter—or perhaps leaving it off altogether. These are, perhaps, among the most common of the immediate causes to which colds may be attributed. Let us look a little more particularly into these and other causes, and as we mean to go to the bottom of this subject, let us begin with the feet. Everybody knows that getting the feet wet on a cold day, when they are likely to become chilled thereby, is a dangerous accident; and yet, how few people take the pains to avert a possible catastrophy by adopting the necessary applications,—such as taking a hot foot-bath, drying the feet before a fire until warm, etc.!

Perhaps it has not occurred to many of you that a cold may be contracted from having the feet damp, even without any of the ordinary causes of wetting, such as getting out in the snow or rain, or walking in the grass or dew, without rubbers. It is quite possible that a person may take cold through dampness of the feet due to perspiration. Profuse sweating of the feet is a symptom which very frequently accompanies some forms of nervous disease. Many persons are much troubled with sweating of the feet whenever vigorous exercise is taken. Such persons are just as likely to take cold if the feet are allowed to become chilled, as though the feet had been made damp by any other means. All persons who wear rubbers, overshoes, or rubber boots, are exposed to the same danger, unless the rubbers are frequently removed so as to give the feet an opportunity to dry, and great pains taken to keep the feet constantly warm.

Persons who consider themselves particularly careful of their health, frequently take cold unawares by getting their feet damp, though not positively wet. This is most apt to be the result of walking in the damp, or wet, with shoes or boots having thin soles. Sometimes, indeed, the feet will be chilled when not made either wet or damp, from walking on the cold pavement with thin foot-gear. Anything which chills the soles of the feet is sufficient to produce colds, whether the chilling is due to the evaporation of moisture, or to prolonged contact with some cold body without a good non-conductor intervening. It should be remembered that leather is by no means the best non-conductor; it is much inferior to rubber, though better for a foot cover than rubber, on account of being slightly pervious to air. The insertion of a layer of rubber in the soles of shoes and boots has been suggested as an improvement in the manufacture of shoes, and we have no doubt it would prove to be of real value.

Improper protection of the lower extremities, as in the wearing of thin shoes, thin stockings, and thin under-clothing, is an exceedingly common practice, and one which is unquestionably productive of a vast number of colds. The colds resulting from this prac-

tice do not all affect the nasal cavity, or respiratory tract, or at least their ill effects are not confined to these regions. Colds contracted by exposure of the lower extremities frequently result in catarrh of the bowels, bladder, and urinary passages, and sometimes, especially with women, in a violent inflammation of the delicate organs of the pelvis, including cellulitis and peritonitis, two very dangerous maladies. Women are the greater sufferers from this cause, because the greater offenders.

If there is anything a woman really admires, it is a small, shapely foot; and the idea of dressing the foot with thick stockings and thick warm shoes, is one not to be entertained for a moment. Thousands of women have sacrificed their lives to their vanity. There are many persons whose condition of body is such that exposure to the chilling of the feet and legs is a hazard almost as great as that incurred by soldiers from a heavy fire from the enemy. The congestion of the internal organs set up by the sudden chilling of the surface of the lower extremities, may ignite an inflammatory fire, which will only be extinguished with the patient's death. People must be taught that these exposures are highly dangerous, and that the incurring of danger to life, of the sort referred to, is little short of criminal.

Probably more colds are taken in the spring and fall than at other seasons of the year, particularly in early spring and late fall. There are many persons who lay off their under-garments, or exchange them for thin cotton under-clothing at a certain date in the spring, as the first of April or the first of May, taking account only of the time of year, without reference to the weather. These same persons have a set time in the fall for putting on the winter under-clothing. These two changes constitute about the only modification of clothing for health which they consider necessary. In consequence they are constantly taking cold during the seasons of the year mentioned; in the spring because the warm winter under-clothing is laid off too soon, in the fall because the warm under-garments are not put on soon enough. We heartily indorse the remark of the famous English physician, who, when asked the question, "When should under-clothing be laid off?" remarked, "Lay aside under-garments on a mid-summer's day, but be careful to put them on the next day."

The fact is, under-garments are needed the year round, and we are strongly inclined to believe that a great majority of people should wear woolen under clothing. In this climate, at least, nearly every day in warm weather, a thick woolen under-garment may be exchanged for lighter garments of the same material. On the very hottest days, thin cotton garments may be worn with safety, but the arrival of a cool day, even if it be a mid-summer's day, demands that thicker garments should be worn. Under-clothing should be adapted to the weather, with but little or no reference to the season of the year, except that it should be remembered that a cool day in summer is relatively much cooler than a day of the same temperature in the winter-time, since the vital functions of the body have become adjusted to the higher temperature, and hence are not so well prepared to stand exposure of the body to cold. The influence of weather upon health, is a subject which every person suffering from catarrh, either affecting the nose or any other portion of the respiratory tract, should thoroughly understand; and on another occasion we will devote a half-hour to the discussion of the influence of the weather upon health.

Exposure of the arms and chest is even more likely to occasion a "cold in the head," or a "cold on the lungs," than is exposure of the lower extremities. Many a vain woman has sacrificed her life by the exposure of these organs in the *decollete* dress, at a fashionable ball or party. The rule should be considered an inviolable one,—that portions of the body which are accustomed to protection must be protected. Simply cutting the hair, by exposure of the neck, not infrequently gives to a person a severe attack of acute nasal catarrh, or cold in the head. Wetting the hair, and neglecting to dry it properly, frequently occasions the same result, as does also exposure of the head without proper cov-

ering, in one who has been accustomed to the protection of the head. It is noticeable that this more frequently occurs in men than in women. It is probably because a woman's head-gear is worn for ornament, and not for protection. At least, one could hardly imagine that the tiny accumulation of ribbons and feathers perched on the top of a thick mass of hair surmounting the back part of the head, would present any value as a protection for this part of the body, against atmospheric changes. We have often seen a fashionable woman wearing this kind of hat upon the streets, and with no other protection for her head, face, and ears, although the mercury stood close to zero, and all the men in sight had on fur caps, and were vigorously rubbing their ears, if not protected by mufflers or ear pieces; and yet the lady seemed to feel no discomfort, and very likely suffered less ill consequence from the exposure than the men, who were accustomed to protect their heads with warm fur coverings.

One more of the causes of cold which we will briefly mention, is the sudden cooling of the body after perspiration induced by vigorous exercise. A person may take cold from this cause in mid-summer as well as at any other season of the year. We have known violent colds to be contracted by sitting down in the shade after working or exercising in the hot sun. A breezy place, under such circumstances, is particularly dangerous, as it increases the chill by promoting evaporation. Even a mackintosh, which one wears on a damp day to protect himself from taking cold by keeping his clothing dry, may itself become a cause of taking cold. The impervious rubber covering retains in the clothing the moisture which is constantly escaping from the body, and thus, after the impervious garment is worn some time, the clothing may become quite damp from this cause. When one returns home, and the mackintosh is removed, rapid evap ration takes place, and a chill and cold may be the result.

Exposure to cold air, after perspiration induced by a hot bath, is frequently the cause of a cold.

Another deadly cause of colds, to which clergymen and school-teachers are particularly exposed, is a spare bed. The damp sheets and musty mattresses usually found in these death-traps are not infrequently sufficient to induce a cold from which the victim never recovers.

So much for exciting causes of cold which occasion disturbances of the circulation. We will, on another occasion, consider some of the points relating to the causes which render these exciting causes particularly active, and which intensify their effects, and will also give attention to these classes of colds which we have classified under the heads of contagion and imagination.

An Eye to Business.—"There's a couple of nice cucumbers, doctor," said the green grocer; "all I've got left. I was going to send 'em over to the Smiths, but if you want 'em, you can have 'em."

"No," replied the doctor hastily, "let the Smiths have them. They are patients of mine."—*New York Sun.*

—*Lily* (secretary of the cooking class). "Now, girls, we've learned nine cakes, two kinds of angel food, and seven pies. What next?"

Susie (engaged). "Dick's father says I must learn to bake bread."

Indignant Chorus. "Bread? How absurd! What are bakers for?"—*Pittsburg Bulletin.*

—The cheapest and simplest gymnasium in the world—one that will exercise every bone and muscle in the body—is a flat piece of steel notched on one side, fitting tightly in a wooden frame; and, after being greased on both sides, rubbed into a stick of wood laid lengthwise of a sawbuck.

—"I am feeling very blue this morning."

Doctor. "What's the matter?"

"Every time I feel my nose, it hurts me."

"But you are not obliged to feel your nose."

"But how can I tell whether it hurts, unless I feel it?"—*From the German.*

DRESS.

QUEEN ELIZABETH.

HISTORY OF COSTUME.

FIRST APPEARANCE OF THE "WAIST."

FOR most of our modern costumes we are indebted directly to the French, the importation having been begun at the time of the Norman conquest of England, and kept up ever since, without regard to considerations of health, comfort, or comeliness. Previous to the fourteenth century, ladies' dresses were cut in one length, falling straight from head to foot. They were not fitted to the waist with seams, but bound around with a girdle. This girdle gradually tightened and widened, until, about the year 1360, it took the form of a waist, appearing first upon the person of Jeanne, the wife of the French Charles the Wise. However much the French king may have merited his complimentary title, his wife certainly deserved to be called Jeanne the Unwise, for she set a fashion which has

been responsible for untold suffering among the daughters of men, during the last five hundred years.

EVOLUTION OF THE SLEEVE.

At first merely a shoulder strap, the sleeve gradually lengthened until it became a bottomless sack, reaching below the knee, and finally grew to so preposterous a length that it was gathered up and tied about the wrist to form a bag for carrying a large amount of personal property. From this point it shrunk and dwindled, until in the fourteenth century it was merely a long floating filament.

FARTHINGALE AND RUFF.

With the last half of the sixteenth century, came in the farthingale and ruff, which gave a woman of that period the appearance of having just risen from the interior of a hogshead, with the cover about her neck. The extreme to which this costume was carried is well illustrated in the engraving of Queen Elizabeth, who, with her bloated sleeves stuffed with bags of eider-down, her long and narrow "stomacher," her spindling waist, her mighty petticoats, and her wing-like headdress, resembles some huge bird of an extinct species, perhaps the fabulous roc of the Arabian Nights, rather than a woman and a queen. But even Elizabeth shrank from the extravagances of her sisters across the channel, and was fain to reduce the circumference of her shoulders from eight feet to five, the former being the measure of the costumes of the ladies at the court of Henry III.

The rise of the Puritans brought with it a strong influence toward simplicity of dress, which lasted for many years in England and can still be traced in many parts of the New England States. The costume of a Puritan lady was a model of dignified simplicity of attire. Between that period and the present day, dress has undergone kaleidoscopic changes too numerous to specify.

—Avoid passion and exitement. A moment's passion may be fatal.

—Never despair. "Lost hope is a fatal disease."

LEGLETTES.

THE following is a brief extract from a newspaper report of a lecture recently delivered in Chicago, by Mrs. Annie Jenness Miller:—

"'It is the leglettes—an ugly word I know, but one we are forced to use until some genius invents a better term. I know how prejudiced you are against legs; indeed it is little less than criminal in the polite world for a woman to possess anything of the sort. Don't be horrified now, but I have legs, and I have designed a leglette, or divided skirt, to clothe them, for the reason that I will not be trammeled with petticoats. I don't own such an article, neither do I ever speak of little breeches, pants, trousers, or pantaloons, for those are man's garments; and the one thing that my clothes are not, is mannish. The leglette is designed after the Turkish girl's trousers, and will serve well enough as a beginning. After awhile the ladies will get courage, and then we shall have a close-fitting garment to be worn under the dress, and then our reformation will have begun. There are various advantages to be derived from the divided skirt. It will not wind about your legs, as the modern petticoat has a habit of doing; and then it is shorter than the white skirts, and consequently cleaner; and, finally, it may be made of silk, merino, or cloth, and will cost less than the white lace-edged skirt.'

"To show how comfortable and graceful and free a woman would be in the divided skirt, Mrs. Miller skipped about the crowded platform, ballet-fashion.

"About corsets, she said if anybody should not be confined about the waist, it was woman, whose peculiar function required strength and freedom, not pressure or restriction. 'This idea of woman's being the weaker vessel is the worse kind of fallacy. She is strong. Man is the weak mortal, and you see it every time he is called to endure grief or pain. He should have on corsets. Put them on the brothers and fathers, and do you know what would happen? They would be idiotic

in less than half a year. No; you don't want corsets. Take them off. Shake off laziness, and go to work and harden your flesh. Fat, flabby women may need a bosom support, for which there are waists. It really does n't matter much about your older women, but do n't put your growing girls and young lady daughters into the torturous harness.' "

MALE CORSET-WEARERS.

WOMEN usually do not like to be considered masculine, and perhaps some feminine corset-wearer would be induced to abandon this instrument of torture, by being told that nowadays male corset-wearers are getting to be by no means scarce, in some quarters. It is stated that corset-wearing is quite common among officers of the German army, who take this means of giving themselves what they consider a desirable figure.

English dudes and their American imitators also, not infrequently resort to the corset, as a means of making a tailor-made coat set without a wrinkle. A newspaper reporter relates the following account of an attempt of one of these unfortunate creatures to obtain a corset at a New York corset establishment :—

"A well-known manufacturer of corsets on Broadway was recently visited by a dapper little Englishman, who was only about five feet tall. He carried a cane, and wore a high silk hat, a surprisingly tall collar, a red necktie, and a pair of white leggings. He was not shy about his needs, as an American would be; but mincing up to a pretty, young saleswoman, said :—

"'Can I get a corset here?'

"'For your sister?'

"'No!' exclaimed the young fellow, lifting his eyebrows in surprise; 'for myself.'

"'You will please,' said the young woman, drawing herself up until she looked seven feet tall, 'not attempt to joke with me. You will find the book-keeper in the office.'

