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THE HUMAN FACE IN HEALTH AND DISEASE.

(CONCLUDED.)

In those cases where renal dropsy has stamped its characteristic marks upon the countenance, we may perceive the signs of dyspnœa (shortness of breath), due to the accompanying œdema of the lungs, in the corrugated forehead, the raised eyebrow, the dilated and waving nostrils; the corners of the mouth will be found to be drawn downward and outward, expressive of some disease of the abdominal cavity; the eye will be full and anxious, indicative of suffering long-continued and borne with patient calmness; the conjunctiva may present that pellucid and bleb-like condition so often seen in this type of disease, and an œdema of the eyelid may greatly alter its appearance; finally, the waxy pallor of the complexion, and the pasty and bloated cheeks, show the profound anæmia of the patient.

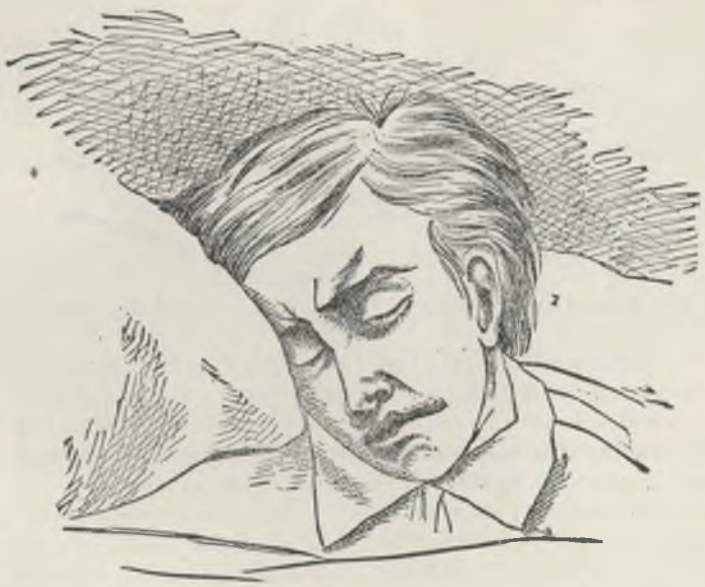

FIG. 1.—CARDIAC DYSPNŒA. (MODIFIED FROM CORFE.)

Chronic diseases of the abdominal cavity are usually characterized by a languor of the eye and by an absence of that flash of alarm so peculiar to the acute forms of abdominal trouble; and, if attended with

steadily increasing danger to life, the corrugated brow and eyelid, the retraction of the cheek, the dragged and elongated nostrils, the depressed angles of the mouth, the protruded chin, and the parted lips, with the teeth firmly clinched behind them, still further proclaim the seat of the disease.

The pale face stamped with the signs of anxiety and distress; the head raised upon two or three pillows, and the trunk similarly supported; the knitted brow, which bespeaks the cerebral disturbance; the nostrils, waving to and fro with each breath; and the jugulars which, as they lie exposed in the throat, show that the valves of the heart are acting imperfectly, by their pulsation or unusual distention; all may be found in endocardial and pericardial inflammations, or in conditions of the heart dependent upon chronic valvular disease.

In Graves's, or Basedow's, disease, a peculiarity of the eye is produced, due to its partial protrusion from the orbit, probably from an increase of the intra-orbital fat, which stamps the disease beyond a possibility of error in diagnosis.

In Asiatic cholera, and in children during attacks of profuse diarrhœa, the eyeballs sink into the orbit, a dark ecchymosis appears in the region of the eyes, the lower eyelid forms a prominent fold in the region of its attachment to the cheek, the nose is pointed and sharp, and the lips, normally ruddy and full, become thin and sharply outlined. These changes are chiefly dependent upon a rapid emaciation, which follows the withdrawal of a large proportion of the water from the tissues. In chronic atrophy, the entire absence of the adipose tissue in the subcutaneous structures causes the skin to become loose and corrugated; while various muscles become prominent from contraction. Thus the so-called "senile face" or "Voltairean countenance" is produced, which is seldom to be mistaken in the child.

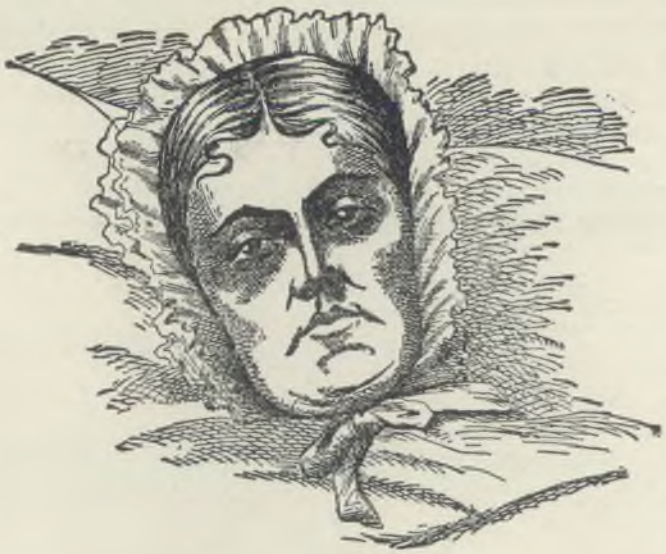

FIG. 2.—FACE OF A PATIENT WITH OBSTRUCTIONS AT THE PYLORIC ORIFICE.

Among the diseases of the nervous system, there are certain types of physiognomy which are so characteristic as to be of the most positive value in diagnosis. Thus, in the attacks of epilepsy, the neck at first becomes twisted, the chin raised, and brought round by a series of jerks toward one shoulder. The features are greatly distorted. The brow is knit; the eyes are sometimes fixed and staring, at other times rolling about in the orbit, and again turned up beneath the eyelid, so that the cornea is covered, and only the white sclerotic is

to be seen; the mouth is twisted to one side and distorted; the tongue is thrust between the teeth, and caught by the violent closure of the jaws, is bitten, often severely; and the foam which issues from the mouth is reddened with blood. The turgescence of the face indicates obstruction of the venous circulation; the cheeks become purplish and livid, and the veins of the neck are visibly distended.

During the fit of exacerbation, in an attack of tetanus, the aspect of the sufferer is sometimes frightful. The forehead is corrugated and the brow knit, thus expressing the most severe type of bodily suffering; the orbicularis muscle of the eye is rigid, and the eye itself staring and motionless; the nostril is widely dilated, indicating the extreme dyspnœa; the corners of the mouth are drawn back, exposing the teeth, which are firmly clinched together; and the features, as a whole, have a fixed and ghastly grin—the so-called "risus sardonicus." During such paroxysms, as in those of epilepsy, the tongue is liable to become protruded between the teeth and to be severely bitten.

In chorea, the facial muscles participate in the general eccentricity of the movement. Watson thus describes the peculiarities of this strange affection: "The voluntary muscles are moved in that capricious and fantastic way in which we might fancy they would be moved, if some invisible mischievous being, some Puck or Robin Goodfellow, were behind the patient and prompted the discordant gestures."

In catalepsy, the patient lies often with eyes open and staring, yet without expression indicative of life; more like a wax figure or a corpse than like a living subject. The features may be made to assume any expression, no matter how absurd, as the tissues have their normal pliability; and they will remain so placed until again mechanically altered. This same peculiarity is also present in the muscles of the extremities, and forms one of the distinguishing tests of the disease. The mental faculties are in abeyance, and all power of voluntary motion is lost. The sensibility of the body seems also to be lost.

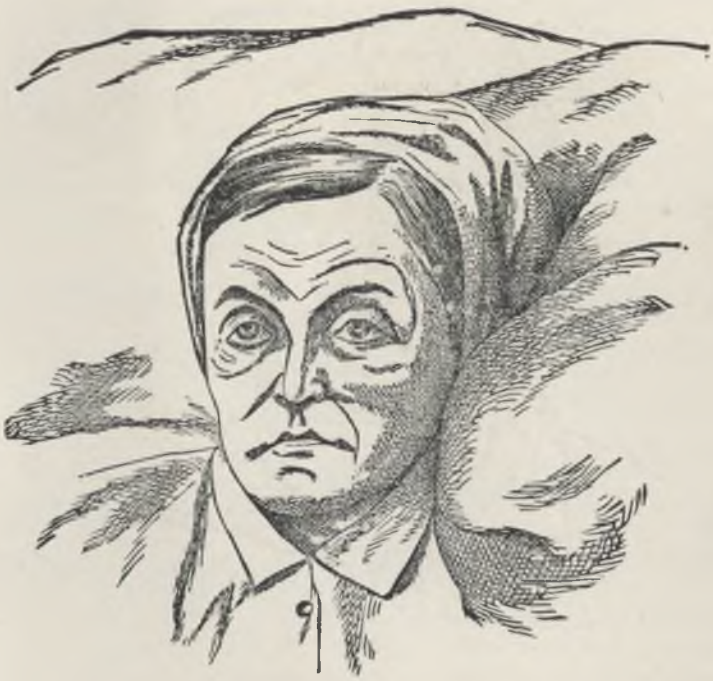

FIG. 3.—CANCER OF THE ABDOMINAL CAVITY.

The deformities of face and intellect which seem to be the result of residence in special atmospheric conditions, or of certain well defined localities, are illustrated in that race of people found in Valais and the adjoining cantons of Switzerland, called "cretins." Many of these wretches are incapable of articulate speech; some are blind, some are deaf, and some suffer from all of these privations. They are mostly dwarfish in stature, with large heads, wide vacant features, goggle eyes, short crooked limbs, and swollen bellies. The worst of them are insensible to the decencies of nature, and in no class of mortals is the impress of humanity so pitiably defaced. They are usually the descendants of parents afflicted with the goître.

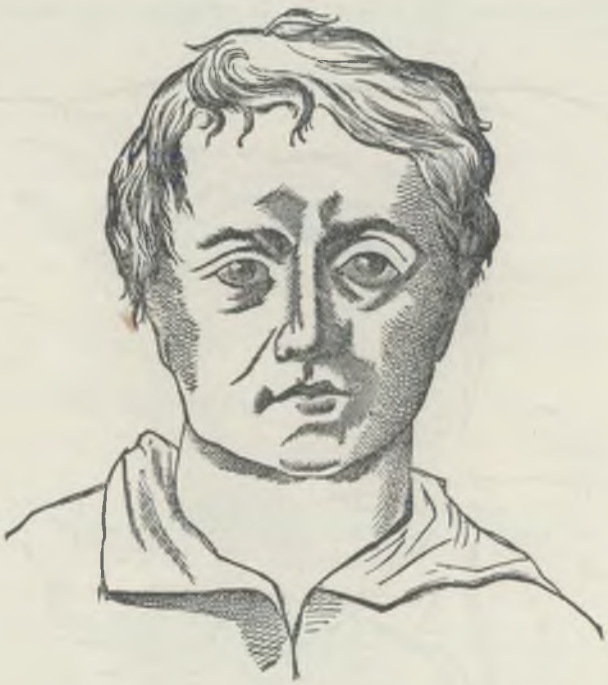

FIG. 4.—PARTIAL PARALYSIS OF THE FACIAL NERVE.

Fig. 4 represents the appearance of the face in cases of partial paralysis of the left facial nerve, near its origin at the base of the brain.

Stimulants.—The President's physician states that in his treatment of the case, very few stimulants have been given, and says: "I believe if stimulants had been administered at the first, when the shot was operating upon him, he would have been a dead man at once. My experience in the army taught me that, in case of wounds of this sort, stimulants should be used cautiously, and only when the patient was so low that no other means for retaining life were available." Valuable medical testimony this, and emphasized by the high quarters from which it proceeds, as well as the prominent occasion that gave rise to it.—*Our Union.*

Wood-Splitting as a Remedy.—Some years since, the wife of a wealthy Tennessee banker, after trying a variety of remedies for dyspepsia and other ailments, consulted a physician noted for plain common sense and small doses of physic. He told her if she would split the wood for the family it would cure her. Wood-houses are unknown in Tennessee, or were at that time, and of course the wood-splitting must be done in the open air. The lady procured an axe suited to her hand, and applied herself to the task, beginning with a few sticks each day, and increasing the number as she grew stronger. Gradually

her ailments all disappeared, and her health became exuberant. When we knew her twenty-five years ago, with a house full of servants, and practically unlimited wealth at command, she still did all the wood-splitting for the family, and bid fair to double the half century in age she had already attained. Doubtless, taking her exercise in the open air had quite as much to do with her recovery as the mere muscular labor had.—*N. Y. Tribune.*

SIMPLE THERAPEUTIC MEASURES.*

BY J. H. KELLOGG, M. D.

(CONCLUDED.)

PROBABLY, next to water, no single remedy fulfills so many requirements in the treatment of disease, as different forms of electricity. It is one of the most powerful agents in nature, for evil as well as for good, it is true; but, nevertheless, it is capable of being controlled so perfectly as to be made useful in the treatment of a large number and great diversity of conditions.

