

THE  
HEALTH REFORMER.

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

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**Formal Dedication of the New Sanitarium Buildings.**

IN accordance with the announcement in last month's issue, the formal dedication of the mammoth buildings of the Sanitarium took place April 10.

For several weeks previous to the opening, the workmen and helpers had been exerting themselves to the utmost to get all in readiness for the event, which had been anticipated with much anxiety as well as pleasure during the nine months since work was begun on the buildings. For a week or two previous to the opening, work was carried on night and day. Every one seemed exerting himself to the utmost, yet amid all the noise and commotion there was a spirit of harmony and good feeling that was very pleasant to observe.

The amount of work still remaining to be accomplished one week previous to the opening was so great that many declared the effort to be preposterous; but a month's work was really accomplished in a few days, and although up to within a half-hour of the opening hour a large gang of workmen were hard at work in the lower halls and public rooms, yet when the audience arrived and the exercises began, all was orderly and quiet; and those who had the day previous seen a hundred and fifty men and women moving quickly about in all directions amidst the dirt and rubbish, unpacking furniture, putting down carpets, touching up with paint or varnish neglected spots, filling up broken corners in the smoothly finished walls, cleaning windows, mopping floors, and doing the hundred other things incidental to the occupying of a new building, felt as though the work must

have been accomplished by magic, so great was the transformation. But those who did the work had quite a different impression of the matter.

**THE DAY'S EXERCISES.**

For a description of the day's exercises we shall draw largely upon the reports of the various representatives of the press who were present. The following we copy from the *Daily Journal* of this city:—

"The 'Sanitarium,' the costly and magnificent edifice erected in our city for hygienic purposes, was formally opened Wednesday with appropriate exercises. The day was remarkably fine, and at the hour designated for the commencement of the public proceedings on the occasion a very large number of our prominent citizens, comprising both gentlemen and ladies, assembled in the spacious parlors of the building, which were completely filled, and many persons were obliged to stand in the halls and corridors. There were also many eminent persons from abroad.

"Among the visitors were Hon. W. S. George and lady, of Lansing; V. C. Smith, D. P. Miller, and Miss Rose E. Carman, Schoolcraft; Dr. W. Hill, Rochester, Ind.; Mr. and Mrs. Merrill, Rock Island, Ill.; Mr. J. Palmer, Sturgis, Mich.; Mrs. F. A. Wheelock, Albion; J. S. Day, wife and daughter, Allegan; Dr. W. D. Stillman, Madison, Wis.; G. W. Winslow, Kalamazoo; W. H. Fowler, Hillsdale; Rev. H. M. Kenyon, Allegan; Mrs. W. H. Poleman, Lansing; J. McGregor, East Saginaw; Charles A. Brown, Port Huron; C. H. Burr and lady, Coldwater; J. K. Gilbert and lady, Marshall; E. Paremy, Albion; Hon. V. P. Collier and family, Prof. I. L. Stone, Hon. L. D. Dibble, Revs. J. T. McGrath, L. D. Palmer, and A. A. Knappen, and Drs. R. G. Tomlinson and wife, S. S. French and wife, Edward Cox and wife, J. H. Wattles and wife, C. E. Bartlett and wife,

J. G. Millspaugh and D. C. Hawxhurst, Messrs. Bock, Peavey, Hinman, McCamly, Grandine, Sheffield, Gould, Walters, with their friends, and many others of the prominent citizens of Battle Creek.

"Over the main entrance were placed in evergreen letters the words, 'Temple of Hygiene.' In the main hall an evergreen motto, 'Welcome,' was displayed conspicuously over the passage-way, and in the dining-room the following: 'Air and Sunshine, Nature's Tonics;' 'Eat That Which Is Good.' The platform was also beautifully decorated with bouquets of natural flowers.

"The Rev. Mr. Canright, of Boston, and the resident clergymen of our city, occupied seats on the platform with Dr. J. H. Kellogg, physician-in-chief of the institution, who directed the exercises."

#### THE DEDICATORY SERVICES.

The exercises began at 11 o'clock with music by the choir, which consisted chiefly of students from the College, led by Mr. H. W. Hens, with Miss Marie Hawes presiding at the piano. After the song a short prayer was offered by Rev. A. A. Knappen, of the M. E. church of this city. After another anthem by the choir, Eld. D. M. Canright, of Boston, gave a historical sketch of the growth of health-reform principles in this country, and particularly of the development of the institution from a small beginning twelve years ago to its present prosperous condition. [A summary of his remarks is given on another page.]

We quote the following respecting the remarks of other speakers from the *Lansing Republican*, which paper published a full report of the day's proceedings:—

"Rev. Mr. McGrath, of the Episcopal church, believed that an institution for promoting the health of men and the welfare of the community ought to be honored and encouraged, and God be thanked for it. A union of religion and science for human welfare is delightful to every Christian heart.

"Rev. A. A. Knappen felt himself richer because of this institution for the relief of illness and for the education of the people in a knowledge of the laws of health.

"Dr. Kellogg said that during the first years of the institution its management was ultra. It went to extremes in diet and the use of water. Now its aim is to keep step with the highest science, and to utilize every discovery for the relief of human suffering. The first distinctive water-cure system was German,—rather unrefined, inconvenient, and unsuitable for Americans. Our old rooms had become wholly unfit for the patients of

to-day. The new appliances are absolutely necessary. He gave notice that the Sanitarium would be open for public inspection on every Monday of this month."

After the remarks of Rev. A. A. Knappen, the hymn, "Praise ye the Lord," was read by Rev. L. P. Palmer, and rendered with good effect by the choir, after which the dedicatory prayer was offered by Eld. D. M. Canright.

#### THE GRAND DINNER.

A few minutes after the conclusion of the exercises, dinner was announced, and the large doors into the dining-room were thrown open. Tables were set for two hundred persons, but it was not until they had been filled for the third time that the great concourse of people had all been seated, so that fully six hundred persons partook of the elegant yet wholesome repast prepared for them.

We quote from the *Michigan Tribune*:—

"The dining hall on this occasion presented a most tempting appearance. The tables were loaded with good, wholesome food, most attractive in variety and arrangement. On the east wall was displayed the significant motto in evergreen, 'We Eat to Live,' while on the north wall was another declaring the fact that 'As a Man Eate h so Is He.' In the gymnasium, which opens into the dining-room, and was used as such on this day, were observed the two other appropriate mottoes, 'Air and Sunshine, Nature's Tonics,' and 'Eat That Which Is Good.'"

#### TOASTS AND CONGRATULATIONS.

After dinner the guests adjourned to the large parlors, and by request Hon. W. S. George, of Lansing, acted as toast-master, performing his duties in a most skillful manner, adding thus very greatly to the interest of the occasion. We copy the following report of the toasts and responses from the *Lansing Republican*:—

"1. The Sanitarium: response by V. P. Collier, ex-state treasurer.

"2. The Doctors: response by Dr. D. C. Hawxhurst.

"3. Air, Rain, and Sunshine: response by L. D. Dibble, Esq.

"4. The Public Health: response by Dr. S. S. French, of Battle Creek.

"5. The Coming Doctor: response by Dr. D. C. Hawxhurst.

"6. The Old and the New: response by W. S. George. In medical practice, the old is somewhat represented by the motto of a certain doctor:—

"'I physics, blisters, bleeds, and sweats 'em;  
And if they die, why, 'tzen I lets 'em.'"

"The new practice is somewhat represented at the Sanitarium thus:—

"I feeds, sleeps, nurses, bathes, and rubs so rough  
That most get well, if they have faith enough.

Mr. G. said that when he first came to the Sanitarium last summer he thought the physicians had got hold of the Japanese New Testament, and had applied the text which they translate, 'In those days came John the soaker, preaching the gospel, and saying unto them, Repent and be soaked, every one of you, for the kingdom of Heaven is at hand.' The treatment at the Sanitarium soaks the disease out of physical sinners by vapor-baths, electric-baths, sitz-baths, spray-baths; and renovates them by pure air, plenty of rest, and a plain diet. Thus they are brought nearer to the kingdom of Heaven on earth, which, being interpreted, means perfect health of body and mind.

"7. The Pioneer Doctors: responded to by Dr. Edward Cox, of Battle Creek, who gave a humorous account of the trials and privations of our early physicians in a wilderness country, and closed by toasting 'the young-fledged M. D.'s of Calhoun County,' whom he advised to 'emulate the old pioneer physicians in faithful and persevering attentions to the sick.'

"8. The Press—A great curative of ignorance, sin, and misery, when controlled by persons of sound morals, minds, and bodies.

"The printed page may be mightier than pills,  
By hindering the spread of human ills,  
By curing the errors in human heads,  
And keeping a multitude off from sick-beds.

"9. The Helpers—Their kindness and patience make our afflictions lighter to be borne; for a cheerful spirit doeth good like a medicine.

"10. The Temperance Reform.

"11. Our Country: response by E. Bogardus, of Ohio.

"12. Woman:

"O woman, in our hours of ease,  
Uncertain, coy, and hard to please;  
When pain or anguish wring the brow,  
A ministering angel then art thou.'

"13. This Building: response by Dr. Kellogg.

"14. Our Patients: responsive letters were read from a large number of absentees who had been benefited at the Sanitarium."

The following are a few extracts from some of the many letters received:—

From Prof. L. V. Dodge and lady, of Berea College, Berea, Ky.:

"We regret to say that circumstances positively preclude our attendance. We cannot, however, let this kind invitation pass without acknowledgment. We remember the pleasant surroundings of your home, and the hearty treatment of those in charge, with feelings of keen appreciation.

"Scarcely anything could give us more pleasure than to mingle with those who are to assemble on the 10th inst. Assuredly our thoughts will be with you, and we desire to be remembered to those with whom we may have had the pleasure of an acquaintance.

"Our wishes and prayers go out for a long and prosperous career for the Medical and Surgical Sanitarium of Battle Creek."

From Judge Carson Graham, of Viroqua, Wis.:

"I congratulate you upon your success in the construction and completion of your noble building to be dedicated to the amelioration and relief of suffering humanity from the various ills that so frequently overtake and beset mankind. Considering the financial pressure and the scarcity of money everywhere prevailing throughout the whole country the past year, it certainly required both nerve and courage to undertake the building of an institution such as yours, requiring so great an expenditure of money. But there was pluck and push at the bottom in this case, crowning the enterprise with success. I feel a deep and abiding interest in the continued success of the Sanitarium in its efforts to heal the sick and afflicted, as well as to teach men and women how to live. This, I am assured, has been and will be the mission of the Sanitarium. Personally, I can say that my own condition has been bettered both physically and morally; and reasoning from analogy, I conclude that what does good in one case may at least do good in many others.

"On looking over the names of the physicians under whose immediate management the institution is mainly dependent, I see they are the same as when I left there ten months since; and I make no attempt at flattery when I say that their well-known skillful and judicious treatment of patients, and universal kindness and courtesy to all, will insure to the Sanitarium that success which it so justly deserves."

From Mrs. Mary A. Brownell, Kalamazoo, Mich.:

"Please accept our heartfelt congratulations and best wishes for the continued prosperity and usefulness of the institution. With its enlarged and greatly improved facilities, while under such excellent supervi-

sion, it must become a great power for good to thousands of suffering humanity. May the blessing of Heaven rest upon it and all connected with it."

Many other letters of congratulation were received from persons to whom invitations were sent. We were quite disappointed at not meeting our friend Dr. Baker, of Lansing, Secretary of the State Board of Health; but we received instead the following encouraging words in a letter received a day or two before the dedication:—

"I heartily congratulate you on the completion of the fine building which you have labored so faithfully to make a model of comfort, convenience, and health. Your excellent Sanitarium starts off under very favorable auspices. You have my best wishes for its success and prosperity."

On the opening day, during the exercises, we received the following congratulatory telegram from the Doctor: "Official duties detain me. Accept cordial congratulations and best wishes."

Following the toasts, a resolution offered by Mr. Bogardus, of Ohio, thanking the Board of Directors of the Sanitarium for the pleasures and courtesies of the day, was adopted by unanimous acclamation. The proceedings concluded with excellent music by the choir.

#### INSPECTION OF THE BUILDING.

Two hours were then spent by the guests in inspecting the building, the various rooms of which were thrown open to the guests, assistants being everywhere in attendance to explain the workings of the different kinds of apparatus used in carrying on the work of the institution. The steam elevator was kept in constant requisition, carrying scores of landscape lovers to the roof, from which a most charming view met the eye, while many others descended to the basement to inspect the mammoth heating apparatus, together with the bakery and kitchen arrangements, and the improved mechanism for the manufacture of gas. All were profuse with exclamations of surprise at the completeness of all the appointments of the institution, its elegance and convenience.

#### THE EVENING ENTERTAINMENT.

We copy again from the *Daily Journal*, as follows:—

"In the evening the Sanitarium presented a brilliant appearance, each of its many rooms, spacious halls, and corridors being fully illuminated, and from the city it appeared like a godly temple on a hill. Early

in the evening the parlors and lower halls were filled with guests, while a crowd almost as large thronged the verandas and grounds, unable to gain admittance. It is estimated that no less than one thousand were present at the evening entertainment and during the afternoon."

The evening entertainment consisted of instrumental music by the sextette orchestra of this city, and vocal duets and quartets by some of the best talent of the city. The exercises were conducted by Mr. Geo. Tenney, and were very enjoyable. Although the crowd was so great that only a small part of the auditors could see the performers, the good order and quiet observed were so great that all could hear with ease. The music was even heard distinctly in the upper halls of the building. The hearty and frequent acclamation showed distinctly the keen appreciation of the audience.

