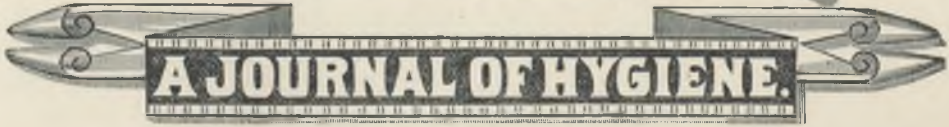


GOOD HEALTH.



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NO. 1.

THE PHYSICAL EFFECTS OF ALCOHOL AND TOBACCO.

A LECTURE DELIVERED AT THE LAKE BLUFF TEMPERANCE CONVOCATION, AUG. 18, 1882.

BY DR. J. H. KELLOGG.

[CONCLUDED.]

A HEALTHY HEART.—In a state of health, the heart is almost wholly composed of muscular tissue and blood-vessels. It is, in fact, a hollow muscle, by the contraction of which the blood is propelled into the remotest corners of the vital economy, carrying in its scarlet stream the elements from which the tissues are rebuilt. The amount of work performed by this little organ is enormous. The strength which it exerts in each contraction has been variously estimated by different experimenters, one of the lowest estimates being ten pounds for each beat or pulsation. As the heart beats on the average seventy-two times a minute, a little computation will show that the work of this little organ is equivalent to lifting the enormous weight of one million, thirty-six thousand, and eight-hundred pounds, or more than five hundred tons, one foot high. The heart is frequently called upon to do a large amount of extra work, as in rapid walking, or running, lifting, or physical labor of any kind. Severe mental labor also brings an extra strain upon it, and its integrity is of the utmost consequence to the safety of the rest of the body.

The heart of the drunkard, like his

nerves, muscles, and other organs, is also subject to the change known as fatty degeneration, in which the heart becomes loaded by an accumulation of fat upon its exterior, and also suffers a change of its muscular tissue to fat, such as occurs in the fatty degeneration of other muscles. This, of course, greatly weakens it, and accounts for the fact that the pulse of the habitual drinker is weak, feeble, intermittent, the large, overloaded, overworked, enfeebled, semi-paralyzed organ being unable to do the work required. The drunkard's heart cannot easily lift its five hundred tons per day, and when called upon to do a little extra work, as during extra physical or mental exertion, it frequently fails altogether, and its owner is instantaneously precipitated into a drunkard's grave.

The next plate represents a number of the results of alcoholic poisoning. First we have a pair of lungs the right half of which is in a healthy condition. Its coloring, as shown on the chart, is almost exactly that of the lungs in health.

The second figure represents the left lung divided in such a way as to show the interior, the upper portion of which is represented as in an advanced stage of destruction from that form of lung disease known as drunkard's consumption. The old notion that alcohol was a preventive of consumption has been thoroughly exploded by that eminent scientist and physician, Dr. Richardson, of England, who has demonstrated that there is a pe-

cular form of consumption which is the direct result of the influence of alcohol upon the lungs. He states that a person suffering from alcoholic phthisis shows no improvement under treatment. The disease steadily, surely, and usually quite rapidly, progresses to a fatal termination. The disease is most liable to attack those who seem to be almost invincible to the effects of alcohol, and who are often pointed to as examples of the harmlessness of alcoholic drinks. The disease often makes its appearance just when the drinker, alas! too late, is making up his mind that the poison is really hurting him, and is thinking of reforming.

The lower portion of the left lung shows the condition of the lung when congested from the use of alcohol.

At D is shown a **HEALTHY KIDNEY**.—The function of the kidneys as eliminative organs is the most important of that of any similar structure in the body. When once thoroughly diseased, recovery is seldom possible, and the victim goes steadily down to the grave.

E illustrates the **ENLARGED FATTY KIDNEY OF BEER-DRINKERS**.—It is universally considered by physicians of large experience that the use of alcoholic drink is one of the most common causes of diseases of the kidneys. Beer-drinking is particularly productive of disease of these organs, often causing enlargement of the kidney and change of its structure to a sort of fatty tissue which is wholly incapable of the performance of the proper work of the organ. The great frequency of diseases of the kidneys among beer-drinkers has long been remarked by medical men.

F shows the **ATROPHIED KIDNEY OF GIN-DRINKERS**.—The effect of strong liquor, as gin, whisky, rum, or brandy, upon the kidney is somewhat different from that of beer and other liquors which contain less alcohol, causing it to shrivel, and destroying its utility.

G represents a **HEALTHY LIVER**.—This, the largest gland of the body, performs the most complicated function of any similar structure, and cannot suffer de-

rangement without seriously affecting the whole vital economy. When liquor is taken into the body, it affects, first of all, the stomach, next the blood, and next comes in immediate contact with the liver. This self-sacrificing organ endeavors to save the rest of the body by absorbing the poisonous liquid much as a sponge soaks up water. On this account the effect of alcohol is soon apparent in causing derangements of this great vital organ, as manifested in frequent biliousness, and finally in fatty degeneration and enlargement. Some time ago we made an examination of a case in which the liver had enlarged to such an extent, through fatty degeneration, as to nearly fill the abdominal cavity.

H represents a peculiar disease of the liver resulting from the use of alcohol, known as **NUTMEG-DEGENERATION**. The term "nut-meg degeneration" is employed on account of the remarkable resemblance of the cut surface of the liver subject to this disease, to the smooth surface of a half-grated nut-meg.

The liver also undergoes a change known as fatty degeneration, its proper tissue being changed to fat. I represents a small bit of a fatty liver magnified many thousand times by a powerful microscope. The round white spots represent globules of fat which have taken the place of the proper liver structure, giving to the organ a whitish color, and a consistency resembling that of cheese.

Such a liver is utterly unable to do its proper work of making bile, and it is no wonder that a drinker looks bilious and feels bilious.

J shows the **ATROPHIED, OR HOB-NAILED, LIVER OF A HARD DRINKER**.—This is a fac-simile of the liver of a victim of intemperance. As may be seen by comparing its size with that of the healthy liver shown at G, it is contracted to about one-fourth the proper size. The left lobe of the liver, which constitutes nearly one-third of the healthy organ, is only represented by a little nodule, its natural form being wholly destroyed. Another peculiar feature of this disease

of the liver is the appearance presented by the surface, which is covered with little elevations, giving it a striking resemblance to the sole of an English cartman's shoe, which is thickly studded with hob-nails, through which fact it is generally known as the "hob-nailed liver." It is also known as the "gin liver," since it is seldom, if ever, found except as the result of the use of strong liquors.

By the aid of a little instrument known as the ophthalmoscope, the interior of the eye can be inspected with as great minuteness as that of any portion of the surface of the body. When thus examined, a healthy eye presents the appearance shown at K. The small disc in the center of the circle is the point at which the optic nerve enters the eye. At or near the center of the disc, arteries and veins are seen entering the eye and diverging in every direction.

Oculists long since discovered and published to the world the fact that *amaurosis*, a disease in which the optic nerve is seriously affected, is much more frequently the result of the use of tobacco and whisky than of any other cause. At L may be seen the appearance of such an eye, as shown by the ophthalmoscope, in wide contrast with that of the healthy eye shown at K. It should also be mentioned in this connection that cataract is not infrequently the result of smoking, and numerous other diseases of the eye can be traced directly to the use of alcohol.

Plate 10 represents the effects of alcohol and tobacco upon the pulse, as shown by an ingenious little instrument known as the *sphygmograph*. We have examined, by means of this instrument, the pulse of persons addicted to the use of alcohol and tobacco many times, and have rarely failed to discover evidence of injury therefrom.

A shows the PULSE OF A HEALTHY PERSON.—This tracing we obtained from a strictly temperate person enjoying perfect health. The vertical lines in the tracing represent the wave produced in the arteries by the contraction of the

heart. At each heart-beat the tracing needle of the instrument is thrown quickly upward, and then curves more or less irregularly downward during the interval between the pulsations. It will be noticed that the curves of the several pulsations are almost absolutely uniform, which indicates a healthy condition of the heart, and that it is able to perform its proper work.

B shows the PULSE OF A MODERATE DRINKER.—This tracing was obtained from the pulse of a person accustomed to the use of wine, just after a dinner at which he had indulged in his usual libations. In place of the strong, uniform curves seen in the tracing from a healthy pulse, we have simply a waved line, indicating in the most graphic manner the depressing effect of alcohol upon the heart, even in moderate quantities, when habitually used.

C represents the PULSE OF A DRUNKARD. This tracing was obtained from the pulse of an habitual drunkard, who was just recovering from an attack of delirium tremens. The irregular character of the tracing well represents the peculiar, nervous, jerking pulse of the weak heart laboring under the influence of intense mental excitement.

D shows the PULSE OF AN OLD TOBACCO-USER.—This tracing is from a person debilitated by the long-continued use of tobacco. It indicates the unsteadiness of the action of the heart, which is one characteristic of the effects of this poisonous drug. We have found it to be one of the most frequent causes of irregular heart action, intermittent pulse, and pain in the region of the heart. It is undoubtedly a great cause of heart disease and sudden death.

E represents the pulse of a young man who had recently learned to smoke, and was suffering from the profoundly poisonous effects of nicotine upon the nerve centers of the heart. The heart was so enfeebled that the pulse was a mere flutter, as shown by the slight deviation from a straight line, of the tracing made by the *sphygmograph*.

The effect of tobacco upon the heart, as well as upon the brain and other organs, is now so well recognized that boys and young men are, in some countries, prohibited its use, it having been found that in districts where it was generally used by boys and young men, it was difficult to obtain the quota of sound men for the army.

We have now considered some of the principal effects of alcohol upon the body, but have by no means canvassed the whole subject. We have said nothing of the innumerable functional disturbances occasioned by alcohol and tobacco. Neither have we said anything of the terrible hereditary results of the use of this poison. Recent researches have shown that intemperance in parents is one of the most prolific causes of insanity in children. Our insane asylums are filled with the demented and maniacal progeny of tipping parents. Alcohol is a poison, intrinsically bad, without one redeeming feature, a deadly foe to the physical, mental, and moral well-being of the race.

IN THE NORTH OF ENGLAND.

BY ELD. J. N. LOUGHBOROUGH.

LEAVING Southampton on the morning of Nov. 9, a ride of three hours brought us a distance of eighty miles to London, the largest city in the world. Here are about four and one-half millions of people, living on a space about eighteen miles east and west, by eleven miles north and south. One can form but little idea how the different modes of travel are taxed to accommodate the crowds of people who are going to and from places of business, without first seeing them. Elevated railways on both low and high level, as well as the underground, all running long trains of carriages every three or five minutes during the entire day, are quite inadequate to convey the people. A vast number of persons are left for the omnibus lines, the cabs, and the hansoms which throng the principal streets and thoroughfares. At such a central point as

that occupied by *The Royal Exchange*, *The Bank of England*, and *The Mansion House*, three and four police are constantly on duty, either escorting people across Cheapside and Lombard streets, or guarding and warning foot passengers of danger.

Having spent about four hours in the transaction of business, a three miles' ride on the underground railway, (fifty feet below the surface) brought us to King's Cross station. Here we took the Great Northern Railway, and after riding about one hour the train passed near Bedford, where John Bunyan was imprisoned, and where he wrote his world-renowned "Pilgrim's Progress." In two hours more we passed Boston, from which Boston, Mass., derived its name. One hundred and forty miles from London and we found ourselves with friends at Great Grimsby, which is situated on the south side of the River Humber, and from whence we look out on the German Ocean. Here we tarried for a night, and on the morning of the 10th resumed our journey, passing through Yorkshire and Durham, two of the best counties in England for dairy and agricultural pursuits. One hundred miles' travel brought us to Newcastle-on-Tyne.

As we came into Newcastle, our train passed over the river Tyne, which was so deep below us that tall-masted, sea-going vessels were passing under the arches of the bridge. We thought, This Borough is "*on Tyne*," surely. The castle from which the place was named, we visited. It stands on a high eminence above the river, and it is not, of course, as "new" as once. It was first constructed of wood by Robert, the eldest son of William the Conqueror, in the years 1079-82. It was one of the most northerly fortifications of the Normans, used as a defense against the Scots. The present structure was built of stone by Henry II., in the years 1172-77. It is said to be the most perfect specimen of a Norman castle existing in England. It is now used as a sort of museum of ancient relics. Here are stone idols of our Saxon ancestors, as well as

their stone mortars, pestles, battle-axes, etc.

Having been invited to address the Vegetarian Society of this place, we were happy to meet in the Bible House, in the evening, a large audience, who listened for an hour, with earnest attention, to what was said on the subject of proper food and drink for mankind. A few days previous to this the Social Science Congress had been held at Newcastle. During its session Professor De Chaumont read an interesting paper on "The Food and Energy of Man." He suggested that "man is naturally a fruit-eating animal," and said, "One reason why, in spite of the teachings of medical and physiological science, we continue to be meat-eaters to so large an extent, is that attempts to substitute vegetable food have, for the most part, resulted in lamentable failures. Vegetarianism has never flourished in England, but mainly, perhaps, because it has never yet been given a fair trial. Perhaps when the South Kensington School has completed its work, we shall have a race of cooks who will do wonders for us in the cooking of vegetables, after which we may begin to dispense with sheep and oxen."