We need not dwell on the therapeutic application of this agent, however, as it is now so well recognized as a useful, and for certain cases an almost indispensable, agent, that it is receiving a fair share of attention. We believe, however, that it is well deserving of more frequent use. For several years we have used this agent in its two most useful forms, in an average of twenty to thirty cases daily, and the results which we have obtained from its use have been for the most part eminently satisfactory. As a means of relieving transient pain, it has no rival, except, perhaps, hot fomentations, among non-medicinal agents. In the form of central galvanization we have obtained most excellent effects in cases of obstinate insomnia, cerebral hyperæmia and epilepsy.

The value of exercises of various sorts as a remedial measure, has for ages been recognized by both barbarous and civilized nations. The Chinese, one of the oldest nations on the globe, together with the inhabitants of India, have long appreciated the value of exercise. According to accounts which have been gathered from their writings, they have for the last two thousand years or more possessed a knowledge of the remedial value of exercise, and have employed it frequently in a more or less systematic manner.

The ancient Greeks and Romans also employed exercises of various sorts, not only for developing the body, but for relieving many diseased conditions. We might find it interesting to note more particularly some of the peculiar modes of treatment employed by the various nations mentioned in ancient and modern times; but as our space is limited, we will confine our remarks entirely to what are known at the present time as "Swedish Movements." This system of medical gymnastics was chiefly developed by a Swede, by the name of Ling, who was born about the middle of the last century. His system of exercise was put in practice in Stockholm, Sweden, about the year 1813. The results obtained were so remarkable, and attracted such general attention, that Ling very soon secured the co-operation of the Swedish government, which enabled him to found an institution under governmental patronage for the employment of his system, for the treatment of chronic diseases of various sorts, which was so successful that it remains in existence at the present time, though its founder has been dead for more than forty years. At the present time, many hundred patients are annually treated at this institution, and its success has encouraged the establishment of similar institutions in various parts, especially in this country, so that it is probable that at present there are not less than fifty in active operation.

The value of movements in the treatment of disease has become now so thoroughly established that it is not necessary for us to adduce other arguments than the results of their use, to show their utility.

For some years after the introduction of this mode of treatment, it was looked upon with suspicion by the better class of physicians generally, and was left to be employed by quacks and charlatans. In many instances it has been employed by unscrupulous persons, who sought to attract patronage by laying claim to the pos-

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

session of skillful magnetic powers. There have been many cases in which the patients were benefited by the treatment of these quacks, when in fact their success was wholly due to the results of the manipulations of various sorts, which were invariably employed by the so-called "magnetic doctors." We will now briefly consider some of the principal remedial effects of the employment of medical gymnastics.

It has long been recognized as an established physiological fact that the circulation of the blood is greatly influenced by the action of the muscles. By muscular action, the blood is pressed along the veins, and thus its progress toward the heart is greatly accelerated. Whenever there is a deficiency of muscular activity, as in persons who are confined to their beds, or who are unable to take a sufficient amount of daily exercise, the employment of the "Swedish movements" will often produce the most marvelous results in restoring to a normal condition the unbalanced circulation. They are of special service as a derivative measure when applied to the hands and feet of any person suffering with habitual coldness of these members. We are acquainted with no remedy which will so readily secure marked and permanent results in this direction as this. Applied to the whole skin, it is an excellent means of relieving congestion of the head, spine, liver, and other organs.

No function may be so readily augmented and permanently increased by the aid of movements, as that of respiration. We have known patients to double their breathing capacity by a few weeks' practice in the employment of lung gymnastics.

In the great majority of chronic diseases of other organs, as well as in functional derangement of the stomach, deficient muscular power and activity of the stomach and intestinal canal is one of the principal morbid conditions, and one to which especial attention must be given in directing a successful mode of treatment. In many cases, movements applied to the abdomen seem to meet these indications better than any other which can be employed.

We have been in the habit of prescribing this means of treatment in cases of this sort for a number of years, and are more and more thoroughly satisfied with the results obtained. In not a small proportion of cases of chronic disease, defective assimilation is one of the most serious obstacles which must be overcome in conducting the case toward a successful issue. It is not what a person eats, or even what he digests, that benefits him, but what he assimilates. There is no means by which assimilation may be so powerfully stimulated and encouraged, as by the careful and skillful employment of "Swedish movements." This fact is now so thoroughly recognized by the leading physicians of all countries, that this means of treatment is relied upon as almost the sole remedy in the treatment of a large class of cases. The influence of movements in increasing vital action is shown not only by the rapidity with which patients gain in flesh under their employment, but by the fact that the immediate effect of the application in the majority of cases, is to produce marked rises of temperature, which cannot be accounted for in any other way, but that there has been a marked increase in vital action as the result of treatment. As the effect clearly suggests, the remedy is of great service in the treatment of cases of general debility, and all other diseases in which there is a general inactivity of the vital functions.

No remedy is of greater value in the treatment of that class of cases in which there is disordered muscular activity, as in various distortions of the spine, which result from unequal muscular action, in the great majority of cases, of displacement of the womb, and various other diseases peculiar to women. In cases of paralysis, no other remedy, unless it be electricity, will accomplish so much as this; and if we were obliged to dispense with the use of one of these two remedies, we should certainly choose this as the one of greatest value.

Medical dietetics is another subject deserving of more attention than it now receives. We have had the pleasure of helping a number of chronic invalids to the recovery of health by simply making a care-

ful diet prescription. Much harm has been done by the popularity achieved by certain "diet cures" for dyspepsia and various other diseases. The patient's conditions should be very carefully studied with reference to his dietary, and an appropriate prescription made. This is quite as important as application of remedies of any sort, especially in cases of chronic diseases.

Lastly, we would mention mental influence, as an agent which we believe to be perfectly legitimate for use in the treatment of disease, and there is no reason why intelligent physicians should not employ it in the treatment of many disorders, at least those of a functional character. Every observing person is aware of the different results, which occur according as the patient's mental condition is cheerful or depressed. It is the common experience of all physicians, to see patients decline and die under the influence of maladies, which might and should have been relieved by the remedial agents employed, but the beneficial effects of which were counteracted by the unhappy mental state of the patient. If the patient's mind can be brought into full harmony with the method of treatment employed, and his faith and confidence secured, his chances for recovery from any malady are increased tenfold.

Many times have we seen patients to whom we could give no encouragement, and whose recovery seemed wholly impossible, gradually improve under simple methods of treatment, and finally recover; as we firmly believe, more through the influence of their own hope and determination to recover than through any remedial agent applied. On the other hand, we have with equal frequency seen patients whose disorders were not of a serious character, and who had sufficient natural vigor and sufficiently favorable conditions to secure recovery, apparently, at least, but who went down into the grave, as we have every reason to believe, simply because of a lack of force of character, or of strength of will to bring the mind to cooperate with the treatment employed, or to preserve such a mental state as would be conducive to recovery.

Every physician, and, in fact, every person who has anything to do with the sick, should realize the importance of imparting courage, good cheer, and hope to them, as by that means they may in many cases do more than in any other way to secure their recovery. There are, no doubt, cases in which it is allowable for the physician to bring to bear such means as fear and other powerful mental agents in the treatment. These cases must be rare, and such means when resorted to must be used with the greatest caution, like doses of powerful poison. A mental remedy, however, which may be used with much success in many cases, is the directing of the patient's attention to the part under treatment, at the same time inspiring the most perfect confidence that the cure will certainly be effected. It has been shown by numerous experiments, that concentrating the attention upon any part induces changes in its circulation and nervous supply, and that attention can thus be used as a means of curing disease. In using it as a curative measure, as before remarked, it is of course essential, that the patient should be thoroughly convinced that the result desired will certainly be secured by the means employed. In a large share of cases, at least, the expected result will be obtained, although the remedy employed may be wholly inert. The remarkable effects often obtained by the use of highly potentized remedies must be attributed to this cause.

In conclusion we would again urge that physicians pay more attention to the employment of simple therapeutic measures, believing that by so doing we shall the better attain the noble ends for which our profession exists, and succeed in accomplishing a maximum of good, with a minimum of harm.

—The primary meaning of temperance is self-control. Nothing, therefore, which endangers or destroys man's self-control, can enter into, or be a part of temperance. Moderate drinking endangers and finally destroys man's self-control, therefore it is no part of temperance.—*Collins.*

IS WINE SAFER THAN WATER?

BY H. CLAY TRUMBULL.

If a man were to judge of the comparative harmlessness of wine and water by what he hears said of the danger of drinking water while away from home, and of the necessity of using wine instead, he would be tempted to think that wine is the true "gift of God," and that water is an invention of the devil.

Some years ago I was riding in an open wagon over the plains of California, with three men who before were strangers to me. The day was hot and the road dusty. At noontime we stopped at a wayside tavern for dinner. The dinner consisted chiefly of boiled pork, boiled potatoes, and boiled beans. One of my companions, not less than sixty years of age, ate of the pork and beans as if he were laying in a week's provisions. After dinner we were again on our tedious ride. Under the hot sun and in the jolting wagon my heavily-laden seat-mate was taken with cramps. As he writhed and groaned in pain, it never seemed to occur to him that that pork and those beans were proving too much for him. Oh no! it was the water which had done the mischief. "Dear me!" he groaned out, "I wish I had n't drank any of that water at dinner. It's almost killing me. I declare I'll never drink any more of the water without a touch of brandy, as long as I'm in California. It really is n't safe." And that man's idea of the perils of water-drinking away from home is a good illustration of the general feeling on the subject among travelers in our own country and abroad.

While at Florence in Italy, I was remonstrated with by a kind-hearted lady who sat next me at the dinner-table, because I ventured to drink cold water as at home. She assured me that there was no safety there except in wine-drinking,—even the guide-books emphasized that fact. Moreover, she told me pathetically of the serious effects of water-drinking in Florence by one and another who had for a time dared brave its risks. I then noticed that I and my traveling companions were the only persons at that well-filled table who did not drink wine. I saw enough of my fellow-boarders in their eating, and I knew enough of them in their modes of living, to know that drinking cold water was not the only danger to which they were exposed in Florence, and that wine-drinking would not by any means prove a guard against their every bodily peril. In their minds, it was not the unsettled life they were living; not the fatigue of sight-seeing, day after day; not the exposure of the night air, and the drain on their nervous force by their late hours and their unaccustomed variety of food, that was a cause of any physical disturbance they might have experienced; no, no, it was "the water"—the God-given, God-cursed water, that was at the bottom of their every fear and risk. And I happened to know, moreover, that the water there at Florence was a great deal better water for steady drinking than the water on which many of those American travelers had been brought up in their American western and southern homes. And as to a substitute for the native water of the region,—if they desired to avoid that,—it did n't seem to occur to them that any of the many standard bottled mineral waters which were available there would be safer and more health-giving than native wine. No, it was the water that must be shunned; it was the wine that must be taken.

I have spoken of Florence because the water there is called particularly bad. But it is pretty much the same the world over, as to this dread of water and faith in wine, by the average traveler. Why, here in Philadelphia, during the Centennial summer, when millions came in from outside, and packed themselves in close quarters, and wore themselves out with long days of walking and standing and bewildering gazing, and overtaxed their stomachs with hurriedly eaten indigestible lunches, whatever pains and aches anybody from that throng of visitors had, in Philadelphia or on the way home, were almost without exception attributed to the water. Of course it was the water! To hear one talk about the troubles that come from water-drinking away from one's

home, might fairly prompt the question, Is there anything that is really dangerous in this world except water? And yet all this talk about the necessity laid on a traveler to drink wine or brandy instead of water while away from his home, is sheer bald nonsense.

I have traveled not a little in my life-time, and I have averaged nearly twenty thousand miles a year for twenty years at a time; I have been through the length and breadth of our land from Maine to California, and from Minnesota to Florida. I have journeyed also in Europe and Asia and Africa. Yet I never found the place where it was necessary for me to drink wine or brandy, nor yet where I deemed a native wine as safe as the native water, judging from the apparent effects on those who used the one or the other.

I have found some pretty poor water in my day,—lime-stone water, brackish water, muddy water, sulphurous water, water well-nigh putrid with decaying vegetation. I have drunk water through a little pocket filter, from the prints of my horse's hoofs in the traveled road after a rain-storm, as the only mode of quenching my thirst with water. I have drunk water from the tangled swamps in the sea-islands of the South Carolina coast, when I had to hold my breath as I drank because of the water's stench. But I was sure, in all these cases, that that water was safer, as a drink, than wine would be, and that if I added anything to it to render it innocuous there was less reason for my trying whisky or brandy than ginger or mustard. Among all the personal risks that I have been called to take in my life of varied experiences, I really count water-drinking the very least; and of all the personal risks I have had occasion to note in others, from my earliest recollection to the present hour, I put wine-drinking among the greater.