The entertainment closed at 9 p. m., with a vote of thanks to the musicians; and the immense audience, which filled the parlors, library, halls, offices, and even the stairways and verandas, and a large portion of the gymnasium, rapidly dispersed, leaving behind them hearty good wishes for the success of the Sanitarium, which had entered upon its new era with such an auspicious beginning. Visitors all expressed themselves as delighted with the exercises of the day, and the weary managers and helpers were delighted that the day to which they had looked forward so anxiously, and for the success of which they had labored so arduously, had at last come and gone. By 10 p. m. the usual quiet had again settled down over the place, and all but the vigilant watchman were safe in the arms of Morpheus, who brought grateful relief to a hundred and fifty weary frames and tired nerves from the excitement of the day.

#### Progress of Health Reform.

BY D. M. CANRIGHT.

[THE following is an abstract of a portion of the address delivered by Eld. D. M. Canright on the occasion of the dedication of the new Sanitarium buildings.]

We date the rise of the health-reform movement among us more than a quarter of a century back, with Eld. Joseph Bates. He was a sea-faring man, and at an early age became captain of a merchant vessel. As was the custom with that class of men, he used not only tea, coffee, and tobacco, but also spirituous liquors. As early as 1820, he saw the

evil effects of alcoholic drinks, and, although it cost him a severe struggle, he entirely abandoned their use. Soon after, he concluded that tobacco was an evil, and its use an intemperate habit; and he cast tobacco aside, with his liquor. Shortly, also, he laid aside both tea and coffee. He performed an immense amount of labor, became a minister of the gospel at fifty, and remained strong and hale until past eighty years of age. In 1824, he organized the first temperance society in the United States. Having embraced the Seventh-day Adventist faith in 1846, he introduced the subject of health reform among this people. They observed its beneficial effects upon him, and were led to regard it with favor.

As early as 1850, Eld. James White, who has ever been a leading man among this people, had his attention called to the subject. Consumption and dyspepsia had brought him nearly to the brink of the grave, and he soon saw that medicine would not save him, but that he must change his mode of living. All liquors, tobacco, tea and coffee, were entirely laid aside by him. He found that he reaped great benefit from the change. Wherever he traveled, he told his experience, and advocated this mode of living. Some years afterward he discarded the use of pork, and was finally led to adopt the present system of health reform.

About the year 1862, Eld. J. N. Andrews, another leading man among us, had his attention forcibly called to the subject by the failure of his health. He suffered very severely from catarrh, and his lungs were badly affected. He partially adopted the reform, and was much benefited. He had a little son six or eight years of age whose left limb was badly diseased. The doctors said he must lose it, but he was sent to a water cure, and by a course of careful treatment restored to perfect health. This opened the father's eyes to the importance of the subject, and he became a thorough convert to the system.

As early as 1864, Mrs. E. G. White began to write and lecture extensively upon the subject, and she has ever since continued to do so, with great success. In that year a little work, entitled, "How to Live," was published. This was the first health publication among us. It had a rapid sale and a wide influence. Since that time we have been thoroughly committed to the reform movement.

An interesting fact which I have noticed, and one showing the progress these principles are making, is that, although twelve years ago, when I began to travel as a minister, I could find graham bread, oatmeal, and such dishes, only in the families of reformers, yet

now, these dishes are found on the tables of every respectable hotel. Another noticeable fact is that all respectable papers and journals devote more or less space to the subject of health. Even the old-school doctors are modifying their practice, thus giving the subject of hygiene more attention, and uniting it with their practice. We regard this as a great triumph for the cause of health-reform.

We believe that this reform is designed to prepare the way for the temperance movement. I notice this fact, that all the prominent temperance lecturers are fast coming upon our ground; that is, they are discarding not only all liquors, but tobacco, tea, coffee, and all other stimulants, as the use of these only creates in the system a demand for strong drink.

We have to confess that this reform movement, like all other good causes, has had its drawbacks. Some of its early advocates were, no doubt, too radical. A water-cure of twenty-five years ago was a place where nothing but water was used as a remedial agent. Much harm was done by this mode of treatment, although it produced some good results. It gave a bad impression. Others have been inclined to be radical in their diet, not making allowance for different constitutions. These things hurt the cause; but our motto is, "Live and learn." It was just so with the temperance movement, just so with the anti-slavery movement. You all remember John Brown's raid in Virginia. It was a rash move; yet perhaps these very radical means are necessary in every reform, to arouse public investigation. Again, many who have undertaken to treat the sick on hygienic principles have been nothing but quacks, possessing no medical skill whatever. Other things have occurred which have tended to hold in check and hinder the work somewhat, but they are now almost wholly removed.

The Health Reform Institute was organized in this city in the year 1866. The institution was opened with one patient. The first six months there were seventy-six patients treated. The books show that during the last six months there have been treated four hundred and fifty patients,—a very encouraging increase. Up to this date, the institution has labored under great disadvantages, from lack of proper facilities. As it has grown, from time to time other buildings have been bought to accommodate the increasing patronage. The bath-rooms have been small and unhandy, and the buildings have been unadapted to the purpose, yet the institution has steadily increased in prosperity.

About ten years ago the foundation was laid for a brick building, and considerable

money expended upon it; but it was finally abandoned. Some have regretted that the building referred to was not pushed to completion; but all are now glad that it was not done, as we now have a building which is far more complete in its appointments, and convenient and commodious in its arrangement, than that would have been.

The physicians who have served in this institution are as follows: Dr. H. S. Lay, with Miss Dr. Lamson, were the first. Dr. Lamson still remains with the Institute; this fact is good proof of her usefulness. Next was Dr. J. H. Ginley, who served four years. Dr. Wm. Russell succeeded him. For the last year and a half, J. H. Kellogg, M. D., has been physician-in-chief of the Sanitarium. Drs. Sprague and Fairfield have just graduated, and are now able assistants. Miss Dr. Lindsay is also a thoroughly educated physician. The Sanitarium employs, at present, seventy helpers, in the various departments. We are glad to hear them spoken of as ladies and gentlemen of real Christian worth.

In conclusion, I would say that we feel grateful to God and our brethren, and to the patrons of this institution generally, for the marked success that has attended the enterprise thus far. We shall do all in our power to merit the good opinion of the citizens of Battle Creek and of those who may attend this institution.

### Open Air and Health.

BY DR. PAUL NIEMEYER.

(Concluded.)

As a general rule, where a cough is habitual, whatever the age of the patient, recourse should at once be had to those means of cure which usually are resorted to only at the last moment, and then without any hope of good results. But, unfortunately, most people think only of the present moment. They want a son to complete his schooling as early as possible, and to go to earning money. But what is the gain if the young life, after a few years, ends its earthly career? Better, therefore, that a year or two should pass without remunerative employment, while in the meantime care is taken of the bodily health and strength, the affected lungs are invigorated, and the spirits are renewed. In the first case we have dead capital; in the second, capital which bears interest.

The person whose lungs are affected must once for all give up dancing; for dancing as now practiced is not "motion," but only destruction of the pulmonary apices by dust

and vapor, fatigue of the body through want of sleep and privation of fresh air.

With this one exception, "caution" as usually understood is bad. Let the one who is threatened with consumption look on himself not as one doomed to die, but only as a pulmonary invalid. We should consider that, while it is a misfortune that the pulmonary apices are from their position exposed to disease, we nevertheless have plenty of lung cells which can be made to do duty in place of them. Still, if these are not daily strengthened by careful treatment, they are in danger of being infected by the others, and of becoming diseased like them. By timely and continuous exercise, it is possible to restore even the diseased cells, and to cure the consumption, or at least to stay its further progress. If one can find the means of visiting Florida, Colorado, or Southern Europe, it is well to do so. But if this is not possible, one must find the means of an air and movement cure at home. That this is possible, the reader will see from the following analysis of the means of cure:—

1. LUNG VENTILATION.—The patient must with scrupulous conscientiousness insist on breathing fresh, pure air, and must remember that the air of closed rooms is always more or less bad, impure. No man, however uncleanly, would drink muddy, dirty water. Unfortunately, for detecting impurities of air, the only organ we have is the nose, and in most persons the nose is of so obtuse a sensibility that it is of no service. Besides dust, injury to the lungs is caused principally by the products of respiration (carbonic acid and watery vapor), which act as poison on the lungs and the blood. A party which occupies a room for hours, breathing the same air, might be compared to a party of bathers drinking the water in which they bathe. The man who on the street cuts off from his lungs the "cold" air, is like a ruminant. If this literally true comparison were universally accepted and acted upon, the number of cough-complaints would be reduced one-half.

The patient must keep the window of his bedroom open. Night-air is fresh air without daylight; he who fears night-air is like a child who dreads darkness; the air in the room after the light is extinguished is also night-air. In close, crowded, heated rooms, the patient suffering from lung complaint respire consumptively. In winter, artificial heat may be employed, but the window must be opened above, and thus we have at once both warmth and ventilation. In the city, night-air is always wholesomer than day-air, being both purer and stiller.

If it be objected that "what suits the blacksmith does not suit the tailor," I reply, That may be true of a plate of sour-kraut. But here the case is just the reverse. The blacksmith who has no trouble with his lungs can stand vapor-dust, heat, fatigue; but the one who has pulmonary disease risks his life if he has not always abundance of fresh, pure air.

So far of the What?—lung ventilation. Next of the Why?

On rising, let the patient go to an open window, brandish the arms over the head,—which enables the lung apices to inhale air more easily,—and for a few minutes fetch as deep inspirations of air as possible. He must frequently take such deep inspirations in the open air.

If the lungs do not become free, let him introduce into them—not into the stomach—something to act on the dry mucous membrane—as the vapor of water or of camomile-tea.

If the cough is caused rather by a "scratchy" feeling in the throat, if it is spasmodic, let him swallow or gargle some substance that will quiet the nerves. Cold water is best—in summer ice-water; in some cases cooled fennel-tea is of service, but not sirup or any hot drink.

2. SKIN VENTILATION.—This is of no less importance for warding off simple coughs, as well as for preventing the transition to consumption. With its millions of pores, the skin is on the one side the main sewer for carrying away superfluous fluids, and on the other it is the principal factor in cooling the body, in colds, in overheating, and in fevers. We will now consider skin-ventilation from this point of view under the two heads—*a*. Elimination of fluids; *b*. Reduction of temperature:—

*a*. ELIMINATION OF FLUIDS.—Like the external skin, the inner skin, the mucous membrane, exudes moisture, sweats. The mucous membranes, having no covering, are always moist. The mucous membrane of the lungs exhales watery vapor. This vapor comes from the serum of the blood, i. e., from that portion of the blood in which the corpuscles are suspended, and which, after the corpuscles have been filtered out, resembles water. The external skin under ordinary circumstances gives off about twice as much watery vapor. But, in proportion as this elimination is checked by defective skin-ventilation, the water of the blood (serum) has to be eliminated internally through the mucous membranes. Cooling, i. e., the sudden action of comparatively low temperature on the warm surface of the skin—for instance, when one sits in a draught of air—may check transpiration, and so cause

the fluids to tend inward in such volume as to overtax the capacity of the mucous membrane of the lungs or the intestines, more rarely of the kidneys, the result being catarrh. But catarrh and coughing are two different things; as for "dry cough," it can never arise from cold. That it results from the inhalation of impure, vitiated air, the reader knows already. It is true that obstruction of the breathing-apparatus, as "rattling" in infants, and hawking and hoarseness in grown persons, results from retention of serum; but that this obstruction is not connected with taking cold must be admitted, at least in all cases where the patient has not quit his chamber, or even his bed. As a matter of fact, no one takes a cough from a cold wall or from an open door.

The conclusion to be drawn from all this is, that the coughs, hoarseness, and sore-throats, from which those persons suffer in winter who are ever on their guard against colds, are produced, not at all from cold, but from its contrary, overheating of the skin, whose evaporation is feeble the nearer the external temperature approaches that of the body. In this case there is a suppression of the action of the skin, but it is produced not by cold but by improper warming—or, as it is more properly called, by pampering. A hot bath, a cold pack, or a good, lively walk, will work wonders in "loosening" a hard cough. At first, it is true, the patient will cough harder than ever; but this effect is not due to the "cold wind," but to the fact that the accumulated mucus, once started, is expelled *en masse*. The oftener the patient resorts to the bath, to the pack, and to walking, the less frequent are the fits of coughing, and the freer and easier does he breathe.

*b*. REDUCTION OF TEMPERATURE.—The body's temperature is normal when in the armpit it is about 95° F. Food and drink are stimulants [?], and the skin is the radiating surface which gives off the surplus heat. If this elimination is not sufficiently active, the body becomes overheated, and this manifests itself by shivering. Overheating is the result when one eats and drinks much, at the same time parting with but little heat. The chill so produced is usually called "inward cold," but this is an error: it is overheating. That this is so is shown from the fact that when on the morning after a "social evening," during which we were overheated, we feel chilly, we have only to take a walk until perspiration is set up; we then feel warm again in spite of a considerable cooling off. And this, by the way, is the very best cure for the "Katzenjammer." We live in a climate where it is far easier to heat the body than to cool it. Hence one of my counsels against catching

cold is, that the weakly, coughing reader, of sedentary habits, should not overheat himself with strengthening food, so called (meat, eggs, beer), else he might take an "inward cold," or even a fever.

Prof. Tyndall, in his "Glaciers of the Alps," tells us that, on being overheated during his rambles in the Alps, he at once took a bath, or poured water over his body. "*Probatum est*," say I, from personal experience.

"Yes," some one will say, "you are inured to that sort of thing." To be sure I am! But what hinders you from being inured also? Just go out on the ice during this glorious winter weather, put on a pair of skates: you will return bright and fresh; you will throw open the windows and be indignant at yourself for ever having shut yourself up in such a steaming atmosphere. The next day take a simple bath—not a Russian or a Turkish bath at all—and you will rid yourself of still another part of your phlegm.

