

GOOD HEALTH.

A JOURNAL OF HYGIENE.

MENS SANA IN CORPORE SANO.

VOL. 17.

BATTLE CREEK, MICH., APRIL, 1882.

NO. 4.

MEDICAL GYMNASTICS, OR SWEDISH MOVEMENTS.

BY THE EDITOR.

PASSIVE AND ACTIVE-PASSIVE MOVEMENTS.—This class of movements requires the assistance of a skilled attendant.



FIG. 1.

Many of them may be learned by almost any intelligent person, however, and their



FIG. 2.

great utility warrants a brief description in this connection.

Figs. 1 and 2 represent exercise of the arm, flexion and extension. These movements, like most other passive movements, are applicable to persons who are either too weak to take active exercise, or are suffering from paralysis which renders them incapable of doing so. It is a most useful exercise in cases of rigidity of the



FIG. 3.

joints as the result of fractures, sprains, or other accidents which require long inactivity. It should be employed in all such cases; and neglect of this important meas-



FIG. 4.

ure in cases requiring it has not infrequently resulted in irreparable injury to the affected joints.

Fig. 3 illustrates flexion and extension

of the hand at the wrist; to be used in the same cases as the preceding.

Fig. 4 indicates the same kind of exercise applied to the lower extremities.



FIG. 5.

Figs. 5 and 6 represent an attendant in the act of flexing and extending the foot of a paralytic patient.



FIG. 6.

Fig. 7 shows the method of rotating the hand at the wrist, a means of treatment



FIG. 7.

often found useful in cases in which there is deficient mobility of the joint.



FIG. 8.

Fig. 8 illustrates the same movement applied to the foot.



FIG. 9.

Fig. 9 shows the position of the lower limbs and the hands of the attendant in applying the rotary movement to the hip-joint.

FULLING MOVEMENT.—Fig. 10 illustrates a form of passive movement which has



FIG. 10.

been appropriately designated as the "fulling" movement. The cut represents the movement as applied to the arm. It is applied to the head, neck, trunk, and lower limbs in a similar manner. It is an ex-



FIG. 11.

cellent means for encouraging assimilation and relieving internal congestion by in-

creasing the circulation of the blood in the surface of the body.

KNEADING.—Fig. 11 illustrates a method of kneading the muscles of the arm. The muscles of the arm are grasped at its upper extremity by the thumb and finger, being rubbed to and fro between them as the hand passes along the arm. In a similar manner the whole body may be kneaded. Kneading of the bowels, applied in a manner similar to that in which a baker kneads bread, employing either one or both hands, is a most excellent means of relieving slow digestion and chronic constipation.



FIG. 12.

STROKING.—Fig. 12 illustrates a movement known as stroking. The hands are applied to the part of the body to which the movement is being applied, and are moved slowly from above downward at first, and then afterward in an opposite direction, in such a manner as to follow the course of the veins and thus encourage the venous circulation. The application may be a very gentle one, soothing in character, or may be sufficiently vigorous to secure a considerable degree of exercise. Applied to the head and spine, stroking is a very excellent sedative, often securing sleep in persons who are unable to sleep on account of nervousness. Stroking the abdomen is an excellent means of increasing the activity of the bowels, and should be made to follow the course of the colon, so as to encourage the downward passage of the contents of the bowels. The hands should be applied low down on

the right side and pressed upward to the ribs, across to the opposite side, and then downward to a point opposite the place of starting. Either one or both hands may be applied, and the movement may be made as gentle or as vigorous as the condition of the patient or the effect desired may require. At the outset of treatment it will often be found that great tenderness is present, so that the most gentle manipulation must be employed; but an experienced manipulator will at first avoid the tender points, gradually encroaching upon them more and more, until finally as great a degree of vigor may be employed as is desired.

CLAPPING.—Fig. 13. This movement consists in alternate percussion of the sur-



FIG. 13.

face with the palms of the hands. It is one of the most generally applicable of all the forms of movement, being usefully applied after nearly all forms of water bath. Whenever it is necessary to excite activity of the surface, it is an admirable measure. Its effect is evidenced by the red color of the skin which almost invariably follows its application.

CHOPPING.—Fig. 14. This movement is similar to the preceding, the only difference being that the edge of the hand, instead of the palm, is used in application. In both chopping and clapping, it is important that the movement of the hand should be wholly from the wrist, which should be kept perfectly flexible. When the wrists are rigid, the movement being made from the elbows, the effect produced is unpleasant, the patient feeling as though

he were being pounded. In chopping, the blow should be quick and sharp, though little force should be employed.



FIG. 14.

The surface should be struck with the fingers, which should be kept a little way apart, and held loosely, so that they will clap together with each stroke. The object of the movement is to secure by quick, short blows rapid contraction of the muscles. It is a most excellent means of passive exercise, and a most efficient promoter of assimilation. Chopping may be applied to the whole body. It should be executed systematically.

THE OVERWORKED ORGAN.

THE second of the final advancements had relation to food and feeding. The physiologists, dealing with the two questions of *digestion* and *food for digestion*, were led to the conclusion that a considerable shortening of life was caused by the excess of work which was put on the digestive organs. They bore in mind the fact that many persons die from the wearing out of one particular organ, the rest being still healthy. Of all organs they agreed that the *stomach* is the most exposed to this danger. It is worked so much more in comparison with other organs, that it must be the first to die unless the uses to which it is put are wisely directed. They found on inquiry that the truth was as they suspected, and that the stomach was distressed both by quantity and quality of food. This led to quite a social revolution. Following a suggestion thrown out by *Flourens*, they

decided, on anatomical grounds, that man was neither herbivorous nor carnivorous but frugivorous,—a fruit-eating animal. Next they estimated the precise amount of food and drink that was necessary to support the reserve and the active life in the varied stages of life.

Again, they determine the reduction that is required when the reserve life is withdrawn, and when, the active life being left alone, it is the more requisite that no additional surplus of tissue or fluid should encumber the body. Step by step they were led to the introduction of an entire change of food and feeding. Animals were given up as a source of sustenance; fruits became in demand; the bread-tree competed with the wheat grain; the banana and the grape were largely in use; water and the juices of fruit entirely superseded malt beverages; while chemistry transmuted many vegetable substances into most perfectly digestible foods for every variety of age and constitution. Of animal substances, milk only and the products of it—butter and cheese—retained full sway. Of the vegetable kingdom, not frugivorous, cereals, pulses, tomatoes, peas, potatoes, and other fresh vegetables, with the edible fungi, maintained their useful place; and, in respect to quantity of food and drink, not more than half, by weight, was consumed, compared to what had been consumed before.

The change thus commenced became universal. It modified not in the least the spirit of hospitality, while it refined it immeasurably. To banquet for the sake of sensual gratification became an obsolete vulgarity; to eat till the sense of oppression from food was the accepted index of enough, and nothing less, was considered worse than vulgar; while the value of abstinence to the body at large by the saving of digestive power and of stomach cell-life, added another period to the general life that had already been acquired. . . . Then when the Sun became the fellow-workman of the people of *Salutis-land*, the redemption of their bodies from premature death was carried out with the fullest success. The people saved millions in money, but this was nothing to the sav-

ing in health. . . . All *Salutis-land* laid down like one vast living world, to enter oblivion, and to wake from it filled with another spell of life, ready and happy to greet another day. The hundred years (as the natural term of human life) in *Salutis-land* were won.—*Salutis-land*, by DR. B. W. RICHARDSON, F. R. S.

HEALTH, THE TRUE NOBILITY.*

BY DR. ALBERT L. GIBON, U. S. N.

CONCLUDED.

THE nausea which assails you in the confined cabin below the water-line or in the musty, pestiferous sleeping holes of a Pulman car, disappears when you have access to the free air, as does the drowsiness which possesses you in church, and which you have ascribed to the prosy sermon. When the public can be made to realize that one-half the men, women, and children who are falling dead around us have died before their time from preventable diseases, and that most of these are due directly or indirectly to impure air, they will appreciate how momentous is this problem of keeping clean the atmosphere we breathe. Yet air as deadly may be found in the sumptuous palaces of princes and millionaires. Men build costly mansions, and heedlessly fit them with contrivances designed to aid that indolence of luxury which spares the flaccid muscles the slightest effort, and which, through their unsanitary construction, destroy their children and themselves.

The victims of typhoid and diphtheria sleep without waking on satin cushions in rosewood coffins. Our own children go to ill-ventilated schools by day, and sleep in ill-ventilated rooms by night. The invalid teacher, fretted by the cares of her vocation, enfeebled by her sedentary life and cheerless solitude, tries to supplant her failing heat-producing power by closing windows and doors and building fires, until the crimson which the sun-light had stamped on the child's cheek fades, and she too shivers at the fresh air's touch.

You, too, suffer headache from foul air;

you are tired and listless from foul air; you sleep disturbed and awoken unrefreshed from foul air; ten in every thousand of you die yearly from foul air. Happier by far to sleep on a rude pallet in a garret, through whose thatched roof the stars twinkle, than on the downiest couch in the alcoved recess of a palace chamber, whose heavy hangings stifle the still air which curtained windows have imprisoned and fire and sewer have poisoned! Better shiver as they do in Europe around a porcelain calorifere, than drowse in lethargic stupor from breathing the mephitic atmosphere of an apartment, overheated by the furnaces and flues by which modern ingenuity contributes to the defilement of the air, accomplished by coal gas, illuminating gas, sewer gas, and human exhalations. The one gift of which nature has been so munificent that peasant and prince alike can boast a boundless wealth of it,—the one whose purity she has so carefully provided that it can only be polluted by confining it,—that of all others most essential to the healthy maintenance of the body, is fresh air. Chief food of the well—most potent of remedies for the sick! Place the convalescent where the bright sun-warmed air can kiss her pallid cheeks; lead the careworn man from the murky recesses of his office to the sea-shore, where the fresh breeze comes skipping over the waves; send the swarms of feeble, emaciated children from the dark, damp courts and cellars of the city into the green fields, with their air perfumed by wild flowers, if you would witness the magic that can be wrought by this invisible agent. But is health only possible in the sunshine, on the sea-shore, or upon the open fields? No! The air of the city may be as pure as that of the mountain top if it be given scope to free itself of impurities. The nursery and the schoolroom, the chamber and the office, the court-room, the theatre and the church, can all be habitable, if human intelligence will lend itself to this one problem of cleansing the air—if the masses will realize that invisible, impalpable filth is as noxious as that filth which offends the sight and touch, and infinitely more to be dreaded. Learn to shun this, and the great

* A paper read before a recent meeting of the American Public Health Association.

victory of sanitary science will have been won.

It is almost supererogatory to do more than suggest that the law of cleanliness involves cleanliness of the body itself as well as of the habiliments with which it is clothed and the domicile it inhabits. One need not be a physiologist to understand what wonderful influence a clean skin has upon the harmony of the functions, how many pounds of effete material are cast off by it during the day, and how necessary that this human refuse should be removed. The dry, grimy skin is neither healthful, comfortable, nor beautiful. If the prize of health be not incentive enough, nor the sense of comfort be an inducement to frequent bathing, the clear complexion and soft, smooth, velvet surface of the clean man and clean woman should induce every human being to avail himself or herself of this cheap balm of beauty.

Man breathes through skin as well as lungs, and if I have succeeded in convincing you that the airy aliment with which the inner man is fed must be innocuous, I would have you not forget that the outer man cannot wallow indolently in the human waste, which the processes of life accumulate about and upon him, without falling from that high caste of physical manhood to which his superior development entitles him. Time will not permit me to enter into the details of the toilet, beyond insisting that a matutinal washing of the face and hands, and an occasional ablution of the feet, are not all the care of person that health requires.

The undergarments, freighted with their load of organic debris, must be changed and cleansed, and the porous surface of the body freed from the dry, horn-like coating of epithelial scales, which neglect allows to form and interfere with the cutaneous exhalation. Man is pre-eminently the creature of habit. The child trained to be clean from birth will look upon sponge and bath and tooth-brush as indispensable, and will walk all its days on the cleanly path on which its mother first taught it to pick its footsteps. The sordid teeth and fetor-tainted breath are not

only disfigurements of the fairest face, but shameful evidences of maternal neglect and incapacity.

With this I might cease to claim your attention. When the lungs are hourly filled with pure air, and the clean body is bathed in its sunlit ocean, the enlivened blood will crave its proper food, and the awakened appetite may be safely trusted to select it. Food has hitherto engrossed the attention of hygienists to the exclusion of this weightier matter of fresh air. Eat what you please of the good things of this life, only be sure to eat enough. Renounce the heresy that it is wise to rise from the table with hunger unappeased, and above all do not send the little helpless dependents on your bounty supperless to bed, to have their empty stomachs rack them with unquiet slumber. The gaunt-eyed gaze of the poor, under-fed shop-girl is a sadder sight than her scantily clad form, but the saddest sight of all is the spectacle of the poverty stricken mother spending her little stock of hard-earned pennies for drugs for the feeble child, which, like herself, needs only abundant food to be well. Let the food be good and wholesome, plentiful in quantity, and not ruined by cooking. National and sectional habits become idiocratic, and are not easily eradicated. The Yankee stomach delights in pies and baked beans, while hog and hominy are in equal favor in Dixie. Banish the pie board from the North and the frying-pan from the South, and thousands will live who now perish. The cook is a mighty power. Amid the smoke and vermin of the kitchen he wages war on the people who despise him. He sugars the venomous pill, and sweetens the poisoned draught, and with disdainful contumely bids you eat, drink, and die. Dignify his calling, and expound its mysteries to the ruler of the drawing room. Let the young mistress of the house know that culinary chemistry is as elevated a study as the physiological chemistry by her brother.