Several years after our civil war I was at the Surgeon-General's office in Washington, making a call on Dr. Otis, with whom I had been a comrade in army-life, and who was now compiling and tabulating the medical records of the entire army. In the course of our conversation he asked me how it was that my health endured through all the exposures to which I had been liable in army service and in prison life. My answer was, "Well, Doctor, I suppose you will hardly agree with me on that point. I think that my keeping up so well was due to my letting whisky alone. The water we had was bad enough; but I thought it was better than the whisky, and I stuck to it all through the war. I think my total abstinence was my safety. I never borrowed to-morrow's income to pay to-day's expenses with, but I lived on the day's strength every day of the war." The Doctor's prompt response was: "A few years ago I should n't have agreed with you on that point, but now I do. Since I have compared, in this office, the health-rolls of regiments where the surgeons refused to give whisky, with those of regiments where whisky was given freely, I am so impressed with the proof of gain from total abstinence that I wonder how so many of our soldiers lived through our whisky treatment of them." And as with whisky in America, so with wine in Europe. So distinguished a medical authority as Sir Henry Thompson has said recently in a letter to the London Times: "I can affirm . . . without hesitation, that the ordinary traveler need never run the risk of drinking poisoned water. I may also add here that it is equally unnecessary to drink alcoholic liquor of any kind. . . . During the last ten years, of which a total of more than two has been spent in continental hotels, I have never consumed any other liquids than tea, coffee, and mineral waters."

The evil effects of wine-drinking I have seen both at home and abroad. A large proportion of all those who were my playfellows and schoolmates have either died from intemperance or are living drunkards. Men of my acquaintance who had larger brain and stronger will than I could claim, have proved unable to resist the temptation to excess which wine-drinking promotes. Even the seeming possession of a Christian character has by no means proved a safeguard against this danger to those who tampered with the evil. Ministers of the gospel by the score, within

the range of my personal acquaintance, have been among the victims of intemperance. And wives and mothers, as well as young ladies, have swelled the list of those whom I have known as drunkards, through counting wine-drinking safe and necessary. Indeed, I have known but few families in all my life, which the curse of intemperance had not in some way blighted. I have in mind the only son of a widowed Christian mother who learned to drink while traveling with his mother, she thinking that wine was safer for him than water. He is a hopeless, worthless sot. He would better have taken the risks of native water, as I did when I was his fellow-traveler. I have seen on our ocean steamers and in European hotels the wine-flush on the cheek of young wives and young misses and lads, day after day, and I have no more doubt that a large share of those wine-drinking travelers are to die drunkards than I have that water runs down hill. If a man drinks wine himself, he is not so likely to notice the effect of wine-drinking on those who are at table with him; yet I have been told by an intelligent Christian advocate of hotel table wine-drinking in Europe, that the effect of the wine in loosening his own tongue and the tongues of his young lady table-mates was one reason of his counting it desirable. To say that the native wine of a vine-growing country is not promotive of intemperance, is to say that the Bible talks nonsense when it tells of Noah's being stupidly drunk on wine from his own vineyard. Even if men were to deny the Bible story about Noah's wine, I could testify that I have seen men drunk on native wine, both in Europe and in America, and that I know so much of the danger of wine-drinking as leading to intemperance that I am afraid to drink wine or beer at home or abroad, lest I should become a drunkard myself, apart from any question of my example before others who are weaker than I am, if there are such.

It requires some courage not to drink wine abroad. Indeed, almost any self-denial involves a struggle, apart from the control of appetite. The fashion of this world is against self-denial. Wine-drinking is the fashion in Europe, and one must have some character to be willing, anywhere, to stand as notably singular in a personal habit or a social custom. Moreover, those who do drink will be constantly telling those who do not that there is no other safe way than theirs. If one would go and come as a total abstainer, he must be ready to abide unflinchingly by his own judgment as to the right and safe way, in spite of the example and the entreaties and the solemn warnings of some very excellent people who think and do differently. But why should one not be an abstainer? Even though he fail to find total abstinence absolutely commanded in the Bible, he must admit that it is not forbidden there. Hence, the privilege is before him to let wine alone if he wants to. And availing himself of this privilege, he avoids a terrible risk on the one hand, and he runs no risk on the other. For myself I am afraid to venture on the moderate use of those drinks which have by their very use led so many to use them immoderately. I have seen that wine-drinking anywhere is dangerous. I have found that water-drinking is safer than wine-drinking everywhere. That is my testimony on the wine question.—*S. S. Times.*

"A NATURAL DEATH."

Natural death is to die sweetly, without a sob, a struggle, or a sigh. It is the result of a long life of uninterrupted health, of a long life of "temperance in all things;" and such a death should be one of the ends and aims of every human being, so that we may not only live long, but in that long life be able to do much for men, and much for God. The love of life is a universal instinct; life is a duty, its peril or neglect a crime. We are placed on earth for a purpose; that purpose can be none other than to give us an opportunity of doing good to ourselves and others; and to be anxious to be "off duty" sooner than God wills, is no indication of true piety. The good man has one ruling, ever-present desire, and that is to live as long on the earth as his Maker pleases, and while living to do the utmost he can to benefit and bless man-

kind, and to accomplish a long and active and useful life. The study how to preserve and promote a high degree of bodily health is indispensable. And it seems to have been ordained by a Providence both kind and wise, as a reward of a temperate life, that such a life should be largely extended; that its decline should be as calm as a summer's evening, as gentle as the babe sleeps itself away on its mother's bosom.

TYPHOID FEVER.

SYMPTOMS.—Lassitude; irregular chills, sometimes followed by perspiration; frequently headache; confusion of mind; irritability of disposition; no appetite; nausea or vomiting; nosebleed; pain in back and limbs; looseness of the bowels; as the disease advances, countenance becomes dull and stupid; cheeks, hands, and arms red, or of a dusky hue; wakefulness; more or less delirium in severe cases; patient talks in his sleep, tries to get out of bed, picks at the bedclothes, etc.; jerking movement of the tendons at the wrist; tongue coated whitish, yellowish, or brownish, usually smooth and glassy, or dry and hard—tremulous; a brownish accumulation on teeth and lips; bleeding of gums; bowels distended with gas; tenderness low down on the right side; gurgling on pressure; hemorrhage from the anus or bowels, or both; a few slightly elevated rose-colored spots on the abdomen; fever less in the morning, increased in the evening; pulse ninety to one hundred and twenty.

This is a general febrile disease, attended by local affection of the glands of the small intestines. For several days preceding the attack, the patient feels weak, debilitated, and a general indisposition. What is termed the forming period of the disease lasts about four days. The severity of the attack is indicated by the temperature. When the thermometer shows the temperature of 106° or 107°, the case may be considered a very grave one. The severity of the disease itself is often greatly increased by complications, the most serious of which are pneumonia, inflammation of the parotid glands as in mumps, peritonitis, and hemorrhage. The duration of the disease is generally from two to four weeks. The popular belief in critical days does not seem to have a very solid foundation. In some cases, the brain symptoms do not disappear with the occurrence of convalescence. In occasional instances, the illusions or delusions incident to the delirious stage of the disease continue for a short time after all other symptoms have disappeared. Recovery from this condition generally takes place, however, in from one to three weeks. In a case of this kind which occurred in our practice a few years ago, the patient was subject to marked religious delusions, which disappeared, however, in a very short time, as his strength returned. Cases frequently occur in which the symptoms of disease are not sufficiently severe to confine the patient to bed. These are termed "walking cases" of typhoid. As a general rule, patients gain flesh very rapidly after recovery begins, often acquiring a greater weight than at any previous time.

CAUSES.—Typhoid fever is, by many physicians, supposed to be produced by a specific germ, which is communicated chiefly by means of the bowel discharges. It is believed that when the discharges are mingled with other human excreta, as in privy vaults, sewers, etc., the germs will affect the whole mass. Others believe that the germs may originate outside of the body, under certain conditions. This theory does not necessitate belief in spontaneous generation, as it is held that germs which, under ordinary circumstances, may not give rise to disease, or under certain other peculiar circumstances, may give rise to other diseases, may, under circumstances not fully understood, but the existence of which is entirely possible, give rise to the disease known as typhoid fever. These germs, however they may originate, are generally received into the system by means of drinking-water. Wells and cisterns often become contaminated. Milk has also been known to be a carrier of typhoid-fever germs, becoming infected through the use

of water containing germs either in diluting the milk, or in washing the milk cans or other vessels in which it was placed. It has also been claimed that milk may be contaminated through the drinking of infected water by cows. Recently an epidemic of typhoid fever in which a large number of persons were affected by the disease, occurred in Germany, the cause of which was traced to the use of soup made from the flesh of a calf which, as was afterward proven, had died of typhoid fever.

It is thought by some that the inhalation of sewer gas, and of the foul odors from neglected privies, cesspools, etc., may occasion typhoid fever; but it is possible that, in these cases, the disease is somewhat different in character, although allied to this affection. Fever originating in this way has been termed cesspool fever.

TREATMENT.—Typhoid fever is clearly a preventable disease, which may also be said of all other infectious and contagious diseases. Since its communicability has been established beyond question, it is of the greatest importance that the proper measures be taken to prevent the contraction of the disease by others, as well as for the relief and recovery of the persons suffering. The proper preventive measures to be adopted are, careful examination of drinking water, and all other possible sources of contamination, thorough ventilation of the sick-room of patients suffering with the disease, destruction of the germs in the discharges of the patient by disinfection, and burying at a safe distance from any well, cistern, or other source of water supply.

In many cases, by the adoption of vigorous measures, especially by the employment of the wet-sheet pack, hot-air bath, Turkish bath, and other means for exciting vigorous perspiration at the outset of the disease, its career can be cut short. We have succeeded in a number of instances in breaking up the disease when it has advanced sufficiently far to leave little doubt as to its real character.

When the fever is slight, tepid and cool sponging, and the application of tepid compresses over the abdomen, are usually sufficient. When fever rises very high, as indicated by very full and rapid pulse, severe headache or delirium, throbbing temples, and a temperature of 102° to 105° or upward, ice to the head and spine, cold compresses over the bowels, frequent cool sponging, and the use of the cool or cold enema once in two or four hours, are the remedies upon which we chiefly depend. By the combined use of these measures, the temperature can almost always be readily controlled. The cold enema is a very useful measure indeed, and is especially serviceable in cases in which the patient complains of chilliness upon being sponged with cold water.

We also value very highly as a means of reducing the temperature, the application of the ice compress to the spine and back. If the patient complains of chilliness, a bag of hot water may be placed at the pit of the stomach. The compress may be continued for from fifteen minutes to two or three hours, care being taken that the skin is not injured by the direct contact of the ice, or the patient annoyed by the cold water from the melting of the ice running down about the body. In extreme cases, the shower pack, or the graduated bath may be employed. We believe, however, that these measures can be dispensed with, even in the most severe cases, if the other measures mentioned, especially the cool enema, are thoroughly employed.

When the fever is high, the patient may be allowed to drink freely of cold water, as by this means an appreciable effect upon the temperature may often be obtained. If at any time, unpleasant sensations are produced in the stomach by taking too much cold or iced water, it may usually be quite promptly relieved by applying a hot fomentation over the stomach. When the patient complains of a bad taste in the mouth and a dislike for water, weak lemonade, slightly sweetened, may be used to very great advantage. Juices of various other fruits, as of apples, raspberries, currants, etc., may be used in the same way as lemon juice. In cases in which the stomach is very irritable and rejects drinks

of all kinds, the thirst will often be relieved by giving the patient an enema, as a considerable quantity of fluid may be absorbed by the mucous membrane of the lower bowel. When given for this purpose, as when administered to reduce the temperature, quite a large quantity of water should be employed. It should be introduced very slowly, and should be retained as long as possible, half an hour at least. When the disposition to expel the water cannot be readily controlled, a sponge or napkin should be held against the anus for some ten or fifteen minutes. The severe headache which most fever patients suffer, is best relieved by a continuous application of cold to the head.

The delirium and sleeplessness are best relieved by ice compresses, or the ice pack, applied to the head. When discomfort is occasioned by pain or gas in the bowels, fomentations should be applied once or twice a day, or every three or four hours, according to the requirements of the case. The use of stimulants is seldom called for. We occasionally employ them, when the patient seems to be sinking with exhaustion from the long continuance of the disease, but do not feel at all certain that we have ever obtained any marked benefit from their use.

In the treatment of a large number of cases of this disease, we have had no occasion for the employment of such large doses of quinine as have lately been recommended by some eminent German physicians. In a few cases in which we have given this remedy a trial, the benefits derived from its use, as shown by the decrease in bodily temperature, were so insignificant when compared with the effects which could be obtained by the employment of other measures, that we had no desire whatever to resort to it again. The cool enema produces far more decided and permanent results than the largest doses of quinine which can be safely given, and is quite free from the unpleasant after effects of this drug. If the patient is very greatly troubled with inability to sleep, mild doses of gelsemium may be employed when other means fail; but if the head is kept cool by cold compresses changed every few minutes, or the ice pack, or cold-water bag, very little difficulty will generally be experienced.

It is frequently the case that the patient is not out of danger when convalescence begins, as hemorrhage from the bowels may occur even after the disappearance of most of the other symptoms of the disease. The only typhoid fever patient we ever lost, was one in whom hemorrhage from the bowels occurred after convalescence seemed to be fully established. The patient had marked symptoms of turberculosis when attacked by the fever, and although the disease ran a very mild course, seeming to be very easily controlled by treatment, the patient finally died in consequence of the unfortunate accident referred to, which was probably due to the relaxed condition of the blood-vessels, and the generally debilitated condition of the system.