"The poor little dude would have been pained, if it were possible, but as it was not, he was only astonished. He spoke to the manager, and was informed in a frigid manner by that gentleman that the firm had not yet found enough idiots in this country to make it worth their while to construct corsets with the front the same shape as the back.

"'Well, can't you make one?' he asked.

"'No, sir, we cannot, and that settles it.'

"The firms that make corsets for men have only one difficulty. It is that of procuring a clerk with tact enough to hold a customer, when he gets him. In this country, men like to appear masculine, if they have anything manly about them. A clerk must not smile when he is artlessly told by a customer that he wants to order a corset for a friend, who is precisely the customer's shape and size, but who is too modest or too much engrossed in business to attend to the matter himself. Sometimes the friend in the background is described as being an invalid, and in need of the corset to hold him together when he coughs. None of these statements deceive the clerk, but he must go to work at the order just as if he believed the customer, frequently making pathetic inquiries regarding the precise physical condition of the ailing friend."

Extravagance Extraordinary.—Last year a reporter discovered a Saratoga woman who was the happy possessor of two hundred frocks, of divers colors and designs; but this extravagant woman of fashion is now wholly outdone by a recently-discovered bachelor, who devotes the greater part of his annual income of one hundred thousand dollars, to dress. His apartments contain dress suits in a variety of styles and appearance sufficient to stock a ready-made clothing store. This connoisseur of clothes keeps always on hand thirty-five or forty suits of all styles of clothes, with shoes to match; eight or ten dozen shirts, dozens of neckties; overcoats, gloves, hats, canes, and umbrellas to suit every day in the year; and other articles in proportion. From this it appears that extravagance in dress is not confined to the sex who are most frequently charged with this fault.

—Be cheerful. "A light heart lives long."

Bustleless. — For years the bustle has reigned triumphant. Beginning with the Grecian bend, this monstrosity of dress has grown, until bustles larger than their wearers, have become a frequent spectacle upon the streets of every city. For a little time back, however, there have been signs of a rebellion, even among fashionable people. We find in a recent newspaper the following:—

"The bustle must go. The upper circles of Washington society have been thrown into a flutter of excitement by the announcement that Mrs. Cleveland has abandoned the bustle. Last week she drove in, and received a few friends at the White House. The ladies who called could hardly believe the evidence of their own eyes, when they observed the entire absence of the customary bustle. They looked again, however, and saw that their first impressions were correct—Mrs. Cleveland was bustleless. No remarks were made on either side, but it is comparatively certain, now that Mrs. Cleveland has abandoned the bustle, that the rest of feminine upper-tendom in Washington will lose no time in following her example.

Clothing for Children.—A point of primary importance in regard to the clothing of children, which mothers should ever bear in mind, is the fact that frequent changes are necessitated by the almost constant changes of temperature in this climate. The weather of a temperate climate is always subject to changes, which will be recognized, and should be as far as possible anticipated, by a careful mother. Children possess very little power to resist the influence of cold or heat. Their vital functions, while very active, are more easily disturbed than those of older people, hence they are more susceptible to injury from change of weather than older persons. Mothers should be constantly on the lookout for changes which may involve the life of their little ones. There is no time of the year when flannel clothing is more imperiously required than in the occasional cool days in summer. Clothing should be adjusted to the weather of each day independently. When the weather is very changeable, it may be necessary to change the clothing two or three times a day, in order to meet the exigencies of the weather.

Stays and Dyspepsia.—The stomach is located just beneath the point where the pressure of the corset stays is greatest. It must either suffer from constant, unyielding compression, or else it must be displaced, either upward or downward. In the first case, it encroaches upon the lungs, and in the second, it presses upon the delicate organs below, so that the result is equally bad in either case. This constant compression and displacement disturbs the function of the organ, and thus produces dyspepsia, with all its dire consequences.

The Bustle Doomed. — According to the *Ladies' Journal*, the bustle is doomed to pass into oblivion. Some theatrical people in Paris have adopted the Recamier style of dress; and as this class of people are the fashion-makers, the bustle must depart. It is singular, indeed, that so monstrous a feature in dress should ever have been tolerated by women of sense and modesty. The purpose of innovations in dress is usually supposed to be to set off the figure to better advantage. One style makes the waist appear smaller; another gives the shoulders a more graceful outline; another makes a short person look taller, or a tall person shorter. But what woman would wish to have the real outline of her body like that represented by the bustle?

—According to an exchange, tight-lacing is many centuries old; for, nearly three hundred years ago, Harvey, in discoursing to the college of physicians, upon the displacement of the abdominal organs, declared that malposition of organs occurred in "young girls by lacing;" and he gives the advice, which is less frequently acted on now than formerly, "to cutt there laces."

—"Work like a man, but don't be worked to death."

THE WINNERS.

No answer comes to those that pray,
And idly stand,
And wait for stones to roll away
At God's command.
He will not break the binding cords
Upon us laid,
If we depend on pleading words,
And do not aid.

When hands are idle, words are vain
To move the stone;
An aiding angel would disdain
To work alone.
But he who prayeth, and is strong
In faith and deed,
And toileth earnestly, ere long
He will succeed.

—*J. C. Rockwell.*

ANARCHY IN THE TOWN OF HUMAN BEING.

BY FANNIE BOLTON.

"WHAT is the matter?" cried Judge Intellect, as Mr. Lungs groaned, Mr. Liver moaned, and Stomach turned a pallid hue, while the Nerve lines were shocked from end to end, and Heart gave a gasp of pain. "Are we getting between the ridges of a closing earthquake?"

"O no!" said Governor Will, "it's only the erection of the new glove-fitting town walls, that I am having put up to strengthen our many weak places. They have been highly recommended as stays for Stomach and Spinal Column."

"Stays!" exclaimed fainting, compressed Stomach. "I should think they were! I feel as though they had stayed me from future usefulness and present joy. O, that they had stayed with the wicked demons that invented them! I tell you, citizens, this is a device of torture which belongs to the Dark Ages of the Inquisition."

"Who is putting them up?" asked the Judge.

"Oh, those False Idea Inventors. They seemed so enthusiastic over their business, and so confident that it would improve the looks and well-being of the town, that I consented to their trying their skill in our behalf. They assured me that after we become accustomed to the novelty of it, the feeling would delight us."

"That is the trouble," whispered Lungs. "I'm cramped so that I can't breathe. I never get half a chance to fill up with pure oxygen. The most horrible gases pollute my atmosphere. Of course, I can't purify the blood, and give it a rich bright tint, when I'm almost paralyzed, and cramped out of shape."

Heart and Liver and Lungs and every other member of the town began a general complaint that was pitiable to hear. There was the greatest anarchy in Brain Court, and Judge Intellect declared that there was nothing ahead but speedy dissolution and ruin, unless the Governor would rouse up, and do something that should meet the wants of the case.

They started on a tour of investigation. It was found that in the first place, the most un-

wholesome supplies had been tumbled into Mouth Gate, and that the millers had only about half ground them up. The Saliva maids had shirked from moistening the substances for Stomach, and everything had been turned into the blood in a crude, unassimilated condition, and had ground and scraped on Nerves and Lungs and Brain.

After sifting matters to the bottom, the blame seemed to belong to everybody in the town; but no one seemed willing to bear it, and apology and excuse and blame did not help matters in the least.

"Well," said Judge Intellect, "if there was n't a demand for this evil in our town, it would n't exist here. We are suffering from the consequences of our own depravity somewhere; but now we must arouse, and expel every intruder that has wronged our government. Where are our great excretory forces?" Alas! where? It was found that the channels had all been blocked up, and on every hand there was hinderance and discouragement. The gates were all out of repair. There was a great foreign trumpet at Ear Gate, a telescopic lens at Eye Gate, and a set of new mill hands at Mouth Gate, that did n't seem to fit the place. The flags of the town had looked like a beautiful rose in a bed of lilies, but the colors had been hauled down; and in their stead foreign flags of sallowness waved on the towers of the town.

"Look at that flag!" exclaimed the Judge. "Have we been conquered before we were aware? What shall we do? Who has been the traitor? Let's go to the court, and read the law."

When the book of the law was consulted, the townsmen were amazed. Every law had been transgressed, and its inevitable consequence had followed. There was great mourning in the town of Human Being. Governor Will acknowledged that he had yielded to the requests of certain unlawful appetites and passions, from the bottom lands, and had himself given the order for their gratification. It was in this way that the foreign matter had been first introduced into the town; and, from the governor to the lowest subject, every one had committed the same error, and had become the subjects of evil thoughts and habits, and now anarchy was within their borders. Railing and bitterness extended from street to street, from house to house, and the whole town was in confusion and distress.

Not only the town of Human Being had suffered loss, but the whole world; for while it was engaged in disputes, the good it might have accomplished was left undone. The law of Human Being was so closely connected with the universal government, that heaven and earth had been wronged by the anarchy of Human Being.

There was great repentance in the town of Human Being. Intellect rose up with great humility, after Governor Will's acknowledgement, and confessed that he had listened to a certain foreigner, called Ignorance, who claimed to be a courtier from the kingdom of Majority. "O," said Judge Intellect, "to think how I have abused my sacred office, fills me with keen pain! I should have opened to you the great law of your community; but the book of the law has been unread, unkept, and we have been following the counsels of one who had only enmity to our welfare; who said there was no need of going according to the law, that instinct would guide us, and everything would happen all right. Fellow-citizens, I have made up my mind that whatever *happens*, is sure to happen wrong. Things do not happen right. It is not their way. There is no harmony from careless thought.

"We have departed from the path of uprightness, and 'the way of the transgressor is hard;' we must reform. Let us solemnly resolve to read and know the principles of our government, and be governed by the divine instruction of the law. All in favor, respond." There was a general "aye" throughout the house.

It was then that the doors of the higher palace opened, and a beautiful princess stepped out, whose name was "Spirituality." She had been a prisoner in her palace; but when these determined efforts for reform had been made,

the guards at her door had become frightened, and hastened away. There was one, an ugly, coarse-looking fellow, who watched her with cruel eyes, and felt of his dagger; but the Governor seemed to discern his purpose, and the townsmen formed a guard for the lovely princess. "Old Carnality," for that was his name, cast a glance of hate toward her, and rushed out into the darkness.

Spirituality was conducted before the people, and as she stood before them, in all her holy loveliness, a hush fell upon all their souls. Her sweet voice rang out these words: "There will be a higher state of life in your kingdom, if you live up to the vow you have made. There is solemn work before you; but it is for the good of the universe that this city of Human Being should be restored to a state of harmony with the law, and Heaven and the good are pledged to your aid. The colors of your allegiance,—the rose of health and the lily of purity,—are the colors of heaven; and while you fight to restore them to your towers, divine power will accompany your efforts; for in so doing, you will bless men and glorify your Maker. 'I beseech you, therefore, brethren, by the mercies of God, that ye present your bodies a living sacrifice, holy and acceptable, unto God, which is your reasonable service.' Tear down these false bulwarks. Give room for all of heaven in your town that is possible, and drive out the intruders,—False Ideas, Ignorance, and Inclination. Let Duty guard your gates, and see that nothing that defileth enters in. Though I am a princess of heaven, I will stay with you, to teach you, and help you to purer and happier days."

Judge Intellect then arose, and said that he proposed to vote the prohibition ticket at the next election. "Let us shut up every brewery in our town," said he. "Let us be examples of what true temperance will do. Let it be our rule that we totally abstain from everything hurtful, and use with moderation the good things of life, and eat to live and not to die."

Governor Will then declared his determination to make the town of Human Being a delight to men and angels, an honor to earth and heaven; and the citizens responded, "Amen."

WORK AND CHARACTER.

SPEAKING of the duty that mothers owe to their children, while small, of giving them some regular tasks to perform, a writer in the *Home Guardian* offers the following forcible thoughts:—

"It is not a question of your needs, or your comforts, or the child's inclinations. It is a question of your duty to the child, and of your responsibility to God for its soul's development. There is no bit of work which your child can do that has not an educating power. So have games, but in the latter case, excitement often furnishes the motive power, while in the former, a habit of industry and self-control may be germinated. Therefore, both work and play should be brought into the educating process.

"One mother teaches her child to work because, she says, it will have to earn its own living. Another neglects this teaching because, from prosperous surroundings, she anticipates no such need. Both err in their estimate of the object of their care of the child. The true reason why every child should have the discipline of work, lies deeper than this. The education and training of the child is not solely that it may be fitted for its station in life, or to take its part in the struggle to supply physical needs. And so the child who never expects to join the ranks of bread-winners, needs the discipline that will develop self-reliance, patience, and industry, as much as he whose worldly prosperity promises to depend on these; the real training being for the development of character, and the awakening of a sense of moral responsibility.

"The over-indulgence of a child cultivates in it a disregard of the feelings and rights of others, which is the beginning of unscrupulous dealings in business, and of heartlessness in the accumulation of wealth, which is so frequently seen. Fraud, robbery, and even murder may grow out of this disregard of the

rights of others, and that in a nature not otherwise cruel or conspicuously selfish.

* * * * * *

"It should be remembered that you are not training your children simply for what is called 'success in life,' but because you owe them all the help you can give, toward the creation of a high moral character. A child with 'nothing to do' frequently becomes restless and dissatisfied, and begs for something to interest it. The mind, lacking habitual exercise, grows weak and listless, drifts and lounges, just as a listless body does. This is frequently seen in delicate children, whose over-indulgent mothers think them unable to do any set task, or be held to any connected line of work. But a set task need not last longer than the child is able to bear, and continued thought need not be kept up to weariness. With such a child, the need of systematic training is especially imperative. The brain, often sharing the weakness of the body, requires as careful thought in its strengthening as does the feeble body. Without that, it remains weak, the temper is irritable, the thought listless, and the child begs pitifully to be told 'something to do.' It is unhappy, simply because it is idle; and yet the ignorant mother says, 'The child is delicate, therefore I set it no tasks, but let it do just as it pleases.' She does not know that in failing to compel habits of order and thoroughness, she has robbed her child of the training, both mental and physical, which it has a right to demand, and has deprived it of the very foundation of the superstructure of comfort and contentment.