The sanitarian who has invaded the penetralia of the household, who has fought his way from kitchen to dining room and salon, may pause before he seeks

to peer beyond the curtained entrance of the dressing-room. Though he disclaim a purpose to assail the æsthetics of the boudoir, and invoke the womanhood of Hygeia as his authority for pointing out wherein they have failed to obey her laws, mother and daughter, grandmother and grandchild will bar the portal against him, and in spite of the goddess's precepts and his warnings, will clothe the future woman as they were clothed, and flock around the gaudy shrine where fickle fashion holds her sway. He may unveil the ample-waisted Venus, but they will turn admiringly to the costumed model in the modiste's window. He may point to the index of the spirometer, which proves unerringly that no woman who wears a corset can fully inflate her lungs, and they will contemptuously lift the edge and ask if that be tight. He demonstrates how the loosest stays prevent the rising of the ribs and flatten the bust, and summons the full-formed Andalusian, Moorish Jewess, and Manillian to bear him witness. He shows by diagrams how the French-heeled boot paralyzes the muscles of the leg, attenuates the calf, and deforms the foot; and argues in vain that a ring in the nose is no more barbaric than rings piercing the pink lobed ear, and that a mountain of hair, robbed from some victim of the morgue, and piled on oval, flat, elongated heads, without regard to symmetry, is both hideous and unhealthful. The corset maker waxes rich, and her hour-glass shaped abomination, fitly like the grim symbol of Time, the destroyer, continues to distort, deform, and destroy the beautiful outlines of nature's grandest masterpiece.

It is not my purpose to discuss the thousand sinnings against the divine Hygeia's laws which we all commit daily. Our children as soon as born are thwarted in their natural instincts by grandams and doting fathers and anxious mothers, who either starve them through fear of over-feeding, or gorge them into dyspeptic surfeits. The breast that should nurture them is unfitted for its office or denied them, and stalwart boys and girls are sought to be built up of farina and its

thousand starchy congeners. The little child toddles to school to have its brain prematurely stimulated by mental aliment as indigestible as the viands put into its stomach, by day cheated of its outdoor life, and burdened with nightly tasks, sits blearing its eye-sight over illegible print by flickering lights. It enters upon adolescence with fallow face, bent form, round shoulders, flat chest, and thin, frail limbs. If a boy, the weakly semblance of a man, learns to smoke cigars or cigarettes, arresting development, obtunding his brain, and impairing his vital powers, until he is only fit to be the father of one or two puny, whining, suffering little repetitions of himself. If a girl, her shrunken chest disguised into an absurd imitation of the shape of woman, her cheeks untinted save by cosmetic art, defying the elements in mid-winter in thin stockings, paper-soled shoes, and phantom under-clothing, she lives in the foul, over-heated atmosphere of the ball-room, spurring her feeble energies by the stimulus of excitement and beef tea to spurts of muscular effort, or saving herself when about to fall gasping by rushing to the open windows, she survives by chance to become a mother—a mother unfit for maternity. If parents thus idly witness the immolation of their children, they are not more tolerant to themselves. They labor to amass riches, to attain position, to acquire power, spurning the head health counsels, the man withering and molding under the pleasureless monotony of office routine, the woman bending and breaking beneath the servile drudgery of domestic burdens, her feminine charms and soft attractions vanishing to give place to the slattern's grime and wrinkled coarseness, they shamble along life's highway to fall before they reach their goal, or reaching it, to find the crown and laurel mirrored on a death's head, the sceptre in a skeleton's hands, and the gaudy trappings shrouding a living corpse.

Oh! men and women who listen to me, if you would not yourselves, nor have your children, meet this terrible fate, give ear in time to the words of warning that we of this association utter. If you would

taste the sweets of this bright, beautiful, glorious world, and live happy lives, unmarred by pain and sorrow, see that the greed of gain, the ignorance of the truth, the blindness of unreasoning gratification do not swerve you from the course of right living, which can alone make you hale, hearty, vigorous, godlike men and women. Do not wait until disease stalks into your homes, and then rush to summon the physician, in the hope that he will in a day undo the evil you have wrought in years. Oh! the monstrous incredulity of this enlightened age! The learned lawyer and divine, statesman and merchant prince, are heedless of sanitary teachings till their loved ones are stricken by the scourge they might have prevented. They, as well as their less gifted fellow-beings, hasten to swallow drugs and nostrums to relieve the bodily afflictions they have deliberately invited. Hamlet and city are ablaze with the colored lights of the apothecary's shop, whose bottle-burdened shelves find eager patrons. Public nuisances exist in great cities under the very eyes of the magistrates. The noisome refuse of the streets lies decomposing in the sun, sending its poisonous emanations into every house. A few decrepit laborers, with brooms they can scarcely wield, brush off the surface into little heaps, to be scattered by passing vehicles, and the miserable farce is unconcernedly witnessed by the intelligence of the age,—the same intelligence which commits to an ignorant mechanic the sanitary construction of a house, whose defects make it a more dangerous habitation than the widely creviced log-cabin of the frontiersman. The details of the midnight murder are carefully perused, while the health officer's solemn utterance,—thirty, forty men, women, and children in every thousand have died—fifteen, twenty of these from preventable diseases—fifteen, twenty murdered by ignorance that is unpardonable, by indifference that is culpable, by neglect that is criminal,—falls on unlistening ears.

Is it a harsh law, "Thou shalt be clean"? Is it an arduous duty for the parent to instruct the child that the nobility of health

is that to which it should aspire, that only the cultured body can be a fit residence of the sound mind, that though the garb be humble and the station obscure, the manhood of the man and the womanhood of the woman will be manifest in the bright eye, the blood-mantled cheek, the robust form, and the vigorous life shown in every movement? Every woman may not have symmetrical outlines of face and figure, but she need be marred by no sickly hue, emaciated frame, and faltering gait. Her heart should send a current of healthful blood to animate a form that knows no ailing. The center of a bright, joyous existence, she should be fit helpmeet, companion, friend, and lover, equally participating and reciprocating all the joys of sense and understanding of one, who, like herself, without blemish, stands proudly peer of all his fellows,—a nature's nobleman.

A PARAGRAPH FOR SMOKERS.

THE following paragraph is of practical interest to cigarette smokers who do not care to regale themselves with gleanings from the gutter, and are satisfied with becoming slaves to the tyrant, *nicotiana tobacum*, without becoming entangled in the toils of the opium habit:—

"I ran across a cigarette factory the other day. Whew! I would n't write—or, rather, you would n't dare print what I saw. Dirty butts of cigars fresh from the filth of the muddy streets are the cleanest and nicest of the material used in compiling these precious roads to ruin. I came down town on a Madison Avenue car this evening, and on the tail end there were three little chaps, the oldest about fourteen. Each smoked a cigarette and spat his little life away. I ventured to ask if they enjoyed the odor. They said they did. And the taste? Certainly. On inquiring I found they had a well-known brand of cigarette, noted for its "opium soak" and its terrible smell when burning. Poor little fellows! They can't last long. They were pale and sickly, puny and offensive. What kind of men will they make? Men! They're men already in

their own eyes. They and a majority of our little lads are full of the slang of the day, up in all the catches, and abundantly able to hold up their end of a conversation. I subsequently saw these three boys in Niblo's Garden. It would have done you good to hear them talk. A blind man might reasonably think he was listening to three old men. Nothing was new. They had seen it all before, and better done at that. Down went the curtain, out went the boys, but before they felt the first breath of fresh air from the street each puny hand held a cigarette to the vile-smelling mouth, and puff! puff! they sickened everybody in their vicinity. This is an old grievance of mine, and I don't care to bore you with it, but I feel it keenly.

"Day by day vice grows stronger. There was a time when cigarette-smoking was confined almost entirely to Cubans, who knew what good tobacco was, and made their own cigarettes. Gradually the habit spread. Dealers followed suit. Makers became unscrupulous. Little dirty boys were sent out to pick up cigar stumps. Other equally disgusting material was also utilized. Opium was made to do duty. Cheap paper took the place of rice paper. I wish these boys could see the stuff their paper is made from! Would n't it turn their little stomachs? I trow, I trow! The cheap paper, the old stumps, the opium, and the chemicals used to make them "strong" deserve to be shown up."

THE PLAGUE NARCOTIC.

BY REV. T. DE WITT TALMAGE.

[THE following sermon is one of a series recently delivered by the author on "The Ten Plagues." It is a very forcible presentation of the subject.—ED.]

"The first plague which I shall mention is the plague narcotic. In all ages the world has sought out some flower, or herb, or weed to stimulate its lethargy or to compose its grief. A drug called nepenthe was widely used among the ancient Greeks and the ancient Egyptians for narcotic purposes. The Theban

women knew how to compound it. You had but to chew the leaves, and your sadness was whelmed with hilarity. But nepenthe passed out from the consideration of the world. Next came hasheesh, which is made from Indian hemp. It is manufactured from the flowers at the top, or workmen in leathern clothing walk through the field of hemp, and the exudation from the hemp adheres to the leathern garments, and then this exudation is scraped off, and prepared with aromatics, and becomes an intoxicant for the people.

Whole nations have been stimulated, narcotized, and made imbecile with this accursed hasheesh. The visions kindled by that drug are said to be gorgeous and magnificent beyond all description; but it finally takes down body, mind, and soul in horrible death. I knew one of the most brilliant men of his day. Whether he appeared in magazine, or in book, or in newspaper column, he was an enchantment. He could in the course of an hour's conversation produce more wit and strange information than almost any man I ever talked with. But he chewed hasheesh. He did so first as a matter of curiosity, to see whether the powers ascribed to it really belonged to it. He put his hand into the creature's den to see whether it would bite, and he found out to his complete undoing. His father, who was a minister of the Gospel, prayed for him and counseled him, and obtained for him the best medical prescription of the best physicians in New York, Philadelphia, Paris, London, Edinburgh, and Berlin. He said he could not stop. A large circle of friends put their wits together to try to rescue him; but he went on down. First, his body gave way in pangs and convulsions of suffering; then his mind gave way, and he became a raving maniac; then he went blaspheming God into a starless eternity. He was only about thirty years of age. Behold the ravages of this Persian and Egyptian weed called hasheesh!

Opium demands emphatic recognition. It is made, as you know, from the white poppy. It is not a new discovery. We read of it three hundred years before Christ, but it was not until the seventeenth

century that it began its death march, passing out from the medicinal and curative, and by smoking and mastication becoming the scourge of nations. In the year 1861 there were imported into this country 109,000 pounds of opium, but last year, 533,000 pounds of opium. It is estimated that in the year 1876 there were in this country 225,000 opium-consumers, but I saw a statistic yesterday that said there are probably now in the United States at least 500,000 opium-consumers. The fact is appalling. Do not think that they are merely barbaric fanatics who go down under that stroke. Read the great De Quincey's "Confessions of an Opium-Eater." He says he went on until he took three hundred and twenty grains a day. He says for the first ten years it gave him the keys of Paradise. But it takes his own powerful pen to describe the horrors consequent. Samuel Taylor Coleridge, after conquering the world with his pen, was conquered by opium. The most magnetic and brilliant lawyer of this century fell its victim, and there are thousands of men and women—but more women than men—who are being bound body, mind, and soul to this terrific habit.

There is a great mystery about some families. You do not know why they do not get on. The opium habit is so stealthy, so deceitful, so deathful. You can cure a hundred drunkards easier than you can cure one opium-eater. I have heard of cases of reformation, but I never saw any. I hope there are cases of genuine reformation. I have seen men who for forty years had been the victims of strong drink thoroughly reformed; but the opium-eaters that I have seen, go on and go down. Their cry in the last hour of life is not for God, nor for prayer, nor for the Bible, but for opium. Perhaps there are only two persons outside the household who know what is the matter,—the physician and the pastor,—the physician called in for physical relief, the pastor called in for spiritual relief; but they both fail. The physician acknowledges his defeat. The minister of religion acknowledges his defeat, for it seems as if the Lord does not answer prayer for

opium-eaters. O man! O woman! are you tampering with this habit? Have you just begun? Are you, for the assuagement of physical distresses or mental trouble, making this a regular resource? I beg you stop! The ecstasies at the start will not pay for the horrors at the last. The paradise is followed too soon by the pandemonium. Morphia is a blessing from God for the relief of sudden pang or acute dementia, but was never intended for prolonged use. And what the peculiar sadness of it is, it comes to people in their weak moments. De Quincey says, "I took it for rheumatism." Coleridge says, "I took it for insomnia, or sleeplessness." What do you take it for? Do not take it too long. What is remarkable, they are going down from the highest and the wealthiest classes and from the most fashionable circles of New York and Brooklyn,—going down by hundreds and by thousands. Over 20,000 opium-eaters in Chicago; over 20,000 opium-eaters in St. Louis. In the same proportion, that would make over 70,000 in New York and Brooklyn. The clerk of the drug-store says, "I can tell them when they come in; there is something peculiar about their complexion, something peculiar about their nervousness, something peculiar about the look of their eye that immediately reveals them." In some families chloral is taking the place of opium. Physicians first prescribe it for sleeplessness. Then the patient keeps on because he likes the effect. Whole tons of chloral are manufactured in Germany. Baron Liebig says that he knows one chemist in Germany who manufactures a half-ton of chloral every week. There are multitudes being taken down by this habit. Look out for hydrate of chloral! But I am under this head speaking chiefly of opium. You never heard a sermon against opium, but it seems to me there ought to be ten thousand pulpits turned into quaking, flaming, thundering Sinais of warning against this plague narcotic. The devil of morphia in this country will be mightier than the devil of alcohol. But nepenthe, and hasheesh, and opium, and

chloral shall not have all the field to themselves.