If vegetarianism has failed to reach the masses in England, it has hundreds of persevering advocates and adherents, and the cause is gaining ground, and will advance more rapidly as its difficulties are surmounted. Good whole-meal bread is an important article of diet for those who would live naturally. It has been hard for those inquiring for such bread to be furnished by their bakers with loaves made of a little white flour and coarse bran stirred together, lacking the *gluten*, the very article they wish to obtain. The Bread Reform League, of London, is really rendering efficient aid to the cause of vegetarianism. The bread lectures of Miss Yeats, given from place to place, under the auspices of the League, are creating a demand for the "decorticated," or "granulated whole meal." Judging of the result by what we have seen in Southampton, some one steps in to supply this

demand. The flour is now prepared in this town, and in many of the baker shops the whole-meal loaf is displayed with the ordinary bread in their windows.

During the recent Congress in Newcastle, Miss Yeats gave one of her bread lectures. This has helped to extend the inquiry on food reform. We were glad to hear it announced at the close of our lecture, that there were places in the town where the proper flour and whole-meal bread can be obtained. With such efficient advocates as Mr. Grant, their Honorary Secretary, and his associates in the work, we shall expect to hear a good report of progress in food reform at Newcastle.

While arranging to place GOOD HEALTH in the reading-room of the free library of the borough, the librarian told me that there was a call made for this journal in the recent Social Science Congress. May the time soon come when a call shall be made for such reading in thousands of places where it is now unknown.

On the 12th we came to Hull. This place is situated on the north side of the Humber, twenty-one miles up the river from Grimsby. It was from this point that the Loughboroughs of Leicestershire, our ancestors, set sail for America, the latter part of last century. Here I met my old and esteemed friend, Mr. George Drew, of California, who is doing a very extensive missionary work in the place, both on land and on board vessels visiting the port. He says it is surprising to see the eagerness with which the Scandinavians receive and read publications in their own language treating on tobacco, temperance, etc. On land he has disposed of a number of copies of the Home Hand-Book. Those who have received it seem anxious to introduce the book to the attention of their friends.

While at Hull we met with the Vegetarian Society, and had the privilege of addressing an interesting audience on the theme of True Temperance, or What to Eat and What to Drink. The evening was unpropitious, or we should doubtless

have had a much larger attendance. We were gratified to form the acquaintance of these Vegetarians, and doubt not the cause will prosper there under the earnest work of the Secretary, C. F. Corlass, and his official associates.

After spending three days with the friends at Grimsby, we came to Manchester. Our route was through and among the Pennine range of mountains. The railway tunnels, mountain gorges, valleys, and numerous fields inclosed with stone walls, reminded us very much of the New England States of America. Sheffield, with its vast manufactories of cutlery, was one of the stations passed to-day. To look at the immense stores of table and spring knives ready for transportation from this place, one would conclude there was a supply for the world. One of the most important and lucrative branches of industry in the borough is the conversion of iron into steel. The iron thus used, we are told, is chiefly obtained from Sweden. It was at Sheffield that Mary, Queen of Scots, was imprisoned for a period of fourteen years.

On arriving at Manchester we were met at the station by our friend and host, Mr. W. E. A. Axon, F. S. S., who conveyed us to the rooms of the Vegetarian Society, 56 Peter street. Here we found our Vegetarian Secretary, Mr. R. Bailey Walker, happy as usual in his indefatigable labors for the cause of diet reform.

The object of our visit to Manchester was to attend the anniversary meetings of the Anti-narcotic League, United Kingdom Temperance Alliance, and the Vegetarian Society. The first of these occurred on the evening of the 16th, the day of my arrival. Although the meeting was not so largely attended by citizens as last year, there seemed to be more present from other places. This we take as a token that the interest in the Anti-narcotic cause is spreading to other localities than Manchester, where the League was first formed. A number of resolutions were adopted by the League. We were called

upon to move the adoption, and speak to the resolution that

"Whereas, Teetotalers who smoke are five times more liable to fall away than those who do not, we call upon Bands of Hope and Temperance Societies generally to offer the additional safeguard of a pledge against tobacco."

The evening was spent pleasantly and encouragingly to the Society.

Tuesday, the 17th, was devoted to the doings of the United Kingdom Temperance Alliance. At 8 A. M. more than 1000 persons sat down to breakfast in the great Free Trade Hall. Probably near 2000 thus partook of refreshment. From 10 A. M. until 4 P. M. (save a short intermission, during which refreshments were served), we were assembled in general council in the Friends' meeting-house. At this Council the officers were elected for the ensuing year, and many important resolutions were passed after being spoken upon by mayors, clergymen, editors, justices, etc. The Council was much larger than last year, and seemingly more earnest in its tone.

In the evening the great Free Trade Hall, said to seat 5000, was crowded to its utmost capacity, hundreds standing who were unable to obtain seats. In this meeting, presided over by Lord Claud Hamilton, earnest speeches were made by members of Parliament, Canons of the church, etc. Although Parliament was so occupied during the last session that the Local Option question was not reached, still, in this jubilee year of teetotalism in England, some laws have been passed forwarding the temperance cause. It was the confident hope expressed by the speakers that the Local Option law would be passed this coming winter, as well as other measures in favor of temperance.

On Wednesday, the 18th, from 2 to 4 P. M., the Council Meeting of the Vegetarian Society was held in the hall of the Young Men's Christian Association. We were pleased to see the increase of numbers in the Council over last year's attendance, and to observe, as it seemed to us, a greater degree of earnestness for the prosecution of the work. The Treasurer's report made at this meeting, not only

showed that more money had been received during the last year than any previous year, but it also showed a larger number of persons contributing to the funds of the Society. This of itself is a substantial proof of the widening influence of the diet reform. In this Council there was an election of officers of the Society. It was also their pleasure to choose a number of honorary members from the ranks of vegetarian workers abroad. In this list is included the name of J. H. Kellogg, M. D.

After the Council meeting we assembled in the spacious restaurant of Mr. Smallman, Cateaton street. Here, for 25 cents (1s. English) we were furnished with a repast fit for any natural appetite, and at the same time illustrative of the vegetarian principles. Such illustrations of the diet do much in removing the prejudices of those who consider a vegetarian diet must of necessity consist of cabbage, turnips, and carrots, not realizing that our system of living gives us the full range of the eatables of the vegetable kingdom. Such men as Mr. Smallman deserve success. May the time soon come when such restaurants shall be more numerous in this Kingdom, for they sometimes demonstrate in a few minutes what hours of talking would not accomplish. A case comes to mind where a friend who had made light of vegetarianism finally consented to go with us to a vegetarian restaurant. Here for 18 cents (9d) he had a most sumptuous dinner, and it was really amusing, when we reached his home, to see how he had changed his tone on the diet question. Said he, "Wife, you ought to just go up there and get a meal; everything is so clean and neat, and the food is so well cooked, and it tastes so good, I had no idea such food as that could be prepared by vegetarians. And then it relished so well, and I had all I could eat for 9d." Indeed, the best way to advance the reform diet among our friends, when they visit us, is not simply to feed them on what they are accustomed to eat, but let them have an opportunity to see that vegetarians really live on "the fat of the land."

The evening gathering of the Society in the rooms of the Y. M. C. Association was also more fully attended than that of last year. Here, for two hours, we were mutually encouraged by ten and fifteen minute addresses from veterans who for thirty-six years have not used a morsel of flesh, and those of all ages of experience, down to a few months' trial. The circumstances of these were as various in other respects as in the periods of abstinence. Each, however, had a testimony to bear in favor of the reform diet. One father spoke of the benefits socially, in the more gentle disposition manifested by his children for the few years since leaving the flesh diet. Physical and mental laborers had a word for the greater ease with which their respective tasks are performed without flesh. Our greatest regret was that we could not have thousands, instead of a few hundred, to listen and candidly weigh the moral and practical bearing of these testimonies.

We look back with pleasure on these few days of association with hospitable friends at Manchester. In closing this report of our visit to this the largest manufacturing city of the world, we must not fail to mention an enjoyable treat, obtained by "mine host" from the Mayor, for a company of us to visit all parts of the Town Hall, on the morning of the 19th. This building cost \$5,000,000, and required ten years for its erection. It is indeed a grand palace in the midst of this busy city. Here we parted with our vegetarian friends, and were soon on our homeward way to Southampton, down through the "Black Country," or the iron and coal districts of Stafford and Warwickshire. We returned encouraged to toil on for another year, if the Lord spares us, in seeking to advance principles of correct living.

EPIGRAM.

If men lived to Nature, by Nature controlled,
The doctors by art would not pocket their gold;
But mankind live by art, and put Nature aside,
Therefore, doctors in carriages prosperously ride.
The fault, then, with men is—not doctors, 'tis said—
For these ride for their living; those ride for the dead.

A LECTURE DELIVERED IN THE SANITARIUM PARLORS, AUGUST 23.

BY DR. J. H. KELLOGG.

[CONCLUDED.]

SEVERAL years ago I took a trip to Colorado, and while there visited Central City and Blackhawk. These two towns are within a mile of each other, but Central City is on the side of the mountain almost directly above Blackhawk. Although the two places are so near together, the rail-road which connects them is several miles long. It cannot run straight up the mountain-side, but is compelled to go part way around the mountain, then switch off and go around the other way, and so on, each time getting a little higher up, until finally it reaches Central City.

Some of our patients seem to regain their health in the same slow, tedious manner, sometimes seeming to be going in the opposite direction, but really rising higher all the time. A lady told me the other day that "she was n't a bit better than when she came." I sent for the symptom record and compared her symptoms at the time of entering the institution with those which she now exhibited. Here was a symptom which had been marked 10 when she came here,—it was as bad as it could be,—and now it was only 3, as shown on the symptom-record for the day. Other symptoms which had been marked 7 or 8 upon her first examination were now marked 0. It was pretty evident from the record that she was considerably better, whether she thought so or not.

Sometimes patients seem to take a sort of pride in maintaining that they are no better than before they came. They are always looking on the dark side, and this very fact stands in the way of their recovery. Instead of trying to think that they are better, and that they are going to get well, they are all the time thinking about this ache and that pain, this bad liver and that sour stomach. They keep thinking about all the discouraging things in their case. Such a

person is very likely to make very slow progress. If a patient wants to get well as fast as possible, he must have faith. If he has a certain kind of bath prescribed for him, he should try and believe that that bath is going to help him, instead of all the time thinking that he needs a hot fomentation over his liver or a galvanization of the stomach, or some other kind of treatment that is not prescribed for him. If you are going to have a fomentation over the liver,—which is a very happy kind of treatment in some cases,—try to believe that this fomentation is going to do you good, that it is going to stir up those little creatures that make bile, and compel them to do their work better. If you do not feel better in the morning, lay it to the weather. Try to make out that you feel better if possible. If a person would use as much logic in trying to convince himself that he felt better as many of our patients waste in trying to persuade themselves and their friends that they are "not a bit better," he would stand a fair chance of recovering from almost any disease.

I recollect a man who came here for treatment some years ago, in a very critical state. I thought that there was no chance for him to recover. About two-thirds of one of his lungs was disabled, and his constitution was so badly demolished that I thought there was no hope for him. I told him what I thought of his case, and advised him to return home. To my surprise he replied that he was going to get well, that he came here for that purpose, and that he was going to stay, unless we absolutely turned him out. He had so much pluck that I began to believe myself that he might get well. Whenever I asked him in regard to his condition, he would always say, "I am getting better." In spite of the fact that it was a damp, late spring, the man continued to improve rapidly. In the course of three weeks his temperature was reduced from 103 to 100; instead of having profuse night-sweats, he now had

none at all. His chills disappeared, his appetite came back, his breathing was very much better. In the course of three months his cheeks had become rosy, he could walk several miles a day, and he came very near accepting an invitation to preach in one of the churches of the city. After a month or two more, he went home. Instead of working in the garden, as I told him to do, he went to preaching again, and when I heard from him a short time ago was still engaged in that occupation. He signs himself G. Tom, E. C. He says that the "E. C." stands for "Ex-consumptive." It was his pluck that cured him; his faith, his confidence, his determination to get well. A man that does not use these healing agents, that is all the time throwing cold water on every hope that we endeavor to inspire in him, that man is going to require a long time for his recovery, if he gets well at all. He seems to neutralize all that we can do for him. A man that wants to get well quick will go to work to infuse energy into himself. Suppose the future does look dark, suppose the diagnosis is grave, that you have some organic disease; don't you know that it is possible for doctors to be mistaken? Perhaps you are not so bad off as they make you out to be. I have frequently known doctors to be mistaken. A lady came here a short time ago who was troubled with what her former physicians believed to be cancer. On examination I found that there was no cancer at all. That was almost enough to cure her. Often in cases where I can find no other hope, I try to think that I am mistaken about it. A man's symptoms may all say cancer of the stomach or organic disease of the heart; and yet his symptoms may be misleading him. There is no organic disease many of the symptoms of which may not be simulated by some functional disease, but we are bound to say what the symptoms indicate, as a rule. Thus there is a chance for hope even when we have the most grave prognosis possible.