"The unreasoning mother will often neglect careful training of a child in habits of industry, because she says the future will bring the necessity, and necessity will do the teaching. This is sometimes true, or rather it is apparently true, in a few exceptional cases where inherent capacity, an active body and quick observation, has seemed to take the place of previous discipline, and to give color to the thoughtless assertion. . . . But whether your child has, or has not, this exceptional ability, you cannot tell until it is much older; meanwhile you *owe* to *it* all the help which your mature thought and your life's experience can give, in cultivating to its utmost any inherent ability, not simply because it may be of use to it in the exigences of life,—the physical life, so to speak,—but because it helps to a higher intellectuality, and aids in the building of a character which brings happiness to its possessor. Whatever future you may anticipate for your child, you owe to it the training that shall help it to meet *any* future in this life, and fit it for a heaven beyond."

HOME SCENES IN TURKEY.

THE home life of the Turks is largely characterized by the same customs that prevailed among them centuries ago. A tendency to a nomadic mode of life is a strong instinct with the race; but where they have adopted a more settled life, the higher classes dwell in quiet, unpretentious homes, surrounded by gardens. Their hospitality is dignified and ceremonious. They restrict themselves to a frugal and principally vegetable diet. Their religion forbids the use of wine. The men, in general, are tall, robust, with dignified carriage, and though small conversationalists, are much given to devotion, at least to its outward rites. Of Turkish women, *Figuer* says:—

"The Turkish lady is born to total and complete idleness. A young girl who, at fourteen years of age, can not only sew fairly, but can actually read, is considered a very well-educated person. If she can also write, and is acquainted with the elementary rules of arithmetic, she is quite learned. The woman of the middle classes never condescends to work, she is always idle. Even the poor woman rarely works, and then only when it suits her.

"To drive away ennui, the wealthier make or receive visits, or give frequent parties. In the harems of the rich, each lady receives her friends in her own room. There they talk, sing, or tell one another stories. They listen to music, they go to pantomimes, to dances, and walk in the gardens. They pass the long hours agreeably by taking baths together, by

swinging in hammocks, by smoking the narguilhe, and by giving elegant little dinner parties.

"An evening party in a harem is a rather rare occurrence, for night festivities are not among Mussulman habits. No man is present at these parties. As the guests arrive, the lady of the house begs them to be seated, and places them side by side on a divan, with their legs crossed under them, or leaning on one knee. Coffee and a tchibouk with an amber mouth-piece are handed round. Small portions of fruit jelly are served on a silver-embossed dish. Each guest, after a little ceremonious hesitation, helps herself with the only spoon in the dish, which every one uses. Each then puts her lips to a large tumbler of water, which follows the jelly.

"General and animated conversation then begins. The maids of the lady of the house seat themselves so that every one can see them, and begin to sing, accompanying themselves on the harp, on the mandolin, on little kettledrums, or on tambourines. Afterwards, other young girls go through a kind of pantomimic dance. When the music and the dances are over, they play games of cards, and the party winds up with a supper.

"Out-of-door pleasure has other attractions. The Turkish ladies of the middle class frequent the bazaars, and pay one another visits. There are three kinds of these visits: visits that have been announced beforehand, unexpected visits, and *chance* visits. The last are the most curious. Several ladies collect together, and go about in the different quarters of the town, paying visits to people whom they have never seen."

Polygamy is less common than is generally supposed, although if a Turk has the means to support a second wife, the Koran permits him to take two or even four lawful wives. Besides their legitimate wives, the wealthy and great keep a collection of Georgian and Circassian slaves. The proverb current among them,—"Many wives, much cost and vexation,"—would indicate that manifold marriages are not always considered productive of happiness. The source of the greatest amount of trouble, however, in the family life, is not the taking of numerous wives, but the facility with which the marriage connection is dissolved. To effect the separation, it is usually sufficient for the husband to make known the fact that his wife is divorced.

Custom requires that the Turkish lady should wear a veil upon the streets, though it does not necessitate that the article named should be so thick as to conceal the features of the wearer. (See frontispiece). For some years past, Turkish ladies have enjoyed a freedom unknown before; and travelers in Constantinople often see the brilliant picture of hundreds of women, elegantly dressed, wearing veils of a texture so airy that they betray more charms than they conceal, riding or walking upon the principal streets of that great and splendid city.

A BOY'S RECORD.

BY "HOPE LEDYARD."

YEAR after year, boys and girls start to "keep a journal," but not one in a hundred persevere. Yet it is a pity that the children have no record of their youth. A mere line would recall numerous incidents which, but for that hint, would be forgotten. My own children were much interested in reading over the single line record which I kept during 1886. "I will keep a journal this year, sure!" said Dick, and came home the happy possessor of a dainty little diary, with about an inch of space for each day. "I'll surely write that much without any trouble," said he.

At the end of a week Dick came to me with a look of great dejection, his pretty diary in his hand. "Here, mother," he said, "I'll give this to you; I've forgotten to write in it for three days."

"But I want that to be *your* diary, not mine," I said. Then a bright idea struck me, and I added, "Suppose mother keeps this for you? I will write down each day whether you have been a good boy or not, and any little thing of interest that occurs. Then next Christmas I will put the little book in your stocking, and you may read it."

Dick brightened at once. "That would be

splendid." Then, remembering a scene at the dinner-table in which he had not taken a very creditable part, he grew sober, "Don't begin to-day," he said, "Let's start to-morrow. May I see what you write each day?"

"No; I think you ought to wait till the end of a month."

So the dainty little book lies in one of the pigeon holes of my desk, and each morning I make a record of the day before, for Dick. I can see the plan is working well. Dick is reminded of the record, and tries to have it a good one, while the little diary is an unexpected help to me too. As I write the record of the day, I have to think carefully and judiciously of what has happened; and I often see that I might have averted small troubles, if I had been more watchful. I try more and more successfully to forestall trouble. For instance, Dick is out of sorts, and his brother's high spirits torment him; remembering the diary, I leave my work, and get Dick interested in something in another part of the house. He shall not have "cross and impatient" written against his name, if I can help it.

I have half promised a friend to spend an evening with her, but I have written, "A good boy *as far as mother knows*," too often of late; and the little book reminds me that I must be with my boy, if I am to judge of his conduct. The record shows me that this evening's entertainment is not for me.

There are many mothers who have great facility of expression, and enjoy writing; and they might keep quite a full record each day of the children's doings, and read it once a month or so, either to the family, or privately to different members. How aimless, careless, even selfish, such a record would show some lives to be! Surely it would prove a power for good, to parents as well as children.

—The joy of the spirit indicates its strength. All healthy things are sweet-tempered. Genius works in sport, and goodness smiles to the last. It is observed that depression of spirits develops the germs of a plague in individuals and nations.—*Emerson.*

PURE READING.

THE taste for pure reading cannot be too early cultivated. The careful selection of books for the young, and a watchful supervision over their reading-matter, cannot be too strenuously impressed upon parents and teachers. Books are, to the young, either a savor of life unto life, or death unto death,—either contaminating or purifying, weakening or strengthening the mind of the reader.

If the first aim of a public-school system is to make men better workers, the second should be to make them better thinkers; and to accomplish this, young minds must be brought into correspondence with the thoughts and works of the great men of the past and of to-day.

Nine-tenths of what they have learned, as arithmetic, algebra, geometry, and geography, will pass away; as the cares of life come upon them. But the taste for pure reading, when acquired, will never pass away; it will be of use every day and almost every hour; they will find it a refuge and a solace in the time of adversity, and be happy when others are sad; it will spread from the father to the third and fourth generations.—*Mother's Magazine.*

Developing Genius.—Genius unexerted is no more genius than a bushel of acorns is a forest of oaks. There may be epics in men's brains, just as there are oaks in acorns, but the tree and book must come out before we can measure them. We very naturally recall here that class of grumblers and wishers who spend their time in longing to be higher than they are, while they should be employed in advancing themselves. How many men would fain go to bed dunces, and wake up Solomons! You reap what you have sown. Those who sow dunce seed, vice seed, laziness seed, usually get a crop. They that sow wind, reap a whirlwind. A man of mere "capacity undeveloped" is only an organized day-dream, with a skin on it. A flint and a genius that will not strike fire are no better than wet junkwood.—*Ralph Waldo Emerson.*

Temperance Notes.

—The W. C. T. U. local unions of West Virginia have increased from four to eighty, within the past four years.

—According to the records of the penitentiary at Joliet, Illinois, ninety-two per cent of all its criminals have used strong drinks.

—By Queen Victoria's order, no intoxicating liquors are, in future, to be allowed upon the premises of the People's Palace in London.

—The fifty-fourth annual meeting of the oldest national temperance organization of the United Kingdom, has just been held at Leeds, England.

—In its number of churches, Topeka, Kansas, outdoes all the cities of its size in the country, but not one drinking-resort nor saloon exists in the place.

—Through the wise and vigorous efforts of the women at the polls and elsewhere, the town of Independence, Iowa, went for temperance in its recent elections.

—Missouri, with its high-license laws, set up more than three hundred saloons last year, while Kansas, under prohibition, started no saloons, but built eight hundred and twelve new school-houses.

—Even staid old Scotland has interest and enthusiasm to bestow upon temperance, as is evidenced by the large attendance at the Sunday temperance meetings held this summer in the open air at Glasgow Green.

—The Legislature of Louisiana has just passed a strong, scientific temperance instruction bill. This makes thirty-six States and Territories, embracing over three-fourths of the entire school population of the United States, which now have temperance education laws.

—A widowed mother in Michigan has sued a neighboring saloon-keeper who has habitually sold intoxicants to her three sons, aged respectively fourteen, seventeen, and eighteen. This comes under the State law which allows parents to recover $50 from any saloon-keeper who sells spirits to a minor. The case is being tested.

—The new penal code of Italy contains the following wholesome regulations: Any one found in a condition of complete and manifest drunkenness, in a public place, shall be fined a sum not exceeding thirty francs (about $6.00). If the drunkenness be found to be habitual, imprisonment from six to twenty-four days may be inflicted. If the offender is under fifteen years of age, the father or guardian is to be reprimanded, and directed to look after the youth, under penalty, in case of neglect, of imprisonment for a period not exceeding ten days. Any one who, in a public place, or place open to the public, maliciously causes the drunkenness of another person, or supplies drink or other inebriating substances to persons already intoxicated, shall be imprisoned for a period not exceeding ten days. If the offender is a liquor-seller by trade, he shall, in addition to imprisonment, forfeit his license, in case he sells to one under the age of fifteen, or to one who, owing to a disorder or weakness of intellect, is obviously in a disordered state; and his imprisonment may extend to a month. If a criminal has his penalty remitted on the ground that he was drunk when he committed the offense, his punishment should equal two-thirds of that which would have been inflicted, had he committed the same when fully possessing his senses.

—Belgium is favored with a king possessed of wise foresight and magnanimity, who determines to put forth his best endeavors to protect his Congo subjects from the terrible evils consequent upon drinking-habits; and through a deputation from the London International Missionary Conference, he pleads for the co-operation of the Christians of Europe and America, in the effort to stop the traffic in strong drink.

—The *Manufacturers' Gazette* truly says that the increasing use of opiates and other drugs intended either to allay or excite nervous activity, is an evil in this country equal to, if not worse than, the excessive use of intoxicating liquors. As a rule, people form the habit of using opium, morphine, and chloral, while following the prescriptions of physicians, and frequently without knowing what they are taking, until well within the clutches of the terrible habit. Compared with the attention that is given to the drinking-habit, very little is said about the curse of opiate-taking. More's the pity.

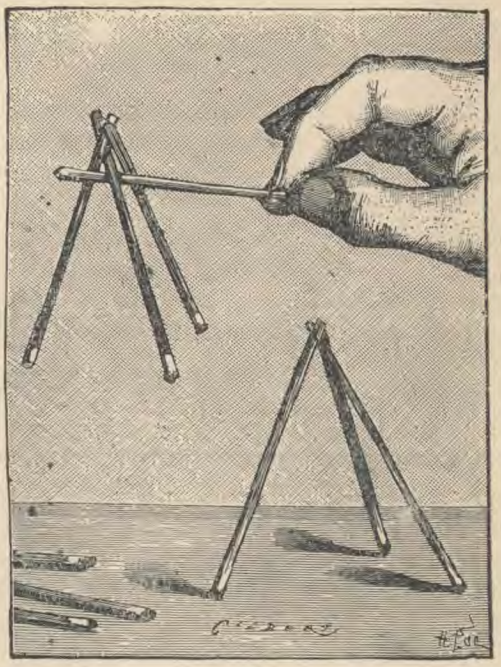
—The idea that prohibition does not prohibit, finds another poser, in the righteous ruling of Judge Couch, of Buchanan Co., Iowa. Although the saloon-keepers claim that it requires a large quantity of ginger-ale to produce intoxication, since it contains only three per cent of alcohol, the Judge pronounces it to be under the ban of the law if it contains any malt, and would intoxicate if taken in any quantity. This decision puts an effectual quietus on the saloon business in that district, and the court has a perpetual injunction against its saloons, with an order to the sheriff to shut them up, and sell their fixtures to meet the costs.

Popular Science.

Insect Jewelry.—There is found, in Cuba, Mexico, and some South American countries, a peculiar species of beetle, which emits a strong greenish light, from areas on either side of its body. Mexican ladies catch these curious creatures, familiarly known as "lantern flies," and, imprisoning them in gauze bags, wear them on their hair or dresses as substitutes for diamonds. The light emitted by these insects is so strong that a scientific gentleman succeeded in making a perfect copy of a photograph, illuminated by it, with an exposure of only thirty seconds.