There sprung up in Yucatan, on this continent, a weed which has bewitched the world. It crossed the Atlantic Ocean in the fifteenth century, and captured Spain. Then it captured Portugal, and then the French ambassadors took it to Paris, and it captured the French Empire. Then Walter Raleigh introduced it into England. The botanists ascribe it to the genus *Nicotiana*; but you all know it as the inspiring, the elevating, the emparadising, the radiating, the nerve-shattering, the dyspepsia-breeding, the health-destroying tobacco. I shall not be offensively personal while I speak on this subject, because you all use it, or nearly all! Indeed, I know from personal experience how it soothes and roseates the world and kindles sociality, and I know what are its baleful results, and I know what it is to be its slave, and, thank God, I know what it is to be its conqueror. I have no expectation that I will persuade the great masses of you to change your habits upon this subject, but I thought I might help you in some advice to your children.

Notice that fathers who chew and smoke generally do not want their boys to chew and smoke, and I have thought we might for a few moments profitably discuss how we ought to advise our young people. You say, "Didn't God make tobacco?" Oh! yes. You say, "Isn't God good?" Oh! yes. You say, "Then God, when he created tobacco, must have created it for some good purpose?" Oh! yes, it is good for a great many things. tobacco is. It is good to kill moths in the wardrobe, and tick in sheep, and to strangulate all kinds of vermin, and to fumigate pestiferous places, and like all other poisons, God created it for some particular use. So he did henbane, so nux vomica, so copperas, so belladonna, so all those poisons which he directly created or had man to extract. But the same God who made the poisons also created us with common sense to know how to use them and how not to use them. "Oh!" say some of my friends, "do n't people use it without

seeming harm to themselves, and are there not cases of plethora which absolutely need this depletion?" Oh! yes. Skillful and prudent physicians have sometimes prescribed it, just as they sometimes prescribe arsenic, and they prescribe it well. There can be no doubt about its being poisonous. There was a case reported in which a little child lay upon its mother's lap, and a drop from her pipe fell on the child's lip, and it went into convulsions and into death. But you say, "Do n't people live on to old age who indulge in this habit?" Yes; so I have seen an inebriate seventy years old.

There are some persons who, in spite of all the outrages to their physical system, live on to old age. In the case of the man of the jug—he lasted so long because he was pickled! In the case of the man of the pipe—he lasted so long because he was turned into smoked liver! But, my friends, what advice had we better give to our young people? I say in the first place, let us advise them to abstain from this habit, because all the medical fraternity of the United States and Great Britain pronounce it the cause of wide-spread and terrific unhealth. Dr. Agnew, Dr. Hamilton, Dr. Alcott, Dr. Barnes, Dr. Woodward, Dr. Rush, Dr. Hosack, Dr. Harvey, Dr. Mott,—all the medical fraternity,—allopathic, homeopathic, hydro-pathic, eclectic,—denounce the habit and warn the community against it. One distinguished physician says: "This habit is the cause of seventy different styles of disease. This habit is the cause of nearly all the cases of cancer of the mouth." What is the testimony of the late Dr. John C. Warren, of Boston, than whom there is no higher authority? He says: "For more than thirty years I have been in the habit of inquiring of patients who come to me with cancer of the tongue and lips, whether they used tobacco, and if so, whether they chewed or smoked; and if they have sometimes answered in the negative as to the first question, I can truly say that, to the best of my knowledge and belief, such cases are exceptions to the general rule. When, as is usually the case, one side of the tongue is affected

with ulcerated cancer, it arises from the habitual retention of the tobacco in contact with this part." Dr. Hosack says: "The alarming frequency of apoplexy and palsy and epilepsy and other diseases of the nervous system, is attributable in part to the use of tobacco." Dr. Ferguson says: "I believe that no one who smokes tobacco before the bodily powers are developed, ever makes a vigorous man." Dr. Waterhouse says: "I never observed such pallid faces and so many marks of declining health, nor ever knew so many hectic habits and consumptive affections as of late years, and I trace this alarming inroad upon young constitutions principally to the pernicious custom of smoking cigars." Dr. Johnson says: "Where one inveterate smoker will bear testimony favorable to the practice of smoking, ninety-nine are found to declare their belief that its practice is injurious, and I scarcely ever have met one habitual smoker who did not in his candid moments regret his commencement of the habit." Dr. Gibbons says: "Tobacco impairs digestion, poisons the blood, depresses the vital powers, causes the limbs to tremble, and weakens and otherwise disorders the heart."

Their united testimony is that it depresses the vitals of the system, and brings on nervousness and dyspepsia, and takes off twenty-five per cent of the physical vigor of the people of this country; and, damaging this generation, it damages the next, the accumulated curse going on to capture other centuries. Why is it that the Turkish nation can stand before no other nation? They go into battle always for defeat. Why? Tobacco has bedwarfed them, has enervated their muscular system, has thrown them into perpetual stupefaction. Tobacco not only injures the body, but it injures the mind.

Dr. Prince, for a long while superintendent of the insane asylum at Northampton, Mass., says: "Fully half of the patients who have come to our asylum for treatment are the victims of tobacco." It is a sad thing, my brother, to damage the body; it is a worse thing to damage the mind, and any man of common sense

knows that the nervous system immediately acts upon the brain. More than that, nearly all reformers will tell you that it tends to drunkenness, it creates an unnatural thirst. There are those who use this narcotic who do not drink, but nearly all who drink use the narcotic, so that shows there is an immediate affinity between the two drugs. It was long ago demonstrated that a man cannot reform from strong drink unless he gives up tobacco. In nearly all the cases where men having been reformed have fallen back, it has been shown they have first touched tobacco, and then surrendered to intoxicants.

(TO BE CONTINUED.)

NATURE'S MEDICINES.

Good, kindly dame Nature has her remedies for the ills of her human children. Her chief and best medicines for our bodily infirmities are sunshine, pure air, and clean water. The first is the most perfect of nervines; the second is the only true blood-purifier; and the third is the sovereignest medicine yet discovered to keep in health, the skin, stomach and bowels. The first two should be taken together, under open sky, in large and frequent doses, and with ample exercise. Let the water be used when needed, both externally and internally. Its sweet, clear drops have a world of purifying tonic power in them.

Better than all the nostrums of doctors and druggists, and all the pills, plasters, and bottled preparations of patent medicine men, are these three God-given medicaments for man's diseases. They are both preventives and cures. It needs no physician to prescribe them; no pharmacist to concoct or furnish them; no medicine chest to preserve them. Mingled and refined in the great laboratories of nature, poured around us afresh every morning, we need only to take of their abundance at our will.

In the oceans of air and water are hidden more curative virtues than the bold-est of quacks ever claimed for his compounds; but it is in the warm, bright, life-bearing sunshine that the noblest healing power resides. We have all noted how

the sun works the annual miracle of resurrection of dead vegetation, and from the bursting seed to the mighty growths of forest and field, the sunshine shows its vivifying forces. Tree, plant, flower, and fruit are children of the sun. Man, also like the Incas of Peru, is the child of the floods, with fire, the crimson current of his life. It penetrates to the marrow of his bones, and transforms itself into its mysterious correlate, the quick nerve force and brain power, which the mind employs in the wondrous laboratory of thought and will. Secluded from its health-giving beams, we grow pale, weak, nervous, and diseased in almost every organ and function. Muscle and brain lose energy and power. To shut the sunshine from our houses, is to shut out the fire of health from the blood, and the light of thought from the brain. In the shadow, the whole soul pales, and the heart loses something of its buoyancy and joy. French physicians prescribe baths of sunshine for nervous patients, and chemistry tells us there is subtle chemic power in the noontide rays.—*Western Educational Journal.*

My Smoke-House.—A man who lives in Albany, and whose business is that of a clerk, said that he had lately built him a house that cost him three thousand dollars. His friends expressed their wonder that he could afford to build so fine a dwelling.

“Why,” said he, “that is my smoke-house.”

“Your smoke-house! What do you mean?”

“Why, I mean that twenty years ago I left off smoking, and I have put the money saved from smoke, together with the interest, into my house. Hence I call it my smoke-house.”

Now, boys, we want you to think of this when you are tempted to take your first cigar. Think how much good might be done with the money you are beginning to spend in smoke.—*Temperance Record.*

A SANITARY POEM.

[THE following stanzas embody more sound sanitary advice than many ponderous volumes wholly devoted to the subject. They have appeared in these columns before but so long ago they will be new to many of our readers.—Ed.]

There's a skin without and a skin within,
A covering skin and a lining skin:
But the skin within is the skin without,
Doubled inward and carried complete throughout.

The palate, the nostrils, the windpipe, and throat
Are all of them lined with this inner coat,
Which through every part is made to extend—
Lungs, liver, and bowels, from end to end.

The outside skin is a marvelous plan
For exuding the dregs of the flesh of man;
While the inner extracts from the food and the air
What is needed the waste in his flesh to repair.

While it goes well with the outside skin,
You may feel pretty sure all's right within
For if anything puts the inner skin out
Of order, it troubles the skin without.

The doctor, you know, examines your tongue
To see if your stomach or bowels are wrong;
If he feels that your hand is hot and dry
He is able to tell you the reason why.

Too much brandy, or whisky, or gin,
Is apt to disorder the skin within;
While if dirty or dry, the skin without
Refuses to let the sweat come out.

Good people all! have a care of your skin,
Both that without and that within;
To the first you'll give plenty of water and soap,
To the last little besides water, we'll hope.

But always be very particular where
You get your water, your food, and your air:
For if these be tainted, or rendered impure,
It will have its effect on your blood, be sure.

The food which will ever for you be the best
Is that you like most, and can soon digest;
All unripe fruit and decaying flesh
Beware of, and fish that is not very fresh.

Your water, transparent and pure as you think it,
Had better be filtered and boiled ere you drink it,
Unless you know surely that nothing unsound
Can have got to it over or under the ground.

But of all things, the most I would have you beware
Of breathing the poison of once-breathed air;
When in bed, whether out or at home you may be,
Always open your window and let it go free.

With clothing and exercise keep yourself warm,
And change your clothes quickly if drenched in a
storm;

For a cold caught by chilling the outside skin
Flies at once to the delicate lining within.

All you who thus kindly take care of your skin,
And attend to its wants without and within,
Need never of cholera feel any fears,
And your skin may last you a hundred years.


 TEMPERANCE AND MISCELLANY.
 

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

SPRING.

AGAIN upon the grateful earth,
Thou mother of the flowers,
The singing birds, the singing streams,
The rainbow and the showers:
And what a gift is thine!—thou mak'st
A world to welcome thee;
And the mountains in their glory smile,
And the wild and changeful sea.

Thou gentle Spring!—the brooding sky
Looks welcome all around;
The moon looks down with a milder eye,
And the stars with joy abound;
And the clouds come up with a softer glow,
Up to the zenith blown,
And float in pride o'er the earth below,
Like banners o'er a throne.

Thou smiling Spring!—again thy praise
Is on the lip of streams;
And the water-falls loud anthems raise,
By day, and in their dreams;
The lakes that glitter on the plain,
Sing with the stirring breeze;
And the voice of welcome sounds again
From the surge upon the seas.

Adorning Spring! the earth to thee
Spreads out its hidden love;
The ivy climbs the cedar tree,
The tallest in the grove;
And on the moss-grown rock, the rose
Is opening to the sun,
And the forest trees are putting forth
Their green leaves one by one.

—*James Otis Rockwell.*

EDUCATED HOUSE-KEEPERS NEEDED.

BY MRS. E. E. KELLOGG.

MUCH has been said and written in condemnation of the too common system of education which deals with the head only, leaving the hand untrained, and results in graduating young ladies "too highly accomplished" to be capable of engaging in the practical duties of life; yet too much can hardly be said in disapproval of the contracted views and apparent lack of right ideas respecting individual responsibilities which leads so many women to look with contempt and dislike upon that department of labor on which, more than any other, depends the health and happiness of the family,—that of house-work. "Home making," which in its highest sense is one of the most truly elevated and noble of all human

pursuits, necessarily involves a proficiency in the art of housekeeping. By "house-keeping" we mean not simply a knowledge of the various routine duties usually devolving upon the housewife, the making of beds, sweeping of floors, and cooking of dinners; but a knowledge and practice of household labor in accordance with scientific principles, which makes every department of house-work a philosophic study, and every household operation replete with interest.

Doubtless much of the aversion to house-work arises from a feeling that it is mere drudgery, needing only physical exertion and associated with weariness and pain; but if we consider that the character and the health of the inmates of every home are dependent in the greatest degree upon the cleanliness of their surroundings, the wholesomeness of their food, together with many other conditions belonging to the province of the housewife, house-work will lose its aspect of drudgery, and become at once one of the most noble and responsible duties in life's great field of action. The very knowledge of this responsibility should suggest the need of a special qualification, a careful and thorough preparation for the work.