The man that wants to get well fast will take all these things into consideration. If he has dyspepsia, he will expect to scrupulously follow his instructions respecting diet. A short time ago I wrote down on a piece of paper just what one of our patients was to eat. The other day he came around and said that he was not a bit better. When I asked him if he was following his diet prescription, he said, "Oh yes, I am following the diet you prescribed, and I have been taking treatment for six weeks without feeling any better." A day or two after a friend who was pretty well acquainted with him, told me I had better ask him if he ever ate pea-nuts. I propounded this question to him, and he said, "Oh yes, I ate a pint of pea-nuts yesterday. You did not say anything about them on the prescription." Well, the prescription did not say that he was to avoid pea-nuts, neither did it say that he was to avoid sardines nor fried pork. It would have been impossible to write out a list of all the highly indigestible articles furnished by the city restaurants. The young man had gotten up this sort of a subterfuge to quiet his conscience. A patient ought to use his common sense a little. If he is to avoid butter, it is because butter is hard to digest, and he ought to know that pea-nuts, which contain a large amount of oil, are a great deal harder to digest than butter. If a man wants to get well rapidly, he must make up his mind to frequently sacrifice his tastes and desires for the sake of his health; he must learn to renounce all sorts of selfish gratifications if they stand in the way of his getting well.

But after all, a person that has been sick a long time, is not going to get well very fast. If he is getting along *at all*, that is getting along *fast*, because he is not going in the opposite direction. A man who has been sweeping down a rapid current toward a precipice, will think that he is getting along splendidly if he is able to keep himself in the same place. If he can only hold himself where

he is for a time, perhaps some one will come along with a rope and rescue him. If you can arrest a patient's downward course for a time, he will gain a reserve force by which he can mount to health again.

Many of the patients who come here are in too great a hurry to get well. At first they say they do not care how long they stay here if we can only cure them. A man told me he would stay here five years if I would promise to cure him. That is the way they talk when they come. After a little while they begin to feel a little better, find several indications that they are getting well, and then they want to know if I do not think that they could take a home prescription, buy a battery, and get on pretty well at home. They have a little business that they want to attend to, or they must get in their crops, or their plants, or something else. In short, it becomes very necessary for them to go home. I think that patients sometimes write home and have their friends send them telegrams, so that they will have an excuse for getting away. A gentleman came here once who affirmed that he was going to stay with us a year. After a week's time he said that he did not think there was much the matter with him anyway, and he guessed he would go home. His liver was in a very bad condition, and he needed a year's rest, but he thought he had got so far up the mountain that he could climb the rest of the way himself. You can't roll a snowball up a hill and get it so large and roll it so fast that it will go the rest of the way by itself. The climbing is very steep until you get to the very top. You have to climb all the way, but when you get to the top, it is easy to stay there. When a person gets well enough so that he can keep well under ordinary circumstances, then he can go home with safety. When a man is just able to keep up under treatment, he is not ready to go by any means. He must get so well that he can endure some hardships. He wants a little *extra* vitality.

If patients would go to work to second our efforts, if they would comply with all the conditions needful in their case, and cooperate in all that we try to do for them, there is not one case out of a hundred that could not get well. Pretty nearly all our patients are hard cases; they are a bad class of patients to deal with, physically. They are just the kind of patients that doctors like to get rid of. I never knew a doctor to send a patient here until he had become thoroughly discouraged with him and wanted to get the case off his hands. Such patients must expect that if they get cured at all it is going to take a long time.

In conclusion, then, those who want to get well fast must go to work to help themselves by following implicitly the rules laid down for them here, in the full confidence that they will receive some benefit thereby. If all our patients would from this time forth do all in their power to cooperate in our efforts for their recovery, there is not one in this room but could get well, or at least receive very substantial benefit.

HEALTH AND SCIENCE.

A good many years ago an epidemic of disease was supposed to be a "visitation," or a "judgment," and prayers were offered up that its progress might be stayed. Now-a-days, when individuals or neighborhoods are attacked with typhus fever, diphtheria, or any one of the long range of malarial disorders, there is an immediate inquiry as to the condition of that house, or that neighborhood, and the disease is traced to its source of rotten vegetation, putrid filth, foul air, bad drainage, or some other of the uncleanly causes of zymotic disease.

For this advance we have to thank physiological and sanitary science, but it will not help us much to know a thing, unless we act upon our knowledge. It will not get rid of the causes of disease to know what those causes are, unless we go vigorously to work to counteract them.

It has been ascertained now beyond a doubt that infectious disease is primarily occasioned by living germs,—that these germs have their origin in dirt, overcrowding, bad air, putrid vegetation, imperfect drainage, and the like conditions. It makes no difference whether these conditions are found in tenement house, cottage, or palace; in the streets of the city, or the green lanes of the country,—the result is the same—it is sickness and death.

It is not entirely a gratifying thing to lazy, irresponsible people to find that health, and the best conditions for living useful and reasonably happy lives, are within their own power, and that they are responsible for their fulfillment. It is so much easier to keep on in the old way, to pile up refuse, to let the drainage go, to build a house like a soap box, and transfer the consequences to the shoulders of Providence, or the Almighty. But it is too late to do this now. Providence has been made responsible for the results of our shortcomings long enough, science has discovered that they are within our control, and that it is our business first to discover what the laws are that govern health and disease, and then adapt ourselves and our circumstances to the obligations they impose.

There is no occasion, in the nature of things, for persons to be born diseased, or die prematurely. A pure and temperate life, in a healthy location, and amid healthy surroundings, are fair guarantees for a green old age.—*Demorest's Monthly*.

Results of Simple Diet.—The Danes were approaching, and one of their bishops asked, "How many men the province of Dalarna could furnish?" "At least twenty thousand," was the reply; "for the old men are just as strong and as brave as the young ones." "But what do they live upon?" "Upon bread and water. They take little account of hunger and thirst, and when corn is lacking they make their bread out of tree-bark." "Nay," said the bishop, "a people who eat tree-bark and drink water, the devil himself would not vanquish." And nei-

ther were they vanquished. Like an avalanche from the mountains they fell upon their foes, beat them with clubs, and drove them into the river. Their progress was one series of triumphs, till they placed Gustavus Vasa on the throne of Sweden.—*Blackwood's Magazine*, 1845.

Physical Beauty and Diet.—Dr. Felix Oswald, in an interesting article in the *Popular Science Monthly*, on "Physiognomical Curiosities," pens the following paragraph:—

"But farther east nature succumbs to art, and the northern Russians are about as outrageously unprepossessing as indoor-life and a combination of all vices could make the image of the Creator. Extremes meet, though, and their Emperor has the honor of commanding twelve regiments of the most godlike men of the present world,—the lance-cuirassiers of the body-guard, recruited in the highlands of Lesghia and Daghestan. Nearly all the natives of the Caucasus have that fatal gift of beauty which made their land the favorite hunting-ground of the harem-agents, and this gave the Czar a pretext for treating it as a Turkish dependency. But no social degradation could counteract the combined influence of the Caucasian climate, hardy habits, temperance, and frugality; for the Circassian mountaineers are teetotalers by religion and vegetarians by preference—figs, honey, barley-cakes, and milk, being the staples of their diet. They are physically self-made men, for their language proves that their ancestors were Turanians—first cousins of the owl-faced nomads of the Mongolian steppe."

—An exchange says that doctors have a good deal to bear from anti-vaccinators, anti-vivisectionists, herbalists, and others; but the latest and worst insult comes from one of the Southern States, where a local legislator has introduced a proposal to make it obligatory to inscribe the name of the physician on the tombstones of deceased persons.



TEMPERANCE AND MISCELLANY.



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

RECOMPENSE.

The earth gives us treasure four-fold for all that we
give to its bosom;
The care we bestow on the plant comes back in the
bud and the blossom.

The sun draws the sea to the sky, Oh, stillest and
strangest of powers,
And returns to the hills and the meadows the glad-
ness of bountiful showers.

The mother regains her lost youth in the beauty and
youth of her daughters;
We are fed after many long days by the bread that
we cast on the waters.

Never a joy do we cause but we for that joy are the
gladder,
Never a heart do we grieve but we for the grieving
are sadder.

Never a slander so vile as the lips of the willing re-
hearer.
And curses, though long, loud, and deep, come home
to abide with the curser.

He who doth give of his best, of that best is the cer-
tainest user,
And he who withholds finds himself of his gaining
the pitiful loser.

The flowers that are strewn for the dead, bloom
first in the heart of the living;
And this is the truest of truths, that the best of a
gift is the giving.

—Carlotta Perry.

Written for GOOD HEALTH.

A FEW DEFINITIONS.

BY JULIA COLMAN.

GREAT confusion is sometimes caused by lack of definiteness and precision in the use of words, and it is not at all surprising that with so deceitful a subject as alcohol to take into account the difficulty is greatly increased. Let us consider a few cases, that of TEMPERANCE first. Books, not a few, have been written, elementary, historical, didactic, yes, even text-books on temperance, in which there is no definition of the word. And this is the more noteworthy since there is no small dispute about its meaning. A good, clear, vigorous definition of the word would have quite taken the wind out of Dr. Crosby's sails in the late controversy.

We can accept Webster as far as he goes. He says Temperance is "Habitual moderation in regard to the indulgence of the natural appetites and passions." The taste for strong drink cannot be called a *natural* appetite.

The word is used mostly with regard to things eatable and drinkable. It forbids gluttony as well as drunkenness, the use of opium and tobacco as well as the use of alcoholic drinks, none of which have any normal relation to the "natural appetites." As indulgence in the use of alcoholic drinks has come to be the most glaring of these vices, one to which public attention is specially tuned, the word Temperance is technically applied to efforts toward the suppression of this vice. Some have proposed the substitution of the word "abstinence," and others the word "prohibition." But the former includes only a part of the true definition of temperance, and the latter looks only to the disposal of the *traffic* in alcoholic drinks, which necessarily falls short of influencing the *use* of the stuff when made at home.

So we think it far preferable to retain the word temperance in its broad sense as a continual reminder that we are to include *abstinence* from hurtful things together with *prohibition* of the traffic therein, and work for both together as essential to the success of either. Of course the ultimate aim is universal, voluntary abstinence from hurtful things; for only when it becomes voluntary does it guarantee perpetuity. When the man no longer wishes for it, then he will rejoice in the law that prohibits the traffic in it. He will no longer seek to undermine the law, but to sustain and execute it. Prohibitory law has many such friends already, and intelligent abstinence is continually adding to their number. But the groundwork of their faith should never be lost to view. The broad foundation of TEMPERANCE should underlie them all, and its definition should be, "Temperance is the proper control of the appetites. It implies the moderate use of good things and total abstinence from poisons." This indeed is very widely adopted.

True, it is objected that it raises the discussion as to what poisons are, and we think it high time that discussions were raised. It will be likely to teach the people a vast amount of physiological knowledge, of which they stand in urgent need. With such a definition, temperance work will not stop with passing prohibitory laws about alcoholic drinks. It will discuss, forbid, and banish the use of tobacco, opium, chloral, morphine, arsenic, and all the other thirty-odd drugs and poisons that are used to play upon the nerves in different parts of the world.

And if it also be ascertained that tea and coffee and spices should come under this category, perhaps the reformers will *then* be brave enough to act up to that advanced state of knowledge. I do not myself wish for that advanced action unless it be for the good of all concerned, and it will require no small amount of investigation to prove that to the public acceptance. But I do not shrink from the investigation, even if it should prove that tea and coffee are sometimes used to do the very same work that wine bibbers claim for wine.

Only recently I was the interested listener to a significant conversation between a literary lady of some note and a dealer in mottoes. The request was for a sentiment in rhyme against the use of tea and coffee. "Oh," exclaimed the writer, "I hope you are not going to make war on tea and coffee! I am afraid I could not write against them. I don't know how I should get on without them. They are a great help to me. Sometimes when it gets along to ten o'clock or so and I am too tired to write any more, if I take a cup of strong tea, I can write away on to three o'clock, or even till morning. As to coffee, I am afraid I could not eat any breakfast at all without that."

"How much do you eat now?" was the quiet inquiry. "Only a piece of toast or bread and butter, but I could not eat that without the coffee."

"But I take no coffee nor tea and can eat a good hearty breakfast of plain unstimulating food. My breakfast is my best meal and it seems I can eat more without coffee than you can with it."

"And don't you drink any tea at night, either?"

"None at all, but when I am tired as you say, about ten o'clock and can write no longer, I take some active exercise and go to bed and sleep, and get up at five o'clock in the morning and go to

writing again; and this I can keep up day after day and month after month the year round."

"What! with no vacation? Oh, you will certainly break down; you cannot go on so!" etc., etc.

But who was the most likely to break down, the one who rested when tired and ate a good supply of good food, or the one who went on working when tired, and borrowing capital from the future by the use of stimulants? When a crisis comes, making an extra demand, who will have the most capital to draw upon? And just here comes in properly the definition for a stimulant; not that which imparts strength, but that which enables us to draw upon our reserve force. In other words, to set free what force we have, and this is often done in such a way as to waste it, while it can never be an economical proceeding.

By the way, I must not forget to note that the verse came as follows:—

"We banish forever strong coffee and tea,
Pure milk or cold water our beverage shall be."

So much testimony against the stuff, even from so faithful a user!

Involuntary testimonies are sometimes very striking. One of the old-fashioned temperance workers once said, "I am very temperate. I even limit myself in my tea. I set the teapot on the stove toward noon, but no matter how much I desire it, I will not allow myself to touch it till the clock points the hour of twelve, and then don't I enjoy it!" She did not say how she limited herself in the use of snuff with which the entire atmosphere of the house was saturated and herself most of all; but she probably thought we did not perceive it. At least, that is the fallacy which the men cherish about tobacco.