Natural Gas.—The terrific energy pent up in the subterranean reservoirs, which are tipped by the natural gas wells, is something beyond computation. Charles Dudley Warner thus describes one of these wells: "When one of these wells is opened, the whole town is aware of it, by the roaring and the quaking of the air. The first one exhibited was in a field a mile and a half from the city. At the first freedom from the screws and clamps the gas rushed out in such density that it was visible. Although we stood several rods from it, the roar was so great that one could not make himself heard by shouting in the ear of his neighbor. The geologist stuffed cotton in his ears, and tied a shawl about his head, and assisted by the chemist, stood close to the pipe, to measure the flow. The chemist, who had not taken the precaution to protect himself, was quite deaf for some time after the experiment. A four-inch pipe, about sixty feet in length, was then screwed on, and the gas ignited as it issued from the end on the ground. The roaring was as before. For several feet from the end of the tube there was no flame, but beyond was a sea of fire sweeping the ground and rioting high in the air,—billows of red and yellow and blue flame, fierce and hot enough to consume everything within reach. It was an awful display of power."

Moon-Dwellers.—The greatest obstacle in the way of the view held by many, that the moon and other celestial bodies are inhabited by human beings, is the influence of gravitation. "Thus, at the moon's surface, the force of attraction being very much less than at the earth's surface, a being constituted like man, and endowed with the same muscular energy, could leap to astonishing distances, clearing, for example, a three-story brick house with the same ease that he would clear a post and rail-fence on the earth; the elephant would become as light-footed as the deer; a stone thrown from the hand of a thoughtless boy might fall in an adjoining county before accomplishing its mission of destruction; armies could engage each other in battle at great distances apart; and all kinds of labor would be greatly lightened by reason of the diminished weight of tools and materials. While this state of things might not render human life, endowed as we have it on earth, impossible on the moon, the opposite state of things which would prevail on Jupiter and Saturn would certainly render life, in reality, a burden. The masses of Jupiter and Saturn, being so much greater than that of the earth, the correspondingly greater attractions which they would exert, would so impede locomotion, that unless endowed with enormously greater muscular power than he is gifted with on the earth, man would only be able to crawl along as though his feet were weighted with lead, while the larger animals, in all probability, would be crushed by their own weight."



A PUZZLE.

OUR engraving illustrates an interesting little puzzle for which four matches or tooth-picks are required. The end of one is slightly split, and a second pressed into it so as to form an inverted V. This is then placed on a table, and the third one placed against the apex of the angle formed by the other two. The problem then is, how to take all three upon a fourth match held in the hand. This is easily accomplished by pushing away the two matches joined together, till the third match falls down upon the one held in the hand. All three can then be lifted from the table, proving, like many other apparently difficult feats, very easy after one knows how to do it.

"Blessed are the Pure in Heart."

COUNSEL TO PARENTS RESPECTING THE PREVENTION OF IMPURITY.

THE earliest duty of the parent is to watch over the infant child. Few parents are aware how very early, evil habits may be formed, nor how injurious the influence of the nurse often is to the child. The mother's eye, full of tenderness and respect, must always watch over her children. Self-respect cannot be too early inculcated. The key-note of moral education is respect for the human body. The mother should teach the child that his body is a wonderful and sacred thing, intended for important and noble ends; that it must not be played or trifled with, or in any way injured. Every thoughtless breach of delicacy should be checked with a gentle gravity, which will not repel or abash, but impress the child.

This watchfulness over the young child, by day and night, is the first duty to be universally inculcated. Two things are necessary in order to fulfill it; viz., a clear knowledge of the evils to which the child may be exposed, and tact to interpret the faintest indication of danger, and to guard from it, without allowing the child to be aware of the danger. Evil should never be presented to the young child's mind. Habits must be formed from earliest infancy, but reasons for those habits should only be given much later. It is the parent's intelligence which must act for the child during very early life. This unavoidable necessity is at the same time, a cause of frequent failure in education, for the reason that parents, through ignorance or egotism, fail to see that they must study the nature of the child. The strong adult too often fails in insight, and imposes its own methods and conclusions upon a nature not susceptible of those methods, and often not adapted to those conclusions. This is really spiritual tyranny, and destroys the providential relation which should exist between child and adult.

The parent should be the truest friend of the child. This possibility and duty is a parent's great privilege, too often unknown, and yet it affects the whole future of the child. It is through the love and confidence that exist between them, that durable influence is exerted. If the child naturally confides its little joys and sorrows to the ever ready and intelligent sympathy of the mother; if it grows up in the habit of turning to this warm and helpful influence, the youth will come as naturally with his experiences and plans to the parent as did the little child; the evils of life, which must be gradually known, will then be encountered with the aid of experience. The *form* of the relation between parent and child changes—not its essence. The essence of the relationship is trust; the fact that the parent's presence will always be welcomed by the child; that in work or in play, in infancy or in youth, the parent shall be the first natural friend. It is only then that wise, permanent influence can be exerted. It is not

dogmatism, nor rigid laws, nor formal instruction, that is needed, but the formative power of loving insight and sympathy. It is only when this providential relation exists, that the parent can understand the life of the child, and exercise influence without harshness.

With every step in life, the child's moral horizon enlarges, and opportunities of good, or temptations to evil, increase. The experiences of school-life, the companions selected, the studies pursued, and the books read, introduce the child into the wide world of practical life, in miniature. All the circumstances of school-life are of serious importance,—an importance not sufficiently realized in their bearing upon character, and in the responsibility which rests with the parents themselves, to mold those circumstances. The child's entrance upon school-life is his first plunge into the great world beyond the family circle,—his first serious contact with new thoughts, customs, and standards, with a new code of morality; not the formal morality of his professors, but the confused practical morality of his school companions. Here he may meet with every kind of evil, of which he had previously no conception, carried on in a crude, practical form, by those whom he naturally looks up to,—his elder companions, who are perhaps rich and clever, and whom he regards as "men." How is the child strengthened to meet this grand new life, as it seems to him, which entrances him with its novelty, its variety, and its vigor; and which very often produces a feeling of kindly contempt for the narrow home life?

Full confidence between parent and child is necessary, in order that all the child is learning may be known. This school-world, unlike the larger world, is directly under the possibility of parental control. What parents, as a body, require, the teacher will endeavor to provide. The material arrangements and regulations, as well as the moral tone of any school to which a child is sent, must be considered. It being remembered that impurity is the curse of our schools and colleges, all the direct and indirect means must be sought by which this vice can be as rigidly excluded from our educational establishments, as is the vice of thieving. School and college sentiment should be trained to regard it as equally dishonorable and unmanly. The views of the Principal on the subject of sexual training; the character of assistant teachers, the water-closet, and sleeping arrangements, the amount of out-door exercise secured, should all be studied by the conscientious parent.

Some direct hygienic instruction and warning, suited to the age of the child, should be given. It is a false and cruel delicacy which ignores the great danger of schools, and sends an innocent child utterly unprepared, into a school-society where corruption exists.—*Dr. Elizabeth Blackwell.*

THE WORK OF MOTHERS.

PROBABLY an investigation would show that in at least four cases out of five, lack of maternal training is the cause which occasioned the first steps in the direction of vice, on the part of those who have gone far astray in this particular. This may be said to be true of vices and crimes of all sorts. We commend as worthy of careful thought, the following excellent paragraphs, which we quote from the *Christian*:—

"'What France needs,' said Napoleon, 'is mothers.' As physical life could not be maintained without parental care, so the child who lacks the mental training which a mother should give, is very sure to suffer from its loss. A child left to itself brings only shame and trouble. As illustrating the evils of neglected childhood, the *Christian Secretary* makes the following statement:—

"'The history of the seven Chicago anarchists shows the danger of allowing children to grow up without proper training. Michael Schwab lost his mother at eight years of age, and his father four years later. He drifted into atheism at the age of seventeen. Spies was a skeptic at fourteen, and soon became an anarchist. Parsons was an orphan at three years of age, spent his boyhood in Texas, and served in the Confederate cavalry during the

war. Fielden lost his mother at ten, and had a father that spent his Sundays at home discussing politics and social theories. Fischer came to this country at the age of fifteen, and learned the printer's trade. Engel lost both parents before he was ten years old, and was thrown as a waif on the world. Lingg came from a family that was plunged into abject poverty by an accident that rendered his father unable to work. He suffered often for want of food, and early became a socialist. Those of them who had parents, were suffered to grow up without control. The others were uncared for by society, and all had a hard fight for their livelihood. They had no religious training, and grew up atheists.'

"It is stated concerning the most prominent infidel in America that he was the child of 'an indulgent father, who could never see anything wrong in his children. They could be guilty of no misconduct which he would not excuse, and for which he would not defend them. After his first wife died, he married several times. His children quarreled with each step-mother, and he took their part; and they separated him from *three wives*. The conduct of his children, and his utter lack of control over them, and his defense of them in their misconduct, caused his last years to be spent, neglected by his church, and in poverty, and obliquity, and contempt. On one occasion he preached a sermon of two hours' length, defending his children, and explaining his family troubles.' What could be expected of a child reared in such a home and under such auspices?

"Charles Darwin records in his autobiography that he was left motherless at the age of eight years; hence he lacked the very training that he should have had in these early and formative years. He says: 'When at school, I told another little boy (I believe it was Leighton, who afterwards became a well-known lichenologist and botanist) that I could produce variously-colored polyanthuses and primroses by watering them with certain colored fluids, which was, of course, a monstrous fable, and had never been tried by me. I may here also confess that, when a little boy, I was much given to inventing deliberate falsehoods, and this was always done for the sake of causing excitement. For instance, I once gathered much valuable fruit from my father's trees, and hid it in the shrubbery, and then ran in breathless haste to spread the news that I had discovered a hoard of stolen fruit!'

"A little judicious training and birching at the hand of a faithful mother in those days, might have served to curb some wayward fancies, and might have prevented the later development of some wild theories.

"Before Lord Shaftesbury was eight years old, Mary Millais had done a work for him which, under God, made him the foremost philanthropist of the age. How important the work of mothers!"

FALSE MODESTY.

"It would be well," writes Catharine Cole, to *The New Orleans Picayune*, "if young women were taught early in life that there is a false shame and an affectation of modesty as unlovely as any coarseness, which disgusts and repels as effectively as brazenness. To be on the *qui vive* for innuendoes, to have a smart faculty for extracting the bitters of evil from any good, is all wrong and all immodest. To see harm where harm is not intended, is immodest.

"A blush is something sacred to pure womanhood, and it is a sad spectacle for thoughtful eyes to note a young woman so far gone in the improprieties that she pretends to be shocked at things which simple, unaffected candor is far from thinking on at all.

"There are otherwise modest and virtuous young ladies who manage to convey by subtle insinuations that they are deeply conscious of sounds and scenes which a truly modest woman would ignore. It is true, indeed, as a great writer has said, that a modest woman must be at times both deaf and blind. Disagreeable happenings, offensive to the eyes or ears, are at times incidental to almost every one's life. The most sheltered young lady cannot be entirely protected. She may find

herself in places where profane language reaches her ears, where objectionable sights greet her eyes. It is then the time for her modesty to take on an armor of dignity; it is the time for her to be both deaf and blind.

"Nothing is more suggestive of a really bold and vulgar mind than to blush behind a fan, peering sharply between the sticks to see if any one has noticed the blush. Modesty, refined feelings and tastes, are not things of which to be proud. One should not be proud that she is virtuous, or honest, or truthful, or benevolent.

"It has often happened at Dr. Chaille's invaluable lectures on physiology that the doctor used some very plain words in addressing his audience. Straightway there would be young women present who giggled, who began chewing their handkerchiefs in an agony of embarrassment, who made eyes at each other, and also made sure that the medical students present took note of what they were doing. Dr. Chaille was at his noble work of teaching such young women to understand the marvelous human caskets in which are enshrined their shallow souls, but more than once his earnestness was confronted and overcome by such a silly, sickly demonstration of affected modesty.

"There are many things in life that young women ought to know of, which, if they did know, they would regard as great, solemn truths, too sacred to be giggled over and simpered at, which are not proper subjects for conversation, but which none the less exist, and should be well comprehended. For a young woman, or a young man either, there is no safety in ignorance."

The Best Antidote for Evil.—The late Dean Stanley is the author of the following excellent advice: "Leisure misused, an idle hour waiting to be employed, idle hands with no occupation, idle and empty minds with nothing to think,—these are the main temptations to evil. Fill up that empty void, employ these vacant hours, occupy these listless hands; the evil will depart, because it has no place to enter in, because it is conquered by good.

"The best antidote against evil of all kinds, against the evil thoughts that haunt the soul, against the needless perplexities which distract the conscience, is to keep hold of the good we have. Impure thoughts will not stand against pure words and prayers and deeds. Little doubts will not avail against great certainties. Fix your attention on things above, and then you will be less and less troubled by the cares, the temptations, the troubles, of things on earth."

A Beneficent Law.—We are glad to note that the Massachusetts Legislature has recently passed an efficient law for the protection of young women. In the large cities of that State, numerous persons holding themselves out to the public as the managers of employment agencies, have been engaged in obtaining recruits for houses of ill repute. The new law holds the proprietors of employment agencies responsible for the character of the places to which they send women or girls.

—Social Purity workers in Minneapolis recently called a mass meeting in the interest of the working girls, particularly the striking sewing girls employed by a firm in that city. It was stated in this meeting that these poor girls were obliged to accept of the most paltry compensation for their labor, making shirts for six cents apiece, pants and overalls for five cents, blouses for four and one-half cents, blouse shirts for three and one-half cents. The relation between wages and vice was clearly pointed out by Mrs. Van Cleve, a veteran philanthropist in efforts looking toward the improvement of the condition of women.

—Licensed vice in India offers many spectacles which seem hardly tolerable among civilized people. Mr. Dyer, who is actively prosecuting the social purity movement in India, reports that at Peshawur, a government brothel stands beside the government church. Commanding officers send their requisitions for supplies of prostitutes, the same as for rations and military equipments.