It takes years of hard study to acquire sufficient perfection to succeed in any other department of life, but housekeeping is too generally looked upon as something that needs no especial fitness, and can be acquired without much effort at any time; yet for no other pursuit is a preparation so greatly needed, nor the requirements so varied and important.

The person would be ridiculed who professes to be able to plead a case in court without a knowledge of law; but we heard an intelligent and talented lady, not long since, boast that she "knew nothing at all about house-work, but thought if she ever had any need to learn, a little common sense and a cook book would be all that would be necessary." If a knowledge of Blackstone is required to dispense justice, why should not a special qualification be deemed necessary for administering the equally important service of selecting and preparing the very elements on which we depend for soundness of body and mind?

Proper food is the largest component in the health and good temper of childhood, the correct habits of youth, and the strength and endurance of later years, and there is abundant evidence that the great prevalence of intemperance, with its accompanying evils, is very largely due to the baneful effects of the indigestible, innutritious viands which serve as food for a large majority of the people.

How then can we underrate the importance of the work of housekeeping, or the need of a particular preparation for its duties?

It is often said of the person who finishes a college course only to take up the role of housekeeping, that "she has just thrown away her education." This is, indeed, a mistake; for in no other pursuit ought an education to be brought into more constant requisition than in housekeeping. A knowledge of scientific principles and physiological laws are eminently essential. Indeed, there is scarcely any branch of knowledge which may not be made to contribute valuable aid in the care of a home and the comfort and health of its inmates.

Household labor done with thought and conscience is a grand and noble calling. Abraham's wife prepared with her own hands the meal for the strangers, not knowing that she was entertaining "angels unawares," and Solomon praises above all others the wise woman who "worketh with diligent hands." Homer sung of princesses busy in domestic service, and since that time the daughters of royal blood and ladies of rank have often deemed it their highest prerogative to engage in this art of arts. No sphere of usefulness is broader or more productive of glorious results than that of the true home worker.

WILL ALCOHOLIC LIQUORS ASSIST DIGESTION?

Characters: Ernest Williams and Thomas Jackson, companions. Dr. Thompson, a young and rising practitioner.

E. W. (soliloquizing): Yes, I am afraid it is quite true. I am certainly suffering from an unpleasant attack of indigestion, dyspepsia, a failing of gastric juice, or something of the same kind, call it what you will. This aching head, this fevered brow, this peevish and irritable temper, all indicate that there is a screw loose somewhere. A very simple remedy, I am told, is at hand—a glass of bitter ale at dinner and supper, with an occasional glass of sherry, will soon put me right. Well, it is no use talking

here, I must pay a visit to my friends at the Rose and Crown, and take a good dose of this indigestion curer.

[Enter *T. J.*]

T. J.: Ah! ah! whither are you hastening with such a serious countenance and earnest look! One would imagine you had the care of a nation upon you, or that the existence of the State depended upon the speed of your walking.

E. W.: Well, now, to tell you the truth, I am just going to purchase a little medicine in the shape of a glass of bitter ale. I know you are a most determined enemy to the use of intoxicating drinks, but even you must admit that alcohol is an excellent medicine at times.

T. J.: On that point we will not at present argue, but perhaps you will kindly inform me for what complaint you are seeking that universal remedy, alcohol.

E. W.: *Mon garcon*, pity me, I am the unhappy subject of dyspepsia. I feel all that misery and wretchedness that indigestion produces, and I am advised that a glass of bitter ale at dinner and supper time will materially assist me to assimilate my food. So come along, my boy; on this particular occasion I hope I may have the pleasure of increasing the one glass to two.

T. J.: Steady, steady, mind what you are about; if this medicine that you are advised to take is worth anything, it is worthy of being taken with care, in proper quantities, and the dose should not be repeated or increased without proper consideration.

E. W.: There you are, sermonizing again. Bless my heart! you are always so prudent that I wonder you don't try Dr. Tanner's prescription, and live on water alone.

T. J.: Well, I should have a better chance of existence than if I attempted to live on intoxicating drinks. If there is one fact certain in this life, it is that alcoholic liquors tend to shorten life, and that many persons who think they are helping themselves to live are fast ruining their constitutions by the very means they use to preserve them. You have but to look on their faces to see the effects of the drink—

"Puffing the cheeks, blearing the curious eyes,
Studding the face with vicious heraldries—
What pearls and rubies does the mind disclose,
Making the purse grow poor to enrich the nose."

E. W.: That is the same old tale. One must give up all the good things of this life just because a few foolish people abuse these blessings and bring ruin and misery upon themselves.

T. J.: You are mistaken. Like many of

your class, you jump to conclusions without consideration. I say that science, common sense, and the experience of mankind, all tend to establish the assertion that alcoholic liquors cannot and never will assist digestion.

E. W.: You are very emphatic. I will put you to the test, and see how far you can establish what you assert. You know I am open to conviction, and reasonable arguments will not, I hope, be thrown away upon me.

T. J.: Well, then, let us consider what are often the causes of indigestion. It may arise from eating food too quickly, from not masticating it properly, from eating food that is not digestible, from eating too much of what is really good, taking too much fluid, drinking too hot or too cold liquids. It may arise also from mental causes—from grief or pain, or from an excess of joy. Now the common-sense method of dealing with indigestion under these circumstances is to remove the cause of the evil, and not to drown our sorrow in alcohol; for although for a moment it may give us temporary relief, in the end it only increases the complaint.

E. W.: You admit, then, that alcohol does give relief in cases of indigestion?

T. J.: I admit only this much, that alcohol is a deceitful enemy. It sends the nerves of the stomach to sleep, and prevents us feeling the pain that indigestion ought to give us, and thus takes away our efforts to remove the evil or its cause. But here comes Dr. Thompson, who is better qualified to speak on this subject than I am, and who will, I am sure, give us some practical information and advice on the matter.

[*Enter Dr. Thompson.*]

Dr. T.: Come, now, what is the matter in dispute? You seem to be having a warm discussion, for I heard your voices long before I came up to your door.

T. J.: The fact is, doctor, we are arguing as to the advantages of alcohol to aid digestion. My friend here is the subject of an unpleasant attack, and, intending to follow out the advice of some of his friends, he desires to drink bitter ale and other alcoholic liquors with his meals.

Dr. T.: You could not have chosen a more reasonable subject of discussion, for any custom that encourages men to drink alcoholic liquors ought to be tested and tried, to see if it will bear the test of investigation. If you ask my opinion as a medical man, I say at once that it is most foolish to drink alcohol either to cure indigestion or to prevent it.

E. W.: But, Dr. Thompson, if I am not asking too much, would you mind giving us a little more positive information on the

subject, for as yet I am quite in the dark, and need to be enlightened?

Dr. T.: I am afraid you are like a great many other people. Listen, then. Alcohol hardens some kinds of food, such as albumen and fibrine. If alcohol is added to some water in which the white of an egg has been beaten up, the egg will fall to the bottom in flakes. In this manner alcohol, in proportion to its strength, hardens meat. It is well known that animals are preserved in alcohol; they could not be preserved in water.

T. J.: Is it not true, Doctor, that alcohol acts as an irritant to the stomach, and that it does serious injury to the pepsin in the gastric juice?

Dr. T.: You have hit the mark. Alcohol curdles or coagulates the pepsin in the gastric juice. It irritates and inflames the delicate lining of the stomach. A man lived fifty years ago, named Alexis St. Martin, who had a shot wound in his stomach that left a little hole through which the doctors could observe the effects of different kinds of substances and liquids upon the stomach. It was found that alcohol did not assist digestion in any way, but that after a few days' free indulgence, the stomach became inflamed and ulcerated in patches; and, what made matters still worse, alcohol had so silenced the nerves that St. Martin could not feel the pain.

E. W.: Excuse me, Dr. Thompson, do I understand you to say that alcohol prevents digestion instead of assisting it?

Dr. T.: I say that alcohol hinders digestion in the stomach, and, moreover, by its effects upon the nerves it allows the half-digested food to pass out into the bowels. From this cause the liver and kidneys are compelled to do an immense amount of work which they ought never to be called upon to perform. The effect of alcohol upon the liver is such that the liver becomes congested, the formation of bile is hindered, and the death of the drinker is often the result.

T. J.: Thank you, Dr. Thompson, for your information. Can you tell us what is the best thing to drink with our meals?

Dr. T.: Water, most decidedly. Nature herself would teach us this lesson, for the important juices that assist digestion are chiefly made up of water. In the saliva 995 parts out of every 1,000 are water, the gastric juice contains 94 per cent of water, the bile contains 859 parts of water out of every 1,000, the pancreatic juice 980. Water is the very best solvent for food, and if taken in proper quantities, it will never do us harm, while alcohol will create an appetite for itself, and may make us its willing slaves.

T. J.: Thank you, thank you very much. Though a life abstainer, your information has served to strengthen me in my temperance principles.

E. W.: And I will add, if you please, that for the future not a drop of alcohol shall pass my lips, for I am convinced from your statements that water is best.—*Temperance Record*.

THE TOBACCO SLAVE.

THE Hon. Neal Dow, writing of the tobacco habit, says:—

“There is absolutely no gratification whatever coming from the use of tobacco, except this: it relieves the victim from the misery which attacks him from the lack of it. Many years ago I saw a lunatic who had become so much accustomed to a billet of wood that had been chained to one of his legs when he was troublesome and dangerous, that afterward, when he was quiet and harmless, he could not be easy without that ‘clog,’ and always carried it about with him on his shoulder, though the chain was no longer fastened to him. The tobacco slave reminds me of that poor lunatic; he carries about with him his offensive burden, by which he often makes himself odious to the persons whom he annoys with the stench of his presence. The tobacco slave is like him; he cannot dispense with his ‘smoke’ or his ‘chew’ without suffering from the want of it. Why does he not remain at home, then, until his craving for tobacco should be satisfied for the time, so as not to annoy others with the stench of it? One reason is that he cannot afford to sacrifice so much time as this would require, and another reason is the tobacco slave soon becomes indifferent to the comfort or the rights of others. He poisons the air that others must breathe, and ‘if they don’t like it, let them move away!’ The tobacco slave always comes to that; his moral sense is lost or dulled.”

TRUE GENTLEMANLINESS.

TRUE gentlemanliness includes both manliness and gentleness. The real gentleman combines the tenderness of the womanly nature with the strength and nobleness of high manhood. The lad who aspires to be a gentleman must not be content with lifting his cap to a lady, and showing her deference in his words and actions. That is all well, as far as it goes; but it does not go far enough. Real gallantry does not limit its show of respect to those who are of the gentler sex: it is as deferential to age, and as keenly alive to the needs of the weaker of

either sex, as it is uniformly courteous and polite toward every woman. But it is a very common thing to see a young man quick to rise from his seat in a crowded car and proffer the place to a well-dressed and attractive lady, when he had no thought of offering that seat to an aged gentleman who had been standing before him for a considerable time. His action proves his attention to ladies, but it does not show his gentlemanliness. Parents who would have their sons gentlemanly must teach them that it is quite as important to give deference to age as to sex. The command “Thou shalt rise up before the hoary head, and honor the face of the old man,” was spoken by God himself, before the command had gone forth to be very quick to give your seat to a pretty girl in the horse-cars.—*Sunday-School Times*.

EDUCATION IN ICELAND.

THE correspondent of a Swiss journal thus writes as to this subject: “One would certainly have no trouble in finding among the corps of teachers some men of great merit, even erudite, whose obscure and modest science is devoted to study and to the good of their country without care for renown or the reward of this world. I once asked a young Icelander, ‘Who undertook the instruction of children who, from the distance of their dwellings or the poverty of their parents, could not attend school?’ ‘At the age of seven years,’ he replied, ‘all our children know how to read, write, and cipher; among the poorest fishermen of the coast there is not one who has not received what may be called a good primary education. Our mothers are our teachers, the *boer* (Iceland house) our schoolroom. The nearest pastor has an oversight of the progress of the children, and that one who does not furnish the proof of a sufficient education would not be admitted to confirmation. An Icelandic mother would not survive the chagrin of seeing her children refused by the pastor, and not a single example is known of it.’ Ask the first child you meet who it was that taught him or her the history and geography of his country, the names of the birds and flowers, and the invariable reply will be, *Modremi*, my mother. Touching in its simplicity and grandeur, and revealing truly the character of this sympathetic people! At twenty-five the young man is profoundly religious, chaste, gentle, and honest as on the day when at his mother’s knee he was spelling out his first lesson. Can one be astonished after this that in Iceland there

are neither soldiers nor cannon; that the art of robbing one's neighbor of his purse or his land is unknown; that one sees there no police nor prison; and that for centuries one has lost the memory of every kind of crime?"

WANTED, MEN AND WOMEN.

We take up the papers daily, and casting our glances down the long columns, we see many persons asked for after the word "Wanted." Cooks and chambermaids, coachmen and butlers, clerks and porters, are needed here, and there, and everywhere.

And yet the greatest want of this nineteenth century we do not see advertised, and if we did, I think all that could conscientiously apply would find room for employment, and still there would be acres, at least, of unoccupied space.

Men wanted. Men who are honest and pure. Men who are wholesome and truthful. Men who will not be bribed. Men who are like fair, refreshing fruit, sound to the heart's core.

