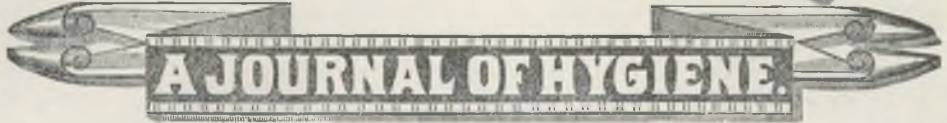


GOOD HEALTH.



MENS SANA IN CORPORE SANO.

VOL. 16.

BATTLE CREEK, MICH., SEPTEMBER, 1881.

NO. 9.



FIG. 1.—"BELL'S PARALYSIS."

THE HUMAN FACE IN HEALTH AND DISEASE.

[THIS month the readers of *GOOD HEALTH* are entertained with another portion of the article on *The Human Face*, from the *New York Medical Journal*. It is needless to

say that these articles are very interesting as well as suggestive.]

THE EYE.—This silent and instructive index of the whole man may be bright or dull, heavy or clear, half shut or unnaturally open, sunken or protruded, fixed or

oscillating, straight or distorted, staring or twinkling, fiery or lethargic, anxious or distressed; again, it may be watery or dry, of a pale blue, or its white turned to yellow.

The pupils may be contracted or widely dilated, insensible to or intollerant of light, oscillating or otherwise, unequal in size, or changed from their natural clearness of outline. The noble arch of the brow speaks its varied language in every face of suffering humanity. It may be overhanging or corrugated, raised or depressed; while the lid of the eye, an important part of this vault, exhibits alternations of puffiness or hollowness, of smoothness or unevenness, of darkness or paleness, of sallowness or brown discoloration, of white or purple. Lines intersect this region, and the varied tints are perpetually giving new color, new feature, new expression, by their shadows. If the frontal muscle acts in connection with the corrugator supercillii, an acute deflection upward is given to the inner part of the eyebrow, very different from the general action of the muscle, and decidedly expressive of debilitating pain, or of discontent, according to the prevailing cast of the rest of the countenance. An irregularity of the pupils of the two eyes indicates, as a rule, pressure upon nerve centers or upon the optic nerve itself. In adynamic fevers the eyes are heavy and extremely sluggish, and are, as a rule, partially covered by the drooping eyelid; while in certain forms of mania they are seldom motionless. This latter peculiarity is also often noticed in idiocy.

In the so-called "Bell's paralysis," due to failure of the facial nerve, the eyelids stand wide open and can not be voluntarily closed, since the orbicularis palpebrarum muscle is paralyzed. This condition may be further recognized, if unilateral, by a smoothness of the affected side, since the antagonistic muscles tend to draw the face toward the side opposite to the one in which the muscular movement is impaired; an inability to place the mouth in the position of whistling, since for this act the two sides of the face must act in

unison; loss of control of saliva, which dribbles from the corner of the mouth; and a tendency to accumulation of food in the cheek, since the buccinator muscle no longer acts.

In photophobia, the attempts to open the eye create resistance on the part of the patient, since the entrance of light causes pain; while, as death approaches, or in the state of coma, the eyes are usually open. In cardiac hypertrophy an unusual brilliancy of the eye is perceived, since the arterial system is overfilled from the additional power of the heart. A peculiar glistening stare exists during the course of scarlet fever, which is in marked contrast with the liquid, tender and watery eye of measles.

Abnormalities of the pupils may afford the practitioner material aid in diagnosis. The pupils are found to be dilated during attacks of dyspnoea and after excessive muscular exertion, in the latter stages of anæsthesia, and in cases of poisoning from belladonna and other drugs of similar action. A contracted state of the pupils exists during alcoholic excitement, in the early stages of anæsthesia from chloroform, and in poisoning by morphia and other preparations of opium, physostigmin, chloral, and some other drugs.

THE CHEEK.—The cheek may become the mirror of the soul. When the feelings are gay, it is drawn outward and upward; but when the mind is depressed or saddened, it is drawn obliquely downward. If these movements be carefully noted, it will be perceived that the moveable point of the cheek is situated in the immediate vicinity of the naso-labial groove; since the attachments of several of the small facial muscles at about this point, tend to draw the anterior part of the cheek outward from the line of this groove. It may be noticed, as a matter of interest, that when the mental impressions are slight and trivial, no traces of their effect upon the face are left upon the cheek; but when they are of a serious or prolonged character, deep and permanent grooves are formed, which are of interest to the physiognomist as an indication of the tem-

perament, and to the medical adviser as often of positive value in diagnosis. In the young child, the cheek, which is at nearly the same instant alternately moistened with a tear or decked with a smile, preserves in the healthy state the roundness which marks that happy age; but in the adult, the cheek, on the contrary, presents numerous lines and wrinkles, and this appearance becomes still more evident as old age approaches.

tive oxygenation of the blood, and occurs chiefly in diseases of the lungs, heart, and larynx; while pale lividity occurs in cases where the circulation of the surface is languid or imperfect. In painful affections of the abdominal organs, the upper lip is usually raised and stretched over the gums or teeth, so as to give a diagnostic expression to the countenance, which is considered by some as of great value. In anasarca of the face, the lips, eyes, and cheeks



FIG. 2.—FACE AFTER HÆMORRHAGE. (MODIFIED FROM CORPE.)

In the child, the bright rose tint, which accompanies exertion and frequently the hours of sleep, bespeaks health and general activity; but in adult age this coloring tends to disappear, and in old age the cheek often assumes a striated redness, which is due to an abnormal dilatation of the capillary vessels, especially the veins.

THE LIPS.—In sickness, if the angle of the mouth be depressed, pain and languor may be read; and when the corrugator supercillii muscle cooperates with the depressor muscles of the mouth, acute suffering is proclaimed.

Extreme pallor of the lips is observed in excessive hæmorrhage, in purpura, in chlorosis, etc.; deep lividity denotes a defec-

are most affected, since the subcutaneous cellular tissue in these regions admits of distension more readily than in those regions where it is not so loose.

SPECIAL TYPES OF FACE.—Many of the specific forms of disease have their special physiognomy. As examples of this fact, scrofulous children inherit either a velvety skin, dark-brown complexion, dark hair, dark brilliant eyes, and long lashes, with the lineaments of a face finely drawn and expressive; or a fair complexion, thick and swollen nose, broad chin, teeth irregular and developed late, inflammation of the Meibomian glands, scrofulous ophthalmia, eruptions of the head, nose, and lips, and enlarged cervical glands.

Hippocrates describes a characteristic expression, which has been called from him the "facies Hippocratica," in which the eyebrows are knitted, the eyes are hollow and sunken, the nose is very sharp, the ears are cold, thin, and contracted, with marked shrivelling of the lobules; the face is pale and of a greenish, livid, or leaden hue; and the skin about the forehead is tense, dry, and hard. This type of countenance is a most frequent indicator of impending death from chronic disease, or in an acute form of disease which has been unusually prolonged.

The "facies stupida" is distinguished by a dullness of expression, which is its chief characteristic. A peculiarity exists as regards the eyes, which are extremely dull, and resemble those seen in alcoholic stupor. This type of countenance is identical with the so-called "typhoid face," since it is most frequently met with either in connection with typhoid fever or with the typhoid condition associated with some other disease.

Another type of countenance to which attention is frequently drawn, is called the "pinched countenance." It can be produced artificially by exposure to cold, and is characterized by an apparent decrease in the size of the face, with a contracted and drawn expression of the features, and pallor or livid color of the skin. It is said to exist most frequently in the course of acute peritoneal inflammation.

In the long list of diseases which tend to shut off the supply of air to the lungs more or less suddenly, and in those accidents, such as choking, strangulation, smothering, drowning, etc., where the same effect is accomplished, the symptoms of apnoea are manifested in the face by flushing and turgidity, at first, and, later on, by a livid and purplish color. The veins of the neck become markedly swollen, and the eyes seem to protrude from their sockets. A loss of consciousness, and possibly convulsions, precedes death.

The countenance of extreme anæmia is seen in those cases where, from sudden or gradual hæmorrhage, the prognosis is rendered alarming. The phenomena which

attend this mode of dying are pallor of the face, with a peculiar leaden or clay-like hue, cold sweats, dimness of vision, dilated pupils, a slow, weak, irregular pulse, and speedy insensibility. With these symptoms are frequently conjoined nausea, restlessness, and tossing of the limbs, transient delirium; a breathing which is irregular, sighing, and, at last, gasping; and convulsions before the scene closes.

The countenance of chronic hydrocephalus is perhaps the most typical of any of the conditions to which the attention of the physician or surgeon is directed. In it, the frontal bone is tilted forward, so that the forehead, instead of slanting a little backward, rises perpendicularly, or even juts out at its upper part, and overhangs the brow. The parietal bones bulge, above, toward the sides; the occiput is pushed backward; and the head becomes long, broad, and deep, but flattened on the top. This, at least, is the most ordinary result.

Thoracic affections are all accompanied by more or less change in the color of the face; whereas the alteration in the natural hue of the features is so slight in abdominal diseases, that both the intellect and the complexion remain unaltered up to the final struggle, though the pinched and dragged features express the acute sufferings of the patient. In pneumonia the countenance is inanimate; the cheek of a dusky hue, with a tinge of red; the eyelid droops over the globe; the brow is overhanging; the lips are dry, herpetic, and of a faint claret color; the chest is comparatively motionless, but the abdomen exhibits evidences of activity; the skin is hot; and the respiratory acts are usually about double the normal number, while the pulse is markedly accelerated.

In emphysema, the face is not only dusky but anæmic; the eyes are wide open, as the patient gazes at you; the dusky redness of the lips bespeaks the lack of proper oxygenation of the blood; the neck is thrown backward, and the mouth is slightly open, while the cheek is puffed out during the expiratory act; the

distended nostril and the elevated brow stamp the case as one of dyspnoea; while the coldness of the skin shows that no acute inflammatory condition is present. If we see, in addition to these facial evidences of the disease, the deformity of the chest which has been termed the "barrel-shaped" thorax, the shrugged shoulders, and the absence of that expansive movement so well marked in normal respiration, auscultation and percussion can

with each respiratory act; the mouth will commonly stand partly open, while its angles will be drawn outward and upward; the upper lip will be elevated, so as to show the margins of the teeth; and the utterance of the patient will be monosyllabic, as the rapidity of breathing renders the utterance of long sentences a matter of extreme difficulty. When we add to these symptoms those of imperfect oxygenation of blood, as is met with in all con-



FIG. 3.—COUNTENANCE OF EMPHYSEMA. (MODIFIED FROM CORFEE.)

hardly make the diagnosis more positive.

There are certain facial conditions, which so clearly tell, to the student of physiognomy, of the existence of that most prominent sign of many pulmonary and cardiac diseases, dyspnoea, that it may be well to enumerate the alterations from the normal countenance which chiefly indicate this condition. In all cases where dyspnoea is present, the brows will usually be found to be raised; the eyes will be full, staring, and clear; the nostril will be dilated, and often it may be seen to move

conditions where the free entrance of air is in any way interfered with, we can better understand how the clear eye becomes stupid, as coma approaches, from the carbonic-acid poisoning, and the face cyanotic from the venous tinge of the blood.

(CONCLUDED NEXT NUMBER.)

—Who would not give a trifle to prevent what he would give a thousand worlds to cure?—*Young.*

—Many dishes bring many diseases.—*Pliny.*

SIMPLE THERAPEUTIC MEASURES.*

BY J. H. KELLOGG, M. D.

(CONTINUED.)

HEAT is a powerful vital stimulant. Any one who has ever watched through a microscope the evolutions of an amœba, and noticed the sudden quickening of its activity under the influence of an increase of temperature, can readily understand that the application of heat may be made a powerful means of quickening the protoplasmic activities of various vital organs. We have often observed the disappearance of uric acid crystals from the urine, after the thorough application of fomentations over the liver, and are thoroughly convinced that this is an excellent means of quickening the functions of this organ. A fomentation over the stomach is a most excellent means of relieving slow digestion, and when applied to the bowels, stimulates their activity. Heat applied over the heart, either moist or dry, stimulates the action of that organ in a very marked degree, while cold has the opposite effect. The universal application of heat, as the Turkish bath, is a powerful stimulant of all the vital functions, thus making this bath an alterative as well as a most excellent eliminative means.

By means of freezing, parts may be rendered wholly insensible to pain, so that slight surgical operations may be easily performed. When the freezing is long continued, the frozen parts may lose their vitality entirely, which will cause them to slough away. By this means, excrescences, as warts, wens, and polypi, fibrous and sebaceous tumors, and even malignant tumors, as cancer, may be successfully removed. Small cancers may sometimes be cured by repeated and long-continued freezing. Their growth may certainly be impeded by this means. A convenient mode of application in cancer of the breast is to suspend from the neck a rubber bag filled with pounded ice, allowing it to lie against the cancerous organ.