THE "CHRISTIAN SCIENCE" DELUSION.

DR. WM. F. HUTCHINSON, an eminent Brooklyn physician, in a recent number of the *American Magazine*, speaks thus soundly upon the subject of this modern delusion :—

"Let me say a few words about the latest medical delusion, which its godmother named 'Christian Science' a few years ago. It is one of those unballasted planks, thrown afloat upon the sea of death, clutched at, but turning quickly in the grasp, and leaving the swimmer deeper than ever in the flood.

"It was shrewdly named. Appealing to superstition, to reverence, and to ignorance, 'Christian Science' has a booming title that sounds afar. It panders to every love of mystery that is part of the human mind, and promises certitude of solution. It holds forth health for the taking, and assumes to possess divine power in its incomprehensible formulas. It has founded 'colleges,' wherein short-haired women, and preachers whose pulpits have spewed them out, teach in a few short weeks, for the considerable sum of $700, the exact method of accomplishing the end sought; and they already have an immense following.

"This promises to be a wide-spread delusion, indeed, and may call for attention from legislatures before long, to prevent ill consequences. All of us are more or less familiar with those curious phenomena of animal life that reveal themselves in the subjection of one person's will to another, in the sudden resolution of pain, or in apparent consonance of thought, which, under various names, have been before the world, since earliest antiquity. Formulated by Caglistro and Mesmer, in France, it took the latter's name, and he reaped rich reward of gold from the believers of his day. The late Dr. Beard went farthest into it of modern investigators, from pure love of science; preferably calling it hypnotism. But English scientists would have none of it from his hands; and it slept again, until in Boston's cultured center, the ancient delusion has sprung up anew; and watered by a woman's wit, is now unloading, from its every limb, showers of gold into her sagacious hands.

"It contains just truth enough to make it perilous. That a nervous, weak-willed person may be governed to his own good by a stronger, admits of no doubt; and diseases that physicians find incurable because they cannot get them under will-control, may be, and often are, cured by others who excite hopeful expectations. Merely to stop talking of sickness to an invalid, and to prevent one from talking about his pains, is to check a powerful source of illness.

"'Madam,' I asked a lady who brought her daughter to my consulting-room some

weeks ago, 'are you alarmed about your daughter?'

"'Very much, doctor.'

"'And you often ask her how she feels?'

"'Yes, I suppose so.'

"'Will you do me the favor to mark a stroke upon this paper each time that you ask her how she is, to-morrow, madam?'

"'Yes, I will try to.'

"And next day, to her incredulous astonishment, she made one hundred and nine strokes!

"A three months' visit away from home was advised; and the pale, hysterical, feeble girl will have a chance to recover.

"Now, here was a fine case for these delusionists; and in many such instances they may effect good results. But when it comes to that most difficult part of a physician's profession, the diagnosis of disease in early stages, where careful education, long experience, and close study are essential requisites; where certainty gives the chance of life, and mistake may be fatal, these people are dangerous. They play with time, that is so precious; and the decisive moment, when medical skill might have saved, passes unheeded by their untrained eyes.

"I have recently heard of a case of acute pneumonia, which, in the hands of one of these people, terminated fatally, having had no medical treatment whatever. It would seem as if this might be termed *constructive murder*, if there is such a legal phrase. Herein lies the serious side, the peril. When they can do more and prove it, than merely to exercise will-power over weaker persons; when they can set a bone or reduce a dislocation without manipulation, then indeed will there be a foundation for their claims. As yet, in their untaught hands, life is unsafe—to say nothing of pocket-book."

—The death-rate in London is twenty per one thousand; in New York, twenty-six per one thousand. In New York, the average number of persons to a dwelling is thirteen and one-half; in London, a little less than eight.

DIABETIC FOOD.

THE characteristic symptom of diabetes is the presence of sugar in the urine in large quantities. We have met cases in which the amount of sugar daily excreted from the kidneys was between three and four ounces. For many years it has been known that the amount of sugar thus lost could be greatly lessened by the employment of a diet free from starch and saccharine substances. This has led to the manufacture and sale of a large number of so-called diabetic, or gluten food preparations, which have been extensively used by persons suffering from this disease. Dr. Charles Harrington published in the *Boston Medical Journal*, for March 22, 1888, a report of the analyses of eleven different brands of these foods, with the following results, as summarized by the editor of the *American Lancet*:—

"1. Gluten flour advertised as substantially free from flour, yet he found that bread made from it would contain over 30 per cent of starch, or the equivalent of 35 per cent of sugar.

"2. Special diabetic foods advertised as diabetic flour that defies competition. The bread made from this would contain 35 per cent of starch, or 40 per cent of sugar.

"3. Health flour recommended as a superior diabetic flour. The bread from this would contain about 40 per cent of starch, or 44 per cent of sugar.

"4. Gluten flour of the New York Health Food Company. This is claimed as possessing almost the sole recommendation of physicians. Examination showed that its bread would contain 35 per cent of starch, or 38 per cent of sugar.

"5. Gluten wafers. These are guaranteed to contain no starch, yet examination showed that they contained over 60 per cent of starch, yielding over 74 per cent of sugar.

"6. Gluten wafers (butter). These contained 51 per cent of starch and 51 per cent of sugar.

"7. Dr. Johnson's Educators. The seller assured the doctor that they contained no

starch, yet his examination showed them to contain over 71 per cent of starch and over 79 per cent of sugar.

"8. Boston Health Food Company's Diabetic Flour. This is sold as absolutely non-starchy, yet examination showed that its bread would contain about 30 per cent of starch, or over 33 per cent of sugar.

"9. Diabetic flour made by the same company as the foregoing, makes bread containing about 23 per cent of starch and over 25 per cent of sugar.

"10. Flour of bran. This is sold as devoid of starch, and very valuable as food. It was found to contain no starch, but neither was its food-value greater than its equivalent weight in saw-dust.

"11. Carlsbad wafers. These are made of three layers, the middle one of which is composed of pure sugar."

Some ten years ago the writer made a similar, though less exhaustive, investigation of food of this character, and with identical results, by which he was led to undertake the manufacture, for the use of his own patients, of food which should be what it claimed to be. After several years of experiments, we have succeeded in manufacturing palatable wafers made of clear gluten, as well as gluten food, which is prepared in the form of a powder. This food is practically free from starch, containing only the merest trace of this element, probably less than half of one per cent. It is manufactured and sold by the SANITARIUM HEALTH FOOD COMPANY, of this city, whose card appears in our advertising columns.

—Dr. Chambard, of Paris, has discovered that boils are the result of germs. He claims to have succeeded in cultivating the microbe which produces boils, and states that when the cultivated germs are injected under the skin, they at once proceed with great activity and energy to produce a very successful boil. From this, it appears that boils are catching, and that they ought to be treated antiseptically.

MORBID HOBBIES.

DR. TALMAGE, in a recent sermon on hobbies, made the following excellent remarks, which we commend for careful perusal to those chronic invalids who are given to talking about their diseases :—

"We notice that many have a mania for talking of their ailments. One question about their health will tilt over on you the great reservoir of their complaints. They have told the story so often that they can slide through the whole scale from C above to C below. For thirty years their spine has been at a discount, and they never were any better of neuralgia, till they took the rheumatism.

"At first you feel sympathy for the invalid; but after a while, the story touches the ludicrous. They tell you that they feel so faint in the morning, and have such poor appetite at noon, and cannot sleep nights, and have twitches in their sides, and lumbago in their back, and swellings in their feet, and ringing in their ears, and little dots flashing before their eyes; and have taken ammoniacum, tincture of cantharides, hydragogue julep, anthelmintic powder, golden syrup of antimony, leaves of scordium, and, indeed, all hepatics, carminatives, antifebriles, antiscorbutics, splenetics, anthritics, stomachics, ophthalmics; they have gargled their throat with sal ammoniac, and bathed their back with saponaceous liniment, and worn discutient cataplasms. That very moment they are chewing chamomile flowers to settle their stomachs, and excuse themselves for a moment to take off a mustard plaster that begins to blister. They come back to express the fear that the swelling on their arm will be an abcess, or their headache turn to brain fever. They shake out from their handkerchiefs delicate odors of valerian and asafetida. They are the harvest of druggists, and the amazement of physicians, who no sooner clear the pain from one spot than it appears in another. If one joint loses the pang, another joint gets it, and, the patient having

long ago resolved never again to be well, it is only a question between membrane and midriff."

A LETTER FROM JAPAN.

A MEMBER of the Sanitarium Health and Temperance Missionary Society, who had sent a copy of GOOD HEALTH to a lady physician, a medical missionary in Japan, received the following letter, which we have no doubt will be of interest to our readers. There certainly seems to be an excellent opportunity for sanitary missionary work in this benighted country:—

"*Tuknoha, Japan.*

"Miss G., whose co-laborer I am, knowing me to be much interested in sanitary subjects, handed your journal to me. I have seen it before, and consider it an excellent periodical.

"I am a new arrival in Japan, and have not yet gotten over wondering how a people can exist, while paying so little heed to the care of their bodies. And yet foreigners call them a clean people; perhaps they are, as compared with those of some countries, I do n't know. You have been told how fond they are of bathing, and think they must keep clean. Yes; they are fond of bathing or soaking in hot water in the summer-time, but in winter hundreds do n't bathe from the time cold weather begins, until it ends. At the public baths, which exist in every town, from thirty to forty will bathe in the same water, and perhaps the first person in, had a horrid sore or some filthy disease.

"But it is the children I pity. It is the custom to shave the heads of babies, and almost immediately the head gets sore. What causes the sores I do not know, whether they come because of the rough treatment of the tender skin, or whether a cut gave some latent poison a chance to develop, or perhaps the razor may have been poisoned. The worst of it is, these sores are never cared for. I have seen children whose heads and faces were one sore, strapped to the back of another child, bare headed, and the hot sun beating down upon it.

"The children take a great deal of care of the babies, or rather what little care they get is from the children. A child from two months to two years old is tied to the back of another child, and there it stays all day until the little nurse is completely tired out, and an American baby would have had its brains baked.

"It is no wonder to me that people here get malaria. The open sewers and creeks that do n't begin to have water enough to carry off the refuse thrown into them, keep the air full of vile odors.

"Japanese houses are built very open, and there is nothing to hinder thorough ventilation, and I do n't know but what that is all that saves the people.

"If I ever succeed in learning this lawless language, the teaching of physiology and hygiene I shall make a specialty, and there is nothing I should like better than building a sanitarium."

Swine Fever.—The hog is bad enough at best,—a scavenger, a wallower in the mire, a generally loathsome creature, given to scrofula, consumption, obesity, and general repulsiveness. It is possible, however, that even a hog may be made worse than he is by nature. Veterinarians tell us that swine fever is growing in frequency, and that swine fever and typhoid fever are one and the same disease; so here is a newly-discovered channel through which the most serious and fatal of all fevers may be extensively and rapidly propagated. Little or no attention is given to the food or drink of domestic animals in general, and probably the hog receives less care, in this particular, than do other animals. Anything is good enough for a hog to eat. They are often known to consume carrion and dead members of their own kind. Small children are sometimes eaten by them. Any stagnant pool furnishes water abundantly good enough for their drink. If one of their number happens to contract typhoid fever, or swine fever, and dies, the rest eat him up, thus contracting the disease themselves, and polluting wells in the vicinity of barn-yards, water courses, and other sources of water supply.

Limitation of the Senses.—Until we take the trouble to look into the matter, we have no conception of how limited the range of our senses is. For example, we can see only down to a certain size, even when the eye is aided by the most powerful microscope. Beyond the range of our vision on the infinitesimal side, there exist myriads of exquisite forms in nature, of which we have no conception; so likewise, the form of objects can be distinguished only at limited distances, even by the aid of the most powerful telescope. Fixed stars, though some of them are infinitely larger than the world on which we live, seem mere points of light, even when viewed by the telescope. The retina of the eye fails to recognize rays of light beyond the violet; while the camera of the photographer records the invisible rays as readily as the most brilliant blaze of sunlight. Myriads of insects chirp their songs in a key so high that they are unheard by human ears, while the monsters of the deep communicate with one another in tones of perhaps prodigious energy, but too low in pitch for recognition by the human ear. The air is redolent with odors which our obtuse olfactory sense cannot recognize, although to the noses of dogs and other lower animals, whose sense of smell is many times as acute as ours, they must be readily perceptible.

The Garbage-Box.—The garbage-box, or, as this receptacle of filth sometimes is, the swill barrel, is an enemy of health, which ought not to be tolerated in a civilized community. The idea that the saving of such refuse matter as usually goes into these receptacles is a measure of economy is a grave error. The infinitesimal saving is vastly more than balanced by the enormous waste incurred in the injury to health. The best method of disposing of these waste substances is consumption in the kitchen or furnace fire. The objection some urge, that the odor of burning vegetable trimmings, scraps of meat, etc., is offensive, is without force, since the gases produced by the consumption of coal or wood are vastly more poisonous in character than are the odors objected to; and if the draught of the stove is sufficient to carry away these dangerous gases, it is able to dispose of the odors as well. Our earnest advice is to burn the garbage, and the garbage-box also.

Rations of a Life-Time.—How much do you suppose a person eats in a year? Did you ever figure it up to see? It is safe to say that the average man or woman eats more than a half-ton, on an average, every year of his life-time.

"A 'cosmopolitan' writer asserts that each man who attains the age of threescore and ten, consumes, during the course of his life, twenty wagon-loads of food, solid and liquid. At four tons to the wagon, this would correspond to an average of about a hundred ounces of food per day, or about one hundred and twenty ounces per day during adult life, and about eighty ounces during infancy and youth.