Men wanted. Men who are unwilling to eat the bread of idleness. Men who will scorn to wear what they have not honestly paid for. Men who know what ought to be done and will do it. Men who are not egotistic, but rather have the courage given by the spirit to do and to dare. Men who will give good counsel, who will set a good example for emulation, who will sympathize with the grieving, and succor the distressed. Men who know how to obey before they undertake to command. Men who *do* more than they *talk*. Men who do good to their friends to keep them, to their enemies to gain them. Men whose hearts compare favorably with full pocket-books—who believe in systematic giving, and advocate it. Men whose hearts are moved by the sadness of others, who are touched by a little hungry face and cold, bare feet.

Men wanted. Men who are brave and tender, men who are not ashamed to wipe tears away. Men whose acts will bring smiles to wan faces. Men who hush lamentations, and are rewarded with sweet songs of thanksgiving.

Women wanted. Women who know their own business better than their neighbors'. Women who are true and pure from centre to circumference. Women who will not weary in well-doing, who will neither flag nor flinch. Women who will not take the rear from choice. Women who know their mission and do not pursue the will-o'-the-wisp. Women who will daily do loving

service, gentle little kindnesses, and do them unostentatiously. Women who will see that bare pantries are supplied, and that the shelterless find homes.

Women wanted. Women who will not drift with the tide, but who will courageously stem the current, trusting to the Omnipotent arm to support. Women who will not allow their noble impulses to be crushed by the hand of society.

Women wanted. Women who know how much power there is in a gentle, encouraging word, how much force there is in a hopeful prophecy. Women who will sow their loving acts broadcast, believing that kind words never die. Women who will extend a helping hand all along life's pathway. Women with clear understanding, quick perception, and good judgment. Women of patience, who do not explode at the slightest friction. Women of forethought (yes, and afterthought), of discrimination, and great generosity. Women who will keep their eyes fixed upon the loving Master, and will not listen to the murmuring crowd. Women who will brave the scorn of this world to be crowned of God. —*Earnest Gilmore, in Christian Weekly.*

PITCHERY-BIDGERY.

ACCORDING to a Viennese paper, the *Apotheker Zeitung*, a considerable sensation has been produced in Austrian medical circles by the recent appearance in the drug market of a new narcotic, hailing from Queensland and at present only known to the trade by its quaint native name of "pitchery-bidgery." It is the flower of a plant belonging to the *solanacea* order, and indigenous to Northern Australia,—a sort of stunted shrub, from three to four inches in height when full grown, and bearing blossoms of a waxy texture, white in color and flecked with pink spots. These flowers are picked in the month of August, dried, packed tightly in canvas bags, and then subjected to a high degree of pressure, which imparts to them the consistence of cake tobacco. By chewing a small plug of this substance, relief is speedily obtained from bodily fatigue, hunger, and thirst. A larger dose of "pitchery-bidgery" produces absolute insensibility to pain, but does not subject the patient to any of the inconveniences resulting from the treatment by ordinary anæsthetics. In common with the narcotics hitherto familiar to the faculty, pitchery-bidgery, administered in minute doses, acts as a stimulant,—in larger quantities as a powerful sedative. But it is said to possess the peculiar property

of enabling those who take it habitually to withstand fatigue and undergo great physical exertion upon low diet. Like the famous hasheesh of Monte Cristo it is said to be an effective and agreeable substitute for food and drink. Considering the present cost of good butcher's meat and wholesome fermented liquor, it is probable that the general public will await the further developments of "pitchery-bidgery" with eager and hopeful anxiety.

The claim made for pitchery-bidgery is precisely the same which has been made for coca, opium, arsenic, tobacco, alcoholic liquors, tea, coffee, and every other narcotic or stimulant. Because these articles take away the desire for food, it must not be concluded that it is a substitute for food. Hunger is an indication of the necessity for food. A narcotic or anæsthetic will destroy the demand for food by obtunding the nerves of sense which are involved in the sensation of hunger, so that the subject no longer feels hungry, though the demand for food still remains.

PAUPERISM AND INTEMPERANCE.

MRS. MARY A. LIVERMORE recently made the following statement in regard to the relation of pauperism and intemperance, in a lecture in Boston:—

"Dr. Bowditch once sent to two hundred and eighty-two cities and towns in Massachusetts the inquiry, 'What percentage of the paupers and children of paupers under your care are such in consequence of intemperance?' The answers showed an average of ninety per cent." Once, in the Children's Reformatory Home at Munson, she had herself made the inquiry, and found that of the six hundred children in that institution, *every one* had been brought thither through the influence of drink. In Chicago for fifteen years she had been connected with the Home for the Friendless, and had found the average portion of children brought thither directly in consequence of the drunkenness of parents to be seventy per cent. When she had once said to the superintendent of the Woman's Reformatory Prison at Sherman, Massachusetts, "It will never do to have this institution cost \$600,000 a year for the cure of some three or four hundred inmates. Can you not suggest some way in which this vast expense can be reduced?" she was told in reply: "Yes, I can. Shut up the dram-shops of Massachusetts, and where we now have to

care for ten prisoners, we shall have but two. Eight-tenths, eighty per cent, of our commitments are for drunkenness, or for crimes caused by drink."

THE BIBLE AND WINE.

BY JOHN B. GOUGH.

WHILE in England, I was invited to dine with a clergyman who is now Bishop of Carlisle, and we had a discussion for two hours. A titled lady was present, and she helped him. I was alone, and had to bear the whole brunt of the battle in the Scriptural argument.

"The Bible permits the use of wine," said he.

"Very well," said I; "suppose it does?"

"The Bible sanctions the use of wine."

"Very well; suppose it does?"

"Our Saviour made wine."

"I know he did."

"Why, we thought you were prepared to deny it."

"I do not deny it; I can read."

"Wine is spoken of in the Bible as a blessing."

I replied:—

"There are two kinds of wine spoken of in the Bible."

"Prove it."

"I do not know that I can, but I will tell you what it is; the wine that is spoken of as a blessing is not the same that is a 'mockery;' and the wine that is to be drunk in the kingdom of heaven cannot be the wine of the wrath of God. So that, although I cannot prove it learnedly, I know it is so.

"Now there are others who go farther than I can go, but you will please let me go as far as I can understand it, and if I cannot go any farther, do not find fault with me. I hold that the Bible permits total abstinence; I would rather search the Bible for permission to give up a lawful gratification, for the sake of my weaker-headed brother who stumbles over my examples into sin, than to see how far I can follow my own propensities without committing sin and bringing condemnation upon any one's soul."

Another gentleman who came to me for a long talk, said:—

"I have a conscientious objection to teetotalism, and it is this: Our Saviour made wine at the marriage at Cana in Galilee."

"I know he did."

"He made it because they wanted it."

"So the Bible tells us."

"He made it of water."

"Yes."

"Then he honored and sanctified wine by performing a miracle to make it. Therefore," said he, "I should be reproaching my Master if I denied its use as a beverage."

"Sir," I said, "I do not understand how you should feel so; but is there nothing else you put by which our Saviour has honored?"

"No, I do not know that there is."

"Do you eat barley bread?"

"No," and then he began to laugh.

"And why not?"

"Because I don't like it."

"Very well, sir," said I; "our Saviour sanctified barley bread just as much as ever he did wine. He fed five thousand people with barley loaves, manufactured by a miracle. You put away barley for the low motive of not liking it. I ask you to put away wine for the higher motive of bearing the infirmity of your weaker brother, and so fulfilling the law of Christ. I wish to say, That man signed the pledge three days afterward."—*Sunshine and Shadow.*

A DRUNKARD'S COMBUSTION.

WE have always doubted the reliability of the occasional reports of the sudden combustion of men in a state of intoxication, and cannot vouch for the following story from the *San Francisco Post*, but give it as we find it:—

"In Kernan's saloon, back of the City Hall, recently, a man was burned to death by spontaneous combustion. He had not been more than a month in the city, but in that time had been frequently arrested for drunkenness. He wandered about alone, seemingly demented, occupying his whole time in drinking the vile poison of the city front and Barbary Coast dens. He had twice been treated by Dr. Stivers for delirium tremens, and was this morning discharged after a longer time than usual. He continued drinking steadily at the various bars in the vicinity, and the large size of each potation promised to speedily send him back to the hospital. At length he staggered into the room, nearly insensible, and feebly asked for a drink. This was refused him, and he staggered toward the gas jet to light the stump of a cigar, while the bar-keeper turned away. A moment afterward he heard a low moan, and noticed a flash of fire, and turning around he saw Harley falling to the floor, his head enveloped in black, thick smoke, while flames issued from his mouth and ears. Not a moment was lost in attending to the sufferer. He was beyond relief, however. His face was perfectly

black, partly charred and partly covered with a moist soot. His eyes were open. His mouth was completely roasted on the inside, but, with the exception of his head and hands, no part of his body bore marks of his horrible death. A letter found in his pocket, addressed to M. Harley or Hart ey, furnished the only clue to his identity."

PORCELAIN TEMPLE IN CHINA.

THE Chinese have recently completed at Honkon a porcelain temple in honor of Shinsou, a hero who lived some eighteen hundred years ago, and who is said to have saved the people of the Hanchan dynasty, where he dwelt, from a terrible flood, and to have received as a reward from the gods, an elixir of life, and the pill of incorruption. The temple is styled "The Temple of the Myriad Ages of Longevity," and is said to be the most beautiful porcelain structure ever erected and at a cost equivalent to the sum of fifteen million dollars. Mrs. Helen Thompson thus describes it:—

"Imagine a building three hundred feet square, its walls all paneled, its sides and eaves full of friezes, richly embossed, its columns crowded with chapiters and cornices, images of men and birds and beasts, from life-size to a foot in length; its roof broken up into turrets and towers, rising one above another fifty feet high; every shoulder of the roof rounded and turned upward again, ending in some immense figure of fish or reptile,—imagine all this—pillars, chapiters, cornices, friezes, thousands of figures, turrets, tiles, roofs, *everything*, of the finest *porcelain*, all richly tinted with fifty hues, the scene bursting upon your vision in the midst of the indescribable filth of a Chinese city as the afternoon sun of a cloudless sky shines full upon it—and you have the picture. The inside is filled (I am told) with the choicest wood-carving to be found in China. Historical plays are daily performed there, with the hope of pleasing the departed hero."

POPULAR SCIENCE.

—The Nickajack Cave, near the corner of Tennessee, Georgia, and Alabama rivals in size the famous Mammoth Cave, and contains in its waters blind crawfish of snowy whiteness, and four or five other aquatic animals, all different from those found in the Mammoth Cave.

—A naturalist of West Point, Nebraska, after making an extensive investigation of the matter, announces that there are no locust eggs east of the Rocky Mountains, so that a visitation from these pests need not be looked for this year.

—Seventy cases of spontaneous combustion of coal on ship are recorded as having taken place in 1874. Slack used in ballasting railroads has been known to take fire from spontaneous combustion.

REVERSION OF DOMESTIC ANIMALS TO THE WILD STATE.

JUDGE CATON who has recently been traveling in the Sandwich Islands, made some very interesting observations there respecting the reversion of domestic animals to the wild state. In an article in the *American Naturalist* he remarks as follows:—

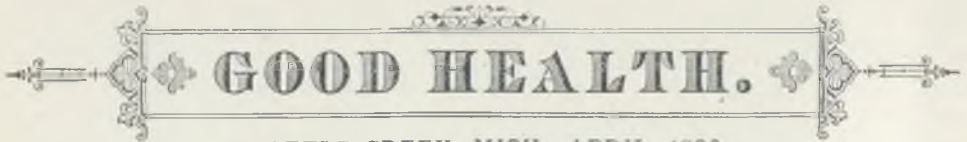
“With the exception of the goose and the duck, nearly all the animals which have been introduced into the islands, as well as those which were then held in domestication, have reverted to the wild state. Among them are the ox, the horse, the goat, the sheep, the hog, the dog, the cat, the turkey, the peacock, and the barn-yard fowl. The greatest physical degeneracy was observed in the wild horse and the wild sheep. The latter are small, gaunt, and long-legged, with a scant and coarse pelage. The ox, in about seventy-five years, while it has not changed much in color and form, has become wild and wary, and very fleet in running over the lava in the mountainous regions which it selects as its home. The wild goats are very numerous, cautious, and difficult to approach, and are mostly white, but some are parti-colored. The hog in a single generation changes in form, color, and habit, from the staid and quiet porker to the fleet and fierce wild boar; and one imported boar is told of that changed immediately after escaping from a ranch, and became as wild and fleet almost as a deer, with a thin body and arched back, and legs that appeared to be much longer, while he more slowly assumed the dark, sandy color of the wild boar. Turkeys also began quickly to take on the color and shape of the wild turkey. Wild barn-yard fowls fifty years after their escape, occupying an extensive elevated or mountainous wooded country, are the most wild and wary animals in the district. They have a

faculty of disappearing without noise at daylight, after having made the forest vocal with the crowing of the cocks, and have diminished in size, and become of a uniform buff-color.”

THE WORK OF THE BUSY BEE.

By far the most serious difficulty in the process of honey collecting by bees arises from the extremely minute quantity of nectar which each flower yields, and from its being dilute—in some cases being so poor in saccharine matter that its sweetness is not appreciable to the tongue. The strength of the sugary fluid varies in different flowers, and even in the same flower at different times. Consequently, the most direct way of estimating the yield of honey is to ascertain the actual quantity of sugar in each flower. This can easily be done by chemical methods. If we take a large number of flowers, wash out their nectar, and determine the sugar in the solution, we can calculate from the number of flowers used the average amount of sugar in each flower with the greatest precision.