But there is one definition we have left behind, which will be sure to be called for, and that is the definition of a "*poison*." Ordinarily people are quick enough to understand its meaning. Tell them that Indian turnip is poison, that when eaten it will cause vomiting, griping, and even death if not rejected, and your statement is accepted without cavil. But if you make the same statement about tobacco, they will immediately begin to take exceptions. Bring up your definition by itself, "A poison is a substance chemically hurtful to the living organism," and they will accept it; but tell them that

alcohol is a poison, and they directly begin to tell of the cases they have known where men have drank it for years, and are still alive. Very well, Prof. Youmans says it is not necessary that poison should always be taken in fatal doses in order to show its poisonous effects. Many and many a man that has poisoned himself with alcohol for years shows the poisonous effect from the crown of his head to the sole of his foot, and so thoroughly poisoned that to become a warning beacon is about all he is good for, and yet people do not call him poisoned because he is still living.

Or if they allow that alcohol is a poison, they destroy the force of it by saying there is poison in everything! If that be true, where is the distinction between a poison and wholesome food, or is there no such thing as wholesome food? We cannot so malign our Creator as to make a supposition like that. Wholesome food, free from poison, is provided in abundance for man, and though he may often be able by chemical action to change it into poison, that is very far from proving that it is poisonous in its natural state. Starch, sugar, and alcohol are all made from carbon, oxygen, and hydrogen; but starch is bland and nutritious, while alcohol is a violent poison which has wrought more ruin by its absolute and direct poisonings than any other substance known to the human race.

There is another set of definitions that seems to trouble some people very much. They are always puzzling themselves and confusing others with questions as to whether intemperance is a sin or a disease, and other cognate questions. Our definition of Temperance must be referred to; for Intemperance is its opposite. The latter is either the immoderate use of good things or the indulgence in poisons. In our common use of it we mean the taking of alcoholic drinks by which we sin against the laws of our own being, and induce drunkenness, which is a disease, a sickness caused by the poison alcohol. This disease in its first stages is cured with comparative ease, but if the cause is continued the disease of alcoholism is produced (it has many other names) which is exceedingly difficult to cure. We hold that it is improper in any case to say that intemperance is a disease. It is a vice, it is a sin, as much as the vice of gluttony, or the sin of swearing. The poisoned condition of the blood induced by the presence of the alcohol gives rise

to many diseases some of which are also induced by bad blood from other causes. Temperance is favorable to health, and intemperance is favorable to disease; but cause and result should not be confounded in either case. A more accurate knowledge of the nature and effects of alcoholic drinks and other intoxicants would clear up our definitions amazingly.

Written for GOOD HEALTH.

EDUCATION OF MOTHERS.

BY MARY MARTIN.

"THE mill-streams that turn the clappers of the world arise in solitary places."—*Helps*.

"That about one-third of the children born in this country die under five years of age, can only be attributable to ignorance of the natural laws, ignorance of the human constitution, and ignorance of the uses of pure air, pure water, and the art of preparing and administering wholesome food."—*Smiles*.

Notwithstanding the almost unlimited educational facilities that are now provided, a lack of the kind of knowledge here mentioned is painfully noticeable in all quarters of the globe. It is considered essential that men should have opportunities to become thoroughly versed in their various occupations, and it is well. It has also come to be a commonly received opinion that anybody can do housework, and fill a mother's place without preparation or experience. Certain apartments of woman's brain are amply provided for by the various educational systems, while of others it might truthfully be said, as has been remarked of Sheridan's head, "unfurnished apartments to let." If a modicum of the means expended upon the juvenile portion of the inhabitants of asylums and prisons, whose incarceration is directly traceable to the ignorance of mothers, were employed for the enlightenment of the latter, it would be infinitely better for the world. If mothers generally understood that cause preceded effect, they might often pursue a course that would secure immunity from unnecessary pain and unavailing regret. Life is not the spontaneous outgrowth of blind chance, and as no fountain can "send forth at the same place sweet water and bitter," sweet water can never come from a bitter fountain. There are fixed laws as immutable as those of the decalogue, placed on the statute book of our being by the same

authority, following the transgression of which there is as surely a penalty.

Mothers can afford to be ignorant of many things, if need be, but they cannot afford to be ignorant of matters of divine legislation pertaining to "the temple of the Holy Ghost." It was the opinion of Byron that woman's library should be limited to "a Bible and a Cook-Book." The idea is worthy of the man, but wherever we find practical illustrations of such doctrine exemplified in letter and spirit, bigotry and slavery are the result, supplemented by sin and its inseparable concomitant, misery. It is lamentably true that perfection in the minutia of practical housekeeping forms no part of the education of the average young lady of to-day. It is said, "The man who causes two stalks of corn to grow instead of one, is a benefactor of the race," but he, even, must rank second in point of merit to the woman who evidences the most skill and judgment in preparing that which the soil produces, in such a manner as will best subserve the physiological necessities of her family.

"Home makes the man," and woman as well; but if the autocrat of the realm is illy fitted to rule, need we marvel at the inferior order of subjects? It is never expected that the stream will reach a higher attitude than the spring to which it owes its existence. No mother is worthy of the sacred name and honor who is not competent to train her daughter in all the various departments of knowledge essential to the physical, mental, and moral well-being of the family. If education in this direction is entirely superseded by plagues, and pottery, china painting, and fancy needlework, it is probable that at no distant day knowledge of the kitchen *cuisine* will become so rare it will be introduced to the public as one of the "Lost Arts," and instead of the loaf of bread securing a paltry award at an agricultural county fair, the World's Exposition may afford its patrons a higher premium than brush or pencil can claim for the light, wholesome, appetizing loaf made from "whole-wheat meal." Not only this, but who may foresee the physical, mental, and moral degeneracy that will follow as a natural result of the said art being lost. Napoleon was once asked, "Who is the greatest woman?" "The best mother," was his reply. All the fabrics of Eastern looms, all the *trosseaus* furnished by Worth, all the wealth of a Rothschild or Astor can never furnish a perquisite ca-

pable of securing this briefly worded diploma. It requires intelligent, increasing effort. Ninety-nine of the one hundred competitors may shrink from these words that grate so harshly upon the sensitive nerves of the ease-loving woman; but the remaining aspirant will, "by patient continuance in well doing," bear off the victor's palm, and not only "her children," but all (and who may numerate) coming within the charmed circle of influence, shall "rise up and call her blessed."

THE NEW BENEVOLENT SOCIETY.

CHAPTER I.

IN the snug, cosy bar-room of the "Farmers' Inn" at Madisonville, sat six young men. It was a cold, bleak night, a week before Christmas; and the wind that howled and drove without, drifting the snow and rattling the shutters, gave to the blazing fire and steaming kettle additional charms and comforts. There was Peter Hobbs, a youth of five and twenty, who seemed to be the leader, *par excellence*, of the party. He was a good-natured, intelligent, frank-looking man, and was really a noble-hearted citizen. There was John Fulton, a youth of the same age, who worked with Hobbs, both being journeymen carpenters. Samuel Green was a machinist; Walter Mason, a tin worker; Lyman Drake, a cabinet maker; and William Robinson, a clerk.

On the present occasion, they were all of them smoking, and the empty mugs which stood upon the table near them, showed pretty conclusively that they had been drinking something besides water. The subject of the cold winter had been disposed of; the quality of the warm ale and cigars had been thoroughly discussed, and at length the conversation turned upon the missionary meeting, which had been holden in the town on the previous Sabbath.

"I do n't know but this missionary business is all right," said Sam Green, knocking the ashes from his cigar with his little finger, "but, at the same time, I do n't believe in it. Them Hindoos and South Sea Islanders may be savage and ignorant by our scale of measuring folks; but that is no reason why we should send all our money off there, while our own folks are starving at home."

"Did you put anything into the box?" asked Lyman Drake.

"No, I did n't. When they shoved it

into my face, I told 'em I'd left all my money at home—and so I had."

"You're about right, Sam," said Bill Robinson. "But I did more than you did. When the box was handed to me, I spoke right out, so that everybody around me heard. I told the old deacon if he'd take up a subscription to help the poor in our town, I'd put in something."

"What did he say to that?"

"Why—he said, 'Souls are of more consequence than bodies.' So I just said back that I guessed he'd find it hard work to save a soul out of a starving body. But you see that aren't the thing. They won't try to save the souls, nor the bodies either, of their own townfolks. Now when Squire Truman came here to settle, they tried quick enough to save his soul. You see his body was already salted down with ten thousand dollars, so his soul was worth something to 'em. Why do n't they try to save poor old Israel Trask's soul, and his wife's too?"

"Wasn't there a committee of the church that visited old Israel last month?" queried Drake.

"Yes—there was," answered Sam, giving his cigar an indignant shake; "and what did they do? They went there—four on 'em—and found the old folks suffering for want of food and clothing. They tried to make the old man believe their religion was the only true one in the world, but he would not. So they gave him three tracts and a little cheap book, and then went away."

"But these missionaries are honest people, and do some good," remarked Peter Hobbs, who had not before spoken on the subject.

"Of course they do," responded Sam. "But would n't it look better of 'em to begin some of their charities at home? I judge of a man's order by the way his own shop looks, and not by the way he may fuss around on another man's premises. And just so with these philanthropists. I'd rather see how much their religion does toward keeping the Gentiles of their own town, than to go away off to the other end of the earth to look for the fruits of their Christianity."

For some moments after this, the party smoked in silence. Peter Hobbs had been pondering very deeply upon something, and at length he spoke:—

"Now look here, boys," he said, throwing his half-smoked cigar into the fire, "there's a good deal of truth in what's been said—in fact, it's all true; but be-

fore we blame others, we ought to do something ourselves. Now I'm ready to form a regular benevolent society. Let us six go at the work, and see what we can do toward alleviating some of the distress about us. What say you?"

The other five looked on in wonder.

"But," said Sam, "how are we to do it? We are n't among the favoured ones. We wasn't born with silver spoons in our mouths."

"I should like to do it," added Drake, "but what's the use? We couldn't do much anyway—not enough to amount to anything."

And so the others expressed their opinions in like manner. They all "would like," but, "where was the money to come from?"

"Listen," said Peter; and they all turned toward him with real deference, for they knew he never wore a cloak over his heart, and that when he spoke in earnest, his meaning had depth to it. "Now I have formed a plan. There is old Uncle Israel and his wife; then there is the widow Manley, with four little children, suffering for want of the actual necessaries of life; and then there is Mrs. Williams—she is very poor. Her son Philip, who is her main stay, was sick all the summer and fall, and is sick now; so the woman got nothing from her little patch of land, and is now absolutely reduced to beggary, with herself and sick son to support. Now let us take these three cases in hand, and support them."

"But how?" asked three or four voices, anxiously, for they really and fully sympathized with the noble plan.

"I'll tell you," resumed Peter. "Here, Tim," he called, turning to the bar keeper, "what's our bill?"

"Let's see," responded that worthy, coming out. "There's two cigars apiece, three cents each—that's thirty-six. Then the ale—three pints—eighteen cents; and wine—three gills—that's eighteen more—makes just thirty-six more; and twice thirty-six is—is seventy-two—seventy-two cents is all."

"Come, boys," said Peter, "let's pay an equal share to-night. Let's give him nine pence apiece."

So the "boys" paid up, and after Tim had gone, Peter resumed:—

"Now see what we've spent to-night for nothing. I'll begin with you, Sam. How much do you suppose you spend each day for cigars and ale? Now reckon fairly."

"Let's see," was Sam's response, after gazing into the face of his interlocutor until he had fairly got hold of the idea. "I certainly average four—no, five cigars a day, and I suppose they average three cents apiece. Then comes my ale—but I could not tell how much that amounts to, for I don't drink it regularly, but perhaps six cents a day."

"That's just twenty-one cents per day utterly wasted," said Peter; "and I'll own up to wasting twenty-five per day. How is it with you, John?"

"I'll say twenty-five."

"And you, Walter?"

"Just about the same."

"Lyman?"

"The same."

"Bill?"

"The same."

"Now look at it. Here we are, a little worse than wasting about a dollar and a half per day. But let us put our loss at a shilling each—"

"No, no," cried Sam, who saw through the whole plan. "Let's give honest measure. I'll own up to twenty-five. Let's go the whole, if any."

"Very well," returned Peter; "then let us commence and pledge ourselves not to smoke, or drink ale for one month from this date. Every night we will lay away a quarter of a dollar, and at the end of the week we'll put our savings all together, and then go on our mission. What say you?"

With one voice the other five joined in the plan. The novelty of the thing may have pleased them; but the real incentives lay deeper down in the natural goodness of their hearts. There was no written pledge, but they took a more speedy method. Peter laid his hand upon the table, and said:—

"Here's my hand, pledged to the work."

"And mine, too," cried Sam, laying his broad palm atop of Peter's.

"And mind," "and mine," "and mine," chimed the rest, placing their hands atop of the other until the six right hands lay upon the table in a pyramid.

"This is Tuesday," resumed Peter. "Will we meet next Saturday?"

"Yes," answered Sam, "and call it a week. Let's throw in two days."

And so the week was begun.

[CONCLUDED NEXT NUMBER.]