"Most modern doctors agree in regarding one hundred and twenty ounces of food per day, corresponding to five or six half-pints of liquid food, as in excess of the real daily requirements of a healthy man or woman. Yet probably most of us take more than this, in one way or another, during the day. Dr. Lankester, from an extensive analysis of the dietary of soldiers, sailors, prisoners, and the better-paid classes of artisans and professional men in London, found the average daily quantity of solid and liquid food to be one hundred and forty-three ounces. Doubtless many take much less; but unquestionably many take much more than this. When some one mentioned before Sydney Smith that twenty wagon-loads of food were calculated for each man's allowance, he turned to Lord Durham, who, like himself, was corpulent (and not without sufficient reason), with the quaint remark, 'I think our wagons, Durham, must be four-horsed ones.'"

—Three hundred and fifty years ago, the English fashion was to dine at ten o'clock in the forenoon, and sup at four in the afternoon. A light lunch was taken soon after rising in the morning.

Dangers of Tea-Drinking.—Dr. Black, an English surgeon, has been investigating the ill effects of tea-drinking, with reference to the teeth. He states that the use of tea occasions inflammation of the teeth-sacs, which finally results in abscess of the root, causing the teeth to ache, and finally destroying the teeth. This physician writes as follows:—

"Some years since, when on duty at recruiting stations in the north of England, I took observation on the great amount of disease and loss of the teeth existing among the class of men offering themselves. It alone became a cause of the rejection of great numbers. As far as my inquiries went, I was led to trace it to the excessive tea-drinking indulged in by the working-classes in the manufacturing towns, and this went on all through the day, whether with food or not. In fact, instead of five-o'clock tea being the invention of the upper-classes, it was found to exist to an injurious extent in the working-classes long before that time."

Poisoning by Toilet Powder.— A Springfield, Ohio, paper reports that two young ladies of that city are suffering from lead-poisoning as the result of using toilet powder containing white lead. One of the young ladies is wasted to a skeleton, and has terrible spasms every half-hour. In both cases the fingers and arms are paralyzed; and if the patients do not die within a short time, they are certainly rendered helpless for life. Warnings of this sort are very frequently given to the public, yet the sale and use of these poisonous cosmetics continue as great as ever.

—Dr. Rutgers, of England, has been making a series of dietetic experiments in which he compared the effects of a mixed diet, consisting of meats, milk, butter, white bread, biscuits, potatoes, rice, sugar, oranges, tea, and wine to a vegetable diet consisting of the same articles with the omission of meat, and the addition of Liebig's Extract of Meat (which contains no albumen), gray and green peas, and small white beans. He reported as the result, that he found a vegetable diet wholly capable of maintaining the strength of the body, and that vegetable albumen was equivalent, weight for weight, to animal albumen. Such experiments are interesting, but at this age of the world, are not really necessary, as the question of the capability of vegetable food to sustain life, even in its highest vigor, was settled so long ago as the time of Pythagoras, who, with his followers, was a radical vegetarian. Indeed, we may say that this question was experimentally settled by Adam and his immediate descendants, who proved that long and vigorous life may be maintained upon a diet from which animal food is excluded.

—The following short stanza, from the pen of the poet Coleridge, will apply with equal force to many other cities besides Cologne, notwithstanding which, multitudes of cities great and small, located along such rivers as the Ohio and the Mississippi, take their drinking-water from the same source into which their sewage and that of other cities is emptied:—

"The river Rhine, as is well known,
Washes the city of Cologne;
But, O, let gods and powers divine,
Tell what shall wash the river Rhine?"

—When the Congressional Committee were investigating the lard business last spring, the disclosures respecting adulteration, the use of diseased hogs, and other disgusting facts were so numerous and revolting, that the Committee were appealed to by telegrams from pork-dealers of all parts of the country, begging them to abandon the investigation, as it was working great mischief to the business.

—A traveler in Norway states that in that country, when a horse is fed on dry hay, a bucket of water is placed beside his food, and the horse now and then takes a sip of water when he eats, not huge draughts, but small sips to moisten his mouth, and enough to soften the bit of food. It is claimed that horses thus fed are healthier than those who are fed otherwise.

TAKE CARE OF THE SKIN.

We should remember that the skin is not only a covering for the body, but a most important depurating surface as well; that is, it serves a very important part in the work of carrying out of the body certain impurities of a very poisonous character. When the skin ceases to act, serious symptoms soon make their appearance. Experiments have been made with animals, in which the varnishing of the skin resulted in producing death in a few hours. If frequent bathing is neglected, especially in summer-time, when a large amount of poisonous matter is eliminated through the skin, this very important eliminative organ becomes clogged, or rather, so covered over with impurities that its work is necessarily interferred with. A daily, or at least a tri weekly, bath will be found to add much to the comfort, as well as to the cleanliness and health of the person.

The skin also breathes. A dirty skin necessarily breathes bad air, and unquestionably absorbs back into the system impurities which are allowed to accumulate upon it. If it is not possible to take a full bath, or a bath of soap and water, the next best thing to do is to use a wet towel. With a little ammonia added to the water from which the towel is wrung, a very refreshing bath may be obtained with a half-pint of water and two towels. The use of a flesh-brush and exposure of the body to the air, though not the equivalants of a good bath, are certainly excellent means of keeping the skin in health.

DRUGS FOR SLEEPLESSNESS.

Probably the majority of people are not aware that sleep produced by medicines is by no means a substitute for natural sleep. We are glad to find the following paragraphs from the eminent physician, Dr. Hutchinson, in a recent number of a popular journal :—

"I have recently met with several cases of insomnia due to over-taxation of the American nervous system, and have been requested to prescribe some drug that should be effective to produce sleep, and be, at the same time, harmless.

"No such drug exists! There is not one medicine capable of quieting to sleep voluntary life that has been working ten hours at high pressure, except it be more or less poisonous. Consumption of chloral, bromide in some form, or opium, has increased in this country to an incredible extent; it is still growing, and a large number of Americans go to bed every night more or less under the influence of poison. Sleep thus obtained is not restful nor restorative, and nature sternly exacts her penalties for violated law, more severe in these cases than in most others.

"Digestion suffers first; one is rarely hungry for breakfast, and loss of morning appetite is a certain sign of ill health. Increasing

nervousness follows, until days become burdens, and poisoned nights are the only comfortable parts of life."

The Aeration of Milk. — Expert dairymen have long known that cheese and butter are much improved by the aeration of milk, and that the cream keeps very much longer when thus treated, as the result of which a larger proportion of cream is obtained. The milk may be aerated by simply pouring it from one vessel to another through a strainer which will allow the milk to fall in fine streams, repeating this operation several times.

A better method is to drive from the milk, by means of a pressure blower, the currents of air, which, in bubbling up through the vessel containing the milk, carry away both heat and animal odors, which are present in the milk as it comes from the cow. A dairyman experimented some time since with this method of treating milk, for the purpose of determining the effectiveness of the method. He found that the odor of turnips, onions, and other strong-smelling vegetables, was wholly removed from the milk by aeration, after the cows from whom the milk was obtained had been fed on turnips or onions for several days previous. We are employing, for this purpose, an excellent aerator, exhibited in the advertising columns of the present issue, and believe it is the most satisfactory device ever invented for this purpose.

Tyrotoxicon.—Weary housekeepers should remember that now is the season when the tyrotoxicon germ is abroad in the land, and making itself severely felt in such maladies as cholera infantum, cholera morbus, summer diarrhea, poisoning from ice-cream, stale milk, cheese, and other unwholesome foods. To escape the ravages of this deadly enemy of health, one should avoid suspicious articles. Ice-cream is unwholesome always, as is stale milk. To ensure safety, milk should be cooled as quickly as possible after milking, and an additional precaution should be taken; namely, aeration of the milk, by blowing through it a quantity of air.

Pantries, cupboards, and all places where foods are kept, should be scrupulously clean. Any odor of mustiness, decay, or sourness should be considered as indicative of the necessity of a thorough clearing out, cleaning up, and disinfecting. When mold gets into a pantry, the only way to get rid of the fungus is to remove from the room everything which it contains, thoroughly scrub and whitewash the walls, and fumigate by burning sulphur in proportion of three pounds to each one thousand cubic feet of air.

A New Source of Typhoid Fever.—Some time ago three children in a clergyman's family were taken sick with typhoid fever. A short time before, the family cat had been sick for a number of days, and was carefully nursed by the children. The symptoms of the disease resembled those of typhoid fever. The attending physician believed this to be the cause of the disease in the children, as no other source was known.

Old Coins a Cause of Disease.—Notwithstanding the fact that money is frequently a very necessary aid to the recovery of health, it sometimes becomes a serious cause of disease. Generally, however, this is when the money is misapplied. This is particularly true of coins. How common it is to see a person who is engaged in making change, hold one or more coins in his mouth while his hands are being employed in hunting up the desired fraction! When one stops to consider the special opportunities which coins have for collecting disease germs, the impropriety of this practice is at once apparent. There is no doubt that various forms of skin disease, to say nothing of such serious maladies as scarlet fever and other contagious diseases, are often communicated in this way; and the category of maladies which may be thus contracted does not exclude some of the most intractable and loathsome to which human flesh is heir. Experienced bank-tellers never put money in their mouths, nor moisten the fingers with the tongue; they always keep a moist sponge at hand for this purpose.

DRINKING AIR.

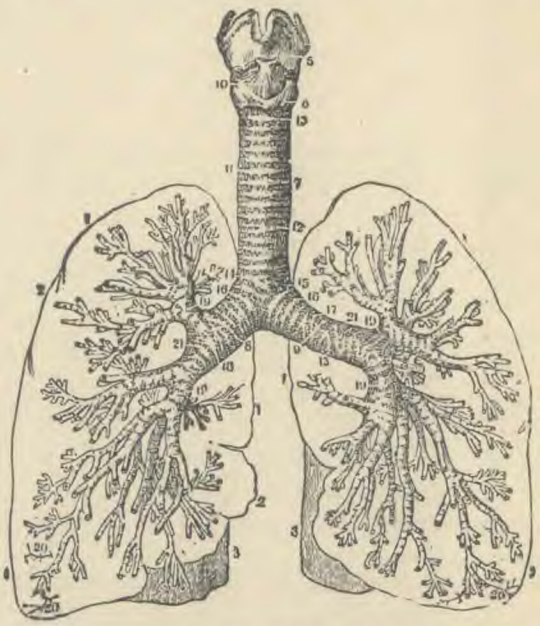
DID you ever see a frog drink?—Very likely not. Let us go in search of some place where the croakers abound. Here we are, and there is a big fellow sitting

on the bank. Now he goes, splash! into the water, and away down out of sight in the mud. Never mind, we will sit down and rest quietly; pretty soon we shall see him coming up to the surface again, to get a drink. There he comes now. As he gets almost to the surface of the water, he lets out of his mouth three or four big bubbles of air. He comes slowly to the top, and protrudes above the water the mere tip of his nose, in which we shall see, by looking closely, two little holes scarcely larger than a pin.

Now notice his broad throat. We shall see that it moves up and down, as though he were drinking. In fact, he is drinking, not water, but air. The frog lives in such damp places that he probably never gets thirsty, and so does not have to drink water; but air he must drink or die.

If some cruel fellow should catch that frog, and cut off his hind legs to eat, you might dissect his body, and in doing so, you would find inside of it two pretty good-sized air-bags, connected with the frog's mouth by a little tube. Before the frog goes under water, he swallows air sufficient to fill these bags; then, after being under water awhile, he comes up to exchange it for a fresh supply.

We have in *our* bodies air-bags, called lungs, similar to those of the frog, only much more complicated in structure. A frog is obliged to swallow air because he has no ribs; but we are enabled, by



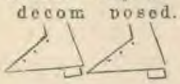
Bronchial Tubes and Air-Cells.

the arrangement of the ribs forming the chest, to expand the lungs, and thus suck in the air through the mouth or nose. A frog needs to exchange the air in its lungs only once in ten or fifteen minutes, and may, under some circumstances, go without breathing for a much longer time. But our lungs require

that the air which they contain should be changed eighteen or twenty times a minute when we are quiet, and twice as fast when we run, or engage in any violent exercise.

The use of the lungs is to remove certain impurities from the blood. To facilitate this work, they are lined with a delicate membrane, which, if spread out, would cover a surface of more than two thousand square feet, or about eighty square rods. Underneath this membrane, an amount of blood equal to the entire quantity contained in the body, passes every minute, for purification, giving off certain poisonous elements, and taking up the life-giving oxygen, which it carries to all the tissues, thus giving them life and activity.

This is the puny youth who smokes the deadly cigarette which chokes those near him with its poisoned fumes and fast and sure his life consumes. With fingers reeking with its stain, with stunted form and weakened brain and pallid face this wretched slave goes gaily to his early grave without will power to release himself from dangers that increase. Poor little fool! He may not know that if to manhood he would grow he, at his present age, needs all the strength he wastes by vices small to pull him thro' the evil traps that tempt and ruin growing chaps and that the worst that him besets is opium loaded cigarettes which paralyse his heart and brain and leave him dead or else insane. Youth! be a man with robust health and manhoods vigor, power and wealth. Don't be a shriveled stunted freak with mind and body dwarfed and weak from smoking cigarettes composed of rottens craps all decomposed.



A TALK TO YOUNG PEOPLE ABOUT HYGIENE.

BY DR. PECANT.

Translated from the French by Addie S. Bowen.

You have learned to read, to write, to reckon; this will be useful to you all the days of your life. But there is something more important than this; it is to learn how to preserve the health. Do not forget that it is better to care for your health than for your maladies.

You say to yourself: "There is but one way to remain well; and that is not to get sick, which does not depend upon us. Health and sickness come and go, and no one knows why nor how." This is what you think, and you are half right, but only half. One cannot always avoid becoming ill, but there are evils that can be avoided, if one knows how to do it.