3. MUSCLE-VENTILATION.—Muscular fiber respire too, i. e., gives off carbonic acid and takes up oxygen. To this end it must diligently contract and then relax; in short, it must work, or, if the reader prefers the expression, it must practice gymnastics. Whether one takes his exercise at home or abroad, makes no difference. They whose lungs are affected would do well to climb hill-sides, for in such exercise the apices of the lungs are most called into play; in climbing, the hands may rest on the hips. Muscle-exercise is not to be separated from lung-exercise. If bodily movement be neglected, deleterious fluids accumulate, which I call "suffocation-blood" and "fatigue-blood." The former contains carbonic acid, which makes one always drowsy, and causes one to go about his day's work with a feeling of lassitude no matter how long he has slept. This feeling of weariness grows steadily worse. "Fatigue-blood" accumulates in the muscles as a result of drinking wine and beer; even simply bending the body causes inconvenience; one feels quite unstrung and wants to recline on a lounge or a bed, whereas what he ought to do is to take a brisk walk in the open air, or a little exercise in a gymnasium. In this way the skin is ventilated and the serum worked off.

My essay cannot exhaust all the topics named in its title; the most it can do is to awaken attention, free the reader from certain erroneous ideas, and lead him to believe that the simplest remedy is always the most natural and the best. If any one will put his faith in recipes, I would remind him of the history of the sale of indulgences. We look back with indignation to Tetzels scandalous work, but how many people still think

they can purchase health by gorging themselves with medicines! Consumptives form no small portion of this class. The treatment here recommended costs no money, but demands only will, self-conquest, and perseverance. The treatment is not so complicated as it may appear; it is simply a movement and an air cure, or, more briefly, an "attempting" cure; for effeminacy is the source of all colds, coughs, and consumption, and hardening is the only protection and remedy against them.

### A New Method of Treatment for Intermittent Fever.

BY W. B. SPRAGUE, M. D.

It seems to be an almost universal opinion that quinine or some other of the "specifics" is indispensable in the treatment of malarial fever. Yet having had, last summer, the opportunity of observing several cases in which a complete cure was effected by the simple use of the vapor-bath and wet and dry packs, I am convinced of the efficiency of this method of treatment.

Whether the cryptogamic theory be correct or not, it is generally admitted that malaria is a poison which, introduced into the system, is the cause of the various phenomena of intermittent fever, and it seems rational that the treatment should be directed to eliminating this poison as well as to breaking up the paroxysms. It was with this point in view that the above-mentioned treatment was tried, and the result was a marked success.

A systematic plan of treatment was adopted, and in describing it I shall enter into the minutiae of the manipulation, as much depends upon whether it is conducted with skill and care.

The type of the disease, and the probable time at which the next paroxysm would occur, were ascertained, when possible, before the treatment was begun. In the tertian type, the patient received a wet pack or a vapor-bath on the day of the intermission, with a view to encourage the process of elimination. On the day of the paroxysm, about an hour before the time for the chill, the hot dry pack was used. The patient was surrounded with hot flannel blankets and quilts, and about the time for the chill hot jugs or bricks were snugly packed to the back, feet, knees, and breast, and great care was taken to have the clothing carefully tucked around the body, especially around the neck and shoulders. If the effect was to abort the chill or to prevent any symptom



of it, as was often the case, the patient soon passed into a profuse perspiration. But in other cases the effect was only to modify the severity of the paroxysm. In this case, although there was a distinct chill, the sufferings of the patient were very much diminished. Then, as soon as the hot stage was fully established, the bedclothing and jugs were gradually removed, and in the height of the fever only a single blanket was left for covering. During this stage he was sponged off once or twice if the fever was very high. He was made comfortable during the sweating stage by wiping off the perspiration with a dry towel. At its close he received another sponge-bath, and was allowed to dress, but was advised to keep comparatively quiet for an hour or two.

When perspiration ensued as soon as the patient was placed in the hot pack, the treatment for the sweating stage only was administered, but it was found necessary to use great caution in avoiding exposure, lest the chill occur at a later hour, especially in irregular cases. Although we aimed to administer eliminative treatment, and, in most cases, of a very vigorous character, before the patient became much reduced, there were some already so weakened that only the abortive treatment was admissible. In all cases the latter treatment was repeated regularly, the suspension of treatment corresponding with the intermission of fever, until the paroxysms were broken, and for several times following, to insure their non-recurrence.

The following cases were treated strictly according to the above-named plan :—

CASE No. I. A girl nine years of age, who had been suffering from regular paroxysms of the tertian type for several months, began to take treatment June 2, 1877. She had become much emaciated, and was very sallow and anæmic. The lower part of her face was covered with herpetic eruptions. The severity of the paroxysms diminished from the time she began treatment, and in about eight days they entirely ceased. The sallowness and hebetude began to disappear, and in four weeks the face was intelligent and rosy, the skin clear, and not a symptom of the malaria remained.

CASE No. II. T. R., nurseryman, aged forty years, began to suffer from paroxysms about June 10. This was the tertian form of the fever, but somewhat irregular, occurring about two hours earlier in the day at each successive paroxysm. Began to take treatment June 15, directly after a paroxysm. He had one more paroxysm, which was, however, much reduced in severity.

At the next paroxysmal period, and for several following, he suffered from headache and general *malaise*, which gradually decreased, and in two weeks he reported himself entirely well.

CASE No. III. A. O., printer, aged twenty. Paroxysms commenced about June 10. They were of a violent character in the cold stage, so much so that the patient was very strongly convulsed. His was also the irregular tertian form, paroxysms occurring about three hours earlier each time. Came under treatment June 25. The first paroxysm following occurred immediately, and was only slightly modified by treatment. The next was very much reduced in severity, and though they continued for a week they gradually grew lighter until they ceased. At the end of two weeks he discontinued treatment, and though he was somewhat reduced in strength and flesh he rapidly recovered, and was as well as ever in four weeks.

CASE No. IV. D. Y., farmer, aged fifty, had four or five severe paroxysms before beginning treatment. They were very irregular, tertian in form, at first, but soon changed to the quotidian variety. Began treatment July 20. The paroxysms were broken in one week. He then left off treatment immediately, and had no return of the disease.

CASE No. V. T. M. S., clergyman, aged forty-five, began to take treatment July 22, having had two paroxysms. He was cured in ten days, but returned to his field of labor, a miasmatic region, and had a relapse. He came back for treatment, and had the paroxysms broken again in two weeks, after which he regained his full health.

CASE No. VI. Student, aged nineteen, had a paroxysm Sept. 13, and began treatment next day. He had a second chill, very light, and left at the end of a week, in good condition.

There were several other interesting cases, of which want of space forbids a detailed account. One was the pernicious form. There were two well-marked congestive chills before treatment was begun. A speedy recovery followed treatment.

The thermometer becomes invaluable in following this plan. It is found that the temperature begins to rise, even an hour before the chill in some cases; always long enough before to determine when the abortive treatment should begin. The most irregular paroxysms are thus brought under control. This plan of treatment seems to have the merit of improving the patient's general health at the same time that the fever is being aborted.

Digestion and general nutrition are strengthened. The objection that it is impracticable in ordinary practice, has some foundation in fact, but it can be used in hospitals and in all places where intelligent nurses can be procured who will carry out directions faithfully. The hot-air bath may be readily improvised by burning a cup of alcohol under a wooden-seated chair on which the patient sits with a blanket pinned around all, close about his neck. It is very essential that no water or cold draughts of air be allowed to reach the body of the patient during his chill.

The abortive treatment is very effectual when used with quinine.

### Col. Ingersoll as a Health Philosopher.

BY J. D. WAGGONER.

COL. R. G. INGERSOLL has the reputation of being "smart." He is especially severe on those antiquated people who are, in his estimation, so foolish as to believe in the God of the Bible. The papers are passing around a saying of his which some think is extremely witty. When a clergyman asked him what change for the better he could make in the arrangement of this world, he replied, "I would make health catching instead of disease."

The Bible says, "The world by wisdom knew not God." We are prompted to supplement the saying with the remark that the world by wisdom—by its own unassisted wisdom—knew not good common sense. This flippant reply of Col. Ingersoll is as foolish and shortsighted as we should expect to hear from one who cavils against the works and word of God.

Were "health catching," that is, if the diseased could be restored to health by merely approaching a healthy person, who can imagine the recklessness of which the human race would be guilty? Even with the grievous consequences before them which now attend upon wrong living, people will gratify their sensual propensities at the risk of health, and even of life. Remove the risks, and the horrid results can be but faintly imagined. With existing safeguards the world has become a sink of pollution and corruption. What would it be with these safeguards removed? Such a remark as that quoted above, from a man reputed to be wise, affords the strongest evidence that his wisdom is superficial and unthinking.

We do not recommend *all* that now exists. Sin exists, for which we have not a word of excuse to offer. This is the cause of all suffer-

ing; but this is not by the order and arrangement of God. He who would remove the suffering without removing sin, would prove to be no friend to humanity. We cannot imagine that moral evil to the race could be separated from moral wrong. Removing the immediate effects, without staying the cause, would only result in greater ultimate evil. Among physicians it is a sure sign of a quack to guarantee restoration to health without regard to diet or habits of life.

The Bible says, "All the wicked shall God destroy." Another declaration follows this as a matter of course: "There shall be no more curse." To remove the curse without removing sin, were that possible, would be to fill the world with fiends rather than men.

We have always felt safe in recommending our Health Institute at Battle Creek, because it was founded and has been conducted on *right principles*. It offers no immunity to wrong-doing. It teaches the patient how to live, and relates him to the most favorable conditions for the recovery of health. And to the convalescent it gives assurance that a relapse to bad habits will necessarily lead to renewed sufferings. And we think that, inasmuch as wrong exists, this is the best and wisest arrangement that is possible.

We hope to see a more happy state of things than is now seen on this earth. Not, however, by reversing unhappy effects, but by a removal of evil causes. When sin shall cease to be, then shall the inhabitant of the land no more say, "I am sick," and sorrow's tears shall be wiped from all faces.

**The Expense of Tobacco.**—A Methodist clergyman, in an article on "Tobacco and the Gospel," gives the following facts:—

"The Commissioner of Internal Revenue, at Washington, gives the total product of manufactured tobacco in the United States in 1874 as follows: Of all kinds paying 25 cents per pound of revenue, 104,502,548 pounds; snuff, and all kinds paying 32 cents per pound revenue, 3,245,143 pounds; total, 107,747,691 pounds. If we put the average price at 57½ cents per pound (and that is low) it gives us, in round numbers, \$61,955,000. The number of cigars on which duty was paid in 1874 was 1,886,697,498. At 3 cents each, they cost over \$56,600,000, a total annual cost, in round numbers, of \$118,550,000 for tobacco, snuff, and cigars. A writer in the *New York Advocate* (Rev. T. F. Parker) estimates the cost of the tobacco consumed annually by the 5,000,000 members of American churches at over \$19,300,

000; and that of this sum Methodism pays over \$3,800,000. These figures are doubtless inside of the actual facts. But say they are twice too large, and then Methodism spends \$1,900,000 for tobacco every year, almost \$2,000,000; say, if you will, that they are three times too large, and make the annual tobacco-money of Methodism only \$1,266,666, and yet what a shameful, not to say wicked, waste of the Lord's money!

"Physicians, physiologists, chemists,—all say that tobacco is a poison, and that he who uses it shortens life. Dr. Morgan says, 'I entertain no doubt that even the moderate use of this article, by impairing the general health, often shortens human life.' It was the opinion of John Quincy Adams that the average of human life is shortened five years by the use of tobacco. Suppose we limit the shortening of life to those who themselves use the article, which he did not, and suppose we make the shortening but half what he did, it is a moderate estimate that puts the consumers of tobacco in the United States at two millions. Here, then, we have, in a single generation, the sacrifice of five million years of human life in the United States alone. It is the poison in this 'weed' which gives it power to soothe, to fascinate, and enslave its victims. Reader, are you its slave? Be free!"

**Early Decay.**—What is it breaks down young men? Is it hard study, or dissipation? It is a commonly received notion that hard study is the unhealthy element of college life. But from the tables of mortality of Harvard University, collected by Professor Pierce from the last triennial catalogue, it is clearly demonstrated that the excess of deaths for the last ten years after graduation is found in that portion of each class inferior in scholarship. Every one who has seen the curriculum knows that where *Æschylus* and political economy injure one, late hours and rum punches use up a dozen; and that the two little fingers are heavier than the loins of Euclid. Dissipation is a swift and sure destroyer, and the young man who follows it, is like the early flower, exposed to untimely frost. Those who have been inveigled into the path of vice are named "Legion," for they are many—enough to convince every novice that he has no security that he will escape a similar fate. A few short hours of sleep each night, high living, plenty of "smashes," and nameless bad habits, make war upon every function of the human body. The brains, the lungs, the liver, the spine, the limbs, the bones, the flesh, every faculty is overtaken,

worn, and weakened by the terrific energy of passion loosed from restraint, until, like a dilapidated mansion, the "earthly house of this tabernacle," falls into ruinous decay. Quack doctors cannot save you. Fast young man, to the right about!—*See*

### Dental Caries.

THE general prevalence of dental caries is chiefly owing to food remaining on and between the teeth after meals—from breakfast time till the following morning—when, according to custom, the teeth are brushed; brushed, but probably not cleaned, as the brush is more often used to polish the surface merely than to assist in removing what has accumulated between them. Experiments have been referred to that prove the solvent action of weak acids on the teeth; and I think it will be conceded without proof that, were portions of our ordinary food, mixed and moistened as in mastication, kept during the night at the high temperature of the mouth, the compound would be sour. It follows that dental caries must continue to prevail as now, while the food is allowed to remain in contact with the teeth all night.