Freezing may be accomplished by ap-

plying a spray of ether, by means of an atomizer, or by a freezing mixture, composed of equal parts of powdered ice and salt, or two parts of snow to one of salt. Mix quickly, put into a gauze bag, and apply to the part to be frozen. In three to six minutes, the skin will become white and glistening, when the bag should be removed. Freezing should not be continued longer than six minutes at a time, as the tissues may be harmed, though, usually, no harm results from repeated freezing if proper care is used in thawing the frozen part. It should be kept immersed in cool water, or covered with cloths kept cool by frequent wetting with cold water, until the natural feeling is restored.

Felons may often be cured, especially when they first begin, by freezing two or three times. Lumbago and sciatica, as well as other forms of neuralgia, are sometimes almost instantly relieved by freezing of the skin immediately above the painful part. We have cured some obstinate cases of sciatica by this means, after other remedies had failed.

The value of sunlight in the maintenance and restoration of health, although well recognized, is seldom made of practical utility in the treatment of disease. The important relation of sunlight to health is shown in the effect produced upon plants as well as animals by depriving them of its influence. In caves, mines, and other places excluded from the light, plants do not grow, or at most they attain only a sickly development. The same is true of animals. In the deep valleys of the Alps in Switzerland, the sun shines only a few hours each day. In consequence, the inhabitants suffer terribly from scrofula and other diseases indicative of poor nutrition. The women, almost without exception, are deformed by huge goitres which hang pendant from their necks, unless suspended by a sling. A considerable portion of the males are idiots. Higher up, on the sides of the mountain, the inhabitants are remarkably hardy, and are well developed, physically and mentally. The only difference in their life is the greater amount of sunshine higher up the

* A lecture delivered by request before the Ann Arbor Medical and Surgical Society, in the amphitheater of the Medical Department of Michigan State University, February 28, 1881.

mountain side. When the poor unfortunates below are carried up the mountain, they rapidly improve.

The value of sunlight for the sick has been amply demonstrated by hospital experience, which shows a much larger percentage of recoveries in rooms exposed to the sun than in those excluded from its rays. That the sun has a powerful influence upon the skin is shown by the greater increase of pigment, referred to ordinarily as "tan," which is produced by a free exposure to the sun and air. This results from an increased activity of the cutaneous tissue.

The sun-bath, or insolation, consists of exposing either the whole or a part of the body, to the direct rays of the sun, or protected by a slight covering of thin white muslin. In taking the bath the head should be protected from the rays of the sun, as the effects upon the head are ordinarily so powerful as to excite unpleasant sensations. In warm weather the bath may be taken in an enclosed space, the top of which is open, admitting the sun in such a manner as to allow it to fall upon a person lying upon a bed or couch within it. Such an arrangement may be easily made of sheets of muslin in the back yard or upon the top of a flat-roofed house. Ordinarily, however, it is best to have a room constructed in the attic for the purpose, a window being placed in a roof having a south slope, in such a way as to make the sunlight admitted available for three or four hours during the middle of the day. Means should be provided for ventilation, as otherwise the heat within such a room may become too great for comfort, and so excessive as to interfere with the efficiency of the treatment. All the benefits to be derived from the use of sunlight can be obtained from ordinary glass. During the "blue glass mania" a few years ago, we made a number of experiments with blue glass, by which we were convinced that the only difference in the effects of different colored glass, aside from the mental effect upon sensitive patients, is in the modification of the intensity of the rays of light, produced by the different kinds of glass.

The length of time the patient should remain in the bath depends on the condition of the patient, and the effect desired. Highly sensitive patients, especially when beginning to use the bath, should remain exposed to the sun but a short time, ten or twenty minutes usually being long enough. Less sensitive patients, and those accustomed to sunlight, may remain in the bath for from half an hour to an hour. The bath should be concluded by a tepid sponge bath, or wet hand rub, as the activity of the skin is greatly increased by exposure to the sun, the patient often perspiring freely.

The effect of the bath is usually to produce a feeling of languor and lassitude. Many patients fall asleep while in it. Unpleasant effects are rarely produced. In cases where they occur, the usual cause is too long continuance in the bath, or too great intensity of the sun's rays. To guard against unpleasant effects from the latter cause, it is well to cover the patient at the first of the bath with a sheet, or to draw over the sash through which the light is admitted, a screen of very thin material, as gauze or mosquito netting. It should be recollected that the solar rays sometimes produce very powerful effects, as seen in sunstroke, and hence patients should receive careful attention while in the bath; especially if they are known to be very sensitive, or easily affected by the sun. Cold water should also be kept at hand in case headache is produced, and also for ready use to guard against sunstroke. By the use of different colored screens, the intensity of the sun's rays may be modified at pleasure. The sun-bath is an excellent means of treatment in all cases of defective nutrition, in convalescence from various acute diseases, in nervous affections and skin diseases, and especially in consumption and dyspepsia. For the last two diseases we have used it very extensively, and with excellent success. Consumptives, under the stimulating influence of the sun's rays, gain flesh, improve in appetite, are relieved of their exhausting night-sweats, gain color, and, in fact, improve in every respect. The dry, inact-

ive, almost lifeless skin of the dyspeptic, becomes moist and supple, and shows marked increase of activity. Rheumatic patients also are benefitted by this bath. In fact, nearly all classes of invalids may employ it with advantage. It has been found also that wounds heal much more rapidly when exposed to the sun's rays two or three times a day, than when kept continually covered.

A solar ray consists of heat rays as well as rays of light. It also contains actinic or chemical rays, and its therapeutic effects are doubtless due to the combined influence of these three potent forces. That by means of a lens, all of these rays may be concentrated, and their potency thereby increased, is illustrated by the well known properties of the burning-glass. The rays of the sun concentrated by means of a lens, have been used in the treatment of obstinate ulcers, discolorations of the skin, and various morbid growths. Undoubtedly the remedial power of the sun's rays used in this way, would be, upon thorough study and utilization, found to be of very great value in a large number of cases.

There are numerous evidences that the sun-bath was not only known among the ancients, but was used by them to a considerable extent. Plutarch tells us that Diogenes, the renowned Athenian cynic, was in his old age accustomed to lie in the sunshine for the purpose of recruiting his energies,—a custom which, according to Pliny, was common among the old men of Greece.

It is stated that Diogenes valued his sun-bath so highly that when Alexander called upon him and offered to render him any service in his power, he replied in answer to the kind offer, "Only stand a little out of my sunshine." According to Pliny, the custom of the sun-bath was common among the Romans. Indeed, both the older and younger Pliny were accustomed to spend an hour in exposure to the sun daily, after dinner. Hippocrates prescribed the sun-bath for chills. Numerous other evidences might be cited of the ancient use of the sun-bath, but these will perhaps be sufficient. A French phy-

sician once said to some person who had brought his children to him for treatment, "Take these children to the country; feed them as well as you can, but above all, roast them—roast them in the sun."

That the atmosphere itself is a powerful medium of affecting the system beneficially or otherwise, is evidenced by a large number of facts, well known to every one as the influence of climate, altitude, and other familiar means of securing what is termed a "change of air." It is not, however, to these applications of air that we wish now to refer, but rather to more specific uses of the element and methods that may be made use of in all latitudes alike. Aerotherapy is still in its infancy, but enough facts have been determined and tested by experience to warrant the conclusion that the air is a potent therapeutic agent, for use in certain classes of cases at least.

The air has a very soothing effect upon the body when allowed to come in contact with its entire surface. It answers a very valuable purpose when a water-bath is impossible, or when the patient is too feeble to endure the application of water. A sleepless person will often fall into a sound and refreshing slumber after walking a few minutes in his room with his whole body exposed to the air. The effects of night labor upon literary people may be partially counteracted by the air-bath. Benjamin Franklin was accustomed to pursue his writings to a late hour after divesting himself of his clothing, and he recommends the practice to others compelled to labor late with the pen. What is known as the pneumatic treatment, which consists in the use of compressed and rarefied air, has become quite popular in France and Germany within a few years. This treatment has been little employed, however, in this country, its use having been confined almost wholly to irregular practitioners and quacks, who have employed it in the form which is known as the vacuum treatment. This treatment consists of either exposing the whole or a part of the body to air which has been either compressed or rarefied.

In the application of compressed air to the whole of the body, the patient is placed

in a small room constructed for the purpose, into which air is admitted until a pressure of one and a half to two atmospheres is obtained, the air being withdrawn as rapidly as needed, to remove the products of respiration. The patient sits or lies in this room from one or two hours, to several hours, according to the effect desired.

In the treatment described, the patient may be subjected to the influence of rarefied as well as compressed air; but the use of rarefied air is usually confined to the exterior of the body. For this purpose it is applied by means of suitable receptacles for the arms and legs, from which the air can be partially exhausted. The first impressions produced by the application of rarefied air, especially when made in the manner last described, are decidedly unpleasant. The same is true to some extent of local applications. Dr. Waldenberg, professor in the University of Berlin, has devised a portable apparatus by means of which compressed air may be inhaled. These various devices are chiefly employed in the treatment of diseases of the chest, although the so-called vacuum treatment has a wider range of application, and is said to be useful in the treatment of paralysis, defective development of the limbs, and also as a derivative, relieving the brain and nerve centers of congestion. We have employed vacuum treatment to some extent, and believe it to be a useful agent. From experiments which we have recently made with Waldenberg's apparatus, we think it capable of producing most excellent results, especially in chronic bronchitis, asthma, incipient consumption, and other chronic lung affections. It may be used in such a manner as to increase exhalation as well as inhalation, and thus produce a greatly increased development of the chest. The same apparatus used for compressed air may be employed in the inhalation of superoxygenated air, or air which contains more than the usual proportion of oxygen. Various medical vapors are also employed by this means. The remedial value of pneumatic treatment is less thoroughly established than almost any other of the remedial agents, on ac-

count of the small amount of attention which this agent has received from scientific investigators. We believe, however, that it is capable of producing excellent results. In a case of chronic emphysema in which we employed the apparatus, causing the patient to breathe into rarefied air, one-fiftieth of the ordinary pressure being removed, the patient was able to exhale one hundred and sixty cubic inches of air, after an ordinary respiration, though he could ordinarily exhale but forty. A consumptive patient, a young lady with remarkably narrow chest, who could inhale but thirty cubic inches of air, by a few weeks' treatment became able to inhale one hundred and twenty inches.

(CONCLUDED NEXT NUMBER.)

TEA AND COFFEE AND INDIGESTION.

THE claim is often made for tea and coffee that they aid digestion. Thus the U. S. Dispensatory, found on the counter of every drug-store, says: "A cup of coffee, taken after a hearty meal, will often relieve the sense of oppression so apt to be experienced, and enable the stomach to perform its office with comparative facility."

Now, while it does not become the youth and inexperience of the writer to criticise so learned a work as that from which the above extract is taken, yet perhaps he may be permitted to suggest modestly that "the sense of oppression so apt to be experienced after a hearty meal," may be due to the fact that people are "so apt" to over-eat; and he would respectfully inquire if it would not be better to eat less, and so avoid the "sense of oppression," than to eat too much, and be forced to relieve the consequent oppression by a cup of coffee.

But how does the coffee afford relief to the overburdened stomach? If we mistake not, the heat relaxes the muscles that compose the walls of the stomach, thus increasing the capacity of that organ. Increase of room relieves the oppression; and we think the same effect would be produced by any other hot drink.

The statement that a cup of coffee, taken

after a hearty meal, "will enable the stomach to perform its office with comparative facility," is clearly opposed to Dr. Steele, who says on page 149 in his *Fourteen Weeks in Physiology*: "At the close of a full meal, it [coffee] hinders digestion, and at night produces wakefulness."

To us, this seems to be the more reasonable conclusion, for the stomach was doubtless designed to be a perfect organ; and if not abused by improper food, taken at unseasonable hours, and in unreasonable quantities, it will "perform its office" with more than comparative facility without the aid of tea, coffee, or any other stimulant.

CHAS. C. LEWIS.

[It is a settled fact that the tannin of coffee neutralizes the influence of the pepsine of the gastric juice, and hence it is evident that the temporary benefit derived from the use of hot coffee at the close of a hearty meal, is due to the stimulating effect of the hot fluid, rather than from the specific influence of the coffee.—ED.]

HOW TO CURE A COLD.

A MEDICAL journal tells how one man was cured of a cold: "He boiled a little wormwood and horehound together, and drank freely of the tea before going to bed. The next day he took five pills; put one kind of plaster on his breast, another under his arm, and still another on his back. Under the advice from an experienced old lady, he took all these off with an oyster knife in the afternoon, and slapped on a mustard plaster instead. Then he put some hot bricks to his feet, and went to bed. Next morning another old lady came in with a bottle of goose-oil, and gave him a dose of it on a quill; and an aunt arrived about the same time with a bundle of sweet fern, which she made into tea and gave him every half hour until noon, when he took a big dose of salts. After dinner, his wife, who had seen a fine old lady of great experience in doctoring in High Street, gave him two pills of her own make, about the size of a walnut and of similar shape, and two teaspoonfuls of home-made balsams to keep them down.

Then he took a half pint of hot rum at the suggestion of an old sea captain, visiting in the next house, and steamed his legs with an alcohol bath. At this crisis two of his neighbors arrived, who saw at once that his blood was out of order, and gave him a half gallon of spearmint tea and a big dose of castor oil. Before going to bed, he took eight of a new kind of pill, wrapped about his neck a flannel soaked in hot vinegar and salt, and had feathers burned on a shovel in his room. He is now cured, and full of gratitude."