Perforation of the intestines by ulceration may also occur at a very late period, giving rise to inflammation of the peritoneum, and thus occasioning death. The patient should be very careful not to take solid food of any kind, especially meat, for some little time after convalescence is fully established, as the stomach becomes very greatly weakened in this as in most other febrile diseases, the secretion of gastric juice being almost suspended, and not being fully established for some time after recovery begins, making the digestion of meat more difficult than that of other foods.

The diet of a fever patient should be very simple, consisting almost wholly of fluid food, as oatmeal gruel, graham gruel, milk, and, occasionally, chicken or mutton broth, or beef tea. We are not much in favor of animal broths, however, on account of their stimulating character. The same objection is valid against the use of beef tea, and especially against the various extracts of beef which are sold at the drug stores, which are almost entirely devoid of nutriment, being of a very stimulating character. No meat nor solid food of any kind, with the exception of toast,

should be allowed. Baked sweet apples, ripe grapes, oranges, and lemons are about the only fruits which may be safely employed under nearly all circumstances when the stomach does not reject food. When grapes are taken, the skins and seeds should be rejected. Vegetables should be discarded as deficient in nourishment and hard of digestion. Jellies, rich sauces, preserves, pastries, and other delicacies, should be strictly prohibited. These articles are not only very difficult of digestion, but contain very little nourishment. Milk is an article of food more generally acceptable than any other. It has the advantage of being easy of digestion, and containing all the elements of nutrition. When it cannot be taken alone, it may be combined with barley-water or oatmeal gruel, in varying proportions to suit the wish of the patient. When necessary, lime-water may be combined with the milk, in the proportion of one part lime-water, to three or four parts milk.

In cases in which the patient is too feeble to take nourishment, or is unconscious, and refuses to swallow food when it is placed in the mouth, nutritive enemata should be employed. It is a mistake to suppose that a patient suffering from fever requires no nourishment at all until the appetite returns. The opposite extreme of excessive feeding should also be avoided. If the patient takes no nourishment at all, the depression and weakness resulting from the disease will be very much increased, and death may result from the great weakness occasioned by want of nourishment. Excessive feeding will increase the fever. We have observed cases in which the violence of fever was very greatly increased by the use of large quantities of stimulating food, as beef tea, egg-nog, brandy and milk, etc. The directions sometimes given to feed a patient every few minutes, or every half hour, is pernicious advice, unless the patient is so weak that only one or two teaspoonfuls of food can be taken at a time. Two or three hours is as short an interval as is admissible. As a general rule, it is better that the patient should take food not more frequently than three or four times a day, the quantity being made large enough to afford the required amount of nourishment.

The supply of an abundance of fresh air by proper ventilation is by no means the least important measure necessary in the successful treatment of fevers, as, in many cases, the morbid action is a result of inflammation excited by poisonous germs. Thorough ventilation is necessary to remove the infectious particles with which the air of the patient's room may become impregnated, so that the infection will not become intensified by breathing over and over the poisoned atmosphere.

The danger of fever patients taking cold by exposure to cool air is much less than is generally supposed. An eminent German physician advocates the use of the cold-air bath, when the cold-water bath cannot be conveniently employed. His plan is to open the doors and windows of the sick-room, and after removing the patient's clothing, place him in such a position that he will be fully exposed to the draft of cold air. We have frequently employed a modification of this plan by stripping the patient, and after moistening the surface with a wet sponge, or the hand dipped in water, allowing evaporation to take place. A marked cooling effect can be produced in this way. If proper care is taken to keep the feet and hands warm, little fear need be felt that the patient will take cold when suffering from a general fever. The temperature of the room should be kept as low as possible without inconveniencing the patient. As a general rule, sixty to sixty-five degrees is a proper temperature. Seventy degrees should rarely be exceeded.

The discharges of the patient are the most efficient means for communicating the disease. They should be promptly and thoroughly destroyed by the use of disinfectants. The night-vessel should constantly contain a solution of copperas, or a strong solution of chloride of zinc or permanganate of potash. This will secure disinfection of the discharges as soon as passed. Immediately after it has been

used, the vessel should be removed from the room, and its contents buried in the earth, at a safe distance from any well or cistern. The discharges of a patient suffering with any contagious or communicable disease, should not be placed in a common privy or water-closet. A neglect to observe this precaution has often resulted in the wide dissemination of infectious maladies. For the majority of fever-patients, careful nursing is more indispensable than the most skillful medical treatment. With careful nursing alone, the majority of patients will recover.

The proportion of deaths in typhoid fever under ordinary methods of treatment are stated by Dr. Flint to be about eighteen to twenty-five in a hundred. Very often the fatality has reached a much higher per cent. than this. According to M. France Glènard, between six and eight thousand cases of typhoid fever have been treated by a method essentially the same as we have described, with an average mortality of only about six per cent. Stieler treated a large number of cases at Munich, losing less than six per cent. Jürgenson reports a mortality of only three and one-tenth per cent. Brandt claims to have lost only two and one-tenth per cent. Glénard treated fifty-two cases at Lyons without a single death. We might mention many others who have been equally successful, but will only add our own experience in the treatment of over one hundred cases, without losing a single patient, although in many cases the disease appeared in its worst form. When the plan of treatment pointed out can be pursued thoroughly and systematically from the outset, death will result in only a very small proportion of cases.

J. H. K.

—In Prussia very great precautions are taken to prevent infection with trichinæ. The city of Berlin has a number of competent inspectors, who are held to strict accountability for doing their duty well. Another large city has an establishment to which all infected pork is sent, being boiled twelve hours, and then treated with chemicals and reduced to powder.

Dr. Clark on Alcohol.—In an address recently delivered in London, Dr. Andrew Clark, for twenty-five years physician to the London Hospital, gave utterance to the following sentiments well worthy of consideration as coming from a man whose opportunities for observation have been so ample as to enable him to form reliable opinions on this subject.

He first stated that alcohol is a poison, like arsenic, strychnia, and opium, and in nine cases out of ten it produces distinctly injurious effects upon those who use it.

"As to the influence of alcohol upon work, Dr. Clark encouraged his hearers to try the experiment of total abstinence, and observe the result in regard to work. Let them, however, try it fairly, and not allow themselves to be deterred from it by the evil prognostications of friends. He was certain that if this experiment were tried, each individual present would come to the conclusion that alcohol was not a helper of work, but on the contrary, a hinderer.

"Now as to the effects of alcohol upon disease. He went through the wards of his hospital to-day and asked himself how many cases were due to natural and unavoidable causes, and how many to drink, and he came, after careful thought, to the conclusion that *seven out of ten owed their ill-health to alcohol.* He did not say that these were excessive drinkers or drunkards—in fact, it was not the drunkards who suffered most from alcohol, but the moderate drinkers who exceeded the physiological quantity. The drunkard very often was an abstainer for months together after a period of intemperance, but the moderate drinker went steadily to work undermining his constitution, and preparing himself for premature decay and death. He had no means of finding out how many victims alcohol claimed each year, but certainly more than three-fourths of the disorders of fashionable life arose from the drug of which he was speaking. Finally, Dr. Clark dwelt upon the heredity of the alcoholic taint, and closed by saying that sometimes, when he thought of all this conglomeration of evils, he was disposed to give up his profession, to give up everything, and to enter upon a holy crusade, preaching to all men everywhere to beware of this enemy of the race."

TEMPERANCE AND MISCELLANY.

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

AUTUMN.

WITH what a glory comes and goes the year!
The buds of spring, those beautiful harbingers
Of sunny skies and cloudless times, enjoy
Life's newness, and earth's garniture spread out;
And when the silver habit of the clouds
Comes down upon the autumn sun, and with
A sober gladness the old year takes up
His bright inheritance of golden fruits,
A pomp and pageant fill the splendid scene.

There is a beautiful spirit breathing now
Its mellow richness on the clustered trees,
And, from a beaker full of richest dyes,
Pouring new glory on the autumn woods,
And dipping in warm light the pillared clouds.

Morn on the mountain, like a summer bird,
Lifts up her purple wing, and in the vales
The gentle wind, a sweet and passionate wooer,
Kisses the blushing leaf, and stirs up life
Within the solemn woods of ash deep-crimsoned,
And silver beech, and maple yellow-leaved,
Where Autumn, like a faint old man, sits down
By the wayside a-weary. Through the trees
The golden robin moves. The purple finch,
That on wild cherry and red cedar feeds,
A winter bird, comes with its plaintive whistle,
And pecks by the witch-hazel, whilst aloud
From cottage roofs the warbling blue-bird sings,
And merrily, with oft-repeated stroke,
Sounds from the threshing-floor the busy flail.

Oh, what glory doth this world put on
For him who, with a fervent heart, goes forth
Under the bright and glorious sky, and looks
On duties well performed, and days well spent!
For him the wind, aye, and the yellow leaves,
Shall have a voice, and give him eloquent teachings.

—*H. W. Longfellow.*

THE GEESE WHO GOT DRUNK.

WHEN geese take to drink, the result is preposterous; for Nature never meant geese to get intoxicated. In the first place, they have no hands to hold on to lamp-posts with, while at the best of times their balance is precarious. Even when sober, a fat goose, when traveling on uneven ground, constantly canta forward on to its beak, or backward on to its tail; but when inebriated it is utterly helpless.

A short time ago, a farmer's wife in Germany had been making some cherry brandy; but as she found during the process that the fruit was unsound, she threw the whole mass out into the yard, and, without looking to see what followed, shut the window. As it fell out, a party of geese, good fellows all of them, happened to be waddling by at the time, and seeing the cherries trundling about, at once investigated them. The preliminary inquiry proving satisfactory, these misguided poultry set to and ate the whole lot. "No heeltaps" was the order of the carouse, and so they finished all the cherries off at one sitting, so to speak. The effect of the spirituous fruit was soon apparent, for on trying to make the gate which led from the scene of the debauch to the horsepond, they found everything against them. Whether a high wind had got up, or what had happened, they could not tell; but it seemed to the geese as if there was an uncommonly high sea running, and the ground set in toward them with a steady, strong swell that was most embarrassing to progress. To escape these difficulties, some lashed their rudders and hove to; others tried to run before the wind, while the rest tacked for the pigstye. But there was no living in such weather, and one by one the craft lurched over and went down all standing. Meanwhile the dame, the unconscious cause of this disaster, was attracted by the noise in the fowl-yard, and looking out saw all her ten geese behaving as if they were mad. The gander himself, usually so solemn and decorus, was balancing himself on his beak, and spinning round the while, in a prodigious flurry of feathers and dust, while the old grey goose, remarkable even among her kind for the circumspection of her conduct, was lying stomach upward in the gutter, feebly gesticulating with her legs. Others of the party were no less conspicuous for the extravagance of their attitudes and gestures, while the remainder were to be seen lying in a helpless confusion of feathers in the lee scupper, that is to say, the gutter by the pigstye. Perplexed by the spectacle, the dame called in her neighbors, and after careful investigation it was decided in council that the birds had died of poison. Under these circumstances their carcases were worth nothing for food, but, as the neighbors said, their feathers were not

poisoned, and so they set to work and plucked the ten geese bare. Not a feather did they leave on the gander, not a tuft of down on the old grey goose, and, the job completed, they left the dame with her bag full of plumage and her ten plucked geese, not without assuring her, we may be certain, of their sympathy with her in her loss.

Next morning the good woman got up as usual, and remembering the feathers down stairs, dressed betimes, for it was market day, and she hoped to get them off her hands at once. And then she bethought her of the ten plucked bodies lying in the porch, and resolved that they should be buried before she went out. But as she approached door, on the decent rites intent, and was turning the key, there fell upon her ears the sound of a familiar voice, and then another and another, until at last, the astonished dame heard in full chorus the well-known accents of all her plucked and poisoned geese. The throat of the old gander was, no doubt, a trifle husky, and the grey goose spoke in muffled tones suggestive of a chastening headache; but there was no mistaking those tongues, and the dame, fumbling at the door, wondered what it all might mean. Has a goose a ghost? Did any one ever read or hear of the spectre of a gander? The key turned at last; the door opened, and there, quacking in subdued tones, suppliant and shivering, stood all her flock! Not a ghost was there among them, for all these were plump and hearty fowls; but, alas! among them all there was not enough feathers to have winged one anew. There they stood, the ten miserable birds, with splitting headaches and parched tongues, contrite and dejected, asking to have their feathers back again. The situation was painful to both parties. The forlorn geese saw in each other's persons the humiliating reflection of their own condition; while the dame, guiltily conscious of that bag full of feathers and down, remembered how that one lapse of Noah, in that "aged surprisal of six hundred years and unexpected inebriation from the unknown effects of wine," has been excused by religion and the unanimous voice of his posterity. She, and her neighbors with her, however, had hastily misjudged the geese, and finding them dead drunk, had stripped them, without remembering for a moment that if feathers are easy to get off, they are very hard to put on. Here were the geese before her, bald, penitent, and shaking with the cold; there in a corner were the feathers, in a bag. But how could they be brought together? Even supposing each goose could recognize his own, how were they to be re-clothed? Tarring and feathering was out of the question, for that would be to add insult to injury; and to try to stick all their feathers into their places again, one by one, was a labor such as only folk in fairy tales could ever have to accomplish. So she called in her neighbors again, but they proved only sorry comforters, for they reminded her, that after all the fault was her own, that it was she and no one else who had thrown the brandied cherries to the geese. The poor fowls, brought up to confide in her, and repaying her care of them by trustful reliance, could never, her neighbors said, have been expected to guess that when she threw the vinous fruit in their path, she, their own familiar mistress, at whose hand they looked for all that was good, could have intended to betray them into the shocking excesses of intoxication, and deceive them to their ruin. Yet so it was. Accepting the feast spread out before them, the geese had partaken gladly, gratefully, freely, of the insidious cherry, and the result was this, that the geese were in one place and their feathers were in another. As it was with Job, these "oblique expostulations" of her friends were harder for the woman to bear "than the downright blows of the devil," and so, turning from her neighbors, she gathered all her bald poultry about her round the kitchen fire, and sat down to make them flannel jackets.