When the teeth are wide apart, food does not remain in contact with them, and they are generally free from caries. The lower front teeth are seldom attacked by caries when, as is generally the case, the spaces between are closed to the entrance of food by tartar. The backs of all the teeth, upper and lower, being kept free from food by the tongue, are seldom affected by caries. Lodgment of food takes place between the bicuspid, between the molars, in the depressions on the masticating surface of these teeth, and on the buccal walls of these molars, and these are the chief seats of caries. While mastication is performed by the molars and bicuspid, the upper front teeth remain free from food and from caries; but, when they themselves are made to do the work of lost or diseased molars, and the food gets between them, caries is certain to follow before long. If no food remained in contact with the teeth after eating, they would be free from caries, unless acted on by acidity from other sources. The only indications, therefore, for the prevention of dental caries are the neutralization of acid applied to the teeth, and the removal of food before it has become acid. The food should be removed after every meal, and all who have not the opportunity of doing so should not fail to remove it every night at bedtime by rinsing, as the brush cannot be trusted to remove the food from between the teeth.—*British Medical Journal.*

# LITERARY MISCELLANY?

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

## MAN'S MORTALITY.

[The following beautiful verses were written by a Christian bard in the year 551. The original exists in an Irish MS. in Trinity Church, Dublin.]

Like as the damask rose you see,  
Or like a blossom on a tree,  
Or like a dainty flower in May,  
Or like the morning to the day,  
Or like the sun, or like the shade,  
Or like the gourd which Jonas had;  
Even such is man, whose thread is spun—  
Drawn out and out, and so is done.

The rose withers, the blossom blasteth,  
The flower fades, the morning hasteth,  
The sun sets, the shadow flies,  
The gourd consumes, the man—he dies.

Like to the grass that's newly sprung,  
Or like a tale that's just begun,  
Or like the bird that's here to-day,  
Or like the pearled dew in May,  
Or like an hour, or like a span,  
Or like the singing of a swan;  
Even such is man, who lives by breath,  
Is here, now there, in life and death.  
The grass withers, the tale is ended,  
The bird is flown, the dew's ascended,  
The hour is short, the span not long,  
The swan's near death, man's life is done.

Like to the bubble in the brook,  
Or in a glass much like a look,  
Or like the shuttle in weaver's hand,  
Or like the writing on the sand,  
Or like a thought, or like a dream,  
Or like the gliding of the stream;  
Even such is man, who lives by breath,  
Is here, now there, in life and death.  
The bubble's out, the look forgot,  
The shuttle's flung, the writing's blot,  
The thought is past, the dream is gone,  
The waters glide, man's life is done.

Like to an arrow from the bow,  
Or like swift course of water flow,  
Or like that time 'twixt flood and ebb,  
Or like the spider's tiny web,  
Or like a race, or like a goal,  
Or like the dealing of a dole;  
Even such is man, whose brittle state  
Is always subject unto fate.  
The arrow shot, the flood soon spent,  
The time no time, the web soon rent,  
The race soon run, the goal soon won,  
The dole soon dealt, man's life soon done.

Like to the lightning from the sky,  
Or like a post that quick doth bie,  
Or like a quaver in a song,  
Or like a journey three days long,  
Or like the snow when summer's come,  
Or like the pear, or like the plum;

Even such is man, who heaps up sorrow,  
Lives but this day, and dies to-morrow.  
The lightning's past, the post must go,  
The song is short, the journey so,  
The pear doth rot, the plum doth fall,  
The snow dissolves, and so must all.

## The Apostasy of Solomon.

HIS IDOLATRY AND DISSIPATION.

BY MRS. E. G. WHITE.

SOLOMON'S career of lasciviousness and unholy ambition was mercifully arrested by God, and he was effectually aroused from the iniquitous state into which he had fallen. He gave proofs of his reformation in the relation of his experience contained in his inspired writings. The case of Solomon should convey to all a lesson of human weakness, and the constant need of divine aid. Solomon possessed great intelligence, and learning, riches, and honor; yet all this was insufficient to insure his integrity to God, to himself, and to his nation. After a youth and early manhood of unsurpassed promise, there followed a blotted history of deterioration and iniquity. It might well be said of him, "How art thou fallen, O Lucifer, son of the morning!"

All the sins and excesses of Solomon can be traced to his great mistake in ceasing to rely upon God for wisdom, and to walk in humility before him. Therefore he went not on from strength to strength, rising higher and higher in the perfection of an elevated character, but soon became the prey of temptation and carnal desires. In the careless life which he entered upon, the blessings which God bestowed upon him were not improved to his glory, but were used to promote himself to an unexampled pinnacle of earthly grandeur. He surrendered the reins of self-control, laying them upon the neck of degrading passions. His conscience was violated, his manhood perverted, and his moral powers debased. Gifted with wondrous genius and fortune, he nevertheless lost his God and his happiness, and degenerated into the most miserable of men.

God had expressly forbidden his chosen people to marry with the idolatrous nations

around them. God singled out Israel to make them the depository of the true faith, and he placed a high barrier between them and the rest of the world. Their safety depended upon keeping pure, and preserving their unity with each other and with God. Solomon, in contracting a marriage to please his fancy instead of seeking by his marriage to glorify God, separated himself from God, ruined himself, and nearly ruined his nation.

Solomon was extolled for his wisdom to the uttermost parts of the earth. He forgot that he was indebted to God for all his admirable qualifications, and came to look upon himself as being supreme in wisdom. He accordingly led out in enterprises without consulting the will of God; he established political alliances with pagan governments, and cultivated commercial intercourse with them. But the advantages accruing therefrom were dearly purchased by the sacrifice of principle and the divine favor. Silver was brought from Tarshish, and gold from Ophir, to enrich the nation; but the fine gold of righteousness, the purity and strength of the nation, became corrupted by idolatry. Polygamy spread widely abroad, and domestic and social life were poisoned under the reign of this apostate king, who had been exalted so highly in point of privilege, and in the favor of God.

The original character of Solomon, as manifested during the earlier years of his reign, was bold, honorable, and judicious. Unparalleled success would have been his, had he continued to seek it in God. But there was everything about him to flatter his pride, and to indulge his appetite and passions. He was fond of wine, and his naturally clear intellect was often clouded by its effects. He was absolute monarch of Israel, holding in his power the lives and property of his people over all his wide-spread domain. As his mental powers became enervated and degraded by his dissipation and lascivious habits, he grew hasty, fitful, and tyrannical. His fine sensibilities were blunted, and his conscience seared. He who had prayed at the dedication of the temple that the hearts of his people might be undividedly given unto the Lord, had become a weak, fallen man. It was through his connection with idolaters that he became thus profligate and a despot. He maintained his unreasonable extravagance by heavy taxation, and lived in a state of unrivaled luxury and magnificence.

His giant mind degenerated, and he could be molded like wax by the unscrupulous persons who studied his caprices and played upon his weaknesses. He endeavored to

unite heathenism with the faith of the Hebrews, mistaking his own unscrupulous license for liberality and merciful toleration. But his attempt to unite darkness and light, in serving God and Baal, was like mingling ink and pure water. The water does not impart its crystal clearness to the ink, but, on the contrary, the ink gives its dark color to the water, making a murky compound. Purity cannot unite with impurity without being stained by the contact. This was the result developed by Solomon in his attempted union of God and Belial. He came finally to disregard all religions.

The lesson for us to learn from the history of this perverted life is the necessity of continual dependence upon the counsels of God; to carefully watch the tendency of our course, and to reform every habit calculated to draw us from God. It teaches us that great caution, watchfulness, and prayer are needed to keep undefiled the simplicity and purity of our faith. If we would rise to the highest moral excellence, and attain to the perfection of religious character, what discrimination should be used in the formation of friendships, and the choice of a companion for life.

Many, like the king of Israel, follow their own carnal desires, and enter into unsanctified marriages. Many who started out in life with as fair and promising a morning, in their limited sphere, as Solomon had in his exalted station, through one false and irrevocable step in the marriage relation, lose their souls, and draw others down to ruin with them. As Solomon's wives turned his heart away from God to idolatry, so do frivolous companions, who have no depth of principle, turn away the hearts of those who were once noble and true, to vanity, corrupting pleasures, and downright vice.

Moral worth has a charm that wealth and outward attractions do not possess. The woman having the ornament of a meek and quiet spirit, in the sight of God has an endowment of great value, before which the silver of Tarshish, and the gold of Ophir, are worthless. Solomon's bride, in all her glory, cannot compare with one of these household treasures.

Few realize that, in their lives, they constantly exert an influence which will be perpetuated for good or evil. Hundreds of years had elapsed since Solomon caused those idolatrous shrines to be erected on the mount; and, although Joshua had demolished them as places for worship, their *debris*, containing portions of architecture, were still remaining in the days of Christ. The prominence upon which those shrines had stood was called, by

the true-hearted of Israel, the Mount of Offense.

Solomon, in his pride and enthusiasm, did not realize that in those pagan altars he was erecting a monument of his debased character, to endure for many generations, and to be commented on by thousands. In like manner, every act of life is great for good or evil; and it is only by acting upon principle in the tests of daily life, that we acquire power to stand firm and faithful in the most dangerous and most difficult positions.

The marks of Solomon's apostasy lived ages after him. In the days of Christ, the worshippers in the temple could look, just opposite them, upon the Mount of Offense, and be reminded that the builder of their rich and glorious temple, the most renowned of all kings, had separated himself from God, and reared altars to heathen idols; that the mightiest ruler on earth had failed in ruling his own spirit. Solomon went down to death a repentant man; but his repentance and tears could not efface from the Mount of Offense the signs of his miserable departure from God. Ruined walls and broken pillars bore silent witness for a thousand years to the apostasy of the greatest king that ever sat upon an earthly throne.

The lesson of Solomon should be a warning to the youth, and to those of mature age who are tempted to deviate from principle in order to follow inclination. The great danger is in feeling that our own strength is sufficient, and not relying upon the strength of God. The youth who have been religiously educated are not safe from temptation; and unless the principles taught them are woven into the words and actions of their daily lives, and they fully comprehend the danger of contamination through evil associations, they are liable to make shipwreck of their lives.

Bewitching temptations to follow the lust of the flesh, the lust of the eyes, and the pride of life, are to be met on every side. The exercise of firm principle, and strict control of the appetites and passions, in the name of Jesus the Conqueror, will alone carry us safely through life.

—The greatest man is he who chooses right with the most invincible resolution, who resists the sorest temptation from within and without; who bears the heaviest burdens cheerfully; who is calmest in storms, and most fearless under menaces and frowns; whose reliance on truth, on virtue, and on God, is most unflinching.—*Seneca.*

## The Son of my Friend.

(Concluded.)

At last all the ladies were gone; but there still remained a dozen young men in the supper-room, from whence came to my ears a sickening sound of carousal. I sought my chamber, and, partly disrobing, threw myself upon a bed. In a state of wretchedness impossible to describe I remained here for over an hour, when my husband came in.

"Are they all gone?" I asked, rising.

"All, thank God!" he answered, with a sigh of relief. Then, after a moment's pause, he said, "If I live a thousand years, Agnes, the scene of to-night shall never be repeated in my house. I feel not only a sense of disgrace, but worse,—a sense of guilt. What have we been doing? Giving our influence and our money to help in the work of elevating and refining society, or in the work of corrupting and debasing it? Are the young men who left our house a little while ago as strong for good as when they came in? Alas! alas! that we must answer no! What if Alfred Martindale were our son?"

This last sentence pierced me as if it had been a knife.

"He went out just now," continued Mr. Carleton, "so much intoxicated that he walked straight only with an effort."

"Why did you let him go?" I asked, fear laying suddenly its cold hand on my heart. "What if harm should come to him?"

"The worst harm will be a night at the station-house, should he happen to get into a drunken brawl on his way home," my husband replied.

I shivered as I murmured, "His poor mother!"

"I thought of her," replied Mr. Carleton, "as I saw him depart just now, and said to myself bitterly, 'To think of sending home from my house to his mother a son in that condition!' And he was not the only one."

We were silent after that. Our hearts were so heavy that we could not talk. It was near daylight before I slept, and then my dreams were of so wild and strange a character that slumber was brief and unrefreshing.

The light came dimly in through half-drawn curtains on the next morning, when a servant knocked at my door.

"What is wanted?" I asked.

"Did Mr. Alfred Martindale sleep here last night?"

I sprang from my bed, strangely agitated,

and, partly opening the chamber door, said, in a voice whose unsteadiness I could not control, "Why do you ask, Kate? Who wants to know?"

"Mrs. Martindale has sent to inquire. The girl says he didn't come home last night."

"Tell her that he left our house about two o'clock," I replied; and, shutting the chamber door, staggered back to the bed, and fell across it, all my strength gone for the moment.

"Send her word to inquire at one of the police stations," said my husband bitterly.

I did not answer, but lay in a half-stupor, under the influence of benumbing mental pain. After a while I arose, and, looking out, saw everything clothed in a white mantle, and the snow falling in large flakes, heavily but silently, through the still air. How the sight chilled me! That the air was piercing cold I knew by the delicate frost-pencillings all over the window-panes.

After breakfast I sent to Mrs. Martindale a note of inquiry about Alfred. A verbal answer came from the distracted mother, saying that he was still absent, and that inquiry of the police had failed to bring any intelligence in regard to him. It was still hoped that he had gone home with some friend, and would return during the day.

Steadily the snow continued to fall, and, as the wind had risen since morning, it drifted heavily. By ten o'clock it was many inches deep, and there was no sign of abatement. My suspense and fear were so oppressive that, in spite of the storm, I dressed myself, and went out to call on my friend. I found her in her chamber, looking very pale, and calmer than I had hoped to find her. But the calmness I soon saw to be a conglomeration of feeling. Fear of the worst had frozen the wild waves into stillness.