NECESSITY FOR RECREATION.

WEAKEN the nervous system by whatsoever means we may, whether by overwork or over-worship, whether by asceticism or prodigality, in persuing virtue or vice, following wisdom or folly, it matters not how, and we become nuisances to ourselves and to others. Then, as the dyspeptic is conscious of his stomach, do we become aware that we have a nervous system; thought is dulled and ideas are cloudy; sympathy awakens no gratitude, draws no response but querulous groanings. Children are banished with the petulant command "Don't bother me!" Too often in this miserable state the first gap is formed between the heart of the child and its mother; the thin edge of the wedge is introduced which is finally to force them apart forever, to render any confidence between them an impossible thing. It is within the experience of only too many how shattered nerves ruin home-life, disturb the peace of the family, and put happiness far away. The writer knows of fellow-students who, in their desire for excellence and knowledge, would pour over their books, neglecting proper exercise, failing even to take the sleep that was actually necessary, and, as might readily have been foreseen, broke down early, and died or became insane. Because we can stand hard work we are apt to forget that there is a limit of resistance in every case, and to ignore the causes which inevitably produce their effects without regard to persons.

We know that hard work must be done in order to achieve success, and that the greatest names of history represent the hardest toil. Virgil spending twelve years on his *Æneid*, Thucydides twenty years on his history, Lucretius a life-time on his great poem; these are illustrations of the law of labor in relation to success. But in our modern life of elbowing and pushing to get bread, thousands seem to be rushing tired through life, to die wearied out for the lack of recreation. Should they take time for it, they say that the many waiting for a chance would rush in and fill their places so that they would be crowded out and lost. This seems like committing slow suicide to keep off death. All workers need recreation for each day, each week, each year. Too often the alleged lack of opportunity is really only fear of Mrs. Grundy, who says that play is undignified and unbecoming for men and women. So much afraid are we seemingly of her sneer, her pointing finger, shrugging shoulder and sarcastic tongue, that we prefer to do almost anything rather than encounter them; hence we choose physic in place of exercise—poisonous drugs instead of health-giving sports. Mrs. Grundy has amusements of her own, it is true, but they are too often wearing, not recuperating.

But we are at last recognizing that the play element is a desirable, even a necessary feature of healthful social life, and are beginning to make room for it to some extent by admitting holidays into our calendar, as older and, in some respects, wiser nations have done before us.—*Rev. J. W. Hageman.*

PORK PACKING IN CHICAGO.

BY D. R. LEONARD.

[THE following article by our friend Mr. Leonard bears the authority of an eyewitness, and ought to be sufficient to destroy the appetite for packed pork in the most ardent lover of the article.—ED.]

Whether or not the use of pork as an article of food is injurious to health, is a question I do not care to discuss. But the

manner in which the "Hog Products" are prepared for food in the most extensive slaughtering yards in the U. S., if not in the world, if seen, would, I am sure, destroy the appetite for pork in most people. I will relate very briefly a few of the facts that have come under my notice here, and leave each one to draw his own conclusions.

To supply these immense slaughter houses, employing thousands of men, animals are drawn from nearly every portion of the central part of the U. S., being shipped in crowded cars, often over long distances, perhaps going without food or drink for forty-eight hours, and sometimes even more. The hogs come to Chicago in a fevered, starved, and often in a dying condition. Very rarely indeed, during the summer and early fall, does a car of hogs arrive here without having some dead ones, often fifty per cent, and sometimes more being dead. Others are so badly crippled that they must be hurried to the killing pen in order to *save them—* from dying a natural death.

The unloading of the hogs is always accompanied with cruelty, often very severe, and always uncalled for. Men tramp over the prostrate animals, and with kicks and blows from heavy clubs and whips, compel the frightened brutes to rush for the car door, sometimes climbing over each other, often crushing the weaker ones. Once unloaded, those that can walk are driven to pens and given food and drink. Those that are alive and cannot walk, are hurriedly carried away in order to save them. Those that are dead are tumbled out on the platform and left to "ripen," then sent to the "stink factory," or rendering establishment, the fat being extracted, and the remainder made into fertilizers. What is done with the fat? It is hinted that some of it goes to the oleo-margarine factory. Possibly we shall follow it up some day and see what becomes of it. After giving the hogs a little time to rest, they are sold, and, if destined for eastern markets, are again loaded into

cars with the same cruelty, and again are without food or drink for many hours. If intended for Chicago killing, they are drawn up the long chutes to the top of the immense packing houses,—always with cruelty, and there they are forced into a small pen with the catcher, who seizes one by a hind leg and attaches a chain slipping noose which is elevated quickly, bearing the hog hanging by one leg, head downwards, to the “sticker,” who plunges a knife into the neck of the struggling brute. The hog is then passed by machinery towards the scalding vat, where by a simple device the chain is disengaged from the leg, and the hog dropped head first into the scalding water. Often the animal is squealing and struggling when it is plunged into nearly boiling water. From there the operations cannot be called cruel, as the animal is now dead, and the work is conducted with as much expedition as possible.

The removing of the fat from the entrails to make the “steam” lard of commerce, is a filthy process. Whether or not all of the poisonous matter can be removed, I do not know; but I have very little appetite for “steam” lard. Of the operations connected with the curing of the meats, the sorting out of the diseased meat and other operations connected with the final disposition of the same, I will possibly speak at some future time. But any one will be safe enough to conclude that the whole operation is uncleanly and unwholesome. Dirty salt is used for curing. Filth is everywhere present.

There is not a single operation connected with the whole business that is not demoralizing, degrading and brutish. The laborers are known as “hard men.” The commission men are sharpers; and the bosses in the packing houses are the roughest, ugliest of men. A prominent man at the Stock Yards said to me the other day, “There is not a man here that can make any pretense to honesty.”

—Never sacrifice principle for favors.

OPIUM EATING IN ALBANY.

“A QUARTER of a century ago the use of opium in Albany was meagre as compared with to-day. There were at that time but about 350 pounds of opium and 375 ounces of morphia sold during a year. Then the population was 57,000, and the consumption of opium about 43 grains per annum to every inhabitant, while the rate for morphine was less than three grains a year to each person. To-day, with the census showing our city to contain over 91,000, the annual consumption of opium has crept up to 3,500 pounds, and morphia to 5,500 ounces. This large increase in the consumption of these drugs cannot entirely be charged to the growth of the city. Since 1855 the increase in the city’s population has been 59 per cent, while the increase of the sale of opium during that time has been 900 per cent and morphia 1,100 per cent, making a total of these two drugs of 2,000 per cent in a quarter of a century, or 296 grains of opium and 24 grains of morphine to every inhabitant. Besides this vast quantity of these drugs, between 400,000 and 500,000 morphia pills are sold throughout the city in a year. These pills contain from one-tenth to one-quarter of a grain of morphine apiece. Taking, on an estimate, 450,000 pills as the average annual consumption, averaging, say, one-sixth of a grain apiece, would make the morphine in them weigh about 170 ounces. Opium pills also have a large sale, but not half so many are sold as of the alkaloid.

It is estimated by men up in the business that there are 500 times as many morphine pills sold as any other kind.

Of the 3,500 pounds of opium disposed of in this city annually, careful inquiry made by a *Journal* reporter reveals the fact that fully one-quarter is consumed by people in its native state. The remaining three-quarters are used in making the different opiates, the largest proportion being used in the preparation of laudanum. One druggist states that where twenty-five years ago he made it by the gallon, he now prepares it by the barrel. A quarter of a century ago an opium eater was a

rarity; to-day the number is large and on the increase. Fully four-fifths of the opium eaters are women.

At first, opium eaters are ashamed of the habit, and procure the drug on the sly, but as the craving increases, the shame wears off and they boldly go to the stores and get the desired article. They have regular places, and as the clerks know their failing, are not afraid to weigh out what they want, sometimes as high as five ounces. We are informed that a well-to-do lady, living not a great distance from this city, sent recently for five ounces of morphine. Opium eating is not confined to any one class of people, but rich and poor, young and old, buy it alike—the rich rather preferring morphine. The regular dose is one-eighth of a grain, but it is stated that seventy or eighty grains of opium may be taken at one time by veteran eaters without serious results.—*Albany (N. Y.) Evening Journal, Dec. 18, 1880.*

THE DELICACIES OF THE BURMESE EVERY-DAY DIET.

BY SAU AH-BRAH.

MANY people in America often ask me, What do the Burmese eat? and how do they prepare their food? It is a surprising fact to know that many of them have never heard of or seen the article called bread, so much valued in this country as the staff of life. If men must live by bread alone, all these poor tawny heathen in Burmah ought to have been in their graves for lack of it; yet we know that they live and are quite active in their peculiar ways and customs.

Twice daily is their regular practice of eating, but between the morning and the afternoon meals they often indulge in fruits which are found in abundance and in great variety through all seasons of the year. Tea, coffee, milk, butter, beer, or stimulating drinks and pastry are never found on the Burmese bill of fare; but cigars, tobacco, chewing and smoking are indulged in by both sexes and at all ages to an outlandish, filthy and astonishing

extent. The rice, which is cooked by plain boiling in water for half an hour, is eaten with meat, fish, and vegetables gathered from the gardens and jungles. Gnap-pee, a most decidedly choice dish to the Burmese taste, mixed with red pepper and onion, is used in enormous quantities; which to our American blue-eyes and red-hair taste would never restrain the copious flow of tears and saliva, even when the other organs of sense may have almost ceased to act.

Gnappee is prepared in the following manner:—

Fish or crawfish (not animal meat) are taken from the water, and are exposed to the sun or air till putrefaction begins, and then pounded to a thick paste with salt, when it is ready for use. Everybody eats this; Christians or heathen, rich or poor, black or white, except the missionaries and the Europeans.

Dried, smoked, and salt fish are used very extensively, but beef, pork and mutton are eaten very little or not at all. Wild game is used unsparingly, and rice, of course, goes hand-in-hand to lead as the staff of life. Fruits of all kinds are invariably eaten uncooked. Acid fruits, especially the tamarinds, mangoes and limes are eaten with much relish. The little Burmese fellows may often be seen climbing the lemon trees with salt in one hand and a lime in the other, feeding themselves contentedly, while the women sit waiting under the trees, looking up with mouths well watered at the happy condition of their fellowmen above. Bitter herbs are used very commonly for food. Sweet-meats, sugar, and sirups are used sparingly; sugar-cane is perhaps the most commonly used. By biting the hard pith and sucking the juice out, they make a natural tooth-brush, the only one ever invented on the Burmese strand to keep the teeth clean.

Six dishes; namely, an earthen pot to cook the rice in, one flat kettle for meat and fish, and another small one for Gnap-pee, a large family dish, which is a round, flat, wooden plate, from one and a half to two feet in diameter, a cup, and a big

spoon are all that are required for house-keeping. Baking, roasting, and frying are never known in the Burmese order of cooking; boiling, and boiling alone, has been for ages the only direction in the Burmese cook-book. Stoves, furnaces and gas have never been introduced there; open fire-places alone are the custom.

The cooked rice is poured into the big family dish, the Gnappee is dished out into the cup, and then placed in the middle of the family dish with the big spreading spoon beside it. As they are about to partake of the bounty, each person must wash his right hand, whether the hands are already clean or dirty. Friends and enemies, strangers and foreigners, must all sit on the floor around the rice dish, and each with his own fingers feed from dish to mouth, using the same spoon and cup. There is no time to ask who has washed his hand the cleanest; and occasionally one will rise to get a drink from the water jar standing near, either to lubricate the *Esophagus*, or to allay the burning of the Capsicum in the stomach, or to quench ordinary thirst. Meat and fish are cut up into small bits before cooking, so as to avoid waste of time when they sit down for the meal. When they have eaten enough, one by one they leave the rice dish unceremoniously; and the one who eats last has to wash all the dishes.

It is astonishing how this barbarous way of living can prolong life and make the nation a thriving people. There are many instances where men and women live to a very old age. Of course, many in tenderer years are swept away by peculiar eastern maladies, small pox, measles, fevers, leprosy, and allied diseases. But considering their ignorance of medicine and limited knowledge of anatomy, they sustain the laws of health and the regulation of nature's repair to an astonishing extent. To see them live in that clime would be as nature lives; eating and sleeping whenever the system requires, and enjoying their days as animals in the green pasture, and like birds in the air plucking fruits as they wing from branch to branch; and thus they make happy the homes where all enjoy an equal share in the duties and obligations of nature's laws.

A FAREWELL TO TOBACCO.

MAY the Babylonish curse
Straight confound my stammering verse
If I can a passage see
In this word-perplexity,
Or a fit expression find,
Or a language to my mind,
(Still the phrase is wide or scant)
To take leave of thee, GREAT PLANT!
Or in any terms relate
Half my love, or half my hate:
For I hate, yet love, thee so,
That, whichever thing I show,
The plain truth will seem to be
A constrained hyperbole,
And the passion to proceed
More from a mistress than a weed.