"GOLD that buys health can never be ill-spent,
Nor hours laid out in harmless merriment."

—Webster.

Written for GOOD HEALTH.

A PUZZLE FOR LITTLE READERS.

I HAVE lately seen a very remarkable house. It has three wonderful rooms, is situated upon two pedestals, which are movable, and has an extension on each side. The lowest room, which is far above the ground, contains the kitchen and many other important "offices." The next is the pump room, and very valuable is this. But for enjoyment the top room is the chief, for here always lives the possessor, who is provided with forty pairs of telegraph wires, by which he knows most of what transpires within and without the house. In this sitting-room are four doors, one of which is double and never closed, and two windows with very convenient self-acting shutters.

There are many passages and a very large number of pipes in this house, but no garden is attached. Inside the front door is a hall with a splendid machine, several mills, and six kinds of sponges. At the back of the hall are six passages. Through the nearest a quantity of gas is constantly rushing up and down to the pump room to keep cool and pure the hot fluid which runs through every part of the walls, rooms, etc. At the top of this passage is an exquisitely arranged musical box, the sounds from which are oftentimes most delightful and generally pleasing, at least to the owner. Behind this passage is another, through which all the fuel is sent into the kitchen; two others lead to the double door, and two more to the side entrances.

In the pump room is a little engine, containing four compartments, and on either side a pair of bellows, full of innumerable cells, which are inflated twenty times a minute. From the engine is pumped 4,000 to 5,000 times an hour a pint of hot, colored liquid, carrying a multitude of solid little particles, which fluid not only keeps the house in one beautiful and comfortable heat, but rebuilds every part of the house as it becomes injured. Behind the pump room runs the passage to the kitchen.

Between the pump room and the kitchen is a movable floor which is constantly rising and falling, and yet, by proper treatment, it never gets out of order. The kitchen is somewhat like an egg in shape, with two doors, one never closed, through which the fuel arrives three times a day. It is then broken up,

and after two to four hours it passes through a small door, kept by a porter, who only opens it when the food is cooked enough. Then it has to run through a passage more than twenty feet long, very small, torturous, and twisted, until near its end. Its walls, too, are constantly becoming smaller and then larger again, and thus helping to crush and cook the food still more.

On the right of the kitchen is a factory for extracting from the "river of life" passing through it, a yellow article, which runs into the passage leading from the kitchen to the back door, and helps again to prepare the food to run into the river.

There are many other most marvelous things I should like to tell you if Mr. Editor will permit me, as well as to say how the house can be kept in order and in good condition, and how it can be renovated by care and proper treatment if injured.

Meanwhile, I wonder if any of you will write on a sheet of paper where I saw this pretty house, and what names are generally given to the parts spoken of.

H. V.

PROFESSOR OF PHYSIOLOGY AND HYGIENE.

Southampton, Eng.

Written for GOOD HEALTH

THE SNOW.

"Oh, the snow, the beautiful snow!
Filling the sky and the earth below!
Over the house-tops, over the street,
Over the heads of the people you meet.

* * * * *

The world is alive, and its heart in a glow,
To welcome the coming of beautiful snow."

"Hast thou entered into the treasures of the snow?" Its crystals assume the forms of star, prism, and pyramid—a thousand different varieties, it is said, and yet how few have "entered into" its "treasures," and can tell us more of its history than—mystery! There are lands and climes where it is never known to fall, and others where its visits are "few and far between." To us it returns with the season in never-varying order, until, like the sun-light, the dew-drop, and numberless blessings and mercies, we cease to marvel at its presence, although "all the men of the land could not fashion in a century such rare and universal architecture, as the hurrying wind and snow build up together o'er tree, and house, and rock,

and fence, and everything that offers niche or pedestal."

The November skies darken, the grand-sire draws nearer the blazing fire, and pointing to the descending army of the sky, whose myriads move with measureless tread, says, "Winter has come." The baby coos and crows, with outstretched hands, like "children of a larger growth," grasping for, it knows not what. The lad from school is jubilant over the prospect of snow-balls and coasting, while the demure maiden of four brief summers, says, "My little garden will have a veil now." Night closes in, and while the comfort of the home life is at its zenith, the trooping millions fall

"Noiselessly as the day-light,
Comes when the night is done,
And the crimson streak on ocean's cheek,
Grows into the great sun."

No longer is the eye pained by unsightly *debris*, for He who "saith to the snow, Be thou on the earth," has arranged the winter's fleecy drapery to cover every deformity, and obliterate every scar upon the face of nature. "Great things doeth He, which we cannot comprehend." The same inimitable skill that dyes the rainbow, crests the ocean wave, and tints the tiniest flower, has assigned each little wanderer its home, and rhythmic, rollicking, or regal (lesson for humanity), it never encroaches on another's rights. "For the infinite variety of types we must go to the will and pleasure of the First Great Cause."

The forms of the crystals, though similar, possess marked individuality; acute observers tell us that each tree or shrub has its own particular kind. The same law finds its counterpart in the created intelligences of the universe, the mental acumen varying as "there is one glory of the sun, and another glory of the moon, and another glory of the stars." As morning after morning we behold the delicate tracery of the frost-work on the window panes, never two, and never twice alike, so suggestive of many things we daily meet, so unlike anything we have ever seen or known, we realize that the Great Artist's hand with masterly skill, unapproached by human art, has left its imprint in infinite variety, as "one star differeth from another star in glory." The fleecy, freshly fashioned flakes contain fitting object lessons of the birth, the baptismal, the bridal, and the burial scenes.

Alas, that the purity prefigured by the falling snow and the first smile of infancy should ever find its anti-type

"—trampled and tracked by the thousands of feet, Till it blends with the filth of the horrible street.

The Power that evolves the lily from the stagnant pool, and transforms the tiny drop, discolored by earth soil, to the flake of snow, not only "Sitteth on the throne," but "doth look down from heaven," and the lowliest should never despair. He "numbers the hairs of your head," and may effect no less marvelous changes in the arrangement of the threads of circumstance that form the warp and woof of your life web. Greater still is the miracle—"the mystery of godliness," as exemplified by Him that "hath loved us, and washed us from our sins in His own blood," and will eventually bring us to the grand coronation day when we shall ascribe honor and glory to Him "who has made us kings and priests unto God."

POPULAR SCIENCE.

—A party of botanists has discovered on the shore of All Saints Bay, California, a new species of rose. Its peculiar formation renders it difficult to decide upon its position in the Rose family. It is said to be "a most striking and lovely species, distinguished from all other roses by its minute, deeply incised leaflets."

—Bottles from cast iron is a recent German invention upon which a patent has been secured. A proportion of silicate enters into their composition, which is said to render the material proof against the action of all acids.

—A quantity of cloves coming from Zanzibar to London were discovered to be the result of fine mechanical skill, instead of the natural growth. They were from deal wood, stained and soaked in essence of cloves to give them the requisite color and odor. They have been traced to America, but no one has arisen to claim the honor of the invention. Whether or not they originated in the same locality as did the wooden nutmeg, who knows?

—A few days since W. B. Strong, President of the Atchison, Topeka, and Santa Fe Railway, being in Boston, talked by telegraph with the manager of the Western Union Telegraph Co., at Guaymas, on the Gulf of California, a distance of 3,500 miles. It was, indeed, "a wonderful feat, even for this age of wonderful things."

—Mr. John G. Lemmon, who made a botanical tour of exploration among the mountain ranges of Mexico and Arizona the past summer, found several varieties of potatoes about the size of walnuts, growing in their native wilds.

Large Trees.—M. Louis Piré, President of the Royal Botanical Society of Belgium, has discovered a tree in the Canton of Vaud 4,500 feet above the sea level, and thirty feet higher than the surrounding forest trees. It is more than thirty feet in circumference, and three feet from the ground has thrown out seven offshoots, which are as tall and large as the ordinary forest trees by which it is surrounded.

Upon an island near Bombay is a curiosity known as Sorrowful Tree, so named because its flowers, which have a fragrant odor, only appear after sunset, and immediately close, or fall off, when day returns.

Near Hobart Town, Tasmania, is the hollow trunk of a tree measuring 86 feet in circumference. It forms a unique chamber for the accommodation of picnic parties who are wont to visit it. Victoria, however, claims to have the largest tree in the world. It is 430 feet high, nearly twice the height of Bunker Hill Monument.

PLANETARY SYMBOLS.

THE following symbolical signs which are customarily used to designate the different planets, ☉ Sun, ☾ Moon, ☿ Mercury, ♀ Venus, ♂ Earth, ♃ Mars, ♃ Jupiter, ♄ Saturn, ♅ Uranus, and ♆ Neptune, are the astronomical signs in every European language without change of form. They do not represent sounds, like the letters of the alphabet, but are employed to designate actual objects. Their origin is not generally known, but in Long's Astronomy, which was published in 1764, is given the following account of their original forms:—

"☿ is the caduceus, the snake-trimmed staff of Mercury; ♀ is a mirror with a handle; ♂ is a lance and shield; ♃ represents the first Greek letter in the name of Zeus or Jupiter; ♄ is a sickle; ☉ and ☾ are the disk of the sun and the moon's crescent."

Alexander Humbolt dates the signs used to represent these planets from the tenth century, but the symbols for the sun and moon are very ancient. They are found in the Egyptian hieroglyphic writing as early as the second century. The Chinese in their writings of more than forty centuries ago used a circle to designate the sun, and a crescent for the moon.

The earth was at first not counted among the stars, and had no symbol until after the discoveries of Copernicus. The symbol ♂, a cross surmounting the earth, shows it to have been of Christian origin.

The planet Uranus is occasionally represented in Germany by a circle surmounted by a vertical lance; but as this is similar to the symbol for Mars, the initial H ♃, in honor of Herschel, its discoverer, is generally used with the symbol.

GOOD HEALTH.

BATTLE CREEK, MICH., JANUARY, 1883.

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

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FASHIONABLE SUICIDES.

If the number of deaths annually resulting from improper dress was accurately recorded, the number would be absolutely appalling. This seems to be the most common and approved method of committing suicide in this country. In France, the person who is tired of life shuts himself up in a close room with an open charcoal fire without connection with a chimney, so that the carbonic-acid gas is discharged into the air of the room, and in an hour or two dies an easy death by suffocation. The fashionable American



FIG. 1.

woman also dies from suffocation, but by the more painful method of corset-strangulation. Choked to death by a corset might be truthfully written on the tombstones of thousands, perhaps tens of thou-

sands of graves to-day. A generation ago, ignorance might have been offered as a plea by the victims of the waist-compress-



FIG. 2.

ing mania; but to-day, what woman can say that she does not know that tight-lacing or corset-wearing is harmful? Most women are very ready to be convinced that their neighbors' waists are compressed ten or fifteen inches below their proper size, but are not willing to admit that their own waists have been diminished even a tenth part of an inch.

Although so much has been said upon this subject that it has doubtless become stale and uninteresting to many, let us glance again at a few of the evils of the modern corset. We quote the following, with the accompanying illustrations from our recent work, "The Ladies' Guide in Health and Disease":—

In Fig. 1 may be seen the natural form

of the female figure as exhibited in the famous Grecian statue, the Venus of Milo. The ruthless hand of time has destroyed the hands and arms, but fortunately left the waist to furnish at once a lesson and a rebuke to the women of our modern "high civilization," who look down upon ancient Greece as almost semi-barbarous. Contrast with this the outlines of the figure of a modern fashionable Parisian Belle, shown in Fig. 2. Unfortunately, such cases of deformity are not confined to Paris.

We read the other day in a newspaper of a young woman who actually broke a rib in the attempt to gain another half-inch on her corset string. She well deserved the accident, no doubt; but the chances are ten to one that she would assert in the most positive terms, if expostulated with about the matter, that her corset was "quite loose," and to demonstrate the matter would show you how much more she could pinch up when she tried, or something of the sort. The fact is, ladies do not really know when their clothing is tight about the waist and when it is loose. The tissues have been so long under pressure that they have lost a good share of their sensibility, and clothing really seems loose to them which to a man would be so uncomfortably tight as to make him utterly wretched.

The thorax, when in a natural condition, is cone-shaped, the base of the cone being below, while in the thorax of a person whose waist has been compressed and distorted by the ruthless hand of fashion by means of the corset, tight belts, and waistbands, the reverse is the case.

The object of the arrangement referred to is to give ample room for the action of the delicate vital organs which are carefully lodged within this bony cage for protection. Chief among these are the *lungs*, the *heart*, the *liver*, the *diaphragm*, and the *stomach*. In the healthy performance of their functions, these organs require a considerable degree of motion. With every act of respiration, the lungs

alternately expand and contract; the diaphragm moves up and down; the stomach and liver have the same motion. Every beat of the pulse is accompanied by a change in the position of the heart. The size of the stomach necessarily varies greatly, being full after a meal, and nearly empty at other times.

How does compression affect these various organs and their functions? The corset, with its inflexible stays and hour-glass shape, grasps the expanding lungs in their lower part like an iron vise, and prevents their proper filling with air. The lungs are thus crowded up into the upper part of the chest, and are pressed against the projecting edges of the first ribs, upon which they move to and fro with the act of breathing. The friction thus produced occasions a constant irritation of the upper portion of the lung, which induces a deposit of tuberculous matter, and the individual becomes a prey to that dread disease, consumption—a sacrifice to a practice as absurd as pernicious.