"God knows best," she said, in a voice so sad that its tones ached through my heart. "We are all in his hands. Pray for me, Agnes, that I may have strength. If he does not give me strength, I shall die."

I shivered; for both in voice and look were signs of wavering reason. I tried to comfort her with suggestions as to where Alfred might be. "No doubt," I said, "he went home with a friend, and we may look any moment for his return. Why should the absence of a few hours so alarm you?"

There was a stony glare in her eyes as she shook her head silently. She arose, and, walking to the window, stood for several minutes looking out upon the snow. I watched her closely. She was motionless as marble. After a while, I saw a quick shud-

der run through her frame. Then she turned, and came slowly back to the lounge from which she had risen, and lay down quietly, shutting her eyes. Oh, the still anguish of that pale, pinched face! Shall I ever be able to draw a veil over its image in my mind?

Suddenly she started up. Her ear had caught the sound of the street bell, which had just been rung. She went hurriedly to the chamber door, opened it, and stood out in the upper hall, listening.

"Who is it?" she asked, in a hoarse, eager undertone, as the servant came up after answering the bell.

"Mrs. Gordon's man. He called to ask if we'd heard anything from Mr. Alfred yet."

Mrs. Martindale came back to her chamber with a whiter face and unsteady steps, not replying. The servant stood looking after her with a countenance in which doubt and pity were mingled, then turned and went down stairs.

I did not go home until evening. All day the snow fell drearily, and the wind sighed and moaned along the streets, or shrieked painfully across sharp angles, or rattled with wild impatience the loose shutters that obstructed its way. Every hour had its breathless suspense or nervous excitement. Messengers came and went perpetually. As the news of Alfred's prolonged absence spread among his friends and the friends of the family, the circle of search and inquiry became larger, and the suspense greater. To prevent the almost continual ringing of the bell, it was muffled, and a servant stationed by the door to receive or answer all who came.

Night dropped down, shutting in with a strange suddenness as some heavier clouds darkened the west. Up to this period not a single item of intelligence from the absent one had been gained since, as related by one of the young Gordons, he parted from him between two and three o'clock in the morning, and saw him take his way down one of the streets, not far from his home, leading to the river. It was snowing fast at the time, and the ground was already well covered. Closer questioning of the young man revealed the fact that Alfred Martindale was, at the time, so much intoxicated that he could not walk steadily.

"I looked after him," said Gordon, "as he left me, and saw him stagger from side to side; but in a few moments the snow and darkness hid him from sight. He was not far from home, and would, I had no doubt, find his way there."

Nothing beyond this was ascertained on

the first day of his absence. I went home soon after dark, leaving Mrs. Martindale with other friends. The anguish I was suffering no words can tell. Not such anguish as pierced the mother's heart; but in one degree sharper, in that guilt and responsibility were on my conscience.

Three days went by. He had vanished and left no sign! The whole police of the city sought for him, but in vain. Their theory was that he had missed his home, and wandered on toward the docks, where he had been robbed and murdered, and his body cast into the river. He had on his person a valuable gold watch, and a diamond pin worth over two hundred dollars,—sufficient temptation for robbery and murder, if his unsteady feet had chanced to bear him into that part of the city lying near the river.

All hope of finding Alfred alive was abandoned after a week's agonizing suspense, and Mr. Martindale offered a reward of five hundred dollars for the recovery of his son's body. Stimulated by this offer, hundreds of boatmen began to search up and down the rivers, and along the shores of the bay, leaving no point unvisited where the body might have been borne by the tides. But over large portions of this, field-ice had formed on the surface, closing up many small bays and indentations of the land. There were hundreds of places, into any one of which the body might have floated, and where it must remain until the warm airs of spring set the water free again. The search was fruitless.

Mrs. Martindale, meantime, had lapsed into a state of dull indifference to everything but her great sorrow. That absorbed her whole mental life. It was the house in which her soul dwelt, the chamber of affliction wherein she lived, and moved, and had her being—so darkly draped that no light came in through the windows. Very still and passionless she sat here, refusing to be comforted.

Forced by duty, yet dreading always to look into her face, that seemed full of accusations, I went often to see my friend. It was very plain that, in her mind, I was an accessory to her son's death. Not after the first few days did I venture to offer a word of comfort; for such words from my lips seemed as mockery. They faltered on my tongue.

One day I called, and the servant took up my name. On returning to the parlor, she said that Mrs. Martindale did not feel very well, and wished to be excused. I had looked for this; yet was not the pang it gave me less acute for the anticipation.

Was not I the instrumental cause of a great calamity that had wrecked her dearest hope in life? And how could she bear to see my face?

I went home very heavy-hearted. My husband tried to comfort me with words that had no balm for either his troubled heart or mine. The great fact of our having put the cup of confusion to that young man's lips, and sent him forth at midnight in no condition to find his way home, stood out too sharply defined for any self-delusion.

I did not again venture to the house of my friend. She had dropped a curtain between us, and I said, "It shall be a wall of separation."

Not until spring opened was the body of Alfred Martindale recovered. It was found floating in the dock at the end of the street down which young Gordon saw him go with unsteady steps in the darkness and storm on that night of sorrow. His watch was in his pocket, the hands pointing to half-past two,—the time, in all probability, when he fell into the water. The diamond pin was in his scarf, and his pocket-book in his pocket, unripped. He had not been robbed and murdered—so much was certain. To all it was plain that the bewildered young man, left to himself, had plunged on blindly through the storm, going he knew not whither, until he reached the wharf. The white sheet of snow lying over everything hid from eyes like his the treacherous margin, and he stepped unheeding to his death! It was conjectured that his body had floated, by an incoming tide, under the wharf, and that his clothes had caught in the logs, and held it there for so long a time.

Certainty is always better than doubt. On the Sunday after the saddest funeral it has ever been my lot to attend, Mrs. Martindale appeared for the first time in church. I did not see her face, for she kept her heavy black veil closely drawn. On the following Sunday, she was in the family pew again, but still kept her face hidden. From friends who visited her (I did not call again after my first denial) I learned that she had become calm and resigned.

To one of these friends she said, "It is better that he should have died than lived to be what I too sadly fear our good society would have made him,—a social burden and disgrace. But custom and example were all against him. It was at the house of one of my oldest and dearest friends that wine enticed him. The sister of my heart put madness in his brain, and then sent him forth to meet a death he had no skill left to avoid."

Oh, how these sentences cut, and bruised,



and pained my heart, already too sore to bear my own thoughts without agony!

What more shall I write? Is not this unadorned story sad enough, and full enough of counsel and warning? Far sooner would I let it sleep, and go farther and farther away into the oblivion of past events; but the times demand a startling cry of warning, and so, out of the dark depths of the saddest experience of my life, I have brought this grief, and shame, and agony to the light, and let it stand shivering in the face of all men.

—*T. S. Arthur.*

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### Flowers and Children.

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At this season, children, like flowers, take a new start. The first days, when even the youngest ones can run out—oh, the delight of the darlings!—run out yourself, even though some pressing duty must be left for a moment, to enjoy it all with them. You like attention, do you, and perhaps once in a while sigh a little over the days when your young friends waited on you so eagerly? You will have a perfect lover in your little son. What though the flowers he brings so eagerly to you are but dandelions and oxeyes, was ever bouquet brought you more lovingly? Take care of them; let him find you treasure his offering just as you used to treasure his father's flowers in the years gone by. Run races with the children; pick up the stones from the lawn, and show them the pale yellow grass beneath, teaching them how bad habits and evil thoughts will lie like stones on the soil of our hearts.

Take care to admire the little treasures your children find. It is in these slight things that we win or repel them. A mother may be very faulty, even grieve bitterly over her hastiness with her children; but, if she wins their love by a thoughtful consideration, such as she would exercise toward her outside friends, she has a hold that even her faults of character cannot loosen.

I wish, through the summer that is coming, we country mothers would resolve to give some special time to out-door life with our children. We have had the troublesome comforts shut up with us all winter, and often our heads have ached, and we have watched the clock for that blessed "bed-time" to come, and, when the darlings have hung around us, telling us, "I love you so, my good mamma," we have felt almost as if we were hypocrites with our weariness and distaste for the noise and romps that are a "needs be" to them.

But now, all is changed. "Can I go out, mamma?" is the first question, and we smile

radiantly, and go to our work with a sigh of relief. But! let us watch ourselves. Let us remember that every moment those little minds are working, those little fingers, lifting first a stone, then pulling a flower, the tongues are going just as fast as ever; so we must teach them to need us out-of-doors, as well as in the house.

When our backs ache, let us though we are "tired to death," run once or twice round the house, with the youngsters, and then, as we rest on the steps, they can stick dandelions in our hair, and find us a wonderful spider to look at, and tell us how they long to spend some day in the woods. You were planning a grown-up picnic, but if you can have only one holiday, give it to your little ones. Have stories ready for the children; let them romp; and be a child with them. You will come home tired; your dress must go straight to the wash, and your hair is tangled shockingly by the stems of flowers and grasses; but each one of these children will remember you, as you shone out to them that summer's day, through their lives. And as your boy grows older, and finds what these sacrifices mean, if you say, "You know I have always hoped you would never smoke," the half-used cigar will be cast aside, for "mother's wish" will be his law.—*Sel.*

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**How to Make Children Lovely.**—There is just one way, and that is to surround them by day and night with an atmosphere of love. Restraint and reproof may be mingled with the love, but love must be a constant element.

"I found my little girl was growing unamiable and plain," said a mother to us the other day, "and reflecting on this sadly, I could but accuse myself as the cause thereof. So I changed my management and improved every opportunity to praise and encourage her, to assure her of my unbounded affection for her and my earnest desire that she should grow up to a lovely and harmonious womanhood. As a rose opens to the sunshine, so the child's heart opened in the warmth of the constant affection and caresses I showered upon her; her peevishness passed away, her face grew beautiful, and now one look from me brings her to my side, obedient to my will, and happiest when she is nearest me." Is there not in this a lesson for all parents? Not all the plowing or weeding or cultivation of every sort we can give our growing crops, will do for them what the steady shining of the sun can effect. Love is the sunshine of the family; without it neither character, morality, nor virtue can be brought to perfection.—*Sel.*

### Gifted in his Nose.

Boys, we wish that not one of you would ever use tobacco in any form. To those who do, we commend the following fine bit of sarcasm as uttered by the old trapper, in the Rev. Mr. Murray's beautiful Adirondack story, published in the *Golden Rule* :—

"Henry," said he, as he stood leaning over the end of his boat, "you come here and we will hist this boat into camp. I dare say I am an old fool, but somehow I sorter feel that this lake shore isn't quite the spot to leave an honest man's boat on. I can remember when to have done it would have cost a man his boat and scalp, too, unless the Lord mercifully kept his eyes open by dreams."

In a moment the boat was placed where the old man wished it, and setting his back against its side for support, he unlaced his moccasins, and thrust his smoking feet out toward the fire. Taking a pipe from my pocket, I filled it with a choice brand of tobacco I had in my pouch, and proffered it to him.

"Thank ye, thank ye, Henry," said he, as he made a motion of rejection of the offer with his hand; "I thank ye for the kindness ye mean in your heart, but if it is all the same to ye, I won't take it. I know it's a comfort to ye, and I'm glad to see ye enjoy it, but I have never used the weed; not for the reason that I had a conscience in the matter, but because the Lord gave me a nose like a hound's, and better, too, I dare say, for I doubt if a hound knows the sweetness of things, or can take pleasure from the scent that goes into his nostrils. But He has been merciful to man—as it was proper He should be—and gave him the power to know good and evil in the air; and smelling has always been one of my gifts, and I could n't make you understand, I dare say, the pleasure I have had in the right exercise of it. For you know that natur' is no more bright to the eye, than it is sweet to the nose; and I have never found a roct or shrub or leaf that had n't its own scent. Even the dry moss on the rocks, dead and juiceless as it seems, has a smell to it; and as for the arth, I love to put my nose into a fresh sile, as a city woman loves the nozzle of her smelling-bottle.

"Many and many a time when alone here in the woods, I have taken my boat and gone up into the inlet where the wild roses were in blossom, or down into some bay where the white lily cups were all open, and sot in my boat and smelt them by the hour, and wondered if Heaven smelt so. Yes, I have been sartinly gifted in my nose, for I have always

noted that I smelt things that the men and women I was guidin' didn't, and found things in the air that they never suspicioned of, and I feared that smokin' might take away my gift, and that if I got the strong smell of tobacco in my nose once, I should never scent any other smell that was lesser and finer than it. So I have never used the weed."—*Sel.*

**The Gift of God.**—"There is no street-cry in Egypt more striking than the short, simple cry of the water-carrier. 'The gift of God,' he says, as he goes along with his water-skin on his shoulder. It is impossible to hear this cry without thinking of the Lord's words to the woman of Samaria—'If thou knewest the gift of God, and who it is that saith to thee, Give me to drink, thou wouldest have asked of him, and he would have given thee living water.'—John 4:10. The Hindoos will frequently, in a dry season, fetch water from a great distance and at great pains, to boil and prepare it for travelers, that they may drink it with safety. The Hindoo will then take his stand in some open road, from morning till night, and offer the water in his jar to any weary and thirsty passenger that comes that way; and as he gives the water, he says, 'In the name of God,' or 'for his sake,' referring to some saint who has left benefactions for this purpose of supplying the thirsty traveler."