How the birds fared after this, history does not relate; but no doubt the geese were wiser in their jackets than they were in their feathers. Cherries would no longer have charms, brandy no more seduction for the teetotal poultry, and no potations stronger than the horsepond afforded would be indulged in by the rigidly abstaining fowls. Such an event, however, as this untoward inebriation of geese, points to another moral besides the obvious one that drunken folk may always expect to be fleeced, for it is one of those deplorable instances of the moral deterioration of the animal world, which from time to time intrude themselves unwelcome upon the notice of lovers of nature. In Belgium and other places men try to make dogs believe they are donkeys or ponies, by harnessing them to carts, but the attempt can never succeed. For a dog thus employed will always be a very indifferent donkey, nd never a good dog. In Paris, again,

the other day a man demoralized all his bees by bringing their hives into the city and putting them down next a sugar warehouse. The bees, hitherto as pure-minded and upright insects as one could have wished to meet on a summer's day, developed at once an unnatural aversion to labor, and a not less unnatural tendency to larceny. Instead of winging their industrious way to the distant clover-fields, and there gathering the innocent honey, they swarmed in disorderly mobs upon the sugar-casks next door, and crawled about with their ill-gotten burdens upon the surrounding pavement. The owner of the hives benefited immensely by the proximity of the saccharine deposits, but it was at the sacrifice of all moral tone in the bees which he had tempted and which had fallen.

In the same way the ten geese who got drunk off brandied cherries, and were plucked by mistake in consequence, had reason for withholding forever after from human beings that pleasing trustfulness which characterizes the domestic fowl. They would never again approach their food without suspicion, nor look upon a gathering of the neighbors except as a dark conspiracy against their feathers. The dame herself, whom hitherto they had been wont to greet with tumultuous acclaim, and whose footsteps to and fro they had been accustomed to follow closely with expectant confidence, would become to them an object of distrust, and instead of tumbling over each other in their glad hurry to meet her in the morning, or crowding round her full of gossip and small goose confidences when she came to pen them up for the night, they would eye her askance from a distance, approach her strategically, and accept her gifts with reproachful hesitation. The dame, if she had any sensibility, would feel such estrangement keenly; but after all, feathers grow again, and by the time the jackets had become superfluous, both the geese and their mistress would have learned the lesson not to do in haste that which cannot be undone.—*London Daily Telegraph.*

THE VATICAN.

The Vatican is the name of an irregular mass of buildings at Rome, connected, at one extremity, with the magnificent cathedral of St. Peter's. The name is derived from that of the hill on which it stands, a name given to it by the old Romans on account of the "vaticinations" or divinations of the Etruscael and Roman "vates" or soothsayers, who made it the place of their fraudulent juggleries, and hence it is called the Vatican Hill. The buildings have been erected at different times, and in various styles of architecture. They enclose more than twenty large courts, and contain, probably, about five thousand apartments. Some of the most ancient constitute the Papal Palace, which was for several centuries the constant residence of the Pope, and is still his occasional residence and his official seat. In the chapels of the Papal Palace are some of the best productions of Michael Angelo, and Raphael. The library, occupying another part of the Vatican, is one of the largest in the world, and is especially rich in the number of manuscripts written long before the art of printing was in use. The Museum, which is connected with the palace and the library by a corridor about a thousand feet long, is filled with sculptures gathered from the ruins of a hundred ancient cities, or wrought by modern skill, and with paintings where the canvas seems to glow with life.—*Ex.*

HOME INSTRUCTION.

Above all things, teach children what their life is. It is not breathing, moving, playing, sleeping, simply. Life is a battle,—a battle between good and evil, from childhood,—good influences, drawing us up toward the divine; bad influences drawing us down to the brute. Midway we stand, between the divine and the brute. How to cultivate the good side of nature, is the greatest lesson of life to teach. Teach children that they lead these two lives, the life without, and the life within; and that the inside must be pure in the sight of God, as well as the outside in the sight of men.

There are five means of learning. These are: observation, reading, conversation, memory, reflection.

Memory is one of the most wonderful gifts God has bestowed upon us, and one of the most mysterious. Take a tumbler and pour water into it; by-and-by you can pour no more; it is full. It is not so with the mind. You cannot fill it with knowledge in a whole life-time. Pour in all you please, and it still thirsts for more.

Remember this: Knowledge is not what you learn, but what you remember.

It is not what you eat, but what you digest, that makes you grow.

It is not the money you handle, but what you keep, that makes you rich.

It is not what you study, but what you

remember and reflect upon, that makes you learned.

Above all things else, strive to fit the children in your charge to be useful men and women—men and women you may be proud of in after life. While they are young, teach them that far above physical courage, which will lead them to face the cannon's mouth, above the wealth which would give them farms and houses, and bank stocks and gold; is moral courage,—that courage by which they will stand fearlessly, frankly, firmly, for the right. Every man or woman who dares to stand for the right when evil has its legions, is the true moral victor in this life, and in the land beyond the stars.—*Hon. Schuyler Colfax.*

"SWALLOWING A YARD OF LAND."

"COME, Tom, have a pint—I the money will stand?"
"No. I shan't drink the price of a good square yard of land."
"Drink what?" Why, the price (look, this fact is a shaker)
Of a square yard of land, seventy pounds to an acre—
Four thousand, eight hundred and forty yards clear;
About three pense a yard, or a pint of strong beer!
Nay, some land in this country to buy would contrive,
Not at sixty pounds ten, but at thirty pounds five.
Four square yards for sixpense! then don't be a fool,
And drink down a small garden at one single pull.
Six feet every way, neither greater or less,
To sow radishes in, or some mustard and cress.
Stop one pint a day, you'd have bought in one year
Seven hundred square yards for a few pints of beer!
Do the sum for yourself, and you 'll find it quite true
That the temperance pledge is the best thing for you.
Then don't be a fool; join the teetotal band,
And don't drink any more solid square yards of land. —*British Workman.*

[In America where, in many places, good land can be bought for three or four dollars an acre, a five cent glass of beer would buy about sixty square yards of land.]

RECENT DISCOVERIES IN EGYPT.

THE glory of Egypt has long since departed, and her present status is considered of very little importance; yet the many relics of her prime, so wonderfully preserved through the centuries, which are continually being brought to light, add so much of interest to ancient history that the study of Egyptian antiquities has almost become a separate science. A recent discovery made at Deir-el-Bahari, in the vicinity of ancient Thebes, is thus described in the *Wisconsin Journal of Education*:—

"In a chamber or gallery cut in the rock, was found an immense quantity of relics supposed to have been stored there 2,500 years ago, to preserve them from the destroying hand of Cambyses, the invading Persian king, who made his name a synonym for ravage and destruction. These relics have now been deposited in the Boulak Museum at Cairo to await more careful examination. They comprise the veritable mummies of many of the most famous monarchs of Egypt in her grandest period. It was at first reported that those of the great Rameses II. and Thothmes III. were included, but that is now denied. But there are the actual bodies of at least a dozen of Egypt's royal line, bodies that walked the earth in regal state from 2,900 to 3,600 years ago,—kings and queens whose very names have a fabulous sound. With these royal mummies were found several papyri, or ancient books, in a perfect state of preservation. One of these, found in the coffin of Queen Ra-ma-ka, is beautifully illustrated. It is sixteen inches wide, and when unrolled, will probably measure from 100 to 140 feet in length. The translation of these books will be awaited by archæological students with the most intense interest.

"There were found, besides, 2,700 mortuary statues with inscriptions, and nearly 2,000 other objects.

"Among these was an enormous leather tent, bearing the name of King Pinotem I. It is beautifully colored and embroidered. Fifteen huge wigs, once worn by royal princesses and the grandest ladies of the Egyptian court, are also in the collection."

READ THE BEST BOOKS.

IN whatever branch of knowledge one reads, he should read its best books. It is estimated that 25,000 volumes are published each year. The British Museum contains more than a million volumes, and the National Library at Paris three millions. Only a very small proportion, therefore, of all the books can one person read. One volume read each week in a life of 60 years amounts to less than 3,200 volumes. Since one can read so few books, those few should be the best. They ought to be, as Milton says, "the life-blood of a master-spirit."

In choosing the best books it is a good rule never to read a book in history, biography, science or in any department of heavier literature once, which is not worth reading twice. Luther said: "All who study with advantage, in any art whatsoever, ought to betake himself to the read-

ing of some sure and certain books often times over." Daniel Webster was distinguished for his knowledge of English literature, and he repeatedly read his favorite authors. He said that in his "boyish days there were two things which he did dearly love; viz., reading and playing—passions which did not cease to struggle when boyhood was over." In those days "we had so few books that to read once or twice was nothing; we thought they were all to be got by heart."

Read the best books; and those books are the best which deserve to be read at least twice.—*Sel.*

THE LIGHT OF A CHEERFUL FACE.

THERE is no greater every-day virtue than cheerfulness. This quality in man, among men, is like sunshine to the day, of gentle, renewing moisture to parched hearts. The light of a cheerful face diffuses itself, and communicates the happy spirit that inspires it. The sourest temper must sweeten in the atmosphere of continuous good humor. As well might fog, and cloud, and vapor, hope to cling to the sun-illuminated landscape, as the blues and moroseness to combat jovial speech and exhilarating laughter. Be cheerful always. There is no path but will be easier traveled, no load but will be lighter, no shadow on heart or brain but will lift sooner in presence of a determined cheerfulness. It may sometimes seem difficult for the happiest temper to keep the countenance of peace and content; but the difficulty will vanish when we truly consider that sullen gloom and passionate despair do nothing but multiply thorns and thicken sorrow. Ill comes to us as providentially as good, and is a good, if we rightfully apply its lessons. Who will not then cheerfully accept the ill, and thus blunt its apparent sting? Cheerfulness ought to be the fruit of philosophy and of Christianity. What is gained by peevishness and fretfulness, by perverse sadness and sullenness? If we are ill, let us be cheered by the trust that we shall soon be in health; if misfortune befall us, let us be cheered by hopeful visions of better fortune. Cultivate cheerfulness if only for personal profit. You will do and bear every duty and burden better by being cheerful. Genuine cheerfulness is an almost certain index of a happy and a pure heart.

—Humility is the source of all greatness.

THE TOPER'S SOPHISTRY.

THE second sophistry is, that wine and ale and other alcoholic beverages are creatures of God, to be not refused, but used in "moderation and with thanksgiving." I have heard that quoted since I was a child. As to alcoholic beverages being good creatures of God, and to be used with thanksgiving, I deny it as an absurdity. Alcohol is not "a good creature" of the God of love; for it is nowhere to be found in the whole domain of nature. While the Almighty has created innumerable fountains of sparkling water, he never created a gill of alcohol! It is the simple product of the fermenting vat and distillery. It is born of vegetable decay. God made the golden corn to nourish and sustain his mighty family; but distillation throws the golden grain into a vat of rottenness, and presses out of the rotten mass the fiery juice of alcohol. God hung the purple clusters on the vine to gladden the human eye and the palate; but fermentation turns the pure blood of the grape into the maddening intoxicant. God created poppies, but he never created opium. If he did create it, are there not poisons known in nature that may sometimes be sparingly used as a medicine, but common sense forbids them as a beverage? The song of the corn conveys its meaning:—

I was made to be eaten,
And not to be drank;
To be thrashed in a barn,
Not soaked in a tank.

I come as a blessing
When put in a mill,
As a blight and a curse
When run through a still.

Make me up into loaves,
And your children are fed;
But if into drink,
I will starve them instead.

In bread I'm a servant,
The eater shall rule;
In drink I am master,
The drinker a fool.

Then remember the warning,—
My strength I'll employ
If eaten, to strengthen,
If drunk to destroy.