The lower part of the chest being narrowed, thus preventing proper expansion of the lungs, the amount of air inhaled is insufficient to properly purify the blood by removing from it the poisonous carbonic acid which gives to impure blood its dark color, and is so fatal to the life of all animals. In consequence of this defective purification of the blood, the whole body suffers. None of the tissues are properly kept in repair. They are all poisoned. Particles of gross, carbonaceous matter are deposited in the skin, causing it to lose its healthy color and acquire a dead, leathery appearance and a dusky hue. The delicate nerve tissues are poisoned, and the individual is tormented with "nerves," sleeplessness, and fits of melancholy.

We wish also to call attention to the important fact that continuous pressure upon these parts may cause such a degree of degeneration of the muscles of the chest as to seriously impair the breathing capacity. Unused muscles waste away, as

already observed, and when pressure is applied in addition, the wasting and degenerating become still more marked. This is exactly what happens with those who wear their clothing tight about the waist. This is the reason why ladies who have been accustomed to wear corsets, declare so emphatically that they "could not live without them," that they feel when their corset is off as though they "should fall down into a heap."

While the ribs suffer the least of any of the organs of the chest from the absurd custom which fashion has imposed upon the gentler sex, tight-lacing the waist and encasing the body in a vise of stays of bone or steel, is of positive and often incurable injury to this part of the vital economy.

The bony ribs do not join the sternum or breast-bone directly, but indirectly through the medium of flexible cartilages, an arrangement which gives to the thorax the power to expand and thus enable the lungs the better to perform their important functions. Careful study has shown that this flexibility of the costal cartilages is due to their constant exercise. Day and night, sleeping or waking, twenty times a minute, these flexible parts are bent and allowed to return again to their natural position. This constant bending and unbending allows them no opportunity to become stiff and unyielding like the bones. But when the chest is imprisoned in a corset, this constant movement becomes impossible; and the consequence is that a process of stiffening is set up, and after a time the once flexible, yielding cartilages become as rigid as the rest of the ribs. The inevitable result of this change is a permanent limitation of the movements of the lungs. It becomes impossible for them to expand except to a limited degree upward and downward. Lateral expansion is as impossible when the corset is laid aside as when it is in place. The deformity, which was at first temporary, has become permanent. There are thousands of delicate ladies all over

the land whose costal cartilages have been thus changed through their own willful abuse of their bodies, and who will undoubtedly go down into premature graves in consequence, in spite of all that the most skillful physicians can do for them.

The action of the lungs ought to be wholly unrestrained, allowing the pure air with its life-giving oxygen to penetrate to the smallest extremity of every air-tube, and fill to its utmost capacity every delicate cell. The chest ought to be capable of expansion from two to five inches; even greater expansion is attainable. But if you put a tape-line around one of these corset-stiffened chests you will be unable to obtain more than a scant quarter-inch of difference in measurement between the chest when empty and when filled to its utmost capacity. We have often tried the experiment when making physical examinations of the chest, and though the patient is almost always anxious to do her best, in order to demonstrate if possible what every lady will eagerly contend for, that her corset never did her any harm because it was worn so loose, and so draws up her shoulders to her utmost and makes a desperate attempt to swallow more air than there is room for, we have often found that the expansion of the sides of the chest was so slight as to be imperceptible. If tight-lacing did no other harm than this, we should certainly wish to condemn it in the strongest terms we could find language to express; and we cannot help feeling sometimes that it is a great misappropriation of money to support an army of missionaries among the inappreciative and degenerated inhabitants of African jungles and other heathen countries, who value human life so little that they feed their superfluous little ones to the crocodiles, and sacrifice a score of women to commemorate the death of a king, while there are so many thousands, perhaps millions, in civilized lands who are sacrificing lives which might be a hundred-fold more useful, in ways equally absurd and senseless. The homage paid

by millions of ladies to the latest style of corset is a grosser form of idolatry than the fetich worship of the natives of African jungles.

CHURCHES AND "PIE FESTIVALS."

THE *Woman at Work*, one of the most ably edited journals which comes to our table, offers in a recent number the following very sensible remarks on the above subject:—

"Our Sunday-school festivals, held to raise funds for libraries, will probably cost the parents enough outlay in sickness to have met every liability of the entire school. The little ones are tempted and urged to eat more than is well for them, and of dainties which under any circumstances produce indigestion.

"Our church festivals are being rightly condemned by our thoughtful doctors. They are a means quite unworthy so good an end, and intelligent minds are waking to the fact that in this case the end will not sanctify the means, or avert the dreadful consequences of violated physical law.

"We read of a 'pie festival' given by a large, wealthy church. Pie was 'trump' that night. It was duly advertised through press and pulpit; the attendance was large beyond precedent. There were mince pies, turkey pies, chicken pies, lemon pies, custard pies, apple pies, cherry pies, jelly pies, cocoa-nut pies, frosted pies, etc., etc., pies served with coffee, pies and cheese, pies and cake, endless and dreadful combinations of cake. It is said that the numerical and composite display was eclipsed by the gastronomic demonstration. The 'buy and eat party' were not to be outdone by the 'bake and bring party,' so the plates were emptied with incredible dispatch. Men, women, and children all joined the ranks, and the demolition of the great enemy of health was complete. That festival was a perfect financial success, the church revenue was greatly increased (so is the city revenue from the sale of whisky). Financially

they recommend similar gatherings for other churches.

"As if the church had no higher mission than to encourage gluttony and sanction the violation of the most important laws of our physical being! Paul says, 'Ye shine as lights in the world.' Woe to the false lights! Thousands may be dazzled and caught in the snare. Sanitary laws are as truly God's laws as the ten commandments from Mt. Sinai. If arsenic produces death, so will pie, dyspepsia; and both are a violation of the sixth rule of conduct.

"Any breach to the moral code may be forgiven, but disobedience to physical law brings its legitimate punishment, and no remission, no dodging. If the kitchens of the churches were put to sensible uses, holy uses I might say, in teaching our mothers and housekeepers the gospel of healthful living, a larger revenue in morals and money could be realized than from a life-time of pie festivals.

"Satan overcame our first parents and cursed the race through the appetite. Our churches labor on Sunday and prayer-meeting nights to remove the curse, and other days allow the modern Adams and Eves to be similarly tempted with their sanction.

"Thanksgiving dinners come in for their share of unparalleled gluttony. It is thought devotional to have large stomach capacity. A prominent paper speaking of New Year's feasting, says: 'We enter sincere protest against the gastronomic features of the day, when the prevailing practice degenerates into indulgence of which beasts are not guilty, for they never eat after they have appeased hunger.'

"Lord Shaftesbury, in a speech to the English people, asserted that there were over 100,000 preventable deaths in their country alone, all answerable to outraged law, and that it was ten thousand times more terrible than war."

—The doctors are having lively times as the result of the holiday gormandizing.

USE OF PHYSICIANS.

THE *New York Star*, in an able editorial under the above heading, makes some assertions which must be startling to members of the profession who have been taking a Rip-Van-Winkle sleep during the last generation or two. We quote a few paragraphs. "One of the marked changes of our time is the altered position of the physician in the community. The traditional duty of the doctor is to cure disease, and disease was supposed to be a sort of malignant entity which had got into the system and could be expelled only by the most energetic and heroic remedies. Physicians were said to belong to the medical profession, as the chief business of the doctor was to prescribe medicines, which were mostly drugs. And Voltaire wittily summarized the work of the physician as an attempt to work a miracle by reconciling intemperance and health. "A half century has altered the whole scope of medical study. Sanitary science profoundly affects medical theories. And the upshot of it all is that the old faith in drugs and medicines of all kinds is fast dissolving. People are everywhere learning that sunlight, pure air, good food, a proper dress, regular habits, plenty of sleep,—in short, that right living is a million times better than all the medicines of the world.

"The great physicians of our times are vastly more interested in sanitary science and hygiene than in therapeutics. They are studying anew the questions pertaining to life. They are investigating the conditions of perfect physical existence. They are giving lectures and writing books on the great art of keeping well, of developing physical force, of building up a perfect body. The questions of drainage and ventilation, of the nutritive values of the different kinds of food and the proper methods of cooking, of artificial exercise when it is necessary to such expedients, the heating of houses, and the quantity and fashion of clothes that should be worn—are assuming an importance hitherto unknown. Everything that relates to the art of living so as to avoid sickness and pain

and maintain the highest degree of power and enjoyment, is invested with new importance. The physician is no longer "a medicine man;" we send for him when ill, it is true, and value his curative services as highly as ever; but we would pay him a double fee to keep us well. He is a member of a health police, whose function it is to keep people from getting sick and hold disease at bay. And instead of killing a doctor when a patient dies, after the manner of the Emperor of China, the skill and proficiency of the physician of the future will be determined by his success in keeping his patients strong and well; and should they fall ill, he may be dismissed for a better one."

MEDICAL THEOLOGY.

A KANSAS physician recently contributed to a medical journal an article entitled, "What is Wrong with our Emmenagogues?" to which he received the following letter from a Dr. Chamberlain, D. D., a missionary in India; the letter contains so much which is undoubtedly startling to many who have not yet gotten out of the ruts of empiricism, we are pleased to place it before our readers:—

"Therapeutics is decidedly empirical in the practice of medicine. It is now just a quarter of a century since the much coveted "sheep skin" was handed to me. I then, as you, and the majority of all others do, believed all what our professors on practice taught. But a few years after my being in active practice, my eyes were opened to the fallacies, uncertainties, of what I was taught, and I at once saw what you now see and complain of.

"Dear doctor, always remember the following:—

- "1. Nature is the Great Physician.
- "2. The great secret in medicine is to know when not to give medicines.
- "3. That we are all here to die.
- "4. That patients will get well in spite of all treatment.
- "5. That patients will die in spite of all treatment.

"6. Hygienic measures are of all the best treatments.

"7. Never drug a hopeless case.

"8. Never drug a case not hopeless.

"9. Bear in mind, patients will recover without medicines.

"My medicine chest is in the corner, a relic of the past twenty years.

"My little satchel is of late placed on top of said chest, and is also about to be a relic of the past seven years.

"My vest-pocket case, with its tiny vials of granules, parvules, and powders, is all that is left of my "medical theology," of which I have been tearing out a leaf yearly to date. After awhile, there will be nothing left, I presume, but a few fancy-shaped vials. That day is fast approaching, dear doctor, depend on it.

"Our medical teachers must soon turn over a new leaf, rest assured. I am no homœopath, but have torn loose my moorings of all *pathies*, and make use of anything and all that will alleviate and relieve human sufferings.

"I find good in everything, and bad in everything; I take the good and leave the bad."

In commenting on the above letter, the doctor remarked very significantly, "At no time in the history of medicine as at the present time are the advancements of medicine to an absolute science so closely questioned, so closely scrutinized, and so alarmingly 'shaky' from pillar to rafter. The 'degeneracy of medicine' has been no idle mouth-piece. When medicine as a 'science' and a 'success' devolves itself into personal magnetism, social influence, fine horses, and fine carriages, costly raiment and fine linen, peculiarities of speech, bearings, and appearance, ye who enter the portals of its temples, first cast from ye the honesty of men!"

—Hot milk may be safely recommended as a substitute for most stimulants.

An English chemist says "that milk heated so that drinking it is barely possible has refreshing and stimulating proper-

ties as prompt in action, and much more lasting than those of alcohol; and that those who try hot milk always afterward prefer it to whisky or brandy when they are suffering from depression or fatigue."

This is a suggestion well worthy the attention of temperance workers.

YOUNG LADY SMOKERS.

WE recently called attention to the increasing evidence of an alarming extension of the vice of smoking among women, particularly of the use of cigars by young ladies. Apropos of the same subject we quote the following from a recent number of the *National Temperance Advocate*:—

A Louisville (Ky.) cigar-dealer is quoted by the *Retailer* of this city as saying: "The most regular and profitable customers I have are the members of a club of young ladies occupying the very pinnacle of social eminence here." He adds: "These fastidious, genteel smokers require the very finest quality of tobacco, flavored with the faintest and most delicate perfumes known to the trade." It was some time before he could obtain a cigar which satisfied them, but at last he obtained a brand with which "they were all delighted." It appears that the members of the club meet at each other's houses to smoke, and, "locking the doors," proceed to "enjoy themselves." Then by carefully cleansing their hands and mouths they "remove all traces of the habit," or if any are left which might give rise to suspicion, they "can be easily accounted for" on the ground that all their "young gentleman friends smoke, and association with them has left a reminder of their tastes behind." One of these young ladies is mentioned as saying, "I do n't see anyhow why a pleasure which is partaken of by the grand dames of Spain should be denied to an American girl"; adding, "For my part, although, of course, being under the submission of fashion, I would rather not have it known, still if it was and objections were made, I would snap my fingers in the objector's face." If all

the "young gentlemen" are to continue to smoke with social immunity, why should not also their "young lady" companions? But whatever society may or may not tolerate in either fashionable young gentlemen or young ladies in the way of smoking, the law of health thus infringed upon by either or both can result only in serious injury and in ultimate race deterioration.

DR. RAE ON THE USE OF ALCOHOL IN COLD COUNTRIES.