Sooty retainer to the vine,
Bacchus' black servant, negro fine;
Sorcerer, that mak'st us dote upon
Thy begrimed complexion,
And, for thy pernicious sake,
More and greater oaths to break
Than reclaimed lovers take
'Gainst women: thou thy siege dost lay
Much too in the female way,
While thou suck'st the laboring breath
Faster than kisses or than death.

Thou in such a cloud dost bind us,
That our worst foes cannot find us,
And ill-fortune, that would thwart us,
Shoots at rovers, shooting at us;
While each man, through thy height'ning steam,
Does like a smoking Etna seem,
And all about us does express
(Fancy and wit in richest dress)
A Silician fruitfulness.

Thou through such a mist dost show us,
That our best friends do not know us,
And for these allowed features,
Due to reasonable creatures,
Liken'st us to fell Chimeras,
Monsters that, who see us, fear us;
Worse than Cerberus or Geryon,
Or, who first loved a cloud, Ixion.

Bacchus we know, and we allow
His tipsy rites. But what art thou,
That but by reflex canst show
What his deity can do,
As the false Egyptian spell
Aped the true Hebrew miracle,
Some few vapors thou may'st raise,
The weak brain may serve to amaze,
But to the reins and nobler heart
Canst nor life nor heat impart.

Brother of Bacchus, later born,
The old world was sure forlorn
Wanting thee, that aidest more
The god's victories than before
All his panthers, and the brawls
Of his piping Bacchanals.
These, as stale, we disallow,
Or judge of thee meant: only thou
His true Indian conquest art;
And, for ivy round his dart,

The reformed god now weaves
A finer thyrsus of thy leaves.

Scent to match thy rich perfume
Chemic art did ne'er presume
Through her quaint alembic strain,
None so sov'reign to the brain.
Nature, that did in thee excel,
Framed again no second smell.
Roses, violets, but toys
For the smaller sort of boys,
Or for greener damsels meant;
Thou art the only manly scent.

Stinking 'st of the stinking kind,
Filth of the mouth and fog of the mind,
Africa, that brags her foison,
Breeds no such prodigious poison,
Henbane, nightshade, both together,
Hemlock, aconite ———

Nay, rather,

Plant divine, of rarest virtue;
Blisters on the tongue would hurt you.
'T was but in a sort I blamed thee;
None e'er prospered who defamed thee;
Irony all, and feigned abuse,
Such as perplexed lovers use,
At a need, when, in despair
To paint forth their fairest fair,
Or in part but to express
That exceeding comeliness
Which their fancies doth so strike,
They borrow language of dislike.

* * * * *

Or, as men, constrained to part
With what's nearest to their heart,
While their sorrow's at the height,
Lose discrimination quite,
And their hasty wrath let fall,
To appease their frantic gull,
On the darling thing whatever,
Whence they feel it death to sever,
Though it be, as they, perforce,
Guiltless of the sad divorce.

For I must (nor let it grieve thee,
Friendliest of plants, that I must) leave thee,
For thy sake, TOBACCO, I
Would do anything but die,
And but seek to extend my days
Long enough to sing thy praise.
But, as she, who once hath been
A king's consort, is a queen
Ever after, nor will bate
Any title of her state,
Though a widow, or divorced,
So I, from thy converse forced,
'The old name and style retain,
A right Katherine of Spain;
And a seat, too, 'mongst the joys
Of the blest Tobacco Boys;
Where, though I, by sour physician,
Am debarred the full fruition
Of thy favors, I may catch
Some collateral sweets, and snatch
Sidelong odors, that give life
Like glances from a neighbor's wife;

And still live in the by-places
And the suburbs of thy graces;
And in thy borders take delight,
An unconquered Canaanite.

—Charles Lamb.

Danger of Dust.—A probably serious source of disease is the dust of our cities. When we reflect that this is the dried and pulverized dirt and filth of our streets, derived from all kinds of refuse matter, its dangerous qualities may be suspected if they are not clearly obvious. Conveyed by the winds, it is diffused everywhere, and settles upon or adheres to everything. We inhale it, drink it, and eat it with our food. A speck of mud on our bread excites disgust; but who minds the same thing when it is nothing but a little dust? If our food just brought from the market or the provision store is examined with the microscope, it is found to teem with small particles of dust, consisting of fine sand, bits of hay and straw, filaments of cotton from old paper and rags, wood fibres, hairs and scurf scales of man and beast, starch grains, spores, etc. Recent investigations render it probable that dust contains the germs of decomposition, gangrene, and contagious diseases.

While our view of the dangerous qualities of dust may be exaggerated, there is certainly sufficient reason to regard it with apprehension, and make it desirable to avoid it. Its subtle and all-pervading character renders this, to a great extent, impossible, but it may be much reduced by the removal of its sources of supply—the accumulation of dirt and filth. For this purpose, the streets should be kept clean, by sweeping and washing, and, to facilitate this, they should be as smoothly paved as will be consistent with safe walking and driving. Especially is this desirable in the vicinity of the depots of our provisions, the market houses, where, unfortunately, we often observe the greatest accumulation of dirt. The streets around our markets should have an asphaltum or other smooth pavement, and it should be swept and washed weekly or oftener.—*American Journal of Microscopy.*



TEMPERANCE AND MISCELLANY.



Devoted to Temperance, Mental and Moral Culture, Social Science,
Natural History, and other interesting Topics.

DOING GOOD, TRUE HAPPINESS.

WOULDEST thou from sorrow find a sweet relief?
Or is thy heart oppress'd with woes untold?
Balm wouldst thou gather from corroding grief?

Pour blessings round thee like a shower of gold.

'Tis when the rose is wrap'd in many a fold,
Close to its heart, the worm is wasting there
Its life and beauty; not when, all unroll'd,
Leaf after leaf, its bosom, rich and fair,
Breathes freely its perfumes throughout the ambient
air.

Wake, thou that sleepest in enchanted bowers,
Lest these lost years should haunt thee on the night
When death is waiting for thy number'd hours
To take their swift and everlasting flight;

Wake, ere the earth-born charm unnerve thee quite,
And be thy thoughts to work divine address'd;
Do something—do it soon—with all thy might.

Some high or humble enterprise of good
Contemplate, till it shall possess thy mind,
Become thy study, pastime, rest, and food,
And kindle in thy heart a flame refined.
Pray Heaven for firmness thy whole soul to bind
To this thy purpose—to begin, pursue,
With thoughts all fix'd, and feelings purely kind;
Strength to complete, and with delight review,
And grace to give the praise where all is ever due.

No good of worth sublime will Heaven permit
To light on man as from the passing air;
The lamp of genius, though by nature lit,
If not protected, pruned, and fed with care,
Soon dies, or runs to waste with fitful glare;
And learning is a plant that spreads and towers
Slow as Columbia's aloe, proudly rare,
That 'mid gay thousands, with the suns and showers
Of half a century, grows alone before it flowers.

Has immortality of name been given
To them that idly worship hills and groves,
And burn sweet incense to the queen of heaven?
Did Newton learn from fancy, as it roves,
To measure worlds, and follow where each moves?
Did Howard gain renown that shall not cease,
By wanderings wild that nature's pilgrim loves?
Or did Paul gain heaven's glory and its peace
By musing o'er the bright and tranquil isles of Greece?

Beware lest thou, from sloth, that would appear
But lowliness of mind, with joy proclaim
Thy want of worth,—a charge thou couldst not hear
From other lips, without a blush of shame,

Or pride indignant; then be thine the blame,
And make thyself of worth, and thus enlist
The smiles of all the good, the dear to fame;
'Tis infamy to die and not be miss'd,
Or let all soon forget that thou didst e'er exist.

Rouse to some work of high and holy love,
And thou an angel's happiness shalt know;
Shalt bless the earth while in the world above;
The good begun by thee shall onward flow
In many a branching stream, and wider grow;
The seed that, in these few and fleeting hours,
Thy hands, unsparing and unwearied, sow
Shall deck thy grave with amaranthine flow'rs,
And yield thee fruits divine in heaven's immortal
bowers.

—Carlos Wilcox.

ONE WOMAN'S REASON.

"It's all nonsense, Sister Mary; for my part I'm free to confess that I'm sick and tired of temperance."

The speaker was a woman, young and fair and elegantly dressed. The frown upon her lovely face, and the scornful curve of the rosy lips showed her hearers how angry she was getting.

"I am surprised," replied a soft voice playfully. "Now for my part I am sick of intemperance. I rather wonder at your taste, Margaret."

The speaker had a tender, serene face, and looking at it you would know that some great sorrow had come into her life. But if you looked long enough you would decide that, although the face was thin and pale and the lovely hair streaked with gray, it was a much more beautiful face than that of the younger woman beside her.

"You know very well what I mean," replied Margaret Preston. "I mean the word temperance disgusts me. You can't even open a paper, that is, a religious paper, but the word stares at you from every page."

"It is a good word, I'm sure, Auntie," spoke a little maiden who was cuddled up on the broad window-seat, with the shadow of the crimson curtain flushing her pale face.

"What do you know about it, Midget?" asked the lady, a smile chasing away the

frowns from the fair forehead, as her eyes rested on the child. "I know lots," laughed Minnie, gleefully; "Temperance means simply freedom from excess in drinking or in eating." "Yes, I know," replied the lady gravely, "but that is just what I am particularly disgusted with, this matter of mixing up the children with all this talk about drunkards and drinking before they are out of their pinafores; it is bad enough to fill up the boys' heads—"

"Oh, Auntie! not *bad* enough. Good enough, I think!" replied Minnie, springing from her perch and nestling down on a low seat by her aunt's side. "Only think, if all the ten millions of children in this country should take the pledge and keep it, there would n't be a single drunkard in the next generation."

"I was going to say," said the lady severely, "that when it comes to the girls, poor things. I think it is simply absurd. Now hear that child! I should think she was about seventy-five years old! The idea! I don't wonder your face is so pale and pinched. I'm going right off to get you a glass of my nice wine. That will bring back your roses, dear. What would you say to that?" "Oh, Auntie," replied Minnie, rising, "I should say, 'No, sir! I can't! You see I'm a Band of Hope girl, and I'm pledged not to touch or taste or handle. My Doctor does n't order me to take wines, either. If he did I should hate to. I'm glad he does n't.'"

"Well, well, child," replied Aunt Margaret coldly, do n't look at me as if I was a common highwayman. Your temperance people do not teach you very good grammar, or politeness, to say 'No Sir' to a lady!"

"Oh, Auntie," laughed Minnie, "I beg your pardon! that is a little speech I learned to say by and by, when young men ask me to take wine. I never thought my first temptation would come from a woman."

The laugh was as clear as a silver bell, and Aunt Margaret could not resist it, and said directly:

"You are pardoned, dear; but I think it is absurd all the same. And Sister Mary, I should like to know if really and truly you are afraid that your daughter will grow up a drunkard, too! I was angry at you for bringing up your boys to be teetotalers before they were fairly into their long trowsers, but for a girl! I think it is outrageous!"

"Oh, Auntie!" began Minnie with a grieved lip. But a soft hand was laid

upon the child's head, and a sweet mother-kiss fell upon the pure up-lifted brow.

"Mamma will have to give Auntie the reasons for her conduct, dear. The sun is warm in the orchard, now run out and play, dear; kiss mamma and Auntie good-by, and go."

The child did as she was bidden, her usually smiling face a little troubled.

Mrs. Leslie's voice trembled a little as she asked gently,

"You do n't think I was over-strict with my boys, Margaret? You do n't think they regret their early temperance training?"

"Oh, dear, no!" replied Margaret Preston; "if I had any boys, I'd send them all to you to train up in the way they should go. Such splendid fellows as they are! Only yesterday Fred told me that everything he is, he owes, under God, to his mother's training, especially the *tee-totalism*."

The tender face was lighted up now, with an expression that made it fairly radiant. "I thought I'd tell you," her sister added a moment afterward. "But I wish I had n't. You are too strict by half, and when it comes to girls, I have not the least patience with you." Mrs. Leslie was evidently disturbed by her sister's words. But she only said gently, "Why should not a temperance education, which, according to your own showing, makes splendid men of boys, work equally well for girls?"

"For girls! What do girls need to meddle with temperance for?"

"Where would my boys have been, I wonder," replied her sister, "if I had not known how to teach them temperance?"

"Oh, well, when she is a woman—"

"You do n't suppose I can bear to think of my darling being taught in the same school that I have been, Margaret?" The voice was very low now, and the quivering lips and pallid face showed how deeply she was moved.

"Forgive me, Mary!" said Margaret, kneeling beside her sister and encircling the slender form with her graceful arms, and kissing over and over the cheeks and brow and lovely hair. "I am cruel to bring that all back to you."

"Ah, my sister, it is always present. Do you think I can ever forget? I vowed a solemn vow over my dead husband—gone to his death, young, talented, beloved, through his passion for drink—I vowed to my God that never a child of mine should know the taste of wine or

any other strong drink, or beer or cider. I have so far kept my vow. My boys know their father's history. Some day I shall tell Minnie."

"But for a girl—what do girls need the pledge for, and all that? They are not in public life. They are not exposed to temptation."