We are apt to forget the value of what we have so freely, because we are more fortunate than the dwellers in those dry lands, for fresh, good water is around and about us all the time. Nothing is sweeter to the taste of a thirsty man than pure, cold water; and I remember the story of an Arab who, finding a spring, thought its sweetness so wonderful after the brackish water he was accustomed to, that he filled a water-skin from it, which he carried to the Caliph as the greatest gift he could make him.—*Sel.*

—Before the discovery of America, money was so scarce that the price of a day's work was fixed by act of the English Parliament in 1351 at one penny per day; and in 1314 the allowance of the chaplain to the Scotch bishops (then in prison in England) was three half-pence per day. At this time, 24 eggs were sold for a penny, a pair of shoes for four pence, a fat goose for 2½ pence, a hen for a penny, wheat three pence per bushel, and a fat ox for six shillings and eight pence. On the whole, human labor bought on the average about half as much food, and perhaps one-fourth as much cloth or clothing as it now does.

## Popular Science.

—It has been discovered that a very excellent and durable glass can be made from phosphate of lime.

—Prof. Barrett has found a way to make a telephone out of a wooden tooth-powder box and a tomato can, with a bar magnet and a piece of iron wire.

—Within the last quarter of a century, geologists have reduced the age of the world, as estimated from geological data, from 200,000,000,000,000 to 20,000,000 of years.

—Dr. Koch has proven the germ-theory of disease in at least one disease, that known as splenic fever. He found by microscopical examinations that in this disease there is always present in the blood, and especially in the spleen, a peculiar kind of bacteria; and he was able to produce the disease at pleasure by inoculating healthy animals with the bacteria or their germs.

—Some of the discoveries of Prof. Marsh in the Rocky Mountains are almost too wonderful for belief. The thigh bone of a fossil reptile which he discovered, was eight feet in length. The whole animal alive must have measured at least one hundred feet in length, and could not have been less than thirty feet in height. It has been thought that the elephant was the largest mass of flesh and bones which could move about on dry land; but this huge creature, which bears the formidable name of *atlantosaurus immanis*, was three times as large.

—New discoveries are daily being made of the wonderful powers of the phonograph, which we have previously described. Mr. Edison has now completed an instrument which speaks so loud as to be distinctly audible at a distance of over ten rods; and he has discovered a means of increasing the power of the instrument *ad libitum*. It has also been discovered that the tracings made by the machine, which are the means of reproducing the sounds, can be duplicated by the stereotype process, so that they can be multiplied at pleasure.

It is entirely possible that we may yet have books printed by the phonograph which will give us not only the words of the writer, but every modulation and inflection of his voice as well.

—Prof. Church finds that the leather of bound volumes on the upper shelves of libraries is destroyed by the combustion-products of coal-gas. Chemical analysis has shown that the injury is due to the sulphur contained in the gas, sulphuric acid in very large proportion having been found in leather which had been destroyed in this way.

A chemical agent that will destroy leather cannot be very wholesome for human lungs.

**The Animalcules in Water.**—The first question always asked when a beginner is about to buy a microscope is, "How much does it magnify?" The second as invariably is, "Will it show the animalcules in water?" Let us try to answer the latter question in such a way that the young microscopist may have a clear idea of what he ought to expect.

Pure water contains nothing that can be seen with any microscope ever made, up to the present time; no solid particles, no animalcules, no minute vegetables, no spores, or germs. Good water, such as is ordinarily procured from wells, and such as has been obtained by filtering rain or river water, contains nothing that is visible to any of the microscopes ordinarily used by our ablest scientific men. Over and over again people have brought their instruments to us with the complaint, "My microscope is out of order, for I have carefully examined a drop of water with it, and I can find nothing!" The microscope was all right, but the owner did not know what he ought to expect.

How, then, are we to account for those wonderful pictures of "a drop of water," which we find in almost every popular book on science? Are the animalcules which are shown in them mere creatures of the imagination, which have no real existence?

The creatures ordinarily pictured as "the inhabitants of a drop of water" are in almost all cases the inhabitants of stagnant pools, and to see very many of them requires no microscope at all. More than this, however; where a so-called *drop* is shown, the book-maker almost always manages to give what would be the full complement of inhabitants for some hundreds of drops, not with the intention of deceiving, but for the purpose of making his book or picture more interesting.

—*Young Scientist.*

# THE HEALTH REFORMER

BATTLE CREEK, MICH., MAY, 1878.

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

TERMS, \$1.00 A YEAR.

## A Grand Hygienic Dinner.

THE grandest hygienic festival ever held was that given upon the occasion of the dedication of the new buildings of the Sanitarium, a full description of which is given on another page. The dining-room and gymnasium were purposely so planned that they could be thrown together, making a grand dining-room forty by fifty feet square. This capacious room was prepared for two hundred guests, which was as many as were really expected; but so large a number came that the tables were cleared and reset for the third time before all were accommodated. At least seven hundred persons took dinner at the Sanitarium on the opening day.

The bill of fare presented an inviting array of various preparations of fruits, grains, and vegetables, from which the guests partook heartily. The tables were ornamented with bouquets and tastefully arranged pyramids of oranges, bananas, nuts, and apples. They looked very attractive indeed, and were gracefully served by the efficient corps of young ladies who acted as waiters on the occasion.

All who were present at the dinner were convinced that people are not starved to death at the Sanitarium. The occasion will be long remembered by both guests and managers as a most happy and successful one.

## Michigan State Board of Health.

WE are under obligations to Dr. H. B. Baker, Secretary of the State Board of Health, for an abstract report of the recent annual meeting of the Board, from which we condense the following very interesting paragraphs:—

The Annual Address of the President of the Board, Dr. R. C. Kedzie, constituted the

chief feature of interest in the meeting. His subject was "The Work of the State Board of Health." In speaking of the efforts to impart information and gather statistics bearing on the public health, he said the results were most gratifying. Not only sanitarians but the people at large are grasping that very important and revolutionary idea, the possibility of the prevention of disease and death; that many diseases may be prevented altogether, or that when they do appear they may as certainly be stamped out as a forest fire may be extinguished, or they may be walled in like an inundation. A people who fully grasp the idea that half of their sickness and death may be avoided, as truly and really as they may prevent the destruction of their crops by cattle by proper fencing, have taken a long stride in State medicine. This fact ought not to be lost sight of, that each person is in the broadest and fullest sense healthy and safe only as every person about him is healthy and safe.

In outlining the future work of the Board, the Doctor said that the law now says that the Board shall from time to time recommend standard works on hygiene, to be used as text-books in our common schools. He recommended that this subject be referred to a committee to report to the Board at an early day, either by recommending standard works on hygiene, or by showing that no proper books have yet been written.

## PRESERVATION AND PREPARATION OF FOOD.

In his opinion the question of food and its preparation for human use has more vital relations to the public health and welfare than all other physical causes combined. If our people can be taught to preserve and prepare their food so as to secure the best dietetic results, preventive medicine will have won a

grand victory. It could then no longer be said that "our appropriate monument would be a frying-pan, and our epitaph saleratus."

#### SANITARY CONVENTIONS.

He suggested the holding of sanitary conventions in different parts of the State to discuss sanitary subjects, and to bring together dealers in sanitary appliances, sanitary experts and the people generally who need instruction in sanitary work. He hoped to see the day when these questions which lay hold on life shall be as freely discussed by the laity as they now are by experts in sanitary science. If such conventions were held, the press would distribute widely the truths brought out. The State Board of Health needs recruits to win victories in sanitary science in every hamlet in the State, but no recruits from other quarters can equal in widespread influence the secular press. In carrying out any sanitary reform we need and must have the aid of the women of our State, for "woman makes the home." The work of sanitary conventions must be confined to sanitary subjects. All questions of party politics, denominational theology, and of curative medicine, must be rigidly excluded.

In closing, he stated that the office of the Board is not to convulse the community with lightning shock, but to let in the sunlight of truth, which, silent as the footfalls of time but resistless as destiny, shall mold and fashion the very conditions of life in our State.

The recommendations made by the President were separately considered, and committees appointed to carry them into effect.

#### TOMATOES AND CANCER.

Dr. Hitchcock made a report on this subject, which had been referred to him at a previous meeting. He based his conclusions on replies of correspondents of the Board throughout the State. There seemed to be no evidence showing that tomatoes cause cancer; and the source of the notion was traced to a quack professor in an institution that sold diplomas in Philadelphia, who claimed to have found cancer cells in the tomato.

Dr. Kedzie reported an analysis of water received from Climax, where cases of sickness had resulted from its use. The water was

loaded with organic matter. This was probably due to slops thrown near the well.

Dr. Hitchcock also made a report on "Wooden Sidewalks," which gave evidence that disease may be produced by the emanations from the decaying wood of sidewalks, wooden pavements, woodpiles, and similar sources.

The Secretary's report showed that a very large amount of work is being done for the sanitary improvement of the people of Michigan. We sincerely hope that our Board of Health may be so assisted by proper legislation that they will be able to accomplish the grand objects which they have in view,—the prevention of disease and the consequent suffering and loss to the community.

#### Voice Hygiene.

THE care of the voice is a very important part of the physical education which is almost always neglected. Thousands of people who possess many other most attractive qualities have voices of a most repulsive character, so harsh and rasping, or shrill and piercing, as to be intolerable to a sensitive ear. A melodious voice is one of the most essential qualifications for a successful public speaker. It is not less essential in the private parlor or drawing-room.

Male voices are expected to be somewhat coarse and rough on account of the harsh usage to which they are of necessity accustomed, in working with noisy machinery, etc.; but the voices of the gentler sex are naturally expected to be soft and melodious. There must be few, however, who have not experienced the unpleasant revulsion of feeling caused by the coarse or shrill, unmusical tones of a lady in other respects most attractive in manners and accomplishments.

It is not supposable that all can possess voices equally attractive or melodious; but there is no doubt that most of the deficiency in this respect is the result of carelessness. If young ladies would devote as much time to the cultivation of their voices as they do to the arrangement of their head-gear, they would possess themselves of an accomplishment far superior to music, or to painting, modeling, or any other of the ornamental arts. The subdued melody and rich cadence of

a well-trained voice are qualities which give to their possessor no small advantage.

Dr. Hale asserts that the shrill, unmusical quality is a predominating trait in the voices of American women, and one which is decidedly characteristic. He states that in foreign cities the peculiarity becomes more apparent from the sharp contrast with the softer and more musical tones of the women of other countries. The cause of much of this coarseness he finds in the common practice in schools of making students "read up." The weak lungs of the child are strained to fill a room too large for their capacity, and the voice is raised in pitch to render the articulation more distinct. In this way a school tone is formed, which soon becomes permanent, and the voice is irretrievably spoiled.

Parents and teachers cannot be too careful to set children a good example in this particular, as they are quite sure to imitate their elders. Much pains may be taken with profit to cultivate in children, whose voices are being formed, qualities which will add so greatly to their enjoyment and influence in life.

#### The How of It.

No little interest has been felt in the study of the problem, Why do people die? Physiologists have apparently settled this question very satisfactorily at last by showing that death is occasioned by the gradual wearing out of the vital machinery. The old theory of a gradually wasting fund of vital force stored up in the body was long ago abandoned as untenable in the light of modern science. But a Dr. Bevan has lately come to the surface with a great amount of self-confidence, maintaining that this very logical position is all an error. He asserts, without producing a shadow of proof, that every man possesses a certain definite amount of force which is locked up in his medulla oblongata, whence it is distributed to the whole body and used up as required.

The Doctor maintains that the reason why imbeciles and the weak-minded inmates of insane asylums attain so advanced age is because they make such small drafts upon their reservoir of force.

The *Scientific American* suggests that the

theory is much like the Keely-Motor humbug, in which it was claimed that an incredible amount of force was stored up in a pint of water, the same being extracted and utilized by the wonderful machine, although no one could tell how the force got into the water, nor explain the process by which it was got out.

The Doctor omits to explain when, or where, or how, the immense amount of vital force necessary to run the human machine for half a century or more is condensed into the narrow limits of the medulla oblongata. He also neglects to advance any rational explanation of how the force thus stored is utilized.

Such a theory as this is directly opposed to the deductions of modern biological studies. It gives no countenance to the generally accepted physiological truth that the waning forces of the system are daily replenished by proper food and rest. On the other hand, it affords the strongest possible support, if it could be proven, of the genuineness of the claims of magnetic doctors, and quacks who claim to be able to restore lost vitality by the use of their nostrums. But as no proof is advanced in favor of the new theory, we shall adhere to the old doctrine of vital force as the result of organization, dependent in the human body upon the integrity of the tissues.

#### Quack Medicines.

THE sale of quack nostrums is undoubtedly one of the greatest evils of the day. It is at the same time most astonishing that so glaring an outrage upon common sense and common decency should be tolerated, much less supported. But such is the state of things, not only in this country, but in England and nearly every other country of the globe. It seems to be true that all a man needs do in this country to make himself rich is to spend a little money in advertising some new name, attributing marvelous properties to the compound for which it stands, and speedily the gold will begin to pour into his pockets. The quack-medicine trade, like the blue-glass mania, which was really one branch of the quack-medicine business, an ingenious new departure, may fairly be considered as a "foolometer," which accurately gauges the

degree of stulticulture attained by the civilization of the day.

The *Sanitarian* states that at a recent convention of pharmacists in England it was proposed to take legal steps for limiting the "wholesale poisoning of the public by patent medicines. It was proposed that even if it be impossible altogether to suppress the reaction of dishonest quackery upon vulgar superstition, the venders of nostrums be compelled to divulge the composition of their wares, and prevented from publishing mischievous and mendacious advertisements concerning them. Among the examples cited, including sundry 'hair restorers,' which, in direct contradiction to their advertised pretensions, contain poisonous quantities of lead, the most glaring one is a largely certificated 'Sure Cure for the Opium Habit,' which is found on analysis to give two grains of morphine to the dose, recommended to be taken thrice a day. It is scarcely to be expected that American apothecaries, most of whom derive the larger part of their income from the sale of these secret nostrums, will join in the crusade preached by their British cousins; but it would be well if the American public were taught that ninety-nine hundredths of the proprietary medicines which flood the market are the products of uneducated impostors, and are either wholly inert or positively deleterious."