Experiments conducted in this way showed each flower of the fuchsia to contain little more than the tenth part of a grain of sugar. In monk's-hood the amount was rather less than one-tenth of a grain, while in the everlasting pea it was found to be three-twentieths of a grain for each flower. In smaller flowers the quantity is proportionately less. Thus each flower of the little naturalized American water-blink only contained six-hundredths of a grain, and in those minute flowers which grow together in compact masses the amount was still smaller. A raceme consisting of twenty flowers of the vetch, only yielded five hundredths of a grain, or little over one five-hundredth for each floret. One head of common red clover gave a little over one-tenth of a grain (exactly .1224). Now each head of clover contains about sixty distinct flower tubes, each of which must, therefore, have a portion of sugar not exceeding the one five-hundredth part of a grain. The proboscis of the bee must consequently be inserted into 500 clover tubes before one grain of sugar can be obtained. There are 7000 grains in a pound, so that for every pound of sugar procured in this way 3,500,000 flower tubes must be emptied. Honey, however, only contains three-fourths of its weight of dry sugar; so that every pound of honey is equivalent to more than 2,500,000 of clover tubes sucked by bees.—*Sel.*



BATTLE CREEK, MICH., APRIL, 1882.

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

TERMS, \$1.00 A YEAR.

THE COMPOUND OXYGEN FRAUD.

NOT long ago we called attention to the fraudulent character of a substance advertised as an ozone-producing compound by the "Ozone Preserving Co.," the real ingredients being sulphur and charcoal. We recently had a conversation with Prof. Prescott of the Medical Department of Michigan University on the subject, and found he had made an analysis of the same substance, and had determined by a careful chemical analysis that the only active ingredients were sulphur and charcoal, a little powdered cinnamon having been added to aid in disguising its real character.

For several years many enterprising quacks have been thriving by the manufacture and extensive advertisement of what they are pleased to call "Compound Oxygen." The name and description give the impression that oxygen, in an unusually active form, is present in the medicine, and is the potent agent by means of which the wonderful cures attributed to it are effected. The medicine is usually administered by an inhaler, air being drawn from the instrument through a small tube. The medicine is put up in 4 oz. to 6 oz. bottles which are sold at the modest price of \$10 to \$15 each. A chemical analysis of this much-advertised compound, made by Prof. A. B. Prescott of the University of this State, shows that it contains only water with a little nitrite of ammonium in solution. Nitrite of ammonium is a chemical compound containing oxygen, but the oxygen is not liber-

ated from its chemical combination by the method of using it.

We have long regarded this as one of the most arrant frauds of the day. We do not doubt that some persons have realized benefits from its use, but believe that the benefits received were the result either of the discontinuance of harmful remedies, or of the influence of the imagination, or of the exercise of the lungs from breathing through a tube,—a means which we have often recommended to persons afflicted with lung troubles, and with good results. If any one wishes to try "Compound Oxygen," let him buy five cents' worth of nitrite of ammonium at the drug store, dissolve it in a pint of water, put a teaspoonful in a twenty-five cent inhaler, and use three minutes at a time three times a day.

CAUTION! *Do not use more than three minutes at a time as the medicine is powerful and might do harm if not used according to directions.*

OPIMUM CIGARETTES.

ONE of the most recent and most alarming developments connected with the tobacco habit is the fact that opium is being employed to a very large extent in the manufacture of cigarettes, especially the cheap varieties. A writer in the *Rural New Yorker* speaks as follows:—

"I have tried cigarette smoking, and have examined cigarettes, wet and dry. I find opium and fenugreek in them to such an extent that the smoking of one or two would narcotize me, although I am an

old smoker. In closely observing ardent smokers of cigarettes, I have observed the effect of the *opium* in the eyes and its unmistakable operation on the nervous system, and in other ways have seen the ruin the use of the fashionable cigarette is bringing upon young men and middle-aged men, too. That there is misery and death in the use of the cigarette as now made, I challenge any man to deny. No person who habitually uses them, as now prepared, can long be healthy, especially in the nervous system, nor can such persons long have good sight, appetite, or physical comfort."

TOBACCO AS A REMEDY FOR ASTHMA.

How often we find people who have been cured of one malady by means of a drug which has produced a disease equally bad or worse! A lady has sick-headache, takes a cup of tea to cure it, and becomes a tea-toper. Another has neuralgia, takes morphia as a remedy, and becomes an opium-eater. A man has general debility, or a supposed tendency to consumption, takes whisky by the recommendation of his physician, and dies a drunkard. A contributor to a contemporary journal thus describes the effect of tobacco used as a remedy for asthma,—a very common use of the filthy weed:—

"I tried many times, when young, to use tobacco through the persuasion of other boys, to make myself appear manly, but it was so nauseating to me it seemed impossible to continue the use of it. My father never could use it, but my mother used it for her phthisic 71 of her 83 years of life. Still I never could until I was nearly 32 years old. I commenced initiating myself with small specks of it, which relieved me much from my spasms of phthisic, or asthma. I kept on using it in small particles when I had my attacks, and omitting it in my more comfortable moments for several years. But finally, after murdering a portion of my nerves of taste, I got into the filthy habit of enjoying the poison. Arriving at the usual age of failing eye-sight, say about 45, I commenced

to put on glasses, and about the same time I discovered I could not button nor unbutton the small buttons on my shirt. I laid it all to the natural decay of life, never once supposing I was poisoning myself to death with tobacco. But so matters jogged on till I was 62, when I had become so badly paralyzed that I had to use crutches. About June or July, 1875, I took the notion, for some reason, that my excessive use of tobacco might be the cause of my apparent deathly malady. I left it off at once, and discovered a decided improvement in twenty-four hours. So I went on slowly improving until this day, thank God! Last February I discovered I could button and unbutton my shirts. That I had been unable to do for over twenty-four years.

"During the thirty years I used the filthy stuff, I am sure I was not twenty consecutive days without a sour stomach, and for over five years since I stopped the use of the poison I have had none of it, have gained nearly fifty pounds, and a healthier man at the stomach doesn't live on this green earth."

WORK AMONG THE PEOPLE.

IN order that sanitary knowledge shall become generally diffused, those who have access to the ears of the people must give attention to the matter and improve every fitting opportunity to enlighten those with whom they have influence. Clergymen, above all others, can exert an influence in this direction the extent of which can hardly be estimated. Physicians, popular lecturers, and others can do much in this line, also; but none can do more than the minister of the gospel, who can press home his instruction with an authority enjoyed only by his class, presenting as a most telling and unanswerable argument the moral obligation of every human being to maintain the highest degree of physical perfection possible. The following letter from our friend, Rev. J. L. Douthit, of Shelbyville, Ill., pastor of a church at that place, and editor of an able paper, *Our*

Best Words, suggests the thought that if every clergyman would take the pains to do as much, an enormous amount of suffering and premature death might be saved:—

“MY DEAR DOCTOR KELLOGG: I want to express my hearty approval of the conduct of your health monthly. I have introduced it into several of the families of my congregation already, and hope to do still more in this direction. I have read yours in last number in regard to ‘Hygeio-Therapy and Its Founder,’ with the feeling that it is a true and wise word.”

We notice that Mr. Douthit gives the influence of his paper, as well as his personal influence with his parishoners, in favor of reform, and we doubt not that the same good work receives not infrequent attention in his sermons. The clergy and the press can do more for the enlightenment and reformation of the masses than all other agencies combined.

FOOD ADULTERATIONS.

MR. G. F. NEEDHAM, of Washington, sends us a brief report of a recent meeting of the Potomac Fruit Growers, at which Mr. Geo. T. Angell, of Boston, spoke on the subject of “Food Adulteration” as follows:—

“Bread is adulterated with alum and sulphate of copper. Yeast with alum. Baking powders with alum, terra alba, plaster of Paris, whiting, and kaolin. Milk with water, chalk, and a variety of substances. Cheese with potatoes, beans, oleomargarine, vermilion, red chalk, sulphate of copper, arsenic, and corrosive sublimate. Lard with starch, alum, and quick-lime. Confectionery with chromate of lead, vermilion, red lead, Prussian blue, copper, and arsenic. Pickles with sulphuric acid and verdigris. Mustard with yellow ochre and chromate of lead. Vinegar with sulphuric acid, arsenic, and corrosive sublimate. Coffee with acorns, spent tan bark, logwood, sawdust, and the burnt livers of horses. Tea with Prussian blue, chromate of lead, leaves of other shrubs, etc., etc. ‘The brands of teas sold in America are unknown in China.’—*Chinese Minister at Washington.*

“*Drugs.*—The adulterations of these are perfectly abominable, and often the medi-

cine has only a quarter of the strength it should have.—*A Boston Chemist.*

“*Wall-Papers.*—Thirty-three per cent of wall paper is poisonous.—*Chemists of Harvard University.*

“*Tin-Ware and Tin Cans* are so much adulterated by lead (mixed with the tin in manufacturing) that if all the chemists in the country were each paid a fee of \$10,000 to keep dark and say nothing, the makers would still have a surplus of \$4,000,000 profit per annum. Don’t use anything put up in tin cans.

“*Glucose* is made by millions of tons; and even southern planters, who can buy glucose for three cents a pound, find it profitable to mix it with their sugar. It is true that glucose, pure and simple, is grape-sugar; but as made at these establishments it contains a percentage of sulphuric acid, and is therefore a poison.

“*Oleomargarine* is a twin giant to glucose. Some 100,000,000 pounds were made in this country during 1880. It is made of the fat of animals, and not infrequently from animals who have died from disease; and in its manufacture is not subjected to heat sufficient to kill the living organisms which refuse fat is liable to contain.—*Dollinger, the English Microscopist.*”

The reporter adds: “Any work on chemistry will contain information how to test any of the poisons in articles of food, etc.; and the curious can decide for themselves as to the purity of the food they purchase.”

There is no doubt as to the existence of many of the evils mentioned by Mr. Angell, and he has done a good work in awakening public attention on the subject of food adulteration; but we have reasons for believing that some of the above statements could be qualified a little without in any way damaging the facts.

Bread is probably sometimes adulterated with alum, but rarely with sulphate of copper or blue vitriol. Poor flour is the chief adulterant of bread. Chalk is rarely used in the adulteration of milk in this country; but bad water is often employed for the purpose. Arsenic and corrosive sublimate are not common adulterants of vinegar, but sulphuric acid vinegar is very common. Tan bark, logwood, sawdust, and horses’ livers are not often used in adulterating coffee, as there are so many

other cheap articles which may be used for the purpose. It is well known that ground coffee rarely contains a grain of real coffee.

Drugs are very greatly adulterated, but it is doubtful whether the health of the people suffer much in consequence, as the adulterants have the advantage of being at least harmless, while the drugs are not.

The extent to which wall-paper is adulterated is certainly overstated. We recently examined several hundred samples from a leading paper manufacturer without finding a single specimen of arsenical paper.

We have also been assured by a gentleman who is in a position to know the facts and whose veracity we can rely upon, that the extent of the adulteration of tin has been overstated. It is claimed that the kind of tin employed for canned fruits does not contain lead. We have tested many tin cans to ascertain the truth on this point, and have found only one which contained lead. However, we consider it a safe rule to follow to discard all food products put up in tin, unless the cans are each tested for the presence of lead before the contents are used.

It is true that glucose made from corn by the aid of sulphuric acid answers to the chemical test for grape-sugar, but it is, nevertheless, a very different thing from the sugar of the grape, and it yet remains to be shown that it is in any sense a food.

Too much attention cannot well be given to securing the purity of food and drink. The body—bones, muscles, nerves, brain—is made of what we eat, and hence partakes of the properties of the substance taken into the stomach in a greater or less degree.

We differ from the reporter in the idea that anybody can decide respecting the purity of food by the aid of the information given in "any work on chemistry." The analysis of foods is by no means a simple matter, in many cases, and our popular chemistries rarely mention any-

thing about this important subject. There are a few simple tests for some of the most common impurities which any intelligent person can employ; but the subject of food adulteration is one which demands the attention of an expert chemist.

MICHIGAN MALARIA.

A WASHINGTON correspondent writes us that he was for some years a resident of Michigan, and was delighted with its fertile soil and genial climate, and should still consider this his home but for one objection. He continues:—

"I refer of course to the effects of miasma. What with the richness of the soil and the exhalations from the numerous lakes, there is much of disease among bipeds and quadrupeds, and the disease is increased in the bipeds by eating the flesh of the diseased quadrupeds. I don't know as my experience was exceptional, but I found very little healthy beef during my three years of abode in the State; in fact, a gentleman residing in one of your cities informs me that the same condition of things still prevails. My wife was obliged to leave the State because of the effects of the climate, and the wife of a neighbor who had been accustomed every year to return East to recuperate, and who did not go the year we lived in the State, died before the close of the summer.

"What is the remedy? Certainly those who are meat eaters must expose themselves very decidedly, unless there be a statutory law making it a felony to sell animals, or their flesh, when diseased. But it seems to me that if your people should eschew flesh-eating, and make much and free use of vegetables and fruits, avoiding exposure and night air, they might keep themselves in good health. I speak of 'exposure.' An example: How many farmers take a rainy day to drive to town, and thus become drenched and bring sickness and expense upon themselves. I would like to hear from your readers through 'GOOD HEALTH' on this subject."

"G. F. NEEDHAM."