You remember the consternation of our little village when, a year since, Jean Claude and his wife suddenly died from having eaten poisonous mushrooms. If they had known how to discern bad mushrooms from good ones, those good people might still be among us. And your comrade Bernard, why is he not in his place among you? You know very well. The other day he became heated by running; he was in a dripping perspiration, when the idea came to him to quench his thirst at the spring in the forest of the Ormes. He had scarcely taken a few swallows of this icy cold water, when he turned pale, and began to stagger. He was taken with a chill, and for two long weeks has been in bed, sick with inflammation of the lungs. If poor Bernard had known how dangerous it is to drink very cold water when the body is perspiring, he would not be ill, and could play to-day with you.

Last summer many persons in the village came down, one after another, with small-pox. You know it, too well, William, since your little sister died of it, and you yourself will carry its indelible marks all your life. Where did this malady come from? I will tell you. Madame Moreau, the grocer's wife went to get it—without knowing it, to be sure—in visiting at the hospital one of her relatives who had the disease. Now if good Mme. Moreau had known to what an extent small-pox is contagious, she would not have gone in the hospital, or she would have taken precautions, and William's sister would not have died.

Many years before your birth, there was, where are seen to-day the beautiful fields of Priche, only a vast marsh, where nothing grew but flags. But the flags were only half the evil: fevers sprang up also, for in some of the houses in the vicinity one was always sure to find some one feverish, shaking, thin, and yellow. This continued until the proprietor conceived the idea of draining the marsh. From that time there were no more fevers. The gain was twofold,—the farmer gained magnificent meadows, and

the village gained health. Had they known sooner that swamps breed fevers, what misery might have been spared by digging some canals and ditches!

You remember Father Baissard, the old road laborer, who was always intoxicated; and that the boys had the detestable habit of chasing him about, and shouting after him. He went away to the hospital, and what a frightful death! Because of much drinking, a trembling attacked him, and it never left him. His hands could no longer hold his tools, his limbs refused their service. Occasionally a terrible crisis would come. Then he would jerk and shake, scream and stamp, and see most hideous sights. A last attack, worse than all before it, carried him off. This lamentable end he might have avoided, if he had only stopped drinking.

To know what are wholesome foods; to know that one must not drink very cold water when in a perspiration; that he must take certain precautions against contagious diseases; to know how needful is sobriety, — all these belong to the science called hygiene.

Question Box.

[☞ All questions must be accompanied by the full name and address of the writer, as it is often necessary to address by letter, the person asking the question.]

Parched Corn. — S. C. P., Michigan, inquires whether a distinction is made between parched and popped corn.

Ans. Yes; parched corn is corn which has been subjected to a moderate heat until the outer envelop is cracked open, and the interior kernel is slightly browned, so that the starch is converted into dextrine and dextrose.

Intestinal Dyspepsia.—W. A. R., Massachusetts, inquires, "What are the usual symptoms of intestinal dyspepsia?"

Ans. The most common symptoms of intestinal dyspepsia are flatulence, bloating of the bowels, black, fetid, sour, or ragged stools, soreness of the bowels, and palpitation of the abdominal aorta. In some cases the local symptoms are so slight as to be scarcely noticeable, while the patient suffers a variety of symptoms; such as, mental confusion, depression, drowsiness after meals, sleeplessness at night, etc.

Climate for Nasal Catarrh—Cold or Hot Water. —T. H. G., New Zealand, inquires:—

"1. What forms of nasal catarrh are benefited by a high dry climate, such as Colorado?

"2. If, for drink early in the morning, a person relishes cold water much more than hot, will it not do him just as much good?"

Ans. 1. Catarrh in the first and second stages is sometimes benefited by a dry climate, provided the temperature is pretty uniform. Colorado, however, has a notoriously bad climate for catarrhal subjects. The rapid changes in temperature which frequently occur are a most potent cause of acute catarrhs, by which the disease is maintained and aggravated. Arizona and New Mexico are better. Cases in which there is a very abundant discharge are likely to be benefited by a residence in a dry, uniform climate.

2. Persons who have an ordinarily good digestion may drink cold water before breakfast in preference to hot water. Cold water taken before breakfast is a better means of stimulating inactive bowels than hot water, in cases where the stomach is not too weak to bear cold water. Cold water should be of ordinary temperature; that is, not more than ten or fifteen degrees lower than that of the air in summer-time. Ice-water is not to be recommended.

Abnormal Growth of Hair.—A Chicago lady writes that within two months quite a growth of hair has appeared all over her face, even including her forehead, and wishes to know some method by which it can be removed.

Ans. Various methods have been recommended for the removal of abnormal growths of hair, but without exception they are of no more than temporary service. The only radical and effective measure is the removal of each individual hair by the application of electricity to the root of the hair. A galvanic current of proper strength is applied to the root of each hair, by means of a fine needle, or brooch, passed down along the side of the hair to the root. The process is a painful one, and usually leaves slight scars upon the face. It is also very tedious, usually requiring many weeks of treatment to accomplish the thorough removal of every hair.

Drinking.—B. C. M., Massachusetts, asks: "Ought one to drink water between meals, either cold or hot, if not thirsty?"

Ans. Water should be taken chiefly at other times than at meals. The purpose of drinking is not to wash down the food into the stomach, but to supply liquid nourishment. Next to air, water is the most important of all foods. It is needed to dissolve the solids which are received as foods, to keep the blood in a proper state of fluidity, to dissolve and carry out of the body waste particles, and to cool the body by evaporation on the surface. A considerable amount of water is required for this purpose. We are inclined to the opinion that the majority of people drink too little. Persons whose systems have become clogged by a gross diet, or who have chronic inactivity of the liver or bowels, should use water freely, even if not thirsty, for the purpose of aiding the weakened organs to do their duty. A glass of

cold water taken half an hour before breakfast is an excellent means of relieving inactivity of the bowels. Two glasses of hot water taken an hour before dinner serves an excellent purpose in stimulating the digestive processes, and preparing the stomach for the reception of food.

SEVERAL of our subscribers have asked for the formula for Listerine. We cannot give the formula for Listerine, but have found the following formula to answer as well for the same purpose:—

Menthol Cryst . . .	dr. 1
Boro Glyceride	oz. 1
Tr Benzoin	oz. 3
Oil Wintergreen . . .	dr. ½
Sat. Sol. Boracic Acid . .	qs. O 1.

Literary Notices.

JUST as we are going to press, our attention has been called to the advance sheets of a new work on gymnastics entitled, THE GYMNASIUM. The work is published by Drs. O. G. Place and G. A. Hare. It is finely illustrated with one hundred and twenty engravings, and comprises instruction in calisthenic exercises with iron and wooden dumb-bells, Indian clubs and wands, directions for a home gymnasium, etc. A valuable feature of the work, which should not be overlooked, is thirty pages of original music composed especially for the work, by Prof. Kinkel, of Louisville, Kentucky, an eminent composer, and which is admirably adapted to the exercises. This part alone is well worth the price of the book. The work embodies substantially the various series of exercises employed in the Sanitarium gymnasium, in which both the authors have had a large experience, as well as abundant opportunity to test and organize the exercises recommended and illustrated. This work will undoubtedly meet a want which has long been felt by teachers and others interested in physical culture.

Bound in cloth. Price, $1.75. Orders should be sent to O. G. PLACE, M. D., Battle Creek, Michigan.

THE *Woman's World* for September, is a most attractive number of this pleasing magazine. The frontispiece is a portrait of the Empress Josephine, after the original by Gerard, which accompanies a sketch of this unfortunate, but always interesting, woman. "An Old-Fashioned Irish Town" is a paper devoted to a description of Yonghal, once a prosperous sea-port, but now noted chiefly for its artistic potteries and its traditions. "Le Monde ou l'on Dine" is a vivacious comparison of cooking in England and France. The second and concluding part of Mathilde Blind's account of that singularly gifted young Russian painter, the late Marie Bashkirtseff, also an article on "Women in Germany," which is followed by a lively account of Vassar College, giving pictures of its exterior and some of its cosy interiors, are among the articles of interest. CASSELL & Co., New York. 35 cents a number; $3.50 a year, in advance.

"ELEANOR KIRK" (Mrs. Ames, of Brooklyn), a veteran of the press, who has done good work for many years in almost every first-class literary and journalistic medium in the country (and is this month represented in the *Record*), has prepared a book entitled, "Periodicals that Pay Contributors,"—meaning, of course, pay in solid cash,—by preventing the waste of time and money and labor constantly incurred by literary workers who have to send out their wares "blind." Its usefulness to this class can scarcely be overestimated, and Mrs. Ames's exhaustive knowledge and acute judgment may be relied on as infallible. The small sum it costs ($1) will be saved many times over by the newer members of the craft, and even by most of the older.

THE *Atlantic Monthly* for September, opens with a story entitled "Passe Rose." "A Week in Wales," "Boston Mobs before the Revolution," "First Year of the Continental Congress," "Boston Painters and Paintings," "A Library of American Literature," "Mrs. Custer's Army Life," with one of Mrs. Wyman's very interesting sketches of "Factory Life," make the present issue a most valuable and entertaining number. HOUGHTON, MIFFLIN & Co., Boston, Massachusetts.

"THE NEW ABOLITIONISTS: the International Federation for the Abolition of the State Regulation of Vice," a paper read by Mrs. Anna Rice Powell, at the Social Purity session of the International Council of Women, which has just been published in pamphlet form, twelve pages, is a deeply interesting sketch of a great international movement for the abolition of State-sanctioned vice, and for the promotion of social purity. It is a timely, valuable contribution to social purity literature, and should be widely circulated. Price, by mail, post-paid, 10 cents; per hundred, $3.00. Address THE PHILANTHROPIST, P. O. Box 2554, New York.

THE table of contents of the September issue of *St. Nicholas* offers the young people a very tempting array of topics, among which may be noted some stories about "The California Lion," "What Dora Did," "A True Story of a Dakota Blizzard," "The Water-Ousel's Address;" "How Some Birds are Cared For." "What to Do with Old Corks," all beautifully illustrated, besides many other interesting stories and poems adapted to young minds.

THE CENTURY CO., Union Square, New York.

SEASONABLE BILLS OF FARE.

DINNER NO. 1.

Green-Corn Soup,

New Potatoes, Baked Cabbage,

Summer Succotash,

Whole-Wheat with Cream,

Graham Bread, Cream Rolls,

Blackberries, Cantaloupe,

Cup Custard.

DINNER NO. 2.

"Left-Over" Soup,

Cracked Potatoes, Cauliflower with Tomato Sauce

Boiled Beets,

Thirded Bread, Whole-Wheat Puffs,

Pearl Barley,

Peach Tart,* Grapes, Water-melon.

Green-Corn Soup.—Take six ears of green-corn, or enough to make one pint of raw pulp. That which is a little old for the table is best for soup, as the pulp is thick rather than milky. With a very sharp knife cut a very thin shaving from each row of kernels, and then with the back of the knife scrape out the pulp, taking care to leave the hulls on the cob. Boil the cobs in sufficient cold water to cover them, for a half-hour. Strain the liquor, of which there should be about a pint, and reheat. When boiling again, add the pulp, cook fifteen minutes, then add a pint of rich milk, part cream if desired, which has been heated to boiling; a teaspoonful of sugar, and salt if desired, may also be added. Thicken the whole with a teaspoonful of flour rubbed smooth in a very little cold milk.

*Prepare the same as Apple Tart, recipe for which was given in the February number.

Baked Cabbage.—Select a small, perfect head of cabbage. Remove the outside leaves, cut into quarters, clean thoroughly, and cook in boiling water till tender. Drain, cut or chop fine, cover with a white sauce, sprinkle with bread crumbs, and brown in the oven.

"Left-Over" Soup.—Take a pint of baked beans left over from yesterday's dinner, add to them a quart of water and a slice of onion. Boil to a pulp, rub through a colander, season with a little cream, and salt if desired, reheat and serve.

Cracked Potatoes.—Prepare and boil new potatoes; and when ready to serve, crack each by pressing lightly upon it with the back of a spoon, lay them in a hot dish, salt to taste, and pour over them a cupful of hot, thin cream or rich milk.

Summer Succotash.—This seasonable dish may be prepared by cooking separately, until tender, equal quantities of shelled Lima beans and corn cut from the cob, and then mixing them; or, white beans may be cooked until nearly soft, and an equal quantity of shaved corn added, and the whole cooked fifteen or twenty minutes longer. Season with cream, and salt if desired.

Cauliflower with Tomato Sauce.—Boil or steam well-washed cauliflower until tender. In another dish, prepare a sauce, by heating a pint of strained stewed tomatoes to boiling, and thickening with a tablespoonful of flour. Salt to taste, and pour over the cauliflower.

Thirded Bread.—Mix together with milk, which has been scalded and cooled, one cup each of white flour, rye flour or sifted rye meal, and yellow corn meal, one half-cup of yeast, three tablespoonfuls of sugar, and a little salt if desired. Only enough milk should be used to make the loaf sufficiently thick to shape. Allow it to rise until well cracked on the top. Put into brick-shaped tins, and when well risen, bake for one hour.

A MODEL KITCHEN.

A MODEL kitchen should be spacious, yet not too large. It should have ample room for tables, chairs, range, sink, and dresser, so as to allow free movement, yet not large enough to necessitate too many steps to and from one place to another. A suitable size is 15x17. There are thousands of kitchens, especially in flats, which are mere cubby holes, where the unfortunate servants hardly have room to move.

In old-fashioned houses the kitchens are far too large, more like barns than rooms, and the servants necessarily walk many miles during the day.

A detached kitchen, such as is common in the South, is a good thing. In country houses they should be placed in an extension or wing, with a passage way and double doors to shut off the rest of the house. A square kitchen is better than an oblong one. If the latter has windows at the end angles, it is an advantage. The windows in all cases should extend to the top of the ceiling, and should open from the top.

There is an advantage in having windows on the sides of the room, for the sake of obtaining, as a purifier, a flash or sweep of air throughout its entire area.