### Florida for Consumptives.

WE are constantly asked by individuals who suspect that their lungs are affected, "What do you think of Florida for consumptives?" What observation we have had on the subject has led us to believe that the practice of sending consumptives just on the verge of the grave to Florida, or to any other distant locality, is a most unwise and almost inhuman thing. The prospects of recovery are not improved in the slightest degree by such a course, and the invalid is made wretched by the annoyances, inconveniences, and exposures of travel among strangers, when he ought to have the comforts of home and the solace of friends to lighten his sufferings and smooth his pathway to the grave.

We have even been led to doubt whether there is any real efficacy in the climate of Florida, Texas, Tennessee, or any other Southern State in cases in which real tuberculosis is fully developed in the lungs. We should consider very seriously before advising a patient to leave all the comforts of home and friends for the sake of a possible advantage to be derived from the air of a distant clime when there were positive evidences of the presence of an organic affection of the lungs. We heartily concur in the following remarks by Dr. Nichols, editor of the *Boston Journal of Chemistry* :—

"Well, then, we say to physicians, Pray do not send your patients suffering from true phthisis to Florida, especially those in whom the disease has passed the first stages, and softening or disintegration of lung tissue has occurred. You cannot save life, or much prolong it, by this course. It is certain you will add greatly to the discomfort and peril of your patients, and crush out *hope*, which like a good angel usually occupies the mind of the invalid until the last hour. This transporting of exhausted invalids in chairs and on couches to Florida is all wrong, and too strong a protest cannot be entered against it. The saddest of all sights seen in the South is that of poor consumptives, weak, dejected, pale, with an incessant tormenting cough, conveyed by the assistance of friends from one point to another, with the view of reaching one supposed to be more favorable. It is a fearful thing to die among strangers, away from home, from friends, and early associations, and yet scores die every year in Florida who ought never to have left their Northern homes.

"We dare not say that no case of genuine inherited tuberculosis was ever cured by a visit or residence in Florida, but we do dare to say that, if there have been such cases, they are extremely rare. The stage of this disease at which it may be safe to transport patients is before the full development of tubercle, or before the stage of suppuration is reached. The sons and daughters of consumptive parents, in whom indications of disease are discoverable by acute physicians, may be sent to Florida to reside for several years, and this may result greatly to their advantage, and may prolong life.

"A class of invalids suffering from what appears to be true phthisis are, as a whole, greatly improved by a residence in Florida; we refer to those afflicted with bronchial and catarrhal affections. Superficial diagnosis does not clearly decide the exact nature of these ailments; there is cough, impairment of appetite, pains in the chest, difficulty of respiration, emaciation, perhaps night sweats, and with all these alarming symptoms *there is no tubercle*. Here we find an immense difference in the tendencies and curability of two affections, which, in symptoms, almost exactly correspond; one is curable by change of climate, and the other generally is not. The patients who are supposed to be dying of consumption at the North, and who are restored by a residence in the South, are not usually afflicted with true tuberculosis; they are suffering from catarrhal or bronchial difficulties, and hence the relief. The obvious duty of physicians is to carefully diagnose their patients before sending them to warm climates; and, if advanced tubercle exists, keep them at home. If, on the other hand, there is the absence of hereditary taint, and no special indications of tubercle, send them to Florida, if they have means of securing the comforts there which invalids require."

**Drinking Sea-Water.**—A writer claims that sea-water can be used with perfect impunity if the system is made accustomed to it by degrees. We have no faith in the statement, since it would necessitate the use of salt in doses which are absolutely poisonous, saying nothing of the other noxious ingredients of sea-water. Every quart of sea-water contains an ounce of salt. Half an ounce of salt is sufficient to produce violent vomiting and purging, and to put the system in a general uproar. If taken into the blood, it would destroy half the red corpuscles, or desiccate them so as to render them useless.

Most people require at least a quart of water a day, and many want even more. So we are justified in pronouncing the statement referred to unreliable, even though it is supported by a fact said to be authenticated, that the inhabitants of many small islands of the sea where rain falls rarely, are accustomed to use sea-water freely without

injury. We advise no one to try the experiment of making himself accustomed to brine as a drink, as he would be certain to ruin his digestion in the attempt.

**Fresh Air for Babies.**—Scores of mothers are sorrowfully watching the gradual fading out of the young lives of their little ones, when they hold in their own hands the power to save them if they will. Foul air kills more babes than bad feeding, or at least as many, for thousands of those who apparently die of bad diet would not succumb so readily were it not that their constitutions are so weakened by the lack of pure air that they quickly fall victims to any disturbing influence. Dr. Van Bibber quotes in the *Sanitarian* a case which well illustrates the beneficial effects of fresh air, in abundance, for infants.

"I will tell you what happened to a neighbor of mine last summer. Mrs. M. had a sick infant about six months old. My daughter and myself went up one day to see if we could do them any good. It was in the hottest part of July. The same room served the family for kitchen, sitting-room, and the baby—as sleeping room. The room was a long, narrow one, extending east and west, with two doors, one north, one south, but not exactly opposite. The cooking-stove was in the northwest corner of the room, the baby cradle in the northeast. One door they kept always shut, the other partially so, for fear the child might catch cold. The poor little thing was panting and gasping for breath, the mother pale and black under the eyes; the air of the room fetid and miasmatic.

"'What doctor attends that child?' 'Dr. D. Before him we had Dr. L. Then we tried Dr. H. I think we'll discharge him and call in Dr. N.' 'Mrs. M.,' I answered, 'that child is dying from want of fresh air. Did not the physicians employed suggest that remedy?' 'No, sir, not one; they did nothing but give it physic.' Then I took the husband out on the little porch (for the air inside was making me sick) and told him in plain Anglo-Saxon what I thought of the case and of the restorative effects of fresh air, and why country infants had so much better chance for life in summer than those of



a city, etc. He listened with evident attention, and said he would act on it, and a day or two afterward we walked up again and found both doors wide open, and the child evidently on the mend. The last time I was there the doors were still open, the child was rosy and hearty, the mother had recovered her good complexion, and all the other children looked gay and hearty."

**Bottled Air.**—During the Centennial Exhibition, specimens of air from the Exhibition grounds, and various other localities, were collected and carefully bottled for examination by the chemists of 1876. The greatest pains was taken to prevent any possibility of contamination by admixture with the external air. We have not infrequently entered rooms, sitting-rooms, parlors, and sleeping apartments, in which the air was almost as effectually bottled as that referred to. We imagine that if the chemists of a century from to-day could examine the air which many of us breathe they would be surprised at the toughness of the human race. It seems to us a grave oversight that specimens of air were not taken from some of our schoolhouses, public halls, churches, and other public buildings, to give the chemists and the sanitarians of the future an opportunity to see what advancement the century will have witnessed in the science of ventilation.

**What Kills.**—We have so often maintained that hard work seldom kills, that even severe mental labor, by far the most taxing of all work, is consistent with good health and long life, that we are glad to quote the following paragraph by B. G. Northrop, of Connecticut:—

"In the school, as in the world, far more rust out than wear out. Study is most tedious and wearisome to those who study least. Drones always have the toughest time. Grumblers make poor scholars, and their lessons are uniformly 'hard' and 'too long.' The time and thought expended in shirking would be ample to master their tasks. Sloth, gormandizing, and worry kill their thousands, where overstudy harms one. The curse of Heaven rests on laziness and gluttony. By

the very constitution of our being they are fitted to beget that torpor and despondency which chill the blood, deaden the nerves, enfeeble the muscles, and derange the whole vital machinery. Fretting, fidgeting, ennui, and anxiety are among the most common causes of disease. On the other hand, high aspiration and enthusiasm help digestion and respiration, and send an increased supply of vital energy to all parts of the body. Courage and work invigorate the whole system, and lift one into a purer atmosphere, above the reach of contagion. The lazy groan most over their 'arduous duties,' while earnest workers talk little about the exhausting labors of their profession. Of all creatures, the sloth would seem to be the most worried and worn."

**Health and Talent.**—The *Home Journal* has the following very truthful paragraph, which is well worthy of careful consideration by those who ignore the laws of life and health as though it were undignified or degrading to observe them:—

"It is no exaggeration to say that health is a large ingredient in what the world calls talent. A man without it may be a giant in intellect, but his deeds will be the deeds of a dwarf. On the contrary, let him have a quick circulation, a good digestion, the bulk, thews, and sinews of a man, and he will set failure at defiance. A man has good reason to think himself well off in the lottery of life if he draws the prize of a healthy stomach without a mind, rather than the prize of a fine intellect with a crazy stomach. But, of the two, a weak mind in a herculean frame is better than a giant mind with a crazy constitution. A pound of energy with an ounce of talent will achieve greater results than a pound of talent with an ounce of energy."

**Cure of Port-Wine Marks.**—It has been supposed that the curious disfigurements known by the name of port-wine marks were incurable; but several English surgeons claim to have succeeded in effecting a complete cure without a scar, by making numerous incisions through the skin of the part in different directions.

## Questions and Answers.

**Holman's Fever and Ague Liver-Pad.**—A correspondent wishes to know our opinion of the wonderful article which bears the above name. We have never seen the "liver-pad," and know nothing but what its advocates say of it in the newspapers. Judging from this alone, we have no hesitation in pronouncing it an unmitigated swindle,—a mere humbug. A certain long-eared animal is easily distinguished by his voice, no matter under what guise he may come; a wolf's savage howl betrays him most certainly, no matter how thick a coat of wool he may carry as a disguise. So a quack is always known by his extravagant pretensions. It makes no difference how much pious cant he may use in dressing up his meretricious wares, or how much truth he may mingle with the falsehoods which he tells, his unwarrantable statements reveal him as a charlatan, and one utterly unreliable. By evidence of this sort we have no hesitation in characterizing the "liver-pad" as an ingenious "money-catch" devised by unscrupulous knaves to swindle the people, the sick and suffering, out of their hard earnings.

**Graham Crackers — Uterine Diseases, etc.**—R. E. V. asks: 1. Can you tell me how to make tender graham and oatmeal crackers without shortening? 2. Are you usually successful in treating uterine diseases? if so, of how long standing, and what are some of the principal diseases? 3. Are trailing arbutus and sweet-fern teas deleterious to the system when drank for rheumatism, stomach diseases, etc.?

*Ans.* 1. Very tender and palatable crackers can be made of either graham or oatmeal alone, or of the two mixed; but a very large amount of kneading is required; and for a cracker which will keep tender for any length of time, baker's machinery is required in the manufacture. Crackers which are very toothsome and tender when fresh may be made according to recipes given in "Healthful Cookery," for sale at this Office. 2. Yes; diseases of the sort mentioned, and of many years' standing, of twenty years' or more in some cases, and of all classes, are treated with success at the Sanitarium. 3. Whether the decoctions mentioned would be very damaging

to the system or not would depend on the amount taken, and the strength. We do not recommend them.

**Catarrh and Torpid Liver.**—W. S. M., New Haven, inquires, 1. Should the nasal douche be discontinued when used for catarrh, if it produces much pain and seems to do no good? 2. What is the cause of the frequent occurrence of giddiness, when standing?

*Ans.* 1. Discontinue the douche by all means, as applied with the fountain syringe. Use instead a slightly saline solution, drawing the water into the nostrils from the hand. The following is a very good solution: Salt, one dram; glycerine, one-half ounce; carbolic acid, ten drops; water, one pint. You are mistaken in understanding us that catarrh cannot be cured. It can be cured, but considerable time and a combination of favorable conditions are often required. 2. You are undoubtedly suffering from inactivity of the liver, and perhaps imperfect digestion.

**Sleeping-Rooms.**—J. F. S., New Haven, wishes to know which is better, to sleep in a large north room with three windows, or in a small west room with one window.

*Ans.* The question in the mind of our correspondent seems to be, Which is preferable, deficient sunlight or imperfect ventilation? Neither one is good, and it is possible that neither need be suffered from in this case. The absence of the direct rays of the sun may be atoned for by the use of a fire in the north room sufficiently often to keep it dry and wholesome. In the west room, all danger may be obviated by securing ample ventilation. A small room is just as healthful as a large one, provided the arrangements for ventilation are such as to secure a change of air sufficiently often to keep it pure.

**Toothache.**—F. H., Minn., asks what to do for a swollen face caused by toothache and taking cold.

*Ans.* The first thing proper to do is to consult a good dentist and have the offending member properly treated. If possible, the tooth should be saved, even at the expense of several dollars; but if it cannot be, it should be at once extracted. Temporary relief, and perhaps entire relief for some time, may usually be obtained by the application of hot fomentations, a rubber bag filled with hot water, heated sand, salt, or corn-meal applied in a loose bag, or some other similar appliance.

# DIETETICS.

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

## Hot Bread.

THE following from the *Boston Journal of Chemistry* so well answers an inquiry which arises not infrequently that we are glad to copy it:—

"A correspondent sends us the following query: 'Physicians often recommend for sick people oatmeal or graham pudding, made by stirring the meal into water and boiling a few minutes, as one of the first things to be eaten when the stomach will not bear hearty food. Why is the meal thus prepared any more easily digested than new bread or hot muffins, which are considered unhealthy? Is not the same chemical change necessary in the one as the other, which can only take place by standing several hours after cooking?'