—*Cuyler.*

—The nervous mother of a bright little boy was alarmed lest he should take the whooping-cough, which prevailed in the neighborhood. She talked so much about it, and worried so over it that she gave the child her fears to such an extent that

he would scarcely leave her side. One night, after the little fellow had been put to bed and asleep, a donkey was driven past the house, and when just opposite set up his he-haw. With a shriek the little fellow was out of bed, screaming at the top of his voice: "The whooping-cough is coming, mamma! the whooping-cough is coming!"—*Little Gem.*

A Word to Rich Rumsellers.—Go, gentlemen, you who deal out liquid death and damnation. Go where the night is blackest, and poor, weary hearts are slowly breaking under the weight of woe! Tell them you have joyous news! Tell them that for all this bitter desolation your palm is filled with gold! Tell the smitten victims of the household, that out of their mouths, off their backs, and from their blighted fields, you and your chosen instruments have gathered a harvest of gold! Tell the pale, wasting wife and mother, that you have a pretty percentage of all that was noble in the husband or kind father, in yellow gold! Tell the drunkard as he dreams, perchance, that he can yet beat back the red billows that toss and consume him, that for his poor body's death and soul's damnation, you have gold! Stand at the threshold of the poorhouse, and mockingly taunt the squalid, the deformed, and the idiotic, with the news that out of all their ruin you gathered gold! Stand by the prison door, and as the remorseless hinge shrieks after the victims it entombs, peer through the grating, cheer the living dead with the news that you sold them to crime and infamy for gold! Tell the murderer that you made him a murderer for gold! Stand by the new graves of the last twelve months, and whisper to the fifty thousand sleepers, victims of your "regulated" traffic, that you slew them for gold! Enter the vestibule of perdition, and, with the Bible in hand, read that *no drunkard shall inherit the kingdom of Heaven!*—*Brown.*

Combustible Blood.—The *Medical and Surgical Reporter* publishes, from a medical contributor, a very interesting and suggestive account of a man who was an habitual periodical drinker, accustomed to get upon a two or three weeks' drinking spree every six or eight weeks, and who insisted upon being bled freely from the arm at the end of his spree as a means of "sobering up." At one of these bleedings, an attendant holding the vessel to receive the blood "was struck by the odor of the blood being so strongly alcoholic; and concluding to see for himself if it was alcohol *in* the blood, he set the vessel containing the blood aside for a couple of hours, when there was found floating upon the coagulated blood a liquid resembling alcohol, and which burned with the characteristic flame of alcohol."

POPULAR SCIENCE.

— The telephone has been used for transmitting speech a distance of 800 miles.

— A new carpet beetle has been discovered. The best remedy is benzine, kerosene, or naptha, which must be applied thoroughly. The usual remedies are powerless.

— The tunnel under the English Channel is begun at last. It is expected that five years will be occupied in the work. The tunnel will be twenty miles in length when completed.

The Polyscope.—The inventor of the polyscope recently exhibited a live fish with its body lit up from within by his polyscope, a minute form of which, with conducting wires passing to the hands of the operator, the animal had been caused to swallow (comfortably, let us hope). The whole body became transparent in the dark, so that the vertebræ could be counted and all details examined.

The polyscope has also been used in a similar manner for exhibiting to medical students the structure of the rectum and bladder. The instrument consists of a small glass bulb containing an electric light, and will probably prove useful for many purposes.

Mysterious Disappearances.—A French writer offers a theory to account for mysterious disappearances, the hypothesis being that there is such a thing as instantaneous dissolution. In proof of this theory, he asserts that he was once walking in the wilderness with a friend, when the latter suddenly vanished from sight, leaving behind only "a strong sulphurous odor." The last remark, we suppose, is intended to be suggestive of the destination of his friend, and we doubt not would be equally appropriate if applied to the theorist himself if he does not speedily re-

pent of his mendacity. Mysterious disappearances such as he describes are worthy of investigation by the police; and it is quite possible that if the "sulphurous odor" were investigated it would have a strong smacking of gunpowder.

Water-Proofing Brickwork.—The *Industrial World* recommends for this purpose the use successively of two solutions, one of castile soap, the other of alum; the proportions being three-fourths of a pound of soap to a gallon of water, and a pound of alum to four gallons of water, both being well dissolved. The wall must be perfectly clean and dry, and the air at least 50° F. The soap wash should be laid on boiling, with a flat brush, and so as to form no froth. After remaining twenty-four hours to become hard, the alum wash is applied in the same manner, but at the temperature of 60° to 70°. After another twenty-four hours a second soap wash is put on, this being repeated until the walls are impervious.

America Ahead in Pyramids.—It will be news to most persons that the largest pyramid in the world is the Pyramid of Pueblo, in Mexico, which greatly exceeds in size the great Pyramid of Cheops, covering an area of forty-four acres, while the latter covers but fourteen. The Pueblo pyramid was originally six hundred feet in height, being made of sun-dried brick. It is very ancient, being probably nearly if not quite as old as the pyramids of Egypt. Here is a splendid chance for some religious fanatic to figure out a theory respecting the destiny of the world, as the Egyptian-pyramid theory is getting a little stale.

A New Optical Experiment.—M. Grandmont lately described to the French Academy of Sciences an optical experiment giving a curious result. The apparatus consists of a black disc with five apertures; behind this is placed a white or a colored disc. If the upper part of the disc near the center be regarded fixedly for some seconds, and the colored disc be then rapidly replaced by the white disc, the eye does not perceive the white through the apertures, but the complementary color of the colored disc which has been removed.

A Locomotive Seed.—So far as has been generally known hitherto, the power of voluntary locomotion of plants from place to place is confined to members of the lower orders of cryptogams, namely, algæ and fungi; but an interesting case of voluntary motion among higher plants has been discovered by Dr. G. Watt, of the Educational Department, Bengal Lower Provinces.

It is only while the seed is germinating that the motion takes place, but the mode of traveling is very peculiar, and quite different from that of any other known plant. The plant is a native of Bengal, and, like all other members of the genus, is parasitical, growing upon a few evergreen trees. The fruit, like that of its relative, the mistletoe, and nearly all other members of the order, consists of a mass of very viscid pulp surrounding a single seed, and on separating from the parent plant adheres to whatever it may chance to fall upon, and after a time begins to germinate. It is only during the first stage of germination that the motion to be described takes place, and it is evident that the power of being able to move about is to enable the plant to find a suitable place to grow upon. The radicle at first grows out, and when it has attained a length of about an inch it develops upon its extremity a flattened disc, and then curves about until the disc is applied to any object that is near at hand. If the spot upon which the disc fastens is suitable for further development of the plant, germination continues, and no locomotion takes place; but if, on the contrary, the spot should not be favorable, the germinating embryo has the power of changing its position. This is accomplished by the adhesive radicle raising the seed and advancing it to another spot; or, to make the process plainer, the disc at the end of the radicle adhering very tightly to whatever it is applied, the radicle itself straightens and tears the viscid berry away from whatever it has adhered to, and raises it in the air. The radicle then again curves and carries the berry to another spot, where it again adheres. The disk then releases itself, and by the curving about of the radicle is advanced to another spot, where it fixes itself.

THE WORK OF ANIMALCULES.

A diatom is, generally admitted to be a single celled plant, bearing a singular relation to the animal and even to the mineral kingdom, being considered by some to belong partly to the latter, and regarded as a vegetable crystal, differing only from

minerals in having the power of locomotion, and of multiplying by separation. Kutzing says, "In comparing the arguments which indicate the vegetable nature of the diatomaceæ with those which favor their animal nature, we are, of necessity, led to the latter opinion."

The thickness of a single diatom is, roughly, the sixth that of a human hair, and its weight is estimated at the 187-1,000,000th part of a grain. Some varieties attach themselves to other bodies, as the algæ, while others swim in the water free.

It is an established fact, strange as it may seem, that some of the greatest mountain chains, such as the Andes, and the very soil beneath our feet, are chiefly composed of the remains of animalcules, invisible to the eye; that is to say, the matter has been used by animated beings, and returned again to the mineral kingdom, retaining the form which it assumed while a part of their minute bodies. Byron has written with more truth than he probably realized, that "the dust we tread upon was once alive;" and the remark of Dr. Buckland is often quoted: "The remains of these minute animals have added more to the mass of minerals which compose the exterior crust of the globe than the bones of the elephants, hippopotami, and whales."

In the tertiary age, beds of diatomaceous or infusorial earth were deposited, consisting almost wholly of these microscopic organisms. The extent of some of these deposits is almost incredible, and is regarded as an evidence of the great age of the world.

The Bohemian deposit in Europe is 14 feet thick, and by the estimation of Ehrenberg, contains 40,000,000,000 diatoms to the cubic inch.

Darwin observed in Patagonia, along the coast for hundreds of miles in extent, a bed of tertiary sedimentary formation, 800 feet in thickness, overlaid by a stratum of diatomaceous earth. At Bilin, in Austria, a bed of infusorial earth, 14 feet thick, occurs. One merchant sells annually many hundred tons of it. The *Bergmehl*, or mountain meal, of Lapland and Norway, is from beds thirty feet in thickness. It must be remembered that these deposits extend over many thousands of square miles. Notwithstanding the astonishing fact that vast areas of the earth's surface are built of these minute forms, the true nature of these deposits was not known until 1837, when Ehrenberg published his celebrated work on that subject. The same deposition is taking place at the present time. In certain lakes in the United States and elsewhere, deposits several inches in thickness accumulate, composed wholly of the remains of recent diatoms. When thoroughly dried, a chalky powder is obtained, which, under the microscope, is easily recognized. Similar deposits have been made known by dredging the bottom of the sea.

Dusty showers of a grayish or red color are not infrequent on the Atlantic and Indian oceans near the coast of Africa. Ehrenberg examined this dust and found it to consist largely of diatoms. He estimated the quantity let fall during a dust shower in the year 1846, near Lyons, at 720,000 pounds, one-eighth of which, or 90,000 pounds, equal to 45 tons, was diatomaceous.

Diatomaceous earth has its uses as well as its scientific interest. It is largely consumed as a polishing powder, under the name of tripoli, from the locality which first gave it to commerce. It is known in California by the absurd name of *electro-silicon*, and at the East by a variety of trade names.

Diatomaceous earth is also used in the manufacture of porcelain, and is a constituent of certain cements and artificial stones. At one time it was claimed to be a fertilizer, but this is thought to be a fallacy, although Ehrenberg states that the fertilizing power of the Nile mud is furnished by fossil infusoria.

A convenient contrivance for lighting fires is a lump of diatomaceous earth with a handle of stout iron wire. It is dipped into a vessel of petroleum, placed in the stove or fireplace, and lighted with a match. It continues to burn safely for some time. It can be used again and again. No person, however, should make use of it who has not the common sense to carefully set away the vessel containing the coal oil before lighting the match.

Bricks that float in water are made of diatomaceous earth mixed with one-twentieth part of clay and well burned. The art of making these floating bricks was well known in the time of Pliny, but was afterward lost. It has recently been discovered. In the Italian department of the Paris Exhibition of 1878, these bricks were exhibited, which attracted considerable attention. Floating bricks, made wholly of California material, may be seen in the State Museum.—*Mining and Scientific Press.*

GOOD HEALTH.

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J. H. KELLOGG, M. D., EDITOR. TERMS, $1.00 A YEAR.

BEWARE OF IMPURE WATER.

Most people are as carelessly indifferent concerning the character of the water they drink as of the air they breathe, though these two articles are of greater importance to life than any others, and when impure, are more productive of harm to the human system than impurities received in any other way. Few, however, have reached such a state of indifference to dirt as that of the Vienna professor, a Dr. Emmerich, who drank daily from the dirtiest ditch accessible to him, and declared that he was benefited, healthwise, by so doing. Such foolhardy experiments prove nothing except that the experimenter is tough or lucky. Modern science has established the fact that dirt is an inveterate foe to health, and in no form is it more dangerous than in drinking-water. Inorganic or mineral dirt is of little consequence, as it is seldom productive of disease unless long used; but organic filth is the well-known cause of many serious and often fatal maladies, even when used in the most transient manner.

Among the most useful discoveries of modern chemistry are reliable methods for testing water for these poisonous organic impurities. Two of the most simple and useful are the following:—

Dissolve in a little pure water a few crystals of nitrate of silver. Add the solution to a tablespoonful of the water to be tested. If a milky appearance is produced, the water contains chlorides in considerable quantity, which is very unusual in inland wells or springs, except in salt districts, the most likely source being contamination with human excreta from a privy vault or a cesspool. The more dense the milky appearance, the greater the quantity of chloride contained in the water, and the greater its unfitness for use. If it is in any degree marked, the water should be considered dangerous.

A second method which is still more reliable is the permanganate of potash test. The test solution is made by dissolving in pure water twelve grains of potash and three grains of permanganate of potash. One drop of this solution should be added to a glass of the water to be tested. A delicate pink tint will be produced if the water is pure, and will not disappear for several hours. If the water is impure, the color will speedily disappear. The solution should be added one drop at a time, as the color disappears, until the pink tinge remains. The number of drops added indicates the degree of impurity. It may be taken as a safe rule that if the color produced by two drops of the solution disappears in fifteen minutes, the water is too impure to be safely used.

The danger of contamination of water is so great that no one should think of using water from any source, without occasional testing to determine its purity.

CLOTHING VS. DRAPERY.