"Ah, my sister, are you sure of that? I should think in your city you might sometimes see a drunken woman?"

"Drunken women! Yes, indeed! miserable, low creatures, a disgrace to their sex and the world!" and Margaret Preston's fair face showed only too plainly the disgust she felt for the poor degraded sister-woman who once was "pure as the beautiful snow." But her sister's face was full of pity as she gently said:

"Somewhere, sometime there was a beginning, Margaret. Did it ever occur to you that these degraded creatures were once pure, innocent little girls, like our own Minnie?"

"No, I believe they were to the manner born, degenerate daughters of sinful Magdalens, perhaps. No pure womanly nature would fall so low."

"Ah, my sister," gravely replied Mrs. Leslie, "you must pardon me for saying that you are wrong; all wrong. I know of more than one case myself where the foundation for a life of sin and shame was laid early, in a pleasant home, where brandied peaches formed a part of the dessert at table, or where wine, harmless (so called) domestic wine was used as a beverage."

"Very improbable, it seems to me, and at least you must own such cases are rare among women. Even then I dare say the love of drink was inherited."

"Granted," replied Mary Leslie with paling cheek again, "my daughter might inherit it. Who can tell what is behind us? 'Unto the children of the third and fourth generation,' you know. And how many of us know anything about even our great-grandfathers, to say nothing of any still farther back? Or of what appetites or passions, as well as brains they may have left us as an inheritance?"

"Well, of one thing I am sure," replied Margaret. "It is not very complimentary to your daughter, to think she is in danger of becoming a drunkard if she ever chances to taste of wine. It vexes me, and I am angry, every time I think of it."

"Ah! my sister," replied Mrs. Leslie, "you can never know what my darling is to me. But she is not above the common lot of humanity. I can not, if I would,

blind myself to the fact that she is subject to like passions with the poor wayfarer who has fallen a victim to the tempter's wiles."

"I don't believe a word of such improbable stuff?" replied her sister, angrily. "Let us change the subject."

For a few moments there was silence between them, and the two ladies went on with their work, one with color heightened by anger, the other with compressed lips and sorrowful face.

At length Mrs. Leslie said, softly, "Do you remember Evelyn Maynard, Margaret?"

"Sweet little Evelyn! Could I ever forget her? I believe she was the nearest perfection of any human being I ever knew, and lovelier than anything earthly. She married young, you know, and after her parents died she never came home, and so I lost sight of her. How glad I should be to hear from her once more. They say she has an elegant home in Boston."

"I can tell you something about her," replied Mrs. Leslie, but I thought I would not. It will not make you glad I am sure. I saw her when I was in Boston, last week."

"Saw her! And didn't she send some word to me? Can Evelyn have forgotten me?" Mrs. Leslie shook her head.

"It was Sunday," she said hurriedly.

"The streets were full of people going home from church. Everybody turned round and stared at an elegantly dressed lady who was leaning against a stone pillar. Her jewels flashed in the sun, and her beautiful hair hung in shining waves below her waist."

"Such lovely hair as Evelyn had! I never saw the like! such golden, glossy ripples like little waves all over her head! Well—well, after awhile she arose, staggered a few steps, and would have fallen but that I took her arm, stopped a carriage and rode with her to her luxurious home. They say truly, her husband is wealthy, occupies a high social position, yet his wife, our dear little school-girl friend, was drunk in the streets of Boston on the Lord's-day!"

Mrs. Preston covered her face and wept silently.

"If you could have gone with me to her elegant home! Two lovely children and the noble man who calls her wife, were nearly heart-broken. He had not forgotten me, and I stayed till the evening, when having slept off her brandy, she woke with

blood-shot eyes and haggard face to call for 'more brandy.' She raved like a mad woman, and when under the influence of a powerful opiate she slept again; her husband came to me and with a face like death said, 'Oh, Mrs. Leslie, what shall I do?' (What could I say?) 'Again and again she has tried to reform, but failed.' 'How did it ever happen?' I asked with tears in my eyes."

"It began before she was six years old, in her father's house,' was his reply. 'Branded peaches, brandy in mince-pies and cake, wines at table, and last, but not least, a little whisky for every little ailment.'"

"But this must be an uncommon case," replied her sister, her tears falling like rain upon her white hands.

"Possibly, but not probably," replied Mrs. Leslie, gravely. "But I mean to leave my daughter the ability to take care of herself. Her tastes are pure now. I will never, so far as I can help it, allow them to become vitiated. That was why I allowed her to take the pledge so young. I want her always to be able to say, 'I've signed the pledge, and I couldn't, you see.'"

May the dear Lord help us who are mothers to "go and do likewise."—MRS. C. A. SYLVESTER.

WOMAN IN JAPAN.

THE test of civilization is the treatment of woman. Find her round on the ladder, and you can count all the libraries, and know all the liberties, and judge all the laws, and explore all the homes without taking another step. Measured by this standard, Japan compares well with any other heathen nation. It is true that her most influential religion, Buddhism, denies to woman a soul, except as she may in the transmigrations of the future appear as a man, and thus become a possible heir to heaven and immortality; yet nine of her one hundred and twenty-three sovereigns have been women.

In the awakening of Japan some of her best men have defied old prejudices and are giving honor to their wives, so that they are no longer ashamed to be seen in public with them. In the Christian Churches in Japan, families sit together in the public congregations—a most amazing spectacle in Asia. Silk-reeling machinery and a wider belt of tea-growing ground have multiplied woman's chances for self-

support and her virtues. Schemes, as wide as the Empire, for the education of girls in common and high schools, are received with great favor.

No woman's feet are ever bound in Japan. She has nearly as much liberty to walk and visit as in America. Chastity is quite a common virtue. But the spiritual teaching of Christ is unknown. Sin merely in the thought is an unknown idea; they apprehend it only in the outward act. There is in every home pretending to respectability what is called a "Japanese Ladies' Library," a number of books bound together. It is something like binding together the Bible, "Ladies' Letter Writer," "Guide to Etiquette," "Hannah More," "Queens of England," and an almanac, with teachings on household economy. All this has promise for the future.

Mothers teach their children to love their country. They are patriots. The Chinese think patriotism or an interest in public affairs almost an offense. The officers are to care for the Government. The people are indifferent. They are easily governed so long as no public peril makes the Government need the aid of the people. In emergencies this indifference is perilous. But in Japan every child is taught the heroic histories of his country. This work of instruction, which is part of a mother's duty, together with reading the "Ladies' Library," has elevated the type of Japanese women. In exquisite taste for the beautiful and becoming in dress and personal adornment, and in the graces of etiquette and female proprieties, the women of Japan are not inferior to the women of Western nations.—*Christian Advocate*.

HOME GOVERNMENT—WHAT IS IT?

It is not to watch children with a suspicious eye, to frown at the merry outbursts of innocent hilarity, to suppress their joyous laughter, and to mould them into melancholy little models of octogenarian gravity. And when they have been in fault, it is not simply to punish them on account of the personal injury that you have chanced to suffer in consequence of their fault, while disobedience unattended by inconvenience to yourself, passes without rebuke.

Nor is it to overwhelm the little culprit with angry words; to call by him hard names, which do not express his misdeeds; to load him with epithets which would be

extravagant if applied to a fault of tenfold enormity; or to declare, with passionate vehemence, that he is "the worst child in the world," and destined for the gal-
lows.

But it is to watch anxiously for the *first* risings of sin, and to repress them; to counteract the *earliest* workings of selfishness; to repress the first beginnings of rebellion against rightful authority; to teach an implicit and unquestioning obedience to the will of the parent, as the best preparation for a future allegiance to the requirements of the civil magistrate, and the laws of the great Ruler and Father in heaven.

It is to punish a fault because it is a fault, because it is sinful, and contrary to the command of God, without reference to whether it may or may not have been productive of immediate injury to the parent or others. It is to reprove with calmness and composure, and not with angry irritation,—in a few words, fitly chosen, and not with a torrent of abuse; to punish as often as you threaten, and threaten only when you intend and can remember to perform; to say what you mean, and infallibly do as you say.

It is to govern your family as in the sight of Him who gave you authority, and who will reward your strict fidelity with such blessings as He bestowed on Abraham, or punish your criminal neglect with such cursés as He visited on Eli.—*Mother's Treasury.*

WOMAN THE QUEEN OF HOME.

THERE is probably not an unperverted man or woman living, who does not feel that the sweetest consolations and the best rewards of life are found in the loves and delights of home. There are very few who do not feel themselves indebted to the influences that clustered around their cradles for whatever good there may be in their characters and condition. Home, based upon Christian marriage, is so evident an institution of God, that a man must become profane before he can deny it. Wherever it is pure and true to the Christian idea, there lives an institution conservative of all the noblest instincts of society.

Of this realm woman is the queen. It takes the cue and hue from her. If she is in the best sense womanly—if she is true and tender, loving and heroic, patient and self-devoted—she consciously and unconsciously organizes and puts in operation a set of influences that do more to

mould the destiny of the nation than any man, uncrowned by power of eloquence, can possibly effect.

The men of the nation are what mothers make them, as a rule; and the voice that those men speak in the expression of power, is the voice of the woman who bore and bred them. There can be no substitute for this. There is no other possible way in which the women of the nation can organize their influence and power that will tell so beneficially upon society and state.—*Scribner.*

SLEEP AND CLEANLINESS OF ANTS.

It is probable that all ants enjoy periods of true slumber alternating with those of activity; but actual observations on this subject have only been made in the case of two or three species. M'Cook says that the harvesting ants of Texas sleep so soundly that they may be pretty severely stroked with a feather without being aroused; but they are immediately awakened by a sharp tap. On awakening they often stretch their limbs in a manner precisely resembling that of warm-blooded animals, and even yawn—the latter action being "very like that of the human animal; the mandibles are thrown open with a peculiar muscular strain which is familiar to all readers; the tongue is also sometimes thrust out." The ordinary duration of sleep in this species is about three hours. Invariably on awakening, and often at other times, the ants perform, like many other insects, elaborate processes of washing and brushing. But, unlike other insects, ants assist one another in the performance of their toilet. The author just quoted describes the whole process in the genus *Atta*. The cleanser begins with washing of the face of her companion, and then passes on to the thorax, legs and abdomen. The attitude of the cleansed all this while is one of intense satisfaction, quite resembling that of a family dog when one is scratching the back of his neck. The insect stretches out her limbs, and, as a friend takes them successively into hand, yields them limp and supple to her manipulation; she rolls gently over on her side, even quite over on her back, and with all her limbs relaxed presents a perfect picture of muscular surrender and ease. The pleasure which the creatures take in being thus combed and sponged is really enjoyable to the observer. I have seen an ant kneel down before another, thrust forward the head until nearly

under the other's face, and lie there motionless, thus expressing as plainly as sign-language could, her desire to be cleansed. I at once understood the gesture, and so did the supplicated ant, for she at once went to work.—*Nineteenth Century.*

SPENDTHRIFTS OF HEALTH.

HORACE MANN justly remarks: "A spendthrift of health is one of the most reprehensible of spendthrifts. I am certain I could have performed twice the labor, both better and with greater ease to myself, had I known as much of the laws of health at twenty as I do now. In college I was taught all about the motions of the planets as carefully as if they would have been in danger of getting off the track if I had not known how to trace their orbits; but about my own organization, and the conditions indispensable to the healthful functions of my own body, I was left in profoundest ignorance. Nothing could have been more preposterous. I ought to have begun at home, and taken the stars when it should come their turn. The consequence was, I just broke down at the commencement of my second college year, and have never had a well day since. Whatever labor I have been able to do has been done only on credit, not on capital—a most ruinous way, either in regard to health or money. For the last twenty-five years I have been put from day to day on my good behavior, and during the whole of this period, as an Hibernian would say: 'If I had lived as other people do for a month, I should have died in a fortnight.'"

The Bright Side.—Look on the bright side. It is the right side. The times may be hard, but it will make them no easier to wear a gloomy and sad countenance. It is the sunshine and not the cloud that gives beauty to the flower. There is always before or around us that which should cheer and fill the heart with warmth and gladness. The sky is blue ten times where it is black once. You have troubles, it may be; so have others. None are free from them; and perhaps it is as well that none should be. They give sinew and tone to life, fortitude and courage to man. That would be a dull sea, and the sailor would never acquire skill, where there is nothing to disturb its surface. It is the duty of every one to extract all the happiness and enjoyment he can within and without him; and above all, he should look

on the bright side. What though things do look a little dark? The lane will turn, and the night will end in broad day. There is more virtue in one sunbeam than in a whole hemisphere of clouds and gloom. Therefore we repeat, "look on the bright side." Cultivate all that is warm and genial—not the cold and repulsive, the dark and morose.—*The Interior.*

GOOD DEEDS.