"The two cases are by no means similar. The oatmeal or graham flour is made digestible by boiling, the starch granules being ruptured, so that their contents are more easily acted upon by the digestive fluids. In the making and baking of bread, the same change is accomplished. The difference between hot new bread and that which is older is essentially the same as between 'heavy' and 'light' bread. It is its 'lightness,' or porosity, which gives to bread its ready digestibility. When new, it is softer, from the steam of the water it contains; and this makes it difficult of mastication and liable to form a close and cloggy mass, which, on passing into the stomach, is less easily penetrated and acted upon by the gastric juice. By cooling and drying, it becomes firmer and more friable, so that it is more thoroughly mixed with the saliva in the mouth, and goes into the stomach in better condition for the process to which it is to be subjected there.

"If the bread is hot enough to melt the butter eaten with it, this makes the matter worse. The melted grease fills up the pores of the bread, and interferes with the action of the saliva and gastric juice. The fatty matters in pastry are objectionable for the same reason, and also on account of the chemical changes which they undergo in the oven.

"Bread becomes more digestible by toasting, chiefly because it is made dryer and firmer,—that is, if the toasting is properly

done. The slice should be rendered crisp throughout its entire thickness. If it be merely scorched on the surface, as often happens when the slices are thick and Bidly is stupid or in a hurry, the interior is merely softened and made like new bread, and consequently less digestible.

"What English people call 'bread jelly' is a light and nourishing article for weak stomachs, in some cases preferable to the oatmeal or wheat porridge. It is made by steeping stale bread in boiling water, and passing it through a fine sieve while still hot. It may be eaten alone, or after being mixed and boiled with milk.

"While on this subject, we may remark that oatmeal, cracked wheat, and similar boiled breakfast dishes, often become more or less indigestible from being 'bolted' in the usual Yankee style. They are soft, and 'go down' easily, and are shoveled or spooned into the stomach, with no delay in the mouth *en route*. They need mastication as really as beefsteak does,—not to save one from choking (which many people seem to suppose is the sole reason for chewing), but to mix them thoroughly with saliva, which is a *digestive* agent and not a mere lubricant to expedite the passage of dry food down the œsophagus. A friend of ours was lately complaining that oatmeal did not agree with him, and we found on inquiry that he was in the habit of eating it in this hurried way, without insalivation. He was much surprised when told that he ought to 'chew' or at least to detain it a moment in the mouth before swallowing it; but after a brief trial he admitted that he had no more trouble in digesting it. If the oatmeal or wheat is not thoroughly cooked, it is all the more important that it should be masticated, as the half-softened grains offer considerable resistance to the digestive fluids."

**Bread Recipe.**—A correspondent sends us the following recipe, which is said to make excellent bread: Scald two cupfuls of corn-meal. Thin slowly with cold water and add eight cupfuls of graham flour. Add a tablespoonful of sugar and a pint of yeast. "Salt risings" is best. A teaspoonful of salt may be added for those who consider that condiment indispensable.

# FARM AND HOUSEHOLD?

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

**Cinders in the Eye.**—It is a very useful thing to know how to remove cinders from the eye, since it is very important that they should be removed as quickly as possible, even before medical aid can be summoned, so as to prevent inflammation. Here are three ways:—

1. Draw out the lower eyelid, and drop into the eye a few flax seeds. By rolling the eye about, the tears which accumulate will speedily remove both seeds and cinders.

2. Draw out the upper eyelid and inject under it, from the outer side, a gentle stream of tepid water from a syringe.

3. Roll the upper lid over upon a pencil or other convenient instrument, and remove the cinders with a small sponge or cloth.

**Sulphuric Acid and Weeds.**—A correspondent of the *Journal of Horticulture* (English) writes: "Take an old blacking bottle, with a wire round it to carry it by, and a stick to dip with. The stick should not be pointed, but should be notched round for an inch or two at the end, the better to hold the liquid. Just one drop quite in the heart of the plantain is sufficient to cause death, and the notched stick will contain at one dip enough to destroy three or four plants. If the acid is good, the work of death can be both seen and heard, for the vitriol hisses, and it burns up the plantain in a moment. A row of plantains a foot wide sprang up on a lawn here, where an iron fence formerly ran. The owner, seeing at a place he visited the good effect of vitriol, put the hint in practice. The plantains were killed in an hour, and have never appeared again. It was three years ago, and it is impossible to recognize the line of the fence. The acid completely burns the roots out. I have tried it on large dandelions with the same result. One of the young gentlemen here amused himself by hunting out the largest thistles he could find to experiment on. The vitriol completely killed them, by eating the roots out. One drop will do. Care is required that it does not touch the skin, boots, or clothes. It is not safe in the hands of children; but a man or woman with ten

minutes' practice can kill plantains much more quickly than any lad can eat gooseberries."

**Healthful Beds.**—Germany excels any other country with which I am familiar in the cleanliness of its beds. It is as much a part of yearly house-cleaning with them to have the hair removed from the mattress, to have it well beaten and sunned, and the cover washed, as it is with us to have the carpets whipped and freed from their disease-begetting dust. I grant that it would be a difficult and expensive undertaking for an American housekeeper, for skilled laborers are rare, and when found must be well paid, as they should be. Knowing the obstacle, then, in the way of thorough renovation of our beds, we should take all the more care to protect and air them. Every bed should have especially made for it, the size of a tick, a white tacked comforter, not too thick, so as to be unmanageable in washing; over this the sheet is spread. Every bed in daily use should be subjected to the purifying rays of the sun at least once a week, and should be left open daily for the reception of air and light some time before being made up. Beds not frequently used are often found very musty and disagreeable to guests. The parlor beds, that swallow their own contents by a magic touch, are fair without, but in time, for the lack of proper airing, they become foul within.—*Sel.*

**How to Save Time.**—There are many ways in which a busy woman may save that which is more valuable to her than any other commodity, viz., her time. One is, by never leaving a room in confusion at night. The family sitting room presents an appearance of cheerful disorder when the circle breaks up for the evening. Take a few moments then to lay the books straight on the table, set the chairs in their places, gather up shreds and patches from the floor, and put newspapers into the wall-pocket. Every living-room should be provided with a wastebasket for odds and ends of paper, a scrap-bag for bits of thread and ravelings, and a wall-pocket, or two of them, for letters and papers. It is much pleasanter in the morning to come down to a neat and tidy room than to one which reminds us by its disorder that work is never done.—*Sel.*

## News and Miscellany.

—Two new planets have been discovered, making 181 of the minor planets now known.

—More snow fell during the past winter along the sunny shores of the Mediterranean than for many previous years.

—Mr. William Orton, President of the Western Union Telegraph Company, died at his home in New York, April 22.

—Mrs. Tilton has lately made a confession, averring the truth of the charges against Beecher, who stoutly denies the charge.

—The transit of Mercury, which occurred on May 6, was observed with great interest by thousands of scientists and amateur astronomers.

—The time given the Cubans to lay down their arms having expired, active operations will be begun against all who are found still armed.

—A terribly destructive storm swept through the Western States and Territories on the 21st and 22d ult., destroying many lives and much property.

—The Keely Motor has finally been completely exposed. The enormous pressure produced was obtained by the use of compressed air concealed in an iron tube.

—The Great Eastern, the largest ship ever constructed, is capable of carrying 10,000 soldiers with their baggage. It would prove very useful to England as a transport ship in case of war.

—A female ex-slave in Ohio brought an action to recover damages from her captor, who resold her into slavery, and has recovered \$2,500. It is not improbable that this case will form a precedent for many similar suits.

—The slave traffic still continues in the region bordering on the Congo River. A British gunboat recently captured a brig which carried one hundred persons who had been captured and baptized, and were being transported for sale.

—Nothing is as yet clearly defined respecting the settlement of the Eastern Question. Russia doubtless thinks it pretty hard to win a victory at an immense cost and then be compelled to fight for the privilege of peaceable possession.

—Iron-clads are going out of fashion. It is found that no armor can be made which will wholly protect a vessel from the terrific force of modern cannon-balls and torpedo explosions, without at the same time rendering the vessel so clumsy as to be useless.

—The people of Iceland are fearing another volcanic eruption, similar to that which devastated the island a few years ago, as the air has recently become very warm and close, and subterranean rumblings have been heard, accompanied by showers of ashes.

—Recent geographical surveys show that the Aconcagua peak is the highest in South America, being nearly 24,000 feet above the level of the sea. It would be pretty difficult to cook at such an altitude, as water would boil at 172°, or 40 degrees below the boiling point at the level of the sea.

—An ingenious Western man has invented a sailing railway car in which a speed of forty miles an hour can be attained. This novel vehicle has already been in use for three years, and is found to be eminently successful and economical. Sailing carriages were in use in Holland more than two hundred years ago.

—Type-setting in Japan is a tedious business. The Japanese have a character for each word, instead of using alphabetic characters; consequently, instead of sitting at a stand at work with his characters all within reach, the compositor is obliged to wander about an immense room searching through the 50,000 word characters for the one required.

## Literary Notices.

TOLEDO MEDICAL AND SURGICAL JOURNAL.

Toledo: Medical Press Association.

This young medical journal, though now only in its second volume, is ably conducted, and readable, and will undoubtedly receive a fair share of patronage, as it deserves. The No. for April is well filled with interesting and practical matter. Among other important articles it contains an original communication on submersion in hot water as a remedy for contused and lacerated wounds, as practiced by Dr. Frank H. Hamilton at Bellvue Hospital. A case cited gives remarkable evidence of the superiority of this kind of treatment.

DEFECTS OF HEARING AND OTHER EVILS. Atlanta: A. W. Calhoun, M. D.

This little pamphlet is a reprint of a paper read before the Medical Association of Georgia. It contains much useful information on "Defects of Hearing and other Evils the Result of Enlarged or Hypertrophied Tonsils." The author is professor of diseases of the eye and ear in Atlanta Medical College, and is evidently a man of large practical experience. His reported cases show distinctly the need of, and the benefit to be derived from, a proper operation in the class of cases described.

HONEST MONEY. By T. M. Nichol. Chicago: Honest Money League of the Northwest.

The author thus sets forth the aims of his production: "This pamphlet presents an argument for a redeemable currency, and attempts to answer candidly some of the most popular arguments of the inflationists." How the writer succeeds in his attempt we leave for the decision of those who are wise on this subject.

## Items for the Month.

We are pleased to learn that Eld. James White, former editor of this journal, and one of its strongest supporters, is quite rapidly improving in health. He hopes to return to Michigan by next fall.

The article on the treatment for intermittent fever, in this number, is an essay read by the writer, Dr. Sprague, before the Medical Society of Battle Creek, at a recent meeting. The reading of the paper was followed by a very interesting discussion.

Dr. M. G. Kellogg writes us that the new Sanitarium now in process of erection at St. Helena, Cal., will be ready for patients by July 1. We wish for the California Sanitarium as successful an opening as was enjoyed by the institution at Battle Creek.

We have on hand a few copies of the Family Health Annual for 1878, which are not at all out of date, and yet they are offered at one-half the regular price. This is a fine chance for those who want to give their ignorant friends an opportunity to learn something of hygienic truths. There are a few of the "Special Edition" left. This is a very handsome thing, and almost anybody can afford to buy them at the rate of ten for a dollar, at which they are now offered.

Very soon all prudent housekeepers should begin their fruit-canning operations, so as to have an abundant and varied store of this wholesome and nutritious class of foods. Many hesitate about spending time and money in canning fruit, on account of the risk of losing their money and labor; but there is no risk if the work is done properly and thoroughly. Twenty-five cents could not be more profitably invested than in the purchase of a copy of "Healthful Cookery," which gives full directions for canning and preserving fruits of all kinds, together with a large amount of other useful information.

This is the season of the year when all should begin to look sharply after sanitary matters. Every one who has charge of a house premises should feel an interest in the subject of disinfection. More people,—men, women, children, and babies,—will die this summer from filth than from any other cause. Those who wish to keep well and to preserve the lives of their families or friends would do well to buy a copy of the HOUSEHOLD MANUAL, and post up on sanitary matters. The book contains information on a hundred other subjects which ought

to be familiar to every one. The book ought to be in every family in America. Price, bound, 75 cts., post-paid.

We are pleased to note that our friend Rev. T. F. Hicks, of Wilmington, Del., has just completed his studies in the medical department of the University of Pennsylvania. Dr. Hicks has been engaged in the study of medical subjects for the last ten years, and is now fully prepared to enter upon a career of successful practice. The Doctor graduated first from the Hygieo-Therapeutic College, now defunct, but wisely thought it best to supplement his studies by a course under more favorable opportunities for obtaining a thorough medical education.

We would candidly advise all who wish to become fully competent to minister to the needs of suffering humanity not to rest contented with a superficial or one-sided education, but to go and do likewise. The Doctor has our best wishes for his abundant success.

The Sanitarium entered upon its new era with most flattering prospects. On the day of the dedication the first citizens of Battle Creek gathered by hundreds in the capacious parlors of the institution, in company with other invited guests from abroad. The new quarters are so commodious, convenient, and cheerful, that a healthy atmosphere seems to pervade the place. Indeed, the very air seems invigorating and health-giving in its freshness and purity, coming as it does from the green fields and meadows, shady groves and sparkling lakes, which are spread out in the pleasant country adjoining the Sanitarium grounds.

The number of patients at the Sanitarium, though already large for this season of the year, is rapidly increasing, and the present prospect is that even the increased facilities and room will prove to be inadequate to accommodate the multitudes of patients who are expecting to visit the institution this summer.

A beautiful thirty-foot fountain has been presented to the Sanitarium, and will soon be set up and in running order.

## A GENEROUS OFFER!

Twenty Copies of the Family Health Annual for One Dollar!

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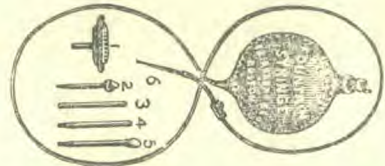
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