The great argument used by the opponents of a radical reform in dress, has been that the required reform was objectionable on æsthetic grounds, that the graceful folds and curves of flowing drapery were elements of beauty which could not be sacrificed; and the flowing robes worn in ancient times, as shown in statuary and picture relics have been cited as showing that the love of graceful draperies is almost as ancient as the race itself. The

following from an English writer in the *Sanitary Record* is so good an answer to this argument, we are glad to give it here :—

"One radical mistake we make with regard to modern dress is to look upon it as an affair of drapery. Let us keep drapery for bed and window curtains, to cover statues, or lay figures; but for the dress of women, in the crowded bustling life of the nineteenth century, it is totally out of place. We want to be clothed, not draped. The idea of beauty, therefore, derived from flowing drapery (and this seems to be the chief one of the so-called æsthetic school) is of no more use to us, as not applicable to modern daily life. Whenever we think of the beautiful with regard to dress, we immediately recur to the ancient Greek models, and to the drapery which looks so grand and graceful on the Greek statues; but we forget that when the Greeks engaged in active exercises, their draperies were thrown aside. Any one visiting our Australian colonies, may see many a handsome native draped in his blanket or beautiful flax mat; but when at work, especially at a distance from European settlements, a very small amount of drapery is retained. Ornamental drapery is suitable to a bygone age, or for a savage life; but for modern life it is out of place, because civilized society does not permit the throwing off of superfluous garments at pleasure.

"Modern dress must learn to gain what beauty it can without the aid of superfluous drapery; from the beauty of the form it covers, from its graceful movements, and by discarding the false and hideous outline which fashion would give it. We must also put aside, at least for the present, the idea that art can improve nature; for this we must wait until we have obtained a more correct knowledge of the 'nature' we have to improve. If not, the result will be what it always has been,—the deforming and caricaturing of the figure, rather than its improvement. We are even now threatened with the re-introduction of a specimen of this false taste. Crinolines are to be worn again, for the double purpose of 'improving nature' by setting a hump on the middle of a woman's back, and of making her carry about a frame over which to hang 'drapery.'"

CLEANLINESS.

THE skin is one of the most important depurating organs of the whole body. From each of its millions of pores constantly flows a stream, laden with the poisonous products of disintegration. As the water evaporates, it leaves behind these non-volatile poisons, which are deposited as a thin film over the whole surface of the skin. As each day passes, the process continues, and the film thickens. If the skin is moderately active, three or four days suffice to form a layer which may be compared to a thin coating of varnish or sizing. The accumulation continues to increase, unless removed, and soon undergoes further processes of decomposition. It putrefies, rots, in fact, and develops an odor characteristic and quite too familiar, though anything but pleasant, being at once foul, fetid, putrid, pungent, uncleanly, and unpardonable.

But the offense to the nose is not the extent of the evil. The unclean accumulation chokes the mouths of the million little sewers which should be engaged in eliminating these poisons, and thus obstructs their work. Being retained in contact with the skin, some portions are re-absorbed, together with the results of advancing decay, thus repoisoning the system, and necessitating their elimination a second time.

Here water serves a most useful end if properly applied. It is unexcelled as a detergent, and by frequent application to the skin, will keep it wholly free from the foul matters described. The necessity for frequent ablutions is well shown by the fact that nearly two pounds of a poison-laden solution, the perspiration, is daily spread upon the surface of the body. It is not an uncommon occurrence to meet with people who have never taken a general bath in their lives. Imagine, if possible, the condition of a man's skin, at the

age of seventy or eighty years, which has never once felt the cleansing effects of a thorough bath!

One of the most serious effects of this accumulation of filth is the clogging of the perspiratory ducts. Their valve-like orifices become obstructed very easily, and depuration is then impossible. It is not wonderful that so many people have torpid skins. The remedy is obvious and always available.

A man who has a perfectly healthy skin is nearly certain to be healthy in other respects. In no way can the health of the skin be preserved but by frequent bathing. A daily or tri-weekly bath, accompanied by friction, will keep the skin clean, supple, and vigorous. There is no reason why the whole surface of the body should not be washed as well as the face and hands. The addition of a little soap is necessary to remove the oily secretion deposited upon the skin.

A lady of fashion, in enumerating the means for preserving beauty, says: "Cleanliness, my last recipe (and which is applicable to all ages), is of most powerful efficacy. It maintains the limbs in their pliancy, the skin in its softness, the complexion in its lustre, the eyes in their brightness, the teeth in their purity, and the constitution in its fairest vigor. To promote cleanliness, I can recommend nothing preferable to bathing. The frequent use of tepid baths is not more grateful to the sense than it is salutary to the health and to beauty. . . . . By such means, the women of the East render their skin softer than that of the tenderest babe in this climate." "I strongly recommend to every lady to make a bath as indispensable an article in her house as a looking-glass."

When the foul matters which ought to be eliminated by the skin and quickly removed from the body are allowed to remain undisturbed, the skin becomes clogged and inactive, soon loses its natural lustre and color, becoming dead, dark, and unattractive. When bathing is so much neglected, it is no marvel that paints, powders, lotions, and cosmetics of all sorts, are in such great demand. A daily bath, at the proper temperature, is the most agreeable and efficient of all cosmetics.

DANGER FROM MANURES.

NOTWITHSTANDING the constant occurrence of examples of the most striking character illustrating the dangers which lie in decomposing matters of every description, people continue to incur the most reckless risks, and with the utmost indifference. In no one way is this thoughtlessness manifested more glaringly than in the common use of manures. It is not infrequently the case, at certain seasons of the year, that whole townships are rendered almost uninhabitable by the intolerable stench arising from fields thickly strewn with the reeking products of the cesspool and the barnyard. Not infrequently have we hastened the speed of our team, when driving in the country at certain seasons of the year, to escape from a nuisance of this sort. No one knows how much illness is the direct result of this gross infraction of sanitary laws; but sometimes it is possible to trace a fatal malady to this as its true source, as in the following instance, which we quote from an exchange, the family in question being that of Mr. Crump, residing in Montclair, N. J.:—

"The family consisted of the father, mother, and six children, and the house occupied by them had all the modern conveniences, and was in a healthy locality. Mr. Crump is a very intelligent gentleman, and specially careful of all sanitary surroundings; he was indeed noted in the place for his systematic and persevering efforts to secure perfect drainage to his house, and the pipes and water-closets were all constructed with every device for preventing access of sewage gases. 'Cleanliness and pure air,' was the text from which he constantly preached. Under these apparently favorable circumstances for health, diphtheria in its most malignant form suddenly appeared last autumn in the family. Two of the children were stricken down with the disease, and in a short time

died. In a few days another was taken ill, and still another, and out of the family of six, five died. Mr. Crump himself was attacked, and narrowly escaped death. Such extraordinary fatality from a purely zymotic disease, under the best sanitary conditions, puzzled the physicians greatly, and thorough investigation was made. It was learned that a neighbor owning an adjoining lot, used as a lawn, had spread over it the contents of a cesspool, and that the wind, for several days thereafter, had been favorable for conveying the filthy odors toward the Crump dwelling. The opening for air, leading to the furnace, was upon the side toward the lawn, and through this avenue the fatal germs of disease gained access to every portion of the house, and hence the mysterious illness."

Here was a sacrifice of five human lives, nearly the whole of a happy family, the result of thoughtlessness or heedless ignorance. The consequence of similar infractions of nature's laws are not always so potently serious, but may be greatly harmful nevertheless. The inhalation of air poisoned with germs and foul gases must be productive of harm and injury under all circumstances. If they do not in all cases develop a distinct disease, they may intensify some existing malady, and thereby bring about, indirectly, a fatal result.

CRIMINAL ABORTION.

FEW but medical men are aware of the enormous proportions which have been assumed by this terrible crime during the present century. That it is increasing with fearful rapidity, and has really reached such a magnitude as to seriously affect the growth of civilized nations, and to threaten their very existence, has become a patent fact to observing physicians.

An eminent medical author asserts "that the frequency of this form of destroying human life exceeds all others by at least fifty per cent, and that not more than one in a thousand of the guilty parties receive any punishment by the hand of civil law. But there is a surer mode of punishment for the guilty mother in the self-executing laws of nature."

The destruction of the child after the mother has felt its movements, is termed infanticide; before that time it is commonly known as abortion. It is a modern notion that the child possesses no soul or individual life until the period of quickening,—an error which modern researches have thoroughly exposed. The ancients, with just as much reason, contended that no distinct life was present until after birth. Hence it was that they could practice without scruple the crime of infanticide, to prevent too great increase of population.

The effects of this crime are not upon the child alone. The mother suffers not only imminent peril of life at the time, but the almost certain penalty of chronic invalidism the remainder of her life. We have good authority for the assertion that abortion is *fifteen times as dangerous* as natural childbirth. With reference to the immorality of the act, the eminent author of "The Ten Laws of Health" says:—

"There are those who would fain make light of this crime by attempting to convince themselves and others that a child, while in embryo, has only a sort of vegetative life, not yet endowed with thought and the ability to maintain an independent existence. If such a monstrous philosophy as this presents any justification for such an act, then the killing of a newly-born infant, or of an idiot, may be likewise justified. The destruction of the life of an unborn human being, for the reason that it is small, feeble, and innocently helpless, rather aggravates than palliates the crime. Every act of this kind, with its justification, is obviously akin to that savage philosophy which accounts it a matter of no moment, or rather a duty, to destroy feeble infants, or old, helpless fathers and mothers."

Another eminent author says: "From a very large verbal and written correspondence in this and other States, I am satisfied that we have become *a nation of murderers*."

Said a distinguished clergyman of Brooklyn, in a sermon, "Why send missionaries to India when child-murder is here of daily, almost hourly occurrence; aye, when the hand that puts money into the contribution-box to-day, yesterday, or a

month ago, or to-morrow, will murder her own unborn offspring?"

Whether this gigantic evil can ever be eradicated, is exceedingly doubtful. To effect its cure would be to make refined Christians out of brutal sensualists; to emancipate woman from the enticing, alluring slavery of fashion; to uproot false ideas of life and its duties,—in short, to revolutionize society. The crime is perpetrated in secret. Many times no one but the criminal herself is cognizant of the evil deed. Only occasionally do cases come near enough to the surface to be dimly discernible; hence the evident inefficiency of any civil legislation. But the evil is a desperate one, and is increasing: shall no attempt be made to check the tide of crime and save the sufferers from both physical and spiritual perdition? An effort should be made, at least. Let every Christian raise the note of warning. From every Christian pulpit let the truth be spoken in terms too plain for misapprehension. Let those who are known to be guilty of this most revolting crime be looked upon as murderers, as they are; and let their real moral status be distinctly shown.

It should be known, too, that wives are not the only ones to be blamed in this matter. In many instances husbands are the instigators as well as the abettors of the crime, and in their hands lies the power to stay the sacrifices to this horrible modern Moloch.

Every human being whose moral sensibilities are not wholly benumbed, must regard with horror and contempt the mother who blights the life of her unborn child even to save herself from shame; but with how much greater horror and loathing must we look upon the fiend in human shape who in cold blood, with no other incentive than the love of gain, murders an unborn innocent. We look upon the assassin who waylays his victim, and springs upon him in the dark without warning, as far worse than a common murderer. Even the soldier who takes the life of a defenceless foe, is regarded as a monster. What language, then, can depict the grim hideousness, the black wickedness of the professional abortionist, who without provocation of any kind, or motive other than avarice, destroys one life and jeopardizes another.

Criminal abortion has become one of the most common crimes. In every large city, numerous individuals devote themselves as specialists to this most heinous of crimes. Every physician is acquainted with the frequency of the crime, and often is obliged to devote his best energies to the amelioration of its effects; but he is powerless to bring the criminals to justice. As remarked by the prosecuting attorney in a recent case in which one of these thugs was being tried: "Crime seals the lips of one, and shame those of the other."

But two persons are witnesses to the awful deed, and only in rare cases can either be induced to testify to the truth. Even if the mother, conscience-smitten at the contemplation of her crime, or trembling in the presence of expected death, exposes one of these villians, and instigates a prosecution, lawyers are easily found, who, for a sufficient compensation, are ready to manufacture all the evidence needed to clear their clients. It is the easiest matter possible to produce any number of witnesses, friends of the criminal, who were conveniently hidden in the attitude of eavesdroppers, behind hypothetical doors, listening to manufactured conversations, and as the jury must give the prisoner the benefit of a possible doubt, a conviction rarely occurs. So notorious has this fact become, it is almost impossible to induce a prosecuting attorney to undertake the prosecution of an abortion case, so certain is he of defeat. "Thugs" are more abundant in America to-day than they ever were in India; and the present prospect is that they will rapidly increase until some better means than at presence exists is provided for securing justice in such cases.

—Of the seventy thousand persons arrested in London last year, three-sevenths, or thirty thousand, were arrested for drunkenness. Of this large number, nearly

one-half were women. Of the remaining forty thousand, no doubt a large proportion were led to the commission of crime by the use of liquor.