At a meeting of the "Dominion Alliance" held last September, Dr. Rae, who was present, offered the following very interesting and instructive remarks:—

"Forty-nine years ago he went out as a surgeon to Hudson's Bay, and first learned temperance there. That great country, inhabited chiefly by Indians, was far ahead of this. For forty years not a drop of spirits has been allowed there. Some of them, as officers of the company, were allowed some wine and brandy, these being supposed to be good in a cold country; but they gave them up—not because they were teetotalers, but from a moral sense, that the Indians should not be able to point to them as drinking what they refused to them. This had an excellent effect, and the officers of the company so far gained the confidence of the natives as to be chosen by them to negotiate the treaties with the Government. After this, it was not surprising that he went to the Arctic under temperance principles. He went to do a work in which several Government ships had failed. They had traveled a thousand miles in small boats, sleeping under oil-cloth and often wet for a week at a time. When he found they could not finish the work in one summer, he asked the men if they would winter in a place to which he believed deer would come in the fall; and they did so. He was now telling them just what men could go through if they take nothing to drink but tea and water. He told them how they lived in a stone house, not know-

ing the advantages of snow, and in spite of the hardships, the hunger, the cold, and the damp caused by the mud trickling down the walls until the frost came, there was not a single case of illness among them the whole time."

Written for GOOD HEALTH.

PROGRESS IN MEDICINE.

MEDICINE as a science is certainly making great advances at the present day, and these advances are in the direction of the rational treatment of disease and the use of many of the more simple agents, therapeutics being based on physiological experiment and on physiological reasons. The use of remedies empirically because they seem to do good in certain cases, is giving way to the use of remedies because we know why they do good in certain diseases. Dr. Carpenter, the eminent physiologist, relates that when he was a medical student he once suggested to his preceptor that he should not bleed a pale, weak patient who was sinking with pneumonia. The surgeon, with a sneer and an oath replied, "Do you suppose, sir, there's any other treatment for pneumonia but bleeding and calomel?"

An illustrative anecdote of the empirical method of using remedies, dependent upon their supposed effects, was recently told by Dr. H. C. Wood to his medical class in the Pennsylvania University. A shoemaker suffered with a fever and was advised to eat heartily of pork and cabbage, as this was an excellent cure. The shoemaker ate heartily of pork and cabbage, and on the next day was quite well. Meeting his friend the blacksmith soon after, he found him also suffering with fever, and at once advised pork and cabbage. On the next morning as he walked past the blacksmith's house he was for a moment overcome with astonishment to see crape on the door, but the logical solution of the seeming mystery at once occurred to him, and he drew a book from his pocket and noted that "pork and cabbage cures bakers but kills blacksmiths."

The Doctor remarked that sequence in time is by no means equivalent to effect, and because good results follow the administration of a medicine is by no means proof that the good results are the effect of the remedies. The Doctor expressed the idea that homeopathy became popular through the fact that under treatment by little pills and high dilutions, patients got well because they were not killed by the medicines administered; while under the old method of drugging, patients were actually killed by the drugs administered. His concluding remark was highly suggestive: "Patients will get well if we nurse them carefully and don't kill them with our drugs."

Such language from so eminent an authority as Prof. Wood, who is one of the most talented instructors in medical science of the present day, must necessarily exert a powerful influence in molding the opinions of the rising generation of doctors, and in dissipating from the science and practice of medicine the errors and superstitions which have gathered about this branch of human knowledge for ages.

F. F. SMITH.

Tobacco-Using among School-Boys.—

The *Boston Journal* has been investigating the matter of tobacco-using among the school-boys of Boston, and finds that the vice is alarmingly prevalent among all classes. Teachers unanimously testify against its use as a decided enemy to scholarship and good morals, even when addicted to the use of the weed themselves. The newspapers of other cities would do well to look into this matter.

Tinned Fruits and Vegetables.—A discussion of the "action of vegetable acids on tin" at the meeting of the American Association for the Advancement of Science, brought out the fact that nearly all of the fruit acids act upon tin. The same is true of tomatoes, really a fruit, although usually considered a vegetable. Glass is the only article safe for use in preserving fruit.

For the Sick Room.

Hot Milk as a Drink.—From careful observation for a number of years, we are satisfied that many people drink too little. Copious water-drinking is one of the best possible means of encouraging the action of the liver, kidneys, skin, and bowels. Invalids with weak digestion suffer discomfort from drinking cold water copiously on account of the depressing influence of cold upon the functions of the stomach. Hot water, however, is not open to this objection, and hence is to be recommended to invalids, especially those suffering with almost any form of disease of the stomach, liver, skin, or kidneys. Water is the universal cleansing agent; and water-drinking is one of the most effective means of cleansing the blood. When taken hot, it stimulates the action of the stomach and bowels, promotes the secretion of bile, encourages the action of the kidneys, relieves dryness of the throat, and secures a healthy activity of the skin. Hence, it is particularly valuable for dyspeptics, especially those suffering with acidity, and for persons suffering with torpid liver and inactive kidneys.

Hot water as well as other drinks should be sparingly used, if used at all at meals. When the digestion is very slow, a few sips of hot water at the close of the meal will be found a useful aid to digestion; but hot milk may generally be substituted with advantage. The best time for taking hot water is one hour before the meal, and just before retiring at night. One or two glasses may be taken at a time. The temperature should be 105° to 108° F.

Hot water is not a panacea, and is not best for everybody. Persons suffering with painful dyspepsia, ulcer of the stomach, and organic disease of the heart, should not take it.

—The cool, condensed, vitalizing air of winter is a splendid time for chronic invalids.

Health and Temperance.

LESSON DEPARTMENT.

THIS department has been added to the journal at the suggestion of the Executive Committee of the American Health and Temperance Association. It will contain each month a lesson on the subject of health or temperance, together with a synopsis of the lesson, articles relating to the subject-matter of the lesson, and suggestions respecting the conduct of health and temperance schools and club meetings.

TRUE TEMPERANCE.

LESSON No. 1.

1. DEFINE true temperance. See "Alcoholic Poison," p. 9.
2. Is the use of tobacco, tea, coffee, and opium, temperance as well as the use of alcoholic liquors?
3. Why? Ans. *Because they are artificial stimulants.*
4. May a person be intemperate in the use of food, drink, and other things not in themselves harmful?
5. Is it not possible for a person to be temperate in the use of wine, beer, cider, tea, coffee, tobacco, or other stimulants?
6. Is alcoholic intemperance a sin? 1 Cor. 6 : 10.
7. With what other sins is it classed in the Bible?
8. Is intemperance in eating represented in the Bible as a sin? Luke 21 : 34; Prov. 23 : 2.
9. Is temperance enjoined as a duty by the Scriptures? 1 Cor. 10 : 31; 2 Pet. 1 : 6.
10. Does the Bible give us notable examples of the results of both temperance and intemperance? Ans. *It does.*
11. Give examples from the Bible of the good results of temperate living.
12. Give examples from the Bible of the results of intemperance.

[Aside from the brief synopsis of the lesson given in this department, assistance may be obtained from the pamphlet published at this office entitled, "Alcoholic Poison," which ought to be in the hands of every teacher at least, and will be of great assistance to students.]

BRIEF SYNOPSIS OF THE LESSON.

TRUE temperance consists in the proper use of wholesome things and the avoidance of unwholesome things. The wise Socrates well defined temperance when he said, "He who knows what is good and chooses it, who knows what is bad and avoids it, is learned and temperate."

A person cannot be temperate in the indulgence of any vice, since temperance relates to the *quality* as well as the *quantity* of an action;

hence the use of tobacco, tea, and coffee, and of other substances of a kindred character, is intemperate as truly as the use of alcoholic liquors. These substances are all artificial stimulants; and the real sin of alcoholic intemperance is in the gratification of the desire for artificial stimulation, not simply in the use of this or that liquor, *per se*.

Excess in the use of articles which in themselves are perfectly wholesome, is also intemperance; hence a person may be intemperate in the use of food and drink.

That intemperance is a sin is clearly pointed out in the word of God. In 1 Cor. 6 : 10, alcoholic intemperance is classed with theft and other crimes. "Nor thieves, nor covetous, nor drunkards, nor revilers, nor extortioners, shall inherit the kingdom of God."

Christ exhorted his followers: "And take heed to yourselves, lest at any time your hearts be overcharged with surfeiting, and drunkenness," etc. The wise man speaks still more forcibly in Prov. 23 : 2: "And put a knife to thy throat if thou be a man given to appetite."

Not only is intemperance recognized as a sin by the Holy Scriptures, but temperance is enjoined as a duty, as appears very forcibly by reference to 2 Peter 1 : 5, 6: "And beside this, giving all diligence, add to your faith virtue; and to virtue knowledge; and to knowledge temperance," etc. And to 1 Cor. 10 : 31: "Whether therefore ye eat or drink, or whatsoever ye do, do all to the glory of God."

The Bible also affords numerous examples of the results of both temperance and intemperance. The drunkenness of Noah, as recorded in Gen. 9 : 20 and the context, and the lamentable results to one line of his descendants, the shame of Lot, mentioned in Gen. 19 : 32-36, the summary punishment of Aaron's sons for the gross audacity to which they were led by the influence of wine, and the downfall of Samson, are all forcible illustrations of the sad consequences of intemperance. On the other hand, the experience of the children of Israel in the wilderness, the Nazarenes, the Rechabites, and Samson before his downfall, are all examples of the happy results of temperate living.

Timothy must have been a total abstainer, since it was necessary for Paul to advise him to take a little wine (sweet wine) for his "stomach's sake." There would have been no propriety in such advice had he been in the habit of using wine.

Temperance among the Ancients.—History furnishes numerous examples of temperance. Pythagoras, one of the most renowned philosophers of ancient times, was an advocate

of total abstinence. Neither himself nor his followers made use of wine. Wine was prohibited to those who were training for competition at the national games. It appears evident, indeed, that there have always been societies analogous to temperance societies, or organizations opposed to the use of intoxicating drinks. There are, even at the present day, barbarous tribes the individuals of which are strict abstainers, the use of wine being prohibited by their religion.

A class of Jews known as Essenes were very temperate in all their habits. They were strict teetotalers, carefully avoiding the slightest indulgence in fermented drinks. They were noted for their rigorous piety. It is thought by many that John the Baptist was a member of this class. He was a Nazarite, at least, and thus a teetotaler.

WHO WERE THE RECHABITES ?

WHENCE this people, and what about their history ? To answer these questions is the purpose of this little sketch. If we turn to the 35th chapter of Jeremiah, we find an interesting account of the first total abstinence society on record, probably the first that ever existed. In the first two verses the prophet was divinely directed to go to the house of the Rechabites, and speak to them, and bring them into the house of the Lord, into one of the priests' chambers, and give them wine to drink. Then Jeremiah took a certain man, Jaazaniah, and his brethren and sons, of the house of the Rechabites, and brought them into the house of the Lord, and set before them pots full of wine, and cups ; and he said unto them, "DRINK YE WINE. But they answered, and said, We will drink no wine ; for Jonadab, the son of Rechab our father, commanded us, saying, Ye shall drink no wine, neither ye nor your sons, FOREVER. . . . Thus have we obeyed the voice of Jonadab, the son of Rechab our father, in all that he hath charged us, to drink no wine all our days, we, our wives, our sons, nor our daughters."

Then the word of the Lord came again unto Jeremiah, saying, "Go tell the men of Judah, Will ye not receive instruction to hearken to MY WORDS ? The words of Jonadab, the son of Rechab, that he commanded his sons not to drink wine ARE PERFORMED, for unto this day they drink none, but obey their father's commandment ; but ye have not hearkened unto me, notwithstanding I have spoken unto you." And to the house of the Rechabites the prophet was directed to say, "Thus saith the Lord, Because ye

have obeyed the voice of your father, and kept all his precepts, THEREFORE JONADAB, THE SON OF RECHAB, SHALL NOT WANT A MAN TO STAND BEFORE ME FOREVER !" (See the entire chapter.)

If we look for the origin and history of the Rechabites, we shall find them of a noble ancestry. They were not Jews, nor Israelites, though dwelling among them. They were Kenites, of "the father of the house of Rechab." 1 Chron. 2 : 55. These Kenites were of the family of Hobab, or Jethro, whose daughter Moses married. Judges 1 : 16. They seem to have sprung from Midian, the son of Abraham by Keturah. Gen. 25 : 2. Jethro, from whom they descended, was a Midianite. Ex. 18 : 1.