Forty or fifty years ago, Michigan was as noted for its malaria as it now is for its salubrity. When the State was new, and its primeval forests were being cleared away, and its fertile soil turned up by the plow for the first time, the conditions favorable for the production of malaria were present in a high degree, and malarial diseases were exceedingly prevalent.

The same was true of Massachusetts and other New England States two centuries ago, when the conditions were similar. But, like the older States, Michigan has now reached a condition in which it is no

more subject to malaria than other States. There is more malaria on Fifth Avenue, New York City, and on Long Island, than in any part of Michigan we are acquainted with. Deaths from malarial diseases form but a very small percentage of the annual mortality in the older portions of the State. Last year was an exceptional one in Michigan, as well as elsewhere. There was more malarial disease in the State of Michigan last year than there had been for ten years previous. The same was true in all parts of the United States. Malaria appeared everywhere, affecting portions of the country that had been supposed to be wholly free from it. In Rhode Island, Connecticut, and Massachusetts, it was, in many parts, very prevalent. It also prevailed very extensively, and in a very severe form, in Western Iowa, Kansas, Nebraska, and Minnesota. It even appeared very extensively among the mountains of Colorado, ten or twelve thousand feet above the sea, in an atmosphere long noted for its purity and salubrity. The conditions which give rise to malaria are not yet well understood. It prevails upon the high table-lands of Mexico and South America, where the air is so dry and pure that flesh elevated a few feet above the surface does not decompose. It has also occurred on the heights of Gibraltar. It thus appears that malaria is not confined to sections of the country which abound in small lakes. Our experience has been that it is much more likely to occur in the vicinity of mill ponds than in any other locality. It does not, however, occur when the pond is full of water, but a dry season, occasioning the lowering of the water to such an extent as to expose a large portion of the bottom of the pond, with its decomposing organic matter, is quite certain to give occasion for an outbreak of malarial disease.

We agree with Mr. Needham that the abundant use of flesh food, especially when diseased, very greatly increases the liability to malarial disease. We have known persons who were rigid vegetarians to live in the most malarious localities for years

without suffering, when all their neighbors suffered almost constantly with various malarial maladies. It occurs to us as a little peculiar, also, that our friend should be so fearful of the climate of Michigan, but does not object to a residence in Washington, which is known to be one of the most malarious localities in the whole United States. Perhaps his object is to demonstrate to the nation that a vegetarian can live, even in such an atmosphere as that of Washington, with impunity. Even the most rigid vegetarianism is not an absolute preventive of malarial disease, and our friend may yet find himself shaking with an ague fit for his temerity. In case such a misfortune befalls him, we would advise him to visit Michigan for his health.

GAS-WORKS AS HEALTH RESORTS.

A FEW years ago there was quite a mania for frequenting gas-works among persons afflicted with any sort of pulmonary disease, particularly bronchial troubles, asthma, chronic bronchitis, etc. The odors always present in the vicinity of these establishments was also recommended for whooping-cough.

An eminent French physician has been investigating the matter in a common-sense manner, and reports that animals subjected for some time to the odors referred to, in the purifying chambers of gas-works, were found after death to have their lungs filled with tubercles. This is certainly not a very powerful argument in favor of gas-works as health resorts. We cannot recommend them, notwithstanding the opinions of an esteemed correspondent.

Beer and Diseased Kidneys.—Dr. Pallen, an eminent English physician, asserts that "the man who habitually drinks beer is sure to have Bright's disease. Beer in large quantities is one of the worst things a man can ruin his stomach and organs with. In Germany, where the students

drink a great deal of the beer young, their kidneys and bladders are always affected."

It has been shown by numerous observations that beer is much more damaging to the kidneys than many stronger liquors, being taken in a much greater quantity.

SANITARY CONVENTION AT NNA ARBOR.

FEB. 28 and March 1, we had the pleasure of attending the Sanitary Convention held at Ann Arbor, Mich., under the auspices of the State Board of Health. This convention was the most successful of any yet held in the State, judging from the number in attendance, and the interest and ability of the papers presented. The sessions of the convention were held in the large court-room, which was crowded full at every session. We have not space to notice here the many interesting papers read, some of which we hope to give our readers at an early day. We may mention, however, an interesting and very practical paper on "Food and Cooking," by Prof. A. B. Palmer, in which many excellent things were said. Dr. Palmer believes that man can live equally well on either vegetable or animal food, though he is practically omnivorous. He told a good story of a clergyman who, when requested to ask a blessing upon a dinner consisting of meat fried to a crisp, potatoes swimming in grease, bread sour, soggy, and ponderous, demurred on the ground that the dinner was "not worth a blessing," and indorsed the sentiment, suggesting that there are thousands of dinners in the same condition. A plea was made for scientific cooking, plain, wholesome, nourishing food, and the abandonment of tea, coffee, and other stimulants. The Professor never loses an opportunity to rebuke the tobacco-using propensity of medical students as a class, planting his feet firmly on the rock of total abstinence.

A very interesting paper was read, showing that freezing does not purify water only in a small degree. Water which is really dangerous before freezing, is dangerous after being frozen.

Dr. Vaughan reported the analyses of a number of specimens of milk from various sources, in which the percentage of cream varied from a little over two per cent to more than eight per cent. Between four and five per cent is the average for common cows, while the milk of Jersey or Alderney cows contains twice as much.

Several very able and interesting papers bearing more or less directly on the subject of education in its hygienic aspects were read and discussed at considerable length, and with much profit.

Among the exhibits presented for examination was a new kind of sewer pipe, which attracted some attention. The pipe differs from ordinary sewer pipe in two ways, being made of a compound of asphaltum and sand, with other chemicals, and so formed at the ends that joints can be made without interrupting the uniform smoothness of the interior. The material is hard, impervious to air and water, and we think is admirably adapted to the purpose for which it is used, provided it proves to be as durable as is necessary for such use.

One of the interesting features of the convention was a visit to the University. We were particularly interested in the examination of the hospital. We found there about one hundred patients under treatment by the various professors connected with the medical department. Dr. Palmer called our attention particularly to several cases of special interest, one of which was a very peculiar form of skin disease. The courteous house physician gave us every opportunity for making a careful inspection of every department. We were much pleased with the general air of neatness which pervaded the establishment, notwithstanding its crowded condition; but could not avoid observing that the facilities for ventilation were considerably short of the requirements for health. We understand that changes are soon to be made, however, which it is hoped will rectify this evil.

We were glad to see so large an attendance of medical students at the

sessions of the convention. No class of persons should be so much interested in this subject as medical men, though too often they are lamentably ignorant. We trust the time will soon come when the subject of hygiene and sanitation will be as much a part of the curriculum of study in all our medical schools as anatomy and physiology.

Tobacco Tax in France.—The annual revenue from the tax upon tobacco in France has rapidly increased within the century. In 1815 it was but a little more than \$6,000,000. Last year it was more than \$60,000,000, or ten times as much. The average tax upon each inhabitant of that country is nearly \$2.00. This, added to the amount expended by tobacco-users, and the time wasted in smoking, makes an enormous total, without taking into consideration the terrible waste of health which this vice occasions.

A Great Physician is thus described by a writer in a prominent medical journal:—

“A physician of the highest order is the man who is great in emergencies, who is keen in discernment, cool in judgment, sagacious in expedients, assuring in demeanor, kind in counsel. The great physician is one who relies but little upon medicines, little upon dosing, little upon specifics. He realizes that if a cure comes, nature, in nine cases out of ten, must have the credit. He does not forget, however, that in certain cases, remedies used at the right time may be of great service in assisting nature. The safe physician must of necessity be a great man; in fact, the greatest of men among those engaged in the active duties of life. No ordinary man can be a great or safe doctor. A man who is not *great*, who has not peculiar qualifications, is not, as a rule, a safe man to have charge of the sick.”

Physicians of this class are never bigoted, narrow, or old-fogyish. They are progressive and liberal. We have the great pleasure to know some, and they are grand men. The world has too few such. There are “doctors and doctors,” but few great physicians. Thousands of

men enter the ranks of the profession who are none too competent to follow the plow or handle the hoe successfully. They drift into medicine because they imagine it to be an easy and lucrative means of getting on in the world. There are plenty such, without whom the world would be vastly better off.

—A case of delirium tremens from the use of tobacco, recently reported, gave occasion for the publication of the fact that the Hon. Chas. Steele suffered in this way. “He says that some twenty years ago, when given to the excessive use of tobacco, he was prostrated by a well defined attack of delirium tremens, and from that time found it necessary to entirely abstain from its use. This occurred before the paralytic stroke from which he was a sufferer during the latter years of his life. He was of a highly nervous temperament, and never addicted to intemperance in drink—in fact, was, I believe, a tectotaler.”

—Americans consumed in the year 1880 the enormous total of 408,708,365 cigarettes. But the waste of money and time in this great sacrifice to a depraved appetite is insignificant compared with the waste of health and vital energy represented by the above figures.

—The most unhealthy city in the world is St. Petersburg, in which one-twentieth of all the inhabitants die annually.

Talks with Correspondents.

WE receive every month hundreds of letters of inquiry on various subjects relating to health and disease, most of which we answer by letter, reserving a few of those which seem to be of most general interest for consideration in GOOD HEALTH. We are always glad to receive such inquiries, and will give all prompt attention, either in this manner or by private letter.

Baldness.—I. S. asks: "Will you please say in GOOD HEALTH whether a person who has lost all the hair from the head can do anything to restore it."

There are several varieties of baldness which are not equally curable. The baldness which results from a fever or other acute malady usually disappears in a few weeks or months. Baldness resulting from dyspepsia is usually curable after recovery of the general health. Patchy baldness, a baldness which appears in spots, is a nervous disease and usually incurable. When the bald spot is smooth and shiny with an entire absence of hair, or nearly so, recovery may not be looked for from any remedy or plan of treatment known. Improvement of the general health, with daily friction of the scalp with cold water and a soft brush, will accomplish as much in the line of permanent benefit as can be done in any case. Hair restoratives are nearly all poisonous and dangerous.

Air Disinfection.—A Minnesota lady asks: "What is the best disinfectant for the air of rooms? I have been using carbolic acid; but I learn now that this agent only disinfects what it touches."

The statement respecting carbolic acid is true. The prevalent idea that the odor of carbolic acid, chloride of lime, creosote, or tea, is a disinfectant is productive of mischief, sometimes of very great injury. The fact is they are all worthless as air disinfectants. They produce what many people seem to regard as a "healthy smell," but there is abundant evidence that such a smell while comforting to the mind may be wholly devoid of protecting value for the body. Disease germs thrive as well in the presence of such odors as when they are wholly absent.

The only satisfactory methods of disinfecting the air of a room are the generation of ozone and producing a disinfecting spray with an atomizer. A strong solution of permanganate of potash, sulphate of zinc, bromo-chloralum, or carbolic acid may be employed. The spray should be kept up for some hours. In fact, in a sick room it is well to keep such a spray in operation constantly, avoiding, of

course, so continuous a use or such strong solutions as may become a source of irritation and annoyance to the sick one. Scrupulous cleanliness and thorough ventilation are means of air disinfection which are both the best and the cheapest, and never to be forgotten.

Water Filters.—L. D. W. asks several questions respecting filters which we answer as follows:—

1. The hardness of hard water is not removed by filtration. If a charcoal filter is employed, some of the mineral ingredients of the water will be retained in the filter, but no very considerable proportion. The use of hard water will very soon spoil the best filter made, by the deposit of lime.

2. A cheap filter can be made by the following method:—

Take a large flower pot or earthen vessel, make a hole one-half inch in diameter in the bottom, and insert in it a sponge. Place in the bottom of the vessel a number of clean stones of sizes varying from that of an egg to an apple. Place upon this a layer of much smaller stones and coarse gravel. Then fill the jar within two inches of the top, with equal parts of pulverized charcoal and sharp sand, well mixed. Place loosely over the top of the jar, white flannel cloth, allowing it to form a hollow in the middle of the jar, into which the water can be poured. Secure the edges by tying a stout cord around the outside of the jar. By keeping a suitable vessel under the filter thus made, and supplying rain-water when needed, very pure water can be obtained. It can be kept in a cool place in the summer. It will require to be renewed occasionally by exchanging the old sand and charcoal for fresh. The flannel and sponge must be frequently cleansed.

3. Such a filter, if allowed to become empty every day, or every other day, at least, ought to last several years. Water which has a distinct odor should never be passed through a filter. Filtration will not purify such water.

4. There are several manufacturers of

filters in the United States, but we know of none equal to the famous carbon filters made in England. We have used these filters several years and feel well satisfied with them.

Are Foul Gases Healthful?—G. F. R. inquires:

1. "Would it be healthful to work in a room directly over a blacksmith's forge where the air would contain more or less of the smoke and gases from the coal burned beneath? If not, why?"

2. "Is the stench that arises from the burning of horses' hoofs healthful? Blacksmiths say that it is these things that make them tough and healthy."

1. A bad odor is never a healthy odor. The Creator has so arranged the natural order of things that healthful relations are pleasant, and unhealthful, as a rule, unpleasant, at least so far as the sense of smell is concerned. The gases arising from a blacksmith's forge are chiefly sulphurous oxide, and carbonous oxide, both very poisonous gases, exceedingly deleterious from their effects upon the lungs and the blood.