THOUSANDS of men breathe, move and live, pass off the stage of life, and are heard of no more. Why? They did not a particle of good in the world, and none were blessed by them; none could point to them as the instruments of their redemption; not a line they wrote, not a word they spoke, could be recalled, and so they perished—their light went out in the darkness, and they were not remembered more than the insect of yesterday. Will you thus live and die? Live for something. Do good and leave behind you a monument of virtue that the storms of time can never destroy. Write your name by kindness, love and mercy, on the hearts of the thousands you come in contact with year by year, and you will never be forgotten. No, your name, your deeds, will be as legible on the hearts you leave behind as the stars on the brow of evening. Good deeds will shine as brightly on the earth as stars in heaven.—*Sel.*

Education.—Education is the knowledge of how to use the whole of ones self. Men are often like knives with many blades; they know how to open one, and only one; all the rest are buried in the handle, and they are no better than they would have been if they had been made with but one blade. Many men use but one or two faculties out of the score with which they are endowed. A man is educated who knows how to make a tool of every faculty—how to open it, how to keep it sharp, and how to apply it to all practical purposes.—*H. W. Beecher.*

The Origin of the Term "Bric-a-Brac."—The term bric-a-brac probably comes from the old French expression, *de bric et de broque*, which means from right and from left—from hither and thither. The word *bric* signifies in old French, an instrument to shoot arrows to birds; and some etymologists derive the word *brac* from *bro-*

canter—to sell or exchange—the root of which is Saxon, and also the origin of the word “broker.” Its signification in pure English is “second-hand goods,” but it has of recent years, been used to indicate objects of some artistic value made in olden times, and which are much esteemed by modern collectors. This century is one of collections, ranging in value from defaced postage-stamps and wax impressions of seals to watches and snuff-boxes of rare metals, ornamented with precious stones.

Individual Rights.—Granting all that men can claim of “personal liberty” in the matter of strong drink, the Rev. Henry Ward Beecher has this to say to those who, by using their liberty, are causing others to stumble :—

“When I look out upon the throngs and throngs of young men that come down, half-apparelled to this great city ; when I see every form of pleasure and business urging men to indulgence in the accursed cup ; when I see hundreds and thousands perish every year ; when it is an open secret, known and read of men at large, that all causes of mistake, and stumbling, and sickness, and vice, and crime, and utter destruction, for time and for eternity, put together, are not equal to the danger that comes from the intoxicating cup, can I or any Christian man say, ‘It is a matter of my own private convenience what I eat or drink or wear?’ I vindicate your right, but I lay the law of God’s judgment upon you. You are bound to use your rights so that they shall not hurt anybody.”

House-Top Flower Beds.—A lady writing of Japanese home life says, the houses in Japan are straw-thatched, and often have a novel flower garden at their summits. A trough is placed along the ridge of the roof, filled with soil, and planted with seeds. The plentiful rains and genial sunshine cause these unique flower-beds to bloom brilliantly in due season, and the effect of a whole village thus decorated is quite picturesque.

—The magnitude of the interests with which the temperance reform comes in collision in other countries as well as our own, appears from the statistics laid before the Congress of Brewers which recently met at Versailles, showing that there are in Europe about 40,000 brewer-

ies, which produce annually nearly 2,250,000,000 gallons of malt liquor. Great Britain alone produces a third of the entire quantity, or to be exact, 785,017,002 gallons. Prussia comes next with 318,579,998 gallons ; Bavaria, 250,757,002 gallons ; Austria, 245,975,158 gallons ; and France, 155,980,000 gallons. If France falls behind in the production and consumption of beer, it is only because her people incline more to light wines.—*The Christian Statesman.*

—A philosopher who speaks from experience says ; “If you drink wine you will walk in winding ways ; if you carry too much beer, the bier will carry you ; if you drink brandy punches, you will get punched ; and if you always get the best of whisky, whisky will always get the best of you.”

—The wind is unseen, but it cools the brow of the fevered one, sweetens the summer atmosphere, and ripples the surface of the lake into silvery spangles of beauty. So goodness of heart, though invisible to the material eye, makes its presence felt ; and from its effects upon surrounding things we are assured of its existence.

POPULAR SCIENCE.

—According to the *Scientific News*, a volcanic eruption is now in progress from Mount Baker, Washington Territory.

—A loaf of eatable bread has been made out of a deal (i. e., pine or fir) board. The wood was boiled, reduced to fibre, dried and ground, when it had the smell and taste of corn flour.

—A third comet was discovered by Mr. J. M. Schaeberle, of Ann Arbor, July 13. It appeared in the northeast, in the constellation Amiga not far from the point of appearance of its predecessor.

—An Electrical Exhibition, where all the various devices for the application of electricity are to be exhibited, was formally opened in Paris, Aug. 10. An electrical railway will convey passengers to and from the grounds, when completed. Each exhibitor of light is to have a saloon set apart for the special show of his sys-

tem. During the exhibition a congress of electricians will convene, of which sixty-five French members have been appointed by the President of the Republic.

—All the machines and engines worked by steam in the world, is estimated at 80,000,000 horse power. Each horse power is equal at least to the strength of ten men, and the steam power of the globe represents a daily working power of 800,000,000 men.

—The longest span of telegraph wire in the world is said to be that stretched across the Kistnah River, in India, which is a little over six thousand feet in length. The only mechanical contrivance used in stretching this cable across the river was a common windlass.

—An experimental series of seventy-two underground telegraph wires has recently been laid in New York city, from the headquarters of the Fire Department in Mercer Street, to the Police Headquarters in Mulbury Street. The wires are protected by being laid in long wooden boxes covered with a preparation of silica and other substances, designed to exclude dampness and secure perfect insulation.

An "Angry Tree."—The *Virginia Enterprise*, of Virginia, Nevada, gives the following account of the conduct of a curious tree owned by a gentleman in that place:—

"A gentleman of this place has a tree which is a species of *acacia*. It was grown from a seed brought from Australia. The tree is now a sapling some eight feet in height, and it is in full foliage and growing rapidly. It is leguminous, and very distinctly shows the characteristics of the mimosa, or sensitive plant. Regularly every evening, about the time the "chickens go to roost," the tree goes to roost. The leaves fold together, and the ends of the tender twigs coil themselves up like the tail of a well-conditioned pig. After one of the twigs has been stroked or handled, the leaves move uneasily and are in a sort of mild commotion for a minute or more. All this was known about the tree, but it was only yesterday that it was discovered that the tree had in it much more of life and feeling than it had ever before been credited with. The tree being in quite a small pot, one which it was very fast outgrowing, it was thought best

to give it one of much larger size. Yesterday afternoon the tree was transferred to its new quarters. It resented the operation of its removal to the best of its ability.

"Arriving at his residence about the time the tree had been transplanted, the proprietor was surprised to learn that the operation had "made it very mad." Hardly had it been placed in its new quarters before the leaves began to stand up in all directions, like the hair on the tail of an angry cat, and soon the whole plant was in a quiver. This could have been endured, but at the same time it gave out an odor most pungent and sickening—just such a smell as is given off by rattlesnakes and many other kinds of snakes in summer when teased. This odor so filled the house, and was so sickening, that it was found necessary to open the doors and windows. It was fully an hour before it calmed down and folded its leaves in peace. It would probably not have given up the fight even then had it not been that its time for going to roost had arrived. It is probably needless to add that the whole household now stand in not a little awe of the plant as being a thing more animal (or reptile) than vegetable."

Origin of the Cat.—St. George Mivart, in his recent work on the cat, says that the early history of the common house cat is uncertain. It is not the common cat of zoölogy which is the wild or native cat, an animal that existed abundantly in the forests in the time of Julius Cæsar, and was seen in Wales within the last twenty years. It appears to have come down to us from the Egyptians, being mentioned, Mr. Mivart informs us, in inscriptions as early as B. C. 1684, and being, as well known, an object of religious worship, and the venerated inmate of certain temples. It was an emblem of the sun to the Egyptians, and, according to Herodotus, the death of a cat from natural causes was followed by the ceremony of shaving the eyebrows in token of mourning. From Egypt it must have been introduced into Greece, though Prof. Rolleston considers that the cat of the ancients was the beech or stone marten. It was not a domestic animal among the Hebrews, though it was known to them, as we read in the apocryphal book of Baruch, who lived, it is supposed, in the reign of Jehoiakim, about 600 B. C., that "upon their bodies and heads sit bats, swallows, and other birds, and the cats also."—*Sel.*

GOOD HEALTH.

BATTLE CREEK, MICH., SEPTEMBER, 1881.

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

TERMS, \$1.00 A YEAR.

SUMMER COLDS.

MANY persons seem to be unaware of the fact that it is possible to take cold in summer-time. The fact is that nothing is more frequent than colds in the months of July and August. The frequent hot days cause profuse perspiration, and a consequent relaxation of the blood-vessels of the skin, and the vital resistance of the body is lowered, so that any disturbance is felt much more readily than in the colder seasons of the year, when the tonic influence of a more condensed atmosphere maintains a higher degree of vitality. In consequence, the system is very readily affected by the lower temperature of the cool days, cold mornings and evenings, and chilly nights. A temperature which would be considered very warm in January, is uncomfortably cold in July and August, and affects the vital economy much more seriously than a temperature thirty or forty degrees lower during the cold season of the year, as the system is unprepared for it. Few people appreciate the importance of being prepared to meet these changes of temperature in summer as well as in winter. Stoves are removed from sitting-rooms and bed-rooms. Under-garments are laid off for the season in early summer, and stored away in some inaccessible place along with woolen blankets and other winter comforts.

In addition, many persons neglect to take proper precautions to avoid sudden cooling after excessive exertion on a hot day. Lying in a shade when perspiring, or sitting in a draught in the same condition, is as likely to give a person a cold in August, as getting the feet wet in December or March.

Summer colds manifest themselves in a great variety of ways. The throat and lungs are not infrequently affected, but less often than in winter-time. The stomach, bowels, liver, kidneys, bladder, and joints are most likely to be the seat of summer colds. A large share of the malarial attacks so common at this season of the year originate in colds. The same is true of a considerable proportion of the cases of rheumatism, inflammation of the bladder and kidneys, as well as diarrhea and dysentery.

By a little attention to proper precautions, nearly all of these difficulties can be avoided. All occupied rooms should be provided with facilities for warming in summer the same as in winter; which should be called into requisition whenever the temperature drops below 60° F. Persons whose circulatory powers are feeble may need a fire at 65° F., especially when the atmosphere is damp. Several suits of underclothing of different thickness should be provided. On warm days, a thin silk gauze undersuit will be sufficient, while a regular winter's suit of cashmere may be not uncomfortable for chilly mornings and nights. A little care in the regulation of the clothing to the weather will well repay the necessary trouble, in the prevention of colds which from an apparently trivial beginning may develop into a fatal malady.

Danger in Vacant Houses.—So long as the house is unoccupied there is no danger; but when new occupants take possession of it, they will do well to take the precaution to have it thoroughly aired for nine days previous, have the cellar cleaned, the drain-

pipes examined, the closets and attics cleaned and disinfected, and a general overhauling effected. More or less refuse is always left by the last occupants of a house, and as these undergo putrefaction, while the windows and doors are tightly closed, the whole house becomes infected. This explains why fevers and other germ diseases so often arise soon after the occupation of a new house.

COFFEE AND DYSPEPSIA.

M. LAVEN, a French medical authority, in a paper read before the Societe de Biologie, and published in the *Rev. Med.*, states that "coffee, instead of accelerating the digestive process of the stomach, as is often supposed, rather tends to impede this. When thirty grammes of coffee, diluted in one hundred and fifty of water, are given to a dog, which is killed five hours and a half afterward, the stomach is found pale, its mucous surface being anæmic, and the vessels of its external membrane contracted. The whole organ exhibits a marked appearance of anæmia. Coffee thus determining anæmia of the mucous membrane, preventing rather than favoring vascular congestion, and opposing rather than facilitating the secretion of gastric juice, how comes it that the sense of comfort is procured for so many people who are accustomed to take coffee after a meal? A repast, in fact, produces, in those whose digestion is torpid, a heaviness of the intellectual faculties and embarrassment of the power of thinking; and these effects, and the disturbance of the head, are promptly dissipated by the stimulant effect which the coffee produces on the nervous centers, as shown by experiments with casein. Coffee and tea, when taken in excess, are a frequent cause of dyspepsia, for the anæmic condition of the mucous membrane being periodically renewed, a permanent state of congestion is at last produced, which constitutes dyspepsia. Coffee exerts both a local and general action, operating locally by means of its tannin, by diminishing the caliber of the vessels, but acting on the general economy by exciting the nervous centers and the

muscular system. It renders digestion slower, and is only of good effect by relieving the feeling of torpor after meals."

The evidence against the use of tea and coffee is accumulating so rapidly that there can no longer be any doubt as to the propriety of using these articles as common beverages. They must be put in the same category with opium, alcohol, tobacco, and other harmful drugs.

THE HYGIENE OF OLD AGE.

At no period of life is a careful observance of the laws of health of so imperious importance as in advanced age. The vital machinery is worn and weakened, the vitality at a low ebb, and it is of paramount importance that all unnecessary hindrances should be removed, that every removable obstacle to the healthy performance of the bodily functions should be taken out of the way. Thousands of lives are annually sacrificed through the mistaken idea that hygienic rules which are acknowledged to apply to young persons and adults are not to be observed by those in advanced age. For example, many popular writers maintain that while the use of wine as a beverage by youth and adults cannot be condemned too strongly, it is necessary for the aged, as a means of stimulating the declining forces.