Of such noble extraction came Jonadab, the father of the Rechabites, who bequeathed three articles of faith to his children ; namely, that they should drink no wine ; neither possess nor occupy houses, fields, nor vineyards ; and that they should dwell in tents. It was Jonadab who assisted King Ahab in overthrowing the licentious and drunken worship of Baal. 2 Kings 10 : 15-23. Total abstinence gives a clear head and good discernment. This Jonadab seemed to possess in an eminent degree. About the time of the invasion of Judea by the Syrians and Chaldeans, the Rechabites dwelt at Jerusalem for safety. At the time of the first advent it has been thought they were identified with the Essenes, a Jewish sect who did not use wine or strong drink. Still later, the church historian, Eusebius, mentions one of the Rechabite priests as remonstrating at the martyrdom of James the Just, and protesting against the crime of the scribes and Pharisees. In the twelfth century, Benjamin, of Tudela, the Jewish traveler, mentions that near El-Jubar he found a numerous body of Rechabites. They abstained from wine and flesh, and gave tithes to teachers who devoted themselves to the study of the law. They were 100,000 in number, and were governed by a prince, Salomon han-Nasi. They are also mentioned by Mr. Samuel Brett in his history of the Great Council of the Jews in Hungary, in 1650. He speaks of them as adhering to their "old rules and customs." The Rechabites are also mentioned by Neibuhr, the well-known traveler and author. More recently still, in 1829, Dr. Wolff, the converted Jew, gives a more detailed account. The Jews of Jerusalem and Yemen told him that he would find the Rechabites of Jeremiah 35 living near Mecca. When he was near Senaa, he came in contact with a tribe, the Beni-Khabr, who iden-

tified themselves with the sons of Jonadab. With one of them, Mousa, Mr. Wolff conversed, and reports the conversation: "I asked him, 'Whose descendants are you?' Mousa answered, 'Come, and I will show you,' and he read from an Arabic Bible the words of Jer. 35:5-11. He then went on, 'Come, and you will find us 60,000 in number. You see the words of the prophet have been fulfilled, JONADAB, THE SON OF RECHAB, SHALL NOT WANT A MAN TO STAND BEFORE ME FOREVER.'"

And so to the very letter there seems to have been an exact fulfillment of the very ancient prophecy respecting this interesting people. Many more facts might be mentioned, but those who wish to continue the subject will find in travels, commentaries, and cyclopedias all they desire.

G. W. AMADON.

LITERARY NOTICES.

We have received from the Executive Committee of the Y. M. C. A., of Massachusetts, copies of a tract, "The Inspiration of the Bible," a lecture before the Annual Convention of the Y. M. C. A., with an appendix containing remarks on "The Mistakes of Moses." The author, H. L. Hastings, Boston, Mass., is well known as an easy and graceful writer upon religious themes. The tract does credit to its author, and justice to the subject.

THE TEACHER'S GUIDE, is an eight-page monthly paper, published at Cleveland, Ohio. It is devoted to the interests and prosperity of teachers and schools, and is one of the most excellent mediums of information on educational topics. Price, 50 cts. per annum.

THE ELECTRICIAN, published by Williams and Co., 115 Nassau st., N. Y.

The December number contains "The Fuller Electric Light System," "An Excursion in a Torpedo Boat," "The Future Electric Lighting," and other articles of equal importance to those interested in electrical science. \$1.00 per year.

VICK'S ILLUSTRATED MONTHLY MAGAZINE.

The holiday number is more interesting than usual, which is saying much. The editorial management is good, and its contributors fine representatives, not only of horticultural skill and experience, but of literary ability. The subjects upon which it treats are discussed in a pleasant manner calculated to impart valuable information. James Vick, Rochester, N. Y. Price, \$1.25 per year.

THE SCHOLAR'S COMPANION is a monthly, edited by Prof. A. M. Kellogg, formerly Superintendent of Training Department of Albany State Normal School. The journal contains useful information and interesting anecdotes for the school and home life. Terms, 50 cts. per year.

IN MEMORIAM.

This tasty little volume of 488 pages is published in memoriam of Hon. W. S. George, who died Dec. 27, 1881, of paralysis, aged 56 years. The volume consists of a sketch of the life of Mr. George, the funeral sermon, and notices of the press. It will be prized by all who were acquainted with Mr. George either personally or by reputation.

THE HEREDITY OF ALCOHOL. By Normon Kerr. National Temperance Society and Publication House: New York.

This little pamphlet of 24 pages includes in addition to the paper named a paper on the "Effects of Alcohol on Offspring," by Nathan Allen, M. D. Both papers are short, concise, and full of striking facts. It is a valuable addition to temperance literature.

FOR GIRLS. By Mrs. E. R. Shepherd. Fowler and Wells: New York.

A work of 212 pages devoted to subjects of special interest to young women. The author, while not claiming special qualifications as a medical author, is evidently in earnest in the attempt to benefit the class for whom she writes. It would, of course, be impossible to include within the limits of a volume of 200 pages all that needs to be said on this important topic, but the author has aimed to speak plainly and clearly on all questions considered, and a healthy, moral, and elevating tone pervades the volume. We trust it may be the means of accomplishing good wherever it is introduced.

ON SLIGHT AILMENTS. By Lionel S. Beale, M. D., F. R. S. Philadelphia: P. Blakiston, Son & Co.

This is a useful little volume, which ought to be in the hands of every physician. It is often the case that the medical student receives his diploma, and enters upon his professional work well equipped with information respecting the proper treatment of fractures, dislocations, apoplexy, sun-stroke, and other grave accidents and maladies, but sadly lacking in practical instruction respecting the best methods of managing the thousand and one little ailments which help to make up the great bulk of the practice of the ordinary physician, leaving him to pick up the needed information from the old ladies of his neighborhood, or to slowly acquire it by personal experience. Price of the work, in paper covers, is only 75 cents. It is beautifully printed on paper of good quality, and will repay purchase and careful perusal.

THE WISCONSIN JOURNAL OF EDUCATION.

This is the organ of the State Teachers' Association and Department of Public Instruction. Its contributors are gentlemen of high scholarly attainments and practical ability, eminently qualified to impart much needed information. Published at Madison, Wis., at \$1.00 per year.

HOW TO BE WEATHER-WISE: A New View of our Weather System. With Illustrations.

By ISAAC P. NOYES, 12 mo, pp. 51, price 25 cents. Fowler & Wells, Publishers, 753 Broadway, New York.

From the examination that we have given this work, we are prepared to indorse the following notice of it given by the publishers: "This is a brief and plainly-written explanation of the causes of changes in the weather, based upon the system of the United States Signal Service. It also explains the nature of that service. Comparatively few appreciate the value of the Weather Bureau, because its work is but little understood by the people who read the daily "Indications." Mr. Noyes shows how the data are obtained for these indications, and how simple a matter it is to observe weather signs, when the principle involved in weather movements is understood. Everybody, he claims, can observe the weather himself and be his own weather prophet, and in good, square English he indicates the way. Let those who would know HOW TO BE WEATHER-WISE send 25 cents in stamps, to the above address, and secure this interesting work."

THE NORTH AMERICAN REVIEW for January opens with a symposium in which three of the most prominent advocates in this country of the "Revision of Church Creeds," namely Rev. Dr. Newman Smyth, Rev. Henry Ward Beecher and Rev. Dr. Lyman Abbott, set forth the grounds upon which such revision is deemed necessary as a defense of revealed religion against the encroachments of skepticism, and as an adjustment of the relations between faith and science. "University Education for Women," a question that just now is being warmly agitated both here and in England, is discussed by Prof. W. Le Conte Stevens, who, though he zealously advocates the measure, commands the attention and respect of its opponents by the eminent fairness with which he states the adverse arguments. Prof. Isaac L. Rice gives a "Definition of Liberty," deduced from a profoundly philosophical study of the phases of political evolution, from the earliest Anglo-Saxon times to the present day. "American English," by Gilbert M. Tucker, is a spirited defense of our cis-Atlantic fashion of English speech against the aspersions of sundry British critics. The Rev. Dr. H. W. Thomas writes an article that can hardly fail to strike a sympathetic chord in many a mind, on "The Responsibilities of Progressive Thinkers." "Bigotry in the Medical Profession," by Dr. David Hunt,

is a protest, from the pen of a respected member of the medical profession, against the First Commandment of medical ethics, which forbids association with any but regular practitioners. Finally, Charles T. Congdon, under the singularly apt title of "Adulteration of Intelligence," exposes some of the grave evils to be apprehended from the monopolization of telegraph lines, press associations, and influential public journals. Published at 30 Lafayette Place, New York.

SULPHATE OF QUININE. By Otis Frederick Manson, M. D. Philadelphia: J. B. Lippincott & Co.

This is a work of 164 pages, devoted to the consideration of the physiological and therapeutic action of sulphate of quinine. It gives a very complete history of the introduction of this remedy, its so-called action, and the various uses to which it has been put in medicine. There is no doubt but that this remedy possesses remarkable influence over malarial diseases, but we feel sure that its value as a therapeutic agent has been very greatly exaggerated, and that its use can be dispensed with in malarial diseases in all but very rare cases. For a person who wishes to know all about the various uses to which the drug has been put, we know nothing so complete to recommend as this volume, though we should not wish by any means to be understood as indorsing its teachings.

THE POPULAR SCIENCE MONTHLY. New York: D. Appleton & Co.

This Journal has won a place in the front rank of scientific journalism, and well deserves the great success which it has achieved. We know of no other periodical which so ably presents the latest thought on all scientific questions. The December number is wholly up to the high standard established by its predecessors. Professor Ferdinand Cohn's article on the "Cell-State" is of remarkable interest as a summing up of the latest views on the subject of cell-structure and cell-action. The problem is at the root of the phenomena of life, but Cohn treats it in the most lucid and familiar manner. Other articles of various instructiveness and interest are "Brain-Weight and Brain-Power," by Dr. J. P. H. Boileau; "American and Foreign Asphalts," by Dr. E. J. Hallock; "Criminality in Animals," by A. Lacassagne; "Is Fingal's Cave Artificial?" by F. Cope Whitehouse (illustrated); "Time-Keeping in London," by Professor E. A. Engler; "Musical Sensations" by M. Héricourt; "The Annual Growth of Trees," by A. L. Child, M. D.; "The Spectroscope and the Weather," by Professor Piazzi Smyth; "The Relations of the Natural Sciences," by Professor T. Sterry Hunt; and "Science in Relation to the Arts," being the concluding portion of Professor C. W. Siemens's presidential address at the last meeting of the British Association for the Advancement of Science.

Publishers' Page.

☞ **GOOD HEALTH** for 1883 will continue its efforts in behalf of hygienic reform as heretofore with unabated interest and earnestness. One by one its contemporaries in the field of health journalism have fallen until scarcely one is left which attempts to feel a higher mission than that of an advertising medium. We are happy to be able to report for **GOOD HEALTH**, however, a steady growth in patronage during the last year, and a circulation at the present time probably equal to that of all other health journals combined. The coöperation of the friends of reform is all that is needed to secure a continuance of the same ratio of increase in our subscription list, by bringing the journal to the notice of those who may be benefited by it.

☞ With this number, a new department is added to the journal, the "Health and Temperance Lesson Department." This department will be devoted to the interests of the American Health and Temperance Association, and each number will contain a lesson on the subject of health or temperance, with a synopsis and articles bearing on the subject of the lesson. Health and Temperance clubs that desire to use the lessons will be furnished with extra copies of the journal at club rates. It is hoped that an effort will be made to awaken a permanent interest in the work wherever H. and T. organizations have been effected. Every member of the Health and Temperance Association ought to be a reader of **GOOD HEALTH**, and should have the journal as a help. The subject of health is hereafter to be made a prominent feature in the work of the Association, and every officer should at once begin to post up on the subject, so as to be able to engage in the work intelligently.

☞ The representation of stock at the annual meeting of the stockholders of the Sanitarium held according to appointment, Dec. 21, was larger than usual, and great satisfaction was felt at the prosperous condition of the affairs of the institution, as shown by the annual report of the Treasurer, which was expressed in the following preamble and resolution:—

Whereas, During the past year financial success and prosperity have attended our Sanitarium at Battle Creek;

Resolved, That we express our unqualified confidence in the present medical and financial management of this institution.

The number of patients treated during the year has been much greater than any previous year, and the receipts from patients some \$25,000 greater than any year previous.

The increase in receipts has been largely due to the unusually large number of surgical operations,

one hundred and thirty-five important operations having been performed during the year, besides many of minor importance.

A New Plan.—From communications received from numerous subscribers, the publishers of **GOOD HEALTH** have decided that many persons who really want the journal, cease to take it from neglect to send in the subscription price at the beginning of the year. The journal being promptly cut off in accordance with the "pay-in-advance" policy which we have followed for several years, it is forgotten, and so a really appreciative reader is lost. We propose to try the experiment, for one year, of sending the journal until it is either returned or ordered stopped, and hence request all those whose subscriptions have expired or expire with this number to promptly notify us if they wish the journal discontinued. If not notified, the publishers will send the journal as usual, and in case the subscriber does not remit after a reasonable length of time a bill will be sent for collection in accordance with the law which renders a subscriber responsible for the price of a periodical so long as he receives it at the post-office.

☞ Miss Julia Colman will continue her contributions to **GOOD HEALTH** during 1883, and quite a number of other able writers have promised articles. We believe that the volume for this year will be of greater interest to those who are anxious to learn how to live long and well than any of its predecessors have been. The editor and publishers will spare no pains to make it so.

☞ The annual meeting of the American Health and Temperance Association, held at Rome, N. Y., recently, and reported in the present number, was one of the most interesting meetings of the Association yet held. Those present manifested more interest and enthusiasm in the work of the Association than ever before, and the new plans of work adopted promise to secure a very appreciable degree of progress during the coming year. The new pledge adopted will be widely circulated during the year, and it is believed that with the co-operation of the officers of the various State and local organizations, a much greater interest in the health question may be awakened than has been manifested for a number of years back.

☞ How many of the monthly readers of **GOOD HEALTH** are willing to show the journal to their friends and solicit a subscription? If each one of our 10,000 readers would do this, our list of subscribers would soon be doubled.

Canvassing Outfit Free.—We will send an outfit for canvassing for **GOOD HEALTH** free to any one who will agree to spend one week in canvassing for the journal between now and March 1.