Lack of table room is a common drawback. With a swinging table there need be no trouble, on this score, of any crowding or confusion in preparing or serving meals. Kitchen furniture should be of light material and light color, so as to be easily cleaned, and not cumbersome. Open dressers, with sliding, not hinged, glass doors, are better than closets, which waste space, are hard to keep clean, and soon get "cluttered up." Dark pantries are an abomination. Every store-room closet should have direct light and a ground glass door. It is ridiculous to observe how close, dingy, and unventilated are most places of this kind.

Foul water-closets for domestics are constantly found close to kitchens in the finest houses, without any means of ventilation, and where they are sure to cause an offense. The best location for such fixtures is out-of-doors, where they can have abundant air, and yet be easily accessible.

* * * * * *

The old-fashioned wooden sink for kitchens has had its day, and should be abolished. It is the nesting place of insects, and when saturated with water and redolent with odors, it is an unsightly object.

Planished or tinned copper is often used for sinks, with wooden border or shelf. The tin soon wears off, leaving the copper bare, and the wood border is subject to warping and cracking, from its frequent soaking in warm water spattered upon it, and is, therefore, objected to as difficult to keep clean.

Marble slabs are complained of as borders for sinks, on the ground of breakage of china. If only a slab sink is wanted, in which dishes can be washed, it is best to make it of earthen-ware, which is easily kept clean. The ordinary glazed ware is made in several forms suitable for the purpose.

Oil stoves and gas stoves have of late been largely introduced, and have been found to be convenient and economical, especially with small families, and in hot weather when a coal fire would be unnecessary and uncomfortable. One great objection to all such appliances is their lack of ventilation. In summer time, when doors and windows are open, they give little trouble, but in cold weather, especially in small, close rooms, they vitiate the atmosphere to a serious extent, with the products of combustion. To remove these impurities, a flue should, therefore, always be provided, which should be connected with a chimney, as a matter of ordinary prudence.—*Chas. F. Wingate.*

How to Lay Carpets.—Carpets are often badly laid down, either from ignorance or carelessness. The carpet should be laid down as it is folded, the way the widths are to run; it must be unfolded by degrees, not dragged open any way. When the carpet is opened out, let the center width be laid out perfectly straight from one end to the other, and tacks put at each end to keep it in place, and all the other widths laid straight according to the first. When one of the widths is straight and thoroughly stretched, let it be tacked down at regular intervals. When the first end has been firmly fastened down, let one side, at right angles to the first nailed, be tacked, taking care to keep it "taut," as the sailor says. When the side and end at right angles have been fastened down, the corresponding side and end are easily disposed of; and the thing is done.

—The ability to labor, physically or mentally, is largely dependent upon the perfect assimilation of one's food. And the amount of work that can be accomplished without detriment to health by a person who is properly fed, is almost limitless. A large proportion of the haggard faces that are seen everywhere are the result of improper diet. And most of the deaths attributed to overwork are the outcome of bad cookery. People who eat nutritious, well-cooked food seldom die of overwork. There is not a single well-attested instance of the kind, and the sooner we get rid of the wretched delusion about men and women being killed by work, the better it will be for us all. When we get down to bottom facts, and ascribe their death to the true cause—badly prepared food—there may be hope of amendment.—*The Kitchen.*

—Peas should be washed while in the pod, and not after they are shelled. It is really the pod, not the pea, which gets the soiling. The pods can be easily washed, and thereby the full flavor of the pea is better preserved.

Publisher's Page.

☞ The Rural Health Retreat at St. Helena, California, is reported in a very flourishing condition. All its rooms, including those afforded by the new building, are occupied.

☞ The external appearance of the main building of the Sanitarium has been improved by the removal of the old wooden steps at the front entrance, and the substitution of elegant cut-stone steps.

☞ Daniel Thompson, agent for GOOD HEALTH in Brooklyn, New York, is meeting with excellent success in introducing the journal. He writes, "GOOD HEALTH is doing a good deal for me. It teaches me what to eat, and pays the bills."

☞ It is now expected that the new Hospital will be ready for dedication by November 1st, at which time appropriate dedication exercises will be held. The graduating exercises of the Nurses' Training-School and the School of Domestic Economy will be held at the same time.

☞ We feel very confident that the intelligent readers of GOOD HEALTH will enjoy reading the interesting article by Rev. Mr. Hallam, which appears in the present number. The Doctor was for more than twenty years a resident missionary in India, where he had an opportunity to study carefully the habits of this ancient people. We are glad to be able to promise for the future more contributions from the same source.

☞ Harper and Brothers, of New York City, have just issued the third edition of Dr. Kellogg's "First Book in Physiology" for schools. This edition has been carefully revised by the author, and a new chapter added. The work has met with general favor, and has been widely introduced into the public schools of the country. The author is revising the manuscript for the second book, which is loudly called for.

☞ The second large edition of "Sunbeams of Health and Temperance" is nearly exhausted. The publishers will soon be obliged to print a new edition. This work has become very popular, wherever it has been introduced, and sells well in the hands of enterprising agents. It proves, in fact, a remarkably easy book to sell, as it is wholly unique in character, covering a ground which has never been canvassed in a single volume. Agents are wanted for this work in all parts of the United States and Canada. Address, GOOD HEALTH PUBLISHING CO., *Battle Creek, Michigan.*

☞ We again call attention to the Sanitarium Training-School for Nurses, an educational institution which, although established but five years ago, has become very popular among those who are seeking a thorough and scientific training for the profession of nursing. Next to the medical and clerical profession, there is none more useful in human society than that of nursing. There are plenty of persons who offer their services as nurses, but scientific nurses are exceedingly scarce. Although there are a number of training-schools for nurses in active operation, the demand is far greater than the supply. Indeed, the public are only just beginning to find out the difference between a well-trained nurse and one who follows in the old rut of ignorance and custom. We know of no equally favorable opportunity for a young woman to acquire the means of obtaining a good livelihood, in a useful and honorable profession, as that offered by the Sanitarium Training-School for Nurses. No money is required. The student, if well-recommended and possessing the qualifications required, is allowed to pay her way in work the first year. Board, washing, and books are furnished free. The second year, wages are paid according to the qualification of the student. At the end of the second year, a diploma is granted, which will enable the graduate to command the very best wages paid to nurses anywhere. A new course of lectures will begin November 1st. The prospect is that the class then organized will be larger than any in the past history of the school.

☞ We are glad to hear through a letter received just as we are going to press, dated July 18th, that our friend, a former contributor to GOOD HEALTH, Eld. C. L. Boyd, is meeting with good success in his mission to South Africa. Eld. Boyd is located at Cape Colony, where great success is attending the introduction of the health and temperance literature issued at this office. We have already nearly half a thousand subscribers in this remote corner of the earth, and the number is constantly increasing.

☞ We are pleased to be able to present to our readers this month the long-promised article by Dr. Norman Kerr, an eminent physician of London, England, whose name is known the world over as an able advocate of total abstinence. Few men in England or in this country have done more to advance the cause of scientific and rational temperance reform than Dr. Kerr. He has also been instrumental in founding the Dalrymple Home for Inebriates, which we believe is the first establishment of the kind in England. The occasional contributions with which the Doctor has promised to favor us in the future, we are sure will be highly appreciated by our readers.

☞ The publishers are pleased to be able to announce that they have arranged with Dr. Felix L. Oswald for a series of articles on the "Drink Problem," the first of which will appear in the October number. The wide reputation which Dr. Oswald has attained, as a writer upon topics relating to health and temperance, through his contributions to the *Popular Science Monthly* and other writings, we are confident will secure for the promised series of articles the attention which they deserve. Few writers wield so vigorous a pen, or command so elegant a diction as Dr. Oswald; and the publishers congratulate themselves upon having secured his services as a contributor to this magazine.

CHEAP EXCURSIONS TO CHICAGO.

A DEMOCRATIC Ratification Meeting is to be held at Cheltenham Beach, Chicago, Saturday, August 25th.

Excursion tickets at the low rate of one fare for the round trip will be sold by the Chicago & Grand Trunk R. R. at all stations between Lansing and Chicago, for trains reaching Chicago Saturday morning, limited for return passage up to and including first train leaving Monday, August 27th.

The Hon. Allen G. Thurman, Democratic nominee for Vice-President, and other distinguished gentlemen have announced that they will be present.

HARVEST EXCURSIONS.

THE Chicago and Grand Trunk; Detroit, Grand Haven and Milwaukee; and the Toledo, Saginaw and Muskegon Railways announce that harvest-excursion tickets to principal points in the West, Southwest, and Northwest, which are located one hundred miles beyond Missouri River or St. Paul, will be on sale at all principal stations on their lines, at the low rate of one fare for the round trip. Dates for sale of tickets are Aug. 21st, Sept. 11th and 25th, Oct. 9th and 23d, limited for return 30 days from date of issue.

Persons intending a trip to the West and return, should at once communicate with the nearest agent of the above companies.

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Michigan City.....†	7.23	11.03	4.54	1.03	11.27	6.57	.....
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STATIONS.	A. M	A. M.	P. M.	P. M	P. M.	P. M.	A. M
Detroit.....††	7.30	9.1	d 1.20	d10 15	d 8.00	4.00	.....
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.....	am	am	pm	pm	Dep. Arr.	pm	am	a m	.....	am
.....	5.55	7.15	8. 5	4.10	.....Port Huron.....	10.20	1.15	4.35	.....	10.50
.....	7.28	8.31	9.34	5.40	.....Lapeer.....	8.42	11.57	6 17	.....	9.17
.....	8.05	9.40	10.15	6.20	.....Flint.....	7.55	11.27	5 40	.....	8.40
.....	8.48	9.35	10.58	7.20	.....Durand.....	7 05	10.58	5 03	.....	8.05
.....	10.00	11.30	11.53	8.26	.....Lansing.....	5.20	10.07	4.00	.....	6.45
.....	10.37	11 00	12.25	9.03	.....Charlotte.....	4.42	9.37	3.25	.....	6.15
a m	11.30	11.45	1.15	10.05	A)) BATTLE CREEK ((D	3.45	8.55	2.35	.....	5.30
6.30	am	12.05	1.20	pm	D))	3.40	8.50	2.30	.....	am
7.15	.....	12.50	2 21	———	.....Vicksburg.....	2.52	8.11	1.44	.....	———
7.25	———	1.00	2.32	Vat.	.....Schoolcraft.....	2.40	.....	1.33	.....	Vat.
8.13	Sun.	1.50	3.19	Acc.	.....Cassopolis.....	1.50	7.26	12.45	.....	Acc.
8.55	Pass.	2.30	4.07	———	.....South Bend.....	1.05	6.50	12.00	.....	———
10.05	am	3.43	5.30	am	.....Haskell's.....	11.54	.....	.....	pm	pm
10.20	7.20	4.00	5.50	6.55	.....Valparaiso.....	11.40	5.30	10.30	3.40	7.00
12.40	10.00	6.25	8.10	9.45	.....Chicago.....	9.05	3.25	8.15	1.15	4.25
pm	am	pm	am	am	Arr. Dep.	am	pm	pm	pm	pm

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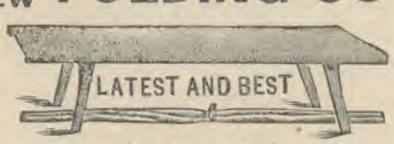

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The one shows the Cot when ready for use, the other when ready for transportation. It is light, simple, strong, durable, convenient, strongly braced in every direction, can be opened and closed within less than a minute and weighs only twelve pounds. Good for the lawn, sick-room, extra beds, excursions, and camping out; in short, is *NEEDED IN EVERY HOME.* First-class, covered with 8 oz. duck, only $1.50 each. Brown or striped duck, $1.60. Legs painted red, 15 cents extra. AGENTS WANTED EVERYWHERE. Good commission. Write for terms. Manufactured and sold by

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CRYSTAL SPRINGS,

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THIS delightful Resort offers unrivaled advantages to **Tourists** and **all classes of Invalids,** both for Winter and Summer. It is situated on the southwestern slope of Howell Mountain, 500 feet above and overlooking the noted and beautiful **Napa Valley,** and 2½ miles from St. Helena. This place is noted for its Pure Water, Dry Atmosphere, Clear and Balmy Sunshine, Even Temperature, Mild Breezes, and the absence of high winds.

THE RATIONAL TREATMENT

By all known remedial agents is employed in this Institution. With these natural and acquired advantages, pleasant and desirable surroundings, thorough and judicious treatment, and wholesome diet, most invalids who avail themselves of these agreeable facilities, rapidly recover. Patients have the care of a regularly graduated Physician of experience, who is assisted by well-trained and courteous gentleman and lady assistants.

All Invalids and Tourists may feel assured that they will be courteously received, and kindly cared for.

For Circulars and further particulars, address

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FOR a check for $20 we will print a ten-line advertisement in One Million issues of leading American Newspapers and complete the work within ten days. This is at the rate of only one-fifth of a cent a line, for 1,000 Circulation! The advertisement will appear in but a single issue of any paper, and consequently will be placed before One Million different newspaper purchasers; or FIVE MILLION READERS, if it is true, as is sometimes stated, that every newspaper is looked at by five persons on an average. Ten lines will accommodate about 70 words. Address with copy of Adv. and check, or send 30 cents for Book of 256 pages.
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We have just issued a new edition of our Book called "Newspaper Advertising." It has 256 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:—

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THIS INSTITUTION, one of the buildings of which is shown in the cut, **stands without a rival in the perfection and completeness of its appointments.**

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Turkish, Russian, Roman, Thermo-Electric, Electro-Vapor, Electro-Hydric, Electro-Chemical, Hot Air, Vapor, and Every Form of Water Bath; Electricity in Every Form; Swedish Movements—Manual and Mechanical, Massage, Pneumatic Treatment, Vacuum Treatment, Sun Baths. All other agents of known curative value employed.

A Lakeside Resort, Steamers, Sail Boats, Row Boats, Bathing, etc.

An Excellent Cold Weather Resort.

A Salubrious Summer Climate.

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