Another writer condemns bathing by the aged because, it is claimed, it uses up the animal heat.

The error of the first theory is apparent when the fact is recalled that stimulation lessens, instead of reinforcing, vital strength, thus weakening the hold on life and shortening its duration. The fallacy of the second theory is equally apparent when we take into consideration the fact that in old age the wastes of the body are greatly increased. The discharges from all of the outlets of the body are more heavily laden with organic impurities than during youth and adult age. The breath is laden with the poisonous products of disintegration, and the perspiration with effete matter. It is for this reason that a sudden obstruction of any of these outlets is so speedily followed by

fatal results. If frequent bathing is neglected, the skin becomes obstructed and the kidneys are overworked. The urine becomes irritating in character, and inflammation or congestion of the bladder is likely to be the result. We have met scores of cases of irritable bladder in elderly men which could be traced, in a great part, at least, to the neglect of the bath.

Old persons should recollect, also, that the bath is for them particularly necessary as a sanitary measure. As the waste of the body preponderates over the repair, the skin, if unwashed, soon becomes covered with a film of the most intensely poisonous and readily decomposable matter. A few days' accumulation is enough to produce a condition not only in the highest degree detrimental to the individual himself, but offensively injurious to all persons of acute olfactory sensibilities who may be closely associated with him.

It is true that cold bathing may be, and generally is, in a high degree injurious to aged persons; but bathing in water at or near the temperature of the body cannot be more productive of harm than putting on a clean suit of clothes. Cleanliness is enforced by one of the first laws in the "code of health," and is binding at all times, and at all ages. The greatest enemy of health is dirt; and the worst of all kinds of dirt is that which arises from the destructive processes at work in the body.

INTERMITTENT FEVER—AGUE—CHILLS AND FEVER.

SYMPTOMS.—*Cold Stage:* Yawning; stretching of the limbs; headache; nausea, and perhaps vomiting; nails blue; goose-flesh; thirst; shivering, or violent shaking; back-ache; pain in the calves of the legs; the chill lasts thirty minutes to three or four hours.

Hot Stage: Fever comes on gradually; headache increased; skin hot; lasts three to twelve hours.

Sweating Stage: The fever is followed by copious perspiration, during which headache and other symptoms subside; the patient goes to sleep and wakes up feeling

quite well, and remains so until the next attack.

This is one of the most common of all the forms of malarial disease. The above symptoms may be varied more or less in different cases. For example, the chill may be lacking entirely, or it may be replaced by other nervous symptoms, as convulsions. This is most likely to occur in children. Cases in which the characteristic symptoms of the chills are not marked, are sometimes termed "dumb ague." Several varieties of ague are described, according to the length of time between the paroxysms. When the patient suffers a daily attack, the disease is called *quotidian*. The form in which it occurs every other day is known as the *tertian* type. When the chill occurs every fourth day it is said to be of the *quartan* type. Cases occur which come on the fifth, sixth, and even the thirtieth day. Occasionally, double types occur. A person suffering with the double quotidian type has a paroxysm twice a day. In the double tertian type, the paroxysm may occur twice in the same day, or the two sets of paroxysms may occur on different days, when we have an imitation of the quotidian form. The quartan variety, or "forty-day ague," as it is sometimes termed, is often quite difficult to cure. The paroxysms may occur at a regular hour on stated days, or an earlier or later hour. The chill nearly always occurs in the forenoon, or sometime between midnight and noon. The most obstinate form of the disease is that in which the paroxysms occur with great regularity.

Among other symptoms may be noted a muddy complexion, coated tongue, often yellowish dinginess of the white of the eyes, enlargement of the spleen, and tenderness of the spleen and liver. When the spleen becomes greatly enlarged, as is often the case with chronic malarial affections, it is known as "ague-cake."

TREATMENT.

When possible, the patient should remove to a non-malarious locality. This is particularly important in severe cases, because one attack does not insure a person

against a second, but rather increases the liability. In selecting a residence, care should be taken to avoid settling in a malarious locality. The popular remedy for malarial diseases of all kinds is quinine. The efficacy of this drug in checking the paroxysms of ague is undoubted. When given in sufficient quantity, the disease may be interrupted in almost every case. Unfortunately, however, the drug does not seem to possess the power to neutralize the poison, since the paroxysms often show an obstinate tendency to return when interrupted in this way without further treatment. In order to effect a permanent cure, it is necessary that the patient should be subjected to thorough eliminative treatment. Packs, hot-water baths, vapor baths, and Turkish and Russian baths, are the best for this purpose. When these are first employed, the paroxysms can be interrupted by the use of a very small dose of quinine, when a very large one would otherwise have been required; and if the eliminative treatment is continued for a time, the disease is much less likely to return.

Although quinine is supposed to be the great specific for malaria and almost indispensable for the successful treatment of the disease, we have repeatedly demonstrated the fact that the disease is curable without it, and in fact without any drug whatever. Our usual plan of treating ague is this: If a patient comes to us suffering with chills every other day, having already passed through his regular paroxysm, we begin treatment with a wet-sheet pack about five or six o'clock in the afternoon. The patient is kept in the pack an hour, and is allowed to sweat profusely. The pack is followed by a wet-sheet rub, after which a thorough fomentation is applied over the liver, spleen, and bowels. A copious enema is administered if the bowels are constipated, and the patient is put to bed with a wet girdle about him. The next day the hot-air or vapor bath is administered about ten o'clock A. M., being followed by another wet-sheet rub and a fomentation over the liver. In the evening, a wet-sheet pack with a fomentation is again administered and the

patient is put to bed with the abdominal girdle, well wrapped in woolen sheets and wearing a woolen night-dress. Having ascertained the time at which the next chill will occur, the attendant should be on hand at least two hours before the paroxysm is expected to begin, so as to be ready in case any irregularity should occur. The patient is now carefully observed, his temperature being taken every half-hour with the thermometer. The first indication of the approach of the chill is a slight rise in temperature. Instead of being $98\frac{1}{2}^{\circ}$, it will be 99° or 100° ; and as the time approaches for the paroxysm to begin, the temperature rises to $100\frac{1}{2}^{\circ}$, 101° , or even higher. When the attendant finds the patient's temperature rising, he uses the thermometer every fifteen minutes, and if he finds it rising quite rapidly he knows that a chill may be expected very soon, and at once begins vigorous efforts to forestall it. Having previously got in readiness six or eight bottles filled with hot water, or an equal number of hot bricks, hot sand-bags, or other means for applying dry heat, he promptly brings these into requisition, placing a hot jug or brick at the patient's stomach, two at his back, others at his feet, the sides of the limbs, at the hands, etc. The blankets are carefully tucked about his shoulders, extra covering is put on, and he is allowed to drink freely of hot drinks of some kind. We never advise ginger or pepper-tea, as they are irritating to the stomach. In nine cases out of ten, the result of this procedure will be to convert the impending chill into a vigorous sweat. This can be accomplished in nearly every case when the patient has had the proper preliminary treatment, and when the treatment is properly managed. It is necessary to exercise some care in its use, however. It is important to get the patient sweating at just about the time when the chill would have begun. It is also necessary to use great care that the patient is not kept in the dry pack too long, since there is usually some fever, even if the chill is escaped.

As soon as it is apparent that all danger of chilling is past, which will not be for an hour and a half to two hours at least,

the patient should be wiped with dry, warm flannels, under the bedclothes, without exposing him to the air, and the hot jugs or bricks should be one by one removed, and the extra covering gradually taken off, and thus he should be by degrees cooled off. A very slight exposure at this time, or drinking cold water, will bring on the chill. In some cases, a very slight chill will occur even in spite of these precautions, but one or two repetitions of the dry pack will almost invariably succeed. When we have been able to carry out this plan of treatment thoroughly, we have rarely failed in effecting a cure, even without the use of any other remedies. One fall we treated thirty or forty cases of malarial fever, and succeeded in effecting a cure in every case without other remedies than the eliminative treatment and the dry pack. Treatment must be vigorous and thorough.

The success of this plan of treating the disease depends upon the elimination of the poison from the system through the skin. The method of elimination for which nature manifests a decided preference is indicated by the profuse perspiration to which the disease is subject. If the eliminative treatment is continued until the brown coating disappears from the tongue, the disagreeable taste from the mouth, the dingy hue from the white of the eye, and the peculiar sallowness from the skin, the dry pack will be almost certainly successful. In fact, we believe that any measure which will interrupt the paroxysm may be considered as curative, after proper eliminative treatment has removed the greater part of the malarial poison from the system.

From observation and careful study of quite a large number of cases, we have come to the conclusion that it is possible for the paroxysm to be fastened upon the system as a habit, so that it may continue long after the poison by which it was first excited has been eliminated from the body. When this is the case, anything which will interrupt the periodicity or regularity of the paroxysm will effect a cure. The same principles are illustrated in the treatment of other diseases; for example, holding the

breath to stop hiccough, and practicing gymnastics to relieve St. Vitus' dance. We have often known persons to be cured of ague by the adoption of some peculiar mode of treatment, such as going down stairs on the hands and knees head foremost, and similar apparently absurd measures. We knew of a case in which a man cured his daughter of ague by burying her in the ground, leaving only the head uncovered, for three hours, at about the time when the chill was expected. Another illustration of the effects of habit upon the system is in the frequency with which relapses occur months, and even years after a person has removed from a malarious district, and has apparently entirely recovered from the effects of malarial poisoning.

These relapses can always be traced to taking cold, or some indiscretion which occasions a slight fever, the occurrence of which is sufficient provocation to develop the tendency to periodicity existing in the system. We have long entertained serious doubts whether this form of intermittent fever is really malarial in character except in the sense that it is due to a habit impressed upon the system by previous malarial influences. Cases of this kind are always very mild, and yield promptly to the use of the dry pack.

TREATMENT DURING THE PAROXYSM.

The dry pack is also the best measure to diminish the severity of the chill during the paroxysm. Care should be taken not to keep the patient heated up too long, as otherwise the fever may be greatly increased in intensity. In one case, which we had under observation, the patient fell asleep in the chill, and the nurse neglected to remove the hot bricks by which he was surrounded, so that when he was aroused, after a short time, it was discovered that he had become delirious. The withdrawal of the hot bricks, and employment of cold applications to the head, and cold sponging, soon reduced the heat and relieved the delirium, however, and the patient made a good recovery.

After the fever is fully established, so that the patient has ceased to complain of chilly sensations, the amount of covering

should be gradually diminished ; and when the fever has reached its height, tepid sponge baths or a wet-hand rubbing should be repeated every few minutes, while the head is kept cool by cloths wrung out of cold or ice-water. Care should be taken not to begin sponging too soon, or to cool the patient too rapidly, as the chill may return. During the sweating stage the patient should be wiped off with dry flannels ; and at its conclusion, the wet clothing should be exchanged for clean and dry garments, and a tepid sponge bath should be administered.

Cold affusions and the application of ice to the spine has been recommended as a means of interrupting the chill. We consider these as harsh measures, and never employ them. In fact, about all the treatment that is of any benefit during the paroxysm is such as will render the patient more comfortable at the time. Nausea may be relieved by hot drinks during the cold stage, and sips of cold water, or bits of ice, during the hot stage. If the patient has eaten a meal just before the beginning of the chill, it is generally best, when there is very much nausea, to assist him to empty his stomach by giving a warm water emetic.

The diet of an ague patient should be very plain and simple. Butter, meat, sugar, rich sauces, and all kinds of pastry, should be entirely avoided. The diet should consist almost entirely of such food as oatmeal gruel, graham or Indian-meal gruel, rice, baked apples, stewed prunes, figs, and grapes. This diet should be continued until the tongue clears off, and then the patient should return to his usual diet very slowly. The free use of lemons is generally advantageous, though, as a general rule, patients become tired of them after using them freely for three or four days. As before remarked, the disease may be successfully treated without the use of quinine or any other drug, yet many cases occur in which small doses of quinine, chinoidine, or some other preparation of Peruvian bark, may be advantageously employed. We have no faith in the popular notion that it is better to allow the disease to "wear itself out." In many

cases the patient becomes worn out instead of the disease. Consumption and various other constitutional disorders may arise from the long continuance of ague or any other severe malarial affection. If the disease does not yield within a week to the measures before described, it will invariably yield to a very small dose of quinine, or double the quantity of chinoidine. We rarely find it necessary to use more than four to six grains of either. After the patient has had a week's course of treatment, as before described, the remedy should be taken during the sweating stage at the conclusion of the paroxysm, or four or five hours before the time the next paroxysm is expected. Although we think it best that the use of quinine should be avoided so far as it can be, on account of its disturbing effect upon the digestive organs, we do not think there is ground for the popular belief that it injures the bones, or very frequently gives rise to permanent or serious injury of any sort. There is, however, some ground for the belief that cases of deafness are occasionally produced by its use in large doses.