2. No sort of stench is healthful. No possible benefit could be derived by the inhalation of the fumes arising from burning hoof. Blacksmiths are quite healthy as a rule because of the active character of their employment. Only strong, vigorous men undertake the trade. But we have seen blacksmiths who were not in health, and whom we believe to have been injured by the business, and hence we recommended that they renounce it for some more healthful employment. It is said that the scavengers of Paris, who spend nearly their whole time during laboring hours in the sewers of that great city, are very healthy men; but no one will argue that they are made such by their occupation.

Nettle Rash.—E. F. T. writes: "I am often troubled with an erysipelatous humor. Cooking over a hot stove, hurrying about my work, or even a surprise or any excitement, causes the skin to break out in red blotches with intense itching. I am told to eat corn meal or buckwheat to clear it out of my blood. Please inform me if I ought."

The malady is not erysipelas, and is not a blood disease. It is probably what is commonly known as *nettle rash*, or more technically as *urticaria*. It will not be

cured by eating corn meal, buckwheat, or any other special article of food. Eat what you can the most easily digest, keep the skin active by frequent bathing, and avoid excitement of all kinds. This is a nervous disease, and it is probable that your nervous system needs greater quiet.

Tomatoes, Sourkroot, Pumpkins, etc.—A Western correspondent wishes our opinion of the dietetic value of tomatoes, sourkroot, pumpkins, squashes, water-melons, musk-melons, and whortleberries.

As usually prepared, with salt, pepper, butter, vinegar, etc., tomatoes are decidedly unwholesome as an article of diet; but they are not objectionable when eaten without the injurious condiments mentioned. Sourkroot is too abominable to go into any stomach but that of a scavenger. We recommend it for *sus scrofa*, but not for human beings. Pumpkins and squashes, if of good variety, well matured and well cooked, are good food for healthy stomachs, but not the best, as they are coarser than the diet naturally designed for man. Whortleberries are among the best of the berry fruits. Musk-melons and water-melons, when ripe, and not stale, are not objectionable if taken at proper times in proper quantity.

None of the articles mentioned possess any very great nutritive value. All could be easily dispensed with without any damage to health.

LITERARY NOTICES.

In the *North American Review* for April, Gov. Eli H. Murray, of Utah, treats of the existing crisis in the political fortunes of that Territory. According to the present method of local government there, the minority of the population, the Gentiles, though they possess the greater part of the wealth of the Territory, exclusive of farm property, and though they constitute by far the most enlightened and enterprising portion of the community, are practically without a voice in legislation. The author proposes a drastic yet entirely practicable remedy for these and all the other evils prevalent in Utah. An article entitled "Why they Come," by Edward Self, is devoted to the consideration of the many important questions connected with European immigration to this country. Dr. Henry A. Martin, replying to a recent article by Henry Bergh, defends the practice of vaccination, citing official statistics to prove the efficacy of bovine virus as a prophylactic against the scourge of small-

pox. E. L. Godkin has an article on "The Civil Service Reform Controversy;" Senator Riddleberger on "Bourbonism in Virginia;" and General Albert Ordway on "A National Militia." Finally there is a paper of extraordinary interest on the exploration of the ruined cities of Central America. The author, Mr. Charnay, has discovered certain monuments which conclusively prove the comparative recentness of those vast remains of a lost civilization. The *Review* is published at 30 Lafayette Place, New York.

GREEN'S LARGER HISTORY OF THE ENGLISH PEOPLE is one of the most brilliant and thoroughly valuable historical works which have appeared in many years. Fairly ranking with Macaulay's great work in the absorbing interest of its narrative, it excels that in its adaptation to popular needs, in that it covers the entire period of English history, from the earliest to modern times, instead of a brief portion as does Macaulay. It richly deserves a place in the homes of the masses, and we are glad to note that it is now placed within their reach, being reduced in price from the \$10.00 for the four volume edition of the Harpers to as low as 50 cents for one edition just being issued by The Useful Knowledge Publishing Co., 162 William Street, New York. They are publishing it in several styles, as follows: In five volumes Elzevir edition, Utility binding, 15 cents; cloth, 30 cents; half Russia, 40 cents per volume (postage five to seven cents per volume extra), and a model Octavo edition, in one volume, Utility binding, 50 cents; cloth, 65 cents; half Russia, 80 cents (by mail 15 cents extra). Numerous other standard works will rapidly follow the publication of this, of which catalogues will be sent free on request. This house sells only to buyers direct; no discounts from their wonderfully low prices being possible to booksellers and agents. The reading public wish God-speed to the enterprise, which is under the energetic and skillful guidance of Mr. Alden, late head of The American Book Exchange. The new company sails under the good motto of "Owe no man anything—buy and sell for cash. Gold dollars ask no favors,"—and Mr. Alden thinks it is therefore free from the danger of wrecking by competing millionaire publishers and the lawyers.

THE ILLUSTRATED CHRISTIAN WEEKLY is most emphatically an excellent paper. It is a twelve-paged, highly-illustrated, undenominational but Christian paper, filled with interesting, useful, and instructive matter for the parents, stories for the youth, and notes on current events for all. It will assist in forming right character for the young, helping to fit them for future usefulness and happiness, and will brighten and cheer all homes into which it regularly comes. And all this for \$2.50 per year. Address all subscriptions to *Illustrated Christian Weekly*, 150 Nassau St., New York.

THE SANITARIAN. M. Augusta Fairchild, M. D., Editor and Publisher: Quincy, Ill.

We have received the first number of the above, which is a new journal devoted to the interests of men and women in the dissemination of health truths. The prospectus states that "an especial effort will be made to awaken an interest in the mind of woman upon all topics which point to her one imperative need, to her 'emancipation,' and at least her physical salvation, the one most pressing want of her existence, and yet the one least prized and cherished,—

health." The field is a broad one, and one in which the demand for efficient labor is very great, and we are glad to see another added to the list of health periodicals that shall help to educate the masses in the principles of hygiene.

GLEANINGS IN BEE CULTURE. A. I. Root, Publisher Medina, Ohio.

This is a monthly especially devoted to the interest of bee-keepers and is one of the best journals of this character we have ever seen. Much valuable information on other subjects, not pertaining exclusively to bee culture, is found in its "Home Department;" and its "Tobacco Column" teems with the "honed" truths of reform. Subscription price, \$1.00 per annum.

FOURTH ANNUAL REPORT OF THE PRESBYTERIAN EYE AND EAR CHARITY HOSPITAL, Baltimore, Md.

Through the courtesy of the surgeon in charge, J. J. Chisholm, M. D., we have received a copy of the annual report of this institution, which has been in successful operation four years. It is managed through representative lady managers from the different Presbyterian churches of Baltimore, each of whom takes entire charge for one month. This institution is nominally Presbyterian, but no one is excluded from the privileges of the hospital if suffering, provided he is poor and has no means of obtaining professional services. The surgeon, in his report, states that during the past year 602 operations for difficulties of the eye or ear were performed in the hospital, and 222 persons were kept in the wards with an average of ten days to each one operated upon.

THE ILLUSTRATED ANNUAL OF PHRENOLOGY AND HEALTH ALMANAC FOR 1882.

We have just received the Health Almanac for 1882, published by Fowler & Wells, of New York. It is a pleasing number and full of varied and interesting reading matter. It contains, in addition to the usual astronomical notes, monthly calendars, etc., the Principles of Phrenology, with the names and the location of the organs illustrated; A fine life-like portrait of Mr. Nelson Sizer, the well-known Phrenologist and Lecturer; Portrait and Sketch of Mrs. Eliza Garfield, the mother of the late President; Some Contrasts we meet in daily life, illustrated; Influence of Habit on Character and Destiny, illustrated; Mental and Medical Science in China, with illustrations; Character and Longevity; The Annual Sanitarium, with hints and admonitions for the farm and household, suitable to the different seasons of the year; and a great amount of information in small paragraphs. It is handsomely published, is 64 octavo pages, price 10 cts.

FOURTH ANNUAL BOOK OF THE MICHIGAN SPORTSMEN'S ASSOCIATION.

This is a report in full of the transactions of the sixth annual session of this Association, held at Lansing, Mich., Jan. 25th to 27th, 1881. The purpose of this Association is the creation of a healthy public sentiment in favor of protection to the game of fur, fin, and feather, and the organization and proper enforcement of a wise and effective code of game laws.

Publishers' Page.

As an aid to those who may be desirous of bringing GOOD HEALTH to the notice of their friends, we are publishing a series of large prospectus sheets, containing extracts from the journal, a prospectus for the year, terms, premium offers, etc. To those who wish we will furnish as many as desired of these sheets at the expense of postage, which is about 20 cts per hundred. Several thousand have been sent out already, and we are now preparing for a new edition which will be still more attractive than those already published. Workers among the people will find these sheets a great assistance, and the cost is insignificant, so that all can take part in it.

The Health and Temperance Missionary Society at the Sanitarium is doing a good work in using these prospectus sheets in the same manner in which tracts and papers are usually employed.

The sheets are equal in size to eight pages of GOOD HEALTH, and fold into a common envelope. 100 sent by mail postpaid, for 20 cts.

At the last meeting of the American Health and Temperance Association at this place, it was decided to issue a Children's Pledge, in addition to the three pledges heretofore recognized by the constitution. A beautiful pledge card is being prepared, and will soon be ready. We hope to be able to announce it as completed in our next number.

On the occasion of our visit to Ann Arbor, in attendance at the Sanitary Convention recently held there, we were pleased to meet Messrs. Smith and Maxson, and Misses Sanderson and Hunt, all of whom were pursuing medical study at the Sanitarium last summer while assisting in various departments. We found them hard at work, fully abreast of the best in their classes, in good health and jubilant spirits. We expect they will graduate with honors, and win still brighter laurels when they enter upon their professional careers.

We have another crop of students started who, we hope, may soon find an equally brilliant prospect opening up before them.

Every Health and Temperance Club ought to possess a set of the new Temperance Charts which are just issuing from the press in Chicago. They are beautifully printed, and will be an ornament to any lecture room or home. The size is 28x42 inches. The set of ten covers the whole field of the physical effects of alcohol and tobacco, and the accompanying key furnishes materials for several interesting lectures. Retail price \$12. To clubs, missionary societies, temperance lecturers, and clergymen, \$10. Send for descriptive circular.

It is rumored that several improvements of great importance are to be introduced into the College at this place, which has long stood unrivaled as a school where instruction is imparted in harmony with the laws governing the healthy development of both mind and body. It is hinted that several experienced educators from abroad will be added to the list of teachers at the beginning of the next school year, who will be a valuable reinforcement to the corps of instructors.

We are glad to be in better time this month, and hope hereafter to be able to go to press by the twentieth of the month.

The managers of the Sanitarium report that their two main buildings are overrunning full, the five cottages owned by the institution are full, and in the five

large hired cottages only three rooms are unoccupied,—an unprecedented state of things at this season of the year. The crowded condition makes it necessary that those anticipating a visit to the institution should send notice of the time of their arrival a few days ahead. By so doing, it is believed by the managers that they will be enabled to accommodate all who come.

Among recent arrivals at the Sanitarium is Mayor Barnes, of Ypsilanti, proprietor of the large paper-mills in that place, which have furnished for years a large share of the paper used for GOOD HEALTH. Mr. Barnes has been quite unwell all winter, but is already making good progress in the direction of health, and we expect will make a good recovery.

Those who went to Florida last fall, missed four months of the most magnificent weather. Nothing better could be desired for the majority of invalids. Even those whose lungs were seriously diseased have been able to go out safely almost every day all winter. Several persons are now at the Sanitarium who intended to go South, but concluded to come here for the winter, and they now feel well satisfied with their decision.

A weekly meeting is held in the Sanitarium parlors, at which patients relate their experience in losing and gaining health. These meetings are very interesting. Sometimes very touching scenes occur as patients or their friends relate with emotion their almost miraculous recovery from a seemingly hopeless illness.

The friends of Eld. S. N. Haskell, well known throughout the United States, will be glad to learn that after a few weeks' sojourn at the Sanitarium he is able to return to his home in New England, and again engage with his accustomed vigor in the various enterprises in which he is interested.

NEW HYGIENIC SCHOOLS.

The friends of hygienic education in the East will be glad to know that a school is about to be opened at So. Lancaster, at which their sons and daughters can receive good advantages for the acquirement of a scientific and literary education, and at the same time receive instruction in the principles of healthful living, both theoretical and practical. In addition to the usual branches taught in our best schools, including physiology and hygiene, special attention will be given to the industrial arts, including agriculture, dress-making, cooking, and other departments of practical life.

Prof. Bell, who has been connected with Battle Creek College from its first establishment, and had entire charge of the school for several years during its infancy, has resigned his position as professor of English language and literature, and visits New England for the purpose of organizing the new school. He is of course greatly missed, as his position in the College could scarcely be filled by another, but his well-trained pupils will be able to carry on the work for a few months until he can be spared to return to his old post.

Miss Edith Sprague, for several years a teacher in the College under Prof. Bell, has also resigned her position here, and takes a more responsible and lucrative one in the East, at the urgent solicitation of the friends of the new enterprise.

With so experienced and sagacious a manager as Eld. Haskell to look after its interests, no doubts need be entertained as to the success of this new educational enterprise. We believe the school is to open about the middle of April.

An educational institution upon the same basis as the So. Lancaster School, has recently been founded at Healdsburg, Cal., where a fine building exactly adapted for the purpose, has been purchased. This new enterprise starts off under the care of Prof. Brownsberger, for eight years principal of B. C. College, which under his management more than trebled its patronage, and reached the greatest prosperity it has ever enjoyed.