Whenever its employment is thought necessary to interrupt the paroxysms of ague, it should not be relied upon as a curative measure, but should be followed by thorough eliminative treatment, such as packs, full baths, hot-air baths, and fomentations over the liver and spleen. Daily fomentations over the liver should be continued for several weeks, if necessary. In case the spleen and liver are considerably congested and enlarged, as indicated by pain and tenderness on pressure in the region of these organs, local hot and cold applications should be employed daily until the symptoms disappear, and the patient should wear for several weeks a moist abdominal bandage at night, replacing it by a dry flannel during the day. In bad cases, the moist bandage should be worn night and day, being discontinued during the daytime as soon as evidences of irritation of the skin make their appearance.

A malarial attack should always receive prompt attention, as the disease is likely to develop the pernicious form known as

"congestive chills," which may be uncontrollable by any remedy.

In conclusion we wish to say that the various popular ague-cures which are sold so extensively in malarious countries, almost without exception contain either quinine or some other preparation of Peruvian bark, possessed of the same properties. Those that do not, contain arsenic, or some other drug worse than quinine. Their use is to be condemned, as they are in no way preferable to quinine, and are likely to be much more injurious.

A Chinese Opinion of Tea.—The following eulogy of the Chinese herb is preserved in manuscript in the British Museum, having been written two hundred years ago, and purporting to have been translated from the Chinese language. The production sounds very much like the advertisements of medical nostrums which are recommended so highly for all the ills that flesh is heir to, with which the newspapers abound, and was undoubtedly written by some one who wished to create a demand for the fragrant herb:—

"1. It purifies the Blood that which is grosse and heavy.

"2. It vanquiseth heavy Dreames.

"3. It easeth the brain of heavy Damps.

"4. Easeth and cureth giddiness and Paines in the Heade.

"5. Prevents the Dropsie.

"6. Drieth moist humors in the Heade.

"7. Consumes Rawnesse.

"8. Opens Obstructions.

"9. Clears the Sight.

"10. Cleanseth and Purifieth Adust (*sic*) humorous and hot liver.

"11. Purifieth defects of the bladder and kidneys.

"12. Vanquisheth superfluous sleep.

"13. Drives away dissines, makes one nimble and valient.

"14. Encourages the heart, and drives away feare.

"15. Drives away all paines of the Collic which proceed from wind.

"16. Strengthens the inward parts and prevents consumptions.

"17. Strengthens the memory.

"18. Sharpens the will and quickens the Understanding.

"19. Purgeth safely the gaul.

"20. Strengthens the use of due benevolence."

If the herb really possessed one-half the merit claimed for it, it would certainly be one of the most remarkable of all vegetable productions. After it has been in use for two centuries, it has at last been thoroughly shown that the above statements would all be true if the qualifying word "not" were introduced into each one of them.

Temperance Camp-Meetings.—Five large temperance camp-meetings have been held this year in as many different States. One is now in progress, and another is to be held near Boston in two weeks. The temperance cause is certainly making some advancement, and we trust that this reform is preparing the way for other more thorough-going reformatations which will improve the prospects for the next generation. Race deterioration is a most appalling fact made evident by the results of daily observation.

Earthenware Milk Vessels.—Much of the sickness among infants in summer comes from the use of milk which contains the elements of decomposition derived from sour milkpans. Pans which contain seams are difficult to cleanse. The tin itself is likely to be contaminated with lead, and on the whole we would recommend that tin milkpans be abandoned entirely during the hot weather, at least, and earthenware vessels employed instead. There is now made a milkpan which is free from seams, being pressed into shape; and when the purity of tin can be assured, these are of course nearly if not quite as good.

LITERARY NOTICES.

THE AMERICAN JOURNAL OF EDUCATION comes monthly to our table, and is ever a welcome visitor. It is now in its fourteenth volume, which speaks well for its popularity. It is one of the best of educational journals, and should be read by all who are interested in the cause of education.

THE POPULAR SCIENCE MONTHLY holds its position as the leading scientific journal of the country. It serves up each month in palatable form a scientific repast which draws its materials from every department of science. Even the most abstruse theories are by skillful writers not only brought within the comprehension of the

common people, but rendered highly attractive and interesting even to those least familiar with scientific topics. No one who cares to be informed on those questions which lie at the foundation of material progress can afford to be without this excellent journal.

ON THE SELF CURABILITY OF DISEASE; or, *The Divine Art of Healing against the Human Art of Healing*; or, *The Natural Cure of Disease against the Customary Use of Drugs*, is the title of a work of 48 pages, by R. K. Noyes, M. D., of Lynn, Mass. The author is what may be termed a Nihilist in relation to medical theories. He states, in his preface, that he has come to believe with reference to medicine that "this profession, this art, this misnamed knowledge of medicine, is none other than a practice of fundamentally fallacious principles, impotent for good, morally wrong, and bodily hurtful." We cannot resist the conclusion that the author is a sensationalist, an extremist, and a fanatic on the subject of which he writes. We think his book calculated to do quite as much harm as good.

OUR BEST WORDS, edited by our friend, Rev. J. L. Douthit, is one of the best family papers we know of. The editor is a man whose acute sensibilities render him keenly alive to the wants of the times and the special needs of his readers. Although we supposed the "Best Words" to be the organ of a church organization, we find so little of a sectarian nature in it that we feel wholly safe in commending it to all as a lively, interesting, and instructive monthly, well worth the subscription price of 50 cts. a year.

DIO LEWIS'S MONTHLY FOR JOLLY FOLKS, is the title of a new monthly magazine, of which we have just received the first number. It is racy, interesting, and withal instructive, for which we commend it as the best funny paper we know of. It is a good thing to take for the dyspepsia.

THE BRAINS OF CRIMINALS. Benedikt, New York: Wm. Wood & Co.

This is the title of a translation of a foreign work, the author of which has made most extensive investigations respecting the relations existing between the brains of criminals and the kind of crimes committed. The following paragraphs from the preface of the work embody the central ideas which led the writer to make these investigations:—

"That man thinks, feels, desires, and acts according to the anatomical construction and physiological development of his brain, was even in olden times (*Erasistrates*) a conviction—or yet more precisely—it was a dogma among reflective natural philosophers."

"An inability to restrain themselves from the repetition of a crime, notwithstanding a full appreciation of the superior power of the law (society), and a lack of the sentiment of wrong, though with a clear perception of it, constitute the two principal psychological characteristics of that class to which belong more than one-half of condemned criminals."

HARMONY OF SCIENCE AND THE BIBLE ON THE NATURE OF THE SOUL AND THE DOCTRINE OF THE RESURRECTION. J. H. Kellogg, M. D. Cloth, 224 pp. Price 60 cts. *Review and Herald Office, Battle Creek, Mich.*

This is a beautiful little volume, written in a pleasing style, pervaded by a charitable spirit, and yet characterized with much independence of thought and manly boldness in the enunciation of carefully studied conclusions. We commend it as worthy a place in any library. With most of it, our readers would be in hearty accord. There would be an honest difference of opinion, however, on one of the author's main positions, namely, that the resurrection does not require the use of the identical atoms of matter that entered into the old body. This question cannot be settled by a toss of the head or a cheap laugh of ridicule. The author's position is worthy of the most candid and thorough investigation, without which it is unwise and unsafe to antagonize it. We might add that many Biblical scholars of the age take essentially the same view of this particular point. Dr. Kellogg has certainly presented arguments that any man would find it difficult to refute. Let the reader examine and decide for himself.—*Bible Banner.*

100 ARCHITECTURAL DESIGNS, is the title of a little work which we have just received from the author, Wm. T. Comstock, 194 Broadway, New York. We commend it to all who contemplate building a home, for the numerous neat and tasty plans for healthful homes which it contains.

THE CHILDREN'S MUSEUM. F. B. Goddard & Co., No. 6 Bond-st., New York.

This is an illustrated monthly for the children. It is full of charming sketches and stories, entertaining to the young, and not less attractive to many of more mature years.

PAUL HART. Philadelphia, Pa. T. B. Peterson & Brothers.

This is a new novel, the characters of which are wholly American, and the scene principally laid in the metropolis of the Empire State. The author dwells less upon the imaginative than most novelists, and many of the characteristic individual traits are very true to life. The plot possesses some interest, but the style is by no means above criticism. This, however, is less excusable than the numerous grammatical errors. The work can hardly pass for a good novel, and as the best novels are poor food for the mind, we do not feel like encouraging this class of literature.

THE QUALITY OF MENTAL OPERATIONS DEBASED BY THE USE OF ALCOHOL. By T. L. Wright, M. D. Bellefontaine, Ohio.

This excellent pamphlet is a reprint from the *Alienist and Neurologist*, and is an analysis of certain depraved mental states, showing many of the disastrous consequences of an indulgence in alcoholic stimulation. We commend it to the attention of every dram-drinker.

Publishers' Page.

☞ We are making up a fine Premium List of useful articles which we shall offer as inducements to canvassers to make up large lists for GOOD HEALTH. We hope to be able to publish at least a partial list next month.

☞ The number of patients at the Sanitarium this summer reached nearly two hundred at one time. The crowd still continues, yet there is room provided for a few more.

☞ The whole country is in mourning on account of the hopeless condition of the president, whose physicians announce him to be in a dying condition as we go to press. Already much unjust censure is being cast upon the eminent physicians who have had his case in charge. We have feared that too much reliance was being placed upon stimulants, which we believe to be a general error in such cases, especially with army physicians; and we are glad to see the recent statement of Dr. Bliss to the effect that the use of stimulants has been very limited. We believe that good sense has on the whole prevailed in the management of the case, and trust that every resource of medical science and art has been utilized in behalf of the distinguished patient.

☞ A MEDICAL COURSE.—Dr. Kellogg will deliver, this winter, at the Sanitarium, a course of lectures to a select class of students who wish to prepare themselves to enter some first-class medical college. The practical instructions and exceptional opportunities for medical observation makes this an unusually favorable opportunity for a few well prepared young ladies and gentlemen who will be allowed to pay their way in assisting in various practical branches, in which they will gain invaluable experience, while helping themselves pecuniarily.

☞ The American Health and Temperance Association is not dead, though less active work has been done than it was hoped would be accomplished during the past few months. The great want is men and women who will give time and energy to the work. Notwithstanding, much real good has been done, and more or less permanent results have been secured; but it is time for a step in advance, and something must be done to keep up an increasing interest in this work.

Blanks for the annual reports are being sent out to the various State organizations. The proper officers will please see that the blanks are promptly filled and returned to the Secretary, Miss M. L. Huntley, Battle Creek, Mich.

J. H. KELLOGG, *Pres. A. H. and T. Ass'n.*

☞ Owing to a large advance in the price of flour the manufacturers of the "Sanitarium Foods" find it necessary to reduce the rate of discount from twenty per cent to ten per cent by the quantity. Those who order foods by mail should send eight cents per pound extra to pay postage.

☞ So many calls have been made for the chapters to boys and girls in Dr. Kellogg's "Plain Facts" in separate form, the author is revising and enlarging them for publication in two beautiful pamphlets, which he hopes to have ready for the holidays.

☞ The "Sanitarium Foods" are meeting with great sales. The food department is a busy place now-a-days. To a visitor the many novel processes by which all kinds of grain products are converted into palatable, wholesome foods, and when necessary into dietetic remedies for disease, are an interesting study. The "Infant Food," prepared from the formula devised by Dr. Kellogg, is one of the most servicable of all the numerous excellent preparations. Most of the various "foods" for infants sold at the stores are really of little or no value, consisting as they do almost wholly of sugar or dextrine, a substance almost identical with sugar. These patent foods will not sustain life if eaten alone. This is not true of the food prepared at the Sanitarium. It contains all the elements of nutrition in itself, in proper proportions; moreover, it is very palatable, and the little ones cry for it after once getting a taste. Full directions accompany each package. The price is placed at about one-third the usual rate, or 25cts. a single package.

☞ WANTED.—A few first-class kitchen and laundry hands can obtain a good situation at the Sanitarium with reasonable compensation. Only those who want a permanent situation need apply.

☞ The Home Hand-book has been a great success, although but a few months out of press. The author has been fortunate in avoiding ultra and untenable positions, so that the work has received the hearty indorsement of the most intelligent portion of the medical profession wherever it has been introduced. It is a complete encyclopedia of useful knowledge on all health topics. No other modern health work can compare with it in completeness and practical value. No hygienic home is complete without it.

☞ We have, for a few months back, had the pleasure of testing the merits of a novel heater manufactured by the Open Stove Ventilating Co., of 78 Beekman St., New York. This heater possesses all the advantages of an open fire-place, and yet may be closed up so as to "keep fire" and economize fuel like a stove. In addition, it may be so arranged as to secure efficient ventilation whether open or closed, and gives a constant supply of fresh, warm air direct from out of doors. The company have very recently perfected an "Air-Warming Grate," which they announce as superior to any other of their productions. We have no hesitation in saying that we know of no heating apparatus which will begin to compare with this for healthfulness. It will prove an excellent preventive of colds, and consequent sore throats, pneumonias, consumption, and other pulmonary affections, wherever introduced. Those who are about purchasing heaters, should send for circulars to the above address before doing so.

☞ Persons residing in Canada can obtain the Sanitarium Foods of Geo. Detwiler, Berlin, Ont.