Dr. Wood on Cigarette-Smoking.—According to the *Philadelphia Press*, Dr. Horatio Wood, one of the most eminent physicians of Philadelphia, thus pronounced himself against the use of tobacco, especially in the form of cigarettes :—

"About half the cases of nervous breakdown in men," says Dr. Horatio C. Wood, "are the result of the use of tobacco, and the use of tobacco is much worse for boys than it is for men. I have in my mind now one of our best boating men, who left off rowing and training, and went back to his cigarettes, and now he is all broken up with heart troubles. There is a peculiar action of the heart caused by the excessive use of tobacco, known as the 'tobacco heart,' which the elder Dr. Pepper made a special study of, and used to lecture upon. I have no positive information on the subject, but I believe cigarettes are the worst form in which tobacco is used, and I believe that their sale to boys is prohibited in France. In addition to the poison in tobacco, the cigarette-smoker absorbs a certain amount of the empyreumatic oil of paper, which is an irritant to the mucous membranes, causing catarrh. But this is not the worst effect. The action of the heart is depressed, and the whole system debilitated. Official investigation in the schools of France proved that the cigarette-smoking students were much behind the others. These vital defects are sure to be transmitted to the offspring."

In the last seven years we have met many cases of nervous exhaustion in men, and in much the greater share, tobacco-using, in one form or another, was the main cause. For years the tobacco devotee will insist that tobacco-using does not harm him. It may be injurious to some, but it is not bad for him. He is different from other men. What is poison to other men is food to him. By-and-by he begins to break down. His friends warn him of the injury he is doing himself, but he laughs at their admonitions, and readily finds in some trivial circumstance a full explanation of his decline in health. A few weeks or months later he breaks down completely with nervous exhaustion, and is treated for "neurasthenia," "softening of the brain," or some other fashionable disease, but gets no better until he finds some physician who recognizes the case as one of tobacco-poisoning, and treats it accordingly; or maybe a voyage, with an attack of seasickness, disgusts him with the weed, and delivers him from his thralldom.

Pigs vs. Babies.—A scientific contemporary thinks it is a pity that babies have not a market value, like hogs. A death-rate among the pigs less than one-third the death-rate among children in our large cities, moves the Government to costly investigations of the cause, and to diplomatic correspondence with foreign nations; while Produce Exchanges get excited on the subject, and all the newspapers join in the discussion. The babies die by the thousand in New York and other overcrowded cities, and scarcely any notice is taken of the fact. Until something near as much attention is given to *homeo*-culture as is given to raising fine horses, cattle-breeding, and horticulture, we cannot hope for any very great improvement in the race, either mental, moral, or physical.

William Penn and Tobacco-Using.—William Penn was an inveterate enemy of tobacco. This was well known to his friends and acquaintances, and whenever he was seen approaching, the pipe was speedily put out of sight. Observing several of his smoking friends in the act of hiding their pipes on one occasion, he remarked, "I am glad to see that you are ashamed of your practice."

The smokers of the present generation have less regard for the feelings of their more cleanly fellows than did their smoking ancestors,—another proof of the degenerating influence of the drug. Once in a while, however, an insolent smoker gets a sharp hint of his impertinence, as did a man in a railroad car, the other day, who re-

ceived a thrust from his seatmate's umbrella for puffing the smoke of a cigar in his face. The devotee of the weed sued for damages, but lost his suit and was obliged to pay costs.

A Temperance Pledge of Olden Time.—Somebody has been at work unearthing old manuscripts, and comes forward with the following specimen of an old-fashioned temperance pledge, which is interesting not only on account of the antique nature of the document and its queer orthography, but as an evidence of the progress in temperance reform during the last two and a half centuries :—

"Temperance Bond, Dundee, 5th July, 1627. The parties to this contract, which is attested by four witnesses, are Alex. Eskine of Dun, and Sir Jhone Blair of Balgille. They bound themselves to drink nothing, except in their own dwellings, till the first May, 1628, the penalty of 500 merks Scots for the first 'failzie and brack,' and of one hundred merks for every succeeding one, and for security agreed to register the contract. The reason alleged for this agreement is that the 'access (*i. e.*, excess) of drinking is prohibit bothe be the Law of God and Man,' and that they were willing to 'give guid exampill to ytheris be their lyff and conversacioun to abstain from the lyke abuse.'"

Mental Unchastity.—It is vain for a man to suppose himself chaste who allows his imagination to run riot amid scenes of amorous associations. The man whose lips delight in tales of licentiousness, whose eyes feast upon obscene pictures, who is ever ready to pervert the meaning of a harmless word or act into uncleanness, who finds delight in reading vivid portrayals of acts of lewdness,—such a one is not a virtuous man.

Man may not see these mental adulteries, he may not perceive these filthy imaginings ; but One sees and notes them. They leave their hideous scars upon the soul. They soil and mar the mind ; and as the record of each day of life is photographed upon the books in Heaven, they each appear in bold relief, in all their innate hideousness.

Foul thoughts, once allowed to enter the mind, stick like the leprosy. They corrode, contaminate, and infect like the pestilence. Naught but Almighty power can deliver from the bondage of concupiscence a soul once infected by this foul blight, this moral contagium.

It is a wide-spread and deadly error, that only outward acts are harmful ; that only physical transgression of the laws of chastity will produce disease. We have seen all the effects of beastly abuse result from mental sin alone.

A New Cure for Tobacco-Using.—In view of the following, we would advise every smoker to take a sea-voyage :—

"One day, while crossing the ocean," said Judge Tyner, the Assistant Postmaster-General, "I had a severe spell of sickness. I went up on deck in hope that the fresh air would act as a reviver. Mechanically, as was my habit, I took out a cigar and lit it. Before it was half consumed the sickness came on again. Ugh ! it makes me pale to think of it even now. Anyhow, overboard went the cigar, and from that day to this a couple of whiffs are enough to turn me upside down. If you happen to know anybody who wants to let up on the habit, just advise them to take the weed and a dose of seasickness together, and I will warrant you he will be an anti-tobacco man ever afterward."

LITERARY NOTICES.

JOURNAL OF ELOCUTION. Des Moines, Iowa. THE ELOCUTIONIST. Chicago, Ill.

These are two new journals devoted to the interests of elocution. Both present features of interest and value, and we doubt not will find fields of usefulness. Few branches of culture are receiving so much attention at the present time as the training of the voice, and no department of culture is more deserving of careful and thorough attention.

One of the most excellent monthlies we have ever seen for family reading is *The Christian*, published at the Scriptural Tract Repository,

Boston, Mass. The reading matter is almost entirely original, and is devoted to literary, religious, and temperance topics.

For all persons interested in architecture and building, few papers can be found better adapted to their interests than *The California Architect and Building Review*, published at San Francisco, Cal. In the September number is begun a series of articles upon the "History of the Steel Square," which promises to be very instructive and interesting. Each number is furnished with several pages of designs and plans for the use of builders.

Through the kindness of C. T. Wilbur, M. D., Superintendent, we have received the eighth biennial report of the Illinois Asylum for Feeble-Minded Children, situated at Lincoln, Ill. This Asylum was organized in 1865, and has since been incorporated by the State as one of its permanent charitable institutions The object of the Asylum is to furnish means of education to such children as are so deficient in intelligence as to be incapable of being educated at any ordinary school, provided they are not epileptic, insane, paralyzed, greatly deformed, extremely helpless, or afflicted with contagious diseases. The pamphlet contains the Report of the Trustees, Superintendent's Report, Daily Programme of School Room Exercises, Treasurer's Report, and an Appendix containing much interesting and valuable matter. The work of this institution is a most praiseworthy one, as it aims to make self-sustaining and useful citizens of persons who would otherwise be a burden to society.

The Popular Science Monthly for October, 1881. The first article in the October *Popular Science Monthly* is by Dr. F. L. Oswald, in continuation of his original and instructive series of papers on "Physical Education." There is no abatement in the practical interest of these essays, nor of the pungency with which they are written. The present chapter, on "Remedial Education," continued from the September number, is full of priceless information on the care of health, and the hygienic remedies and prevention of disease. This series should be issued as a volume, and become a reading-book in schools. Among the numerous other papers of interest and value, one on "Comets," another on "Life Insurance," and an able article by Herbert Spencer, are deserving of special mention.

The contents of the *North American Review* for October cannot fail to arrest the attention of all readers. Every one of the topics discussed is of the highest present interest, and nearly all of the authors are eminent American statesmen, publicists and litterateurs. Senator John T. Morgan, of Alabama, considers "Some Dangerous Questions," namely, certain emergencies arising in the administration of the United States government, for which adequate provision is not made in the Constitution or the laws. Among these questions, that of the succession to the Presidency in case of the inability of the elected incumbent, holds a conspicuous place, and it is treated by the writer with much learning and in the most judicial temper. Prof. Geo. P. Fisher, of Yale College, contributes a profound study of "The Elements of Puritanism," pointing out wherein Puritanism was transient in its influence, and wherein permanent. A stronger vindication of Puritanism perhaps never was written. Senator George F. Edmunds, of Vermont, defines the relations which exist between "The State and the Nation," replying to an article by the Hon. David Dudley Field that appeared in the May number. D. C. Gilman, President of Johns Hopkins University, writes of "The Idea of the University," drawing the line of distinction between the college and the university, and showing how the latter institution is the indispensable organ of a generous, liberal culture. A timely historical paper is that of Mr. Sydney Howard Gay, "Why Cornwallis was at Yorktown." Under the title, "Shall Two States Rule the Union?" the Hon. Thomas A. Hendricks discusses the perennial tariff question, which he insists is a subject not for politicians, but for economists; to be settled, not in the councils of politicians, but by a commission of manufacturers and business men. M. Désiré Charnay, in the ninth of his valuable archæological papers, sets forth the grand results of his researches among the "Ruined Cities of Central America." Finally, Col. H. B. Carrington, in an article on "Washington as a Strategist," proves conclusively the title of Washington to be esteemed "first in war."

The Bible Banner is the title of an excellent family newspaper which comes weekly to our table. Its columns are ever filled with wholesome truths, and its typographical appearance is such as to be worthy of commendation. We wish it a growing prosperity.

One of the most vigorous and racy college papers we have ever seen is the *College Record*, the organ of Battle Creek College. The columns of the *Record* are not, as is the case with many college papers, filled with trashy locals, puns and jokes which only those connected with the Institution can understand; but instead, while there is enough mention of passing events to make the paper of particular interest to old students, its column are devoted especially to articles upon educational subjects adapted to the needs of students, which will tend to ennoble and inspire them in the pursuit of knowledge. The *Record* is issued each month, and the subscription price, 10 cents per annum, is so small that no one interested in education can afford to do without it.

The Cultivator and Country Gentleman. This excellent agricultural paper makes its weekly visit to our table, and we feel no hesitancy in saying that all persons interested in the pursuit of agriculture in any form will find very much of value in its columns. Its Fireside Department is ably conducted, and another department gives, each week, a careful synopsis of passing events. Published at Albany, N. Y.

Publishers' Page.

MAGNIFICENT OFFER!

THE two most popular works ever issued by the publishers of GOOD HEALTH are entitled, "The Household Manual," and "Healthful Cookery." The first is a condensation of good advice respecting hygiene in its various branches, the treatment of disease, what to do in accidents and emergencies, etc. The various editions of the work aggregate more than 25,000 copies. Its one hundred and seventy-six pages contain more really practical information than many ponderous volumes.

"Healthful Cookery, a Hand-book of Food and Diet, or What to Eat, How to Eat, and When to Eat," has reached a sale of nearly 20,000 copies, and is a real treasury of knowledge on the subjects of which it treats. It contains one hundred and twenty-eight pages of carefully prepared matter, comprising in addition to general information on the subject of diet, the best collection of recipes for the preparation of healthful food to be found anywhere. The work is really a compendium of information on healthful cookery.

For several years the first-mentioned work has been offered as a premium to new subscribers to this journal, and thousands have availed themselves of the liberal offer to obtain a work which has sold at retail for seventy-five cents, for just one-third of that sum. The efforts of the publishers to give the public a really valuable work at a price even less that usually charged for worthless pictures, or other articles usually offered as premiums, have been so well seconded by the public, and so thoroughly appreciated, that they now propose to make

A still more Liberal Offer.

The two popular works mentioned are now bound together in one volume, making a work of over 300 pages. The price of the two volumes, as heretofore sold at retail, aggregates $1.00, yet we now offer the two, neatly bound in cloth, for the small sum of 25 cents to all new subscribers to GOOD HEALTH, making the two cost the subscriber only $1.25. Those who send subscriptions directly to the office of publication, wishing the premiums sent by mail, should add two three cent stamps to pay postage.

PUBLISHERS OF GOOD HEALTH.

A GOOD TIME TO CANVASS.

THE next three months is the best time of the whole year for canvassing, and now is the time to begin. To those who wish to make a little money, while at the same time doing a good deal of good, canvassing for GOOD HEALTH offers a most desirable opening. The prejudice which a few years ago made this sort of work somewhat embarrassing and unremunerative, is now almost wholly removed. Intelligent people everywhere are anxious for information on one of the most vital interests of human beings. They are hungry for information, and welcome it from any reliable source. Hygienic reform, divested of its unscientific and ultra elements, commends itself to the common sense of all rational minds.

In wide-awake communities, agents can do well canvassing for this journal. Within the last year, some agents have obtained several hundred subscriptions each. We want at least one agent in every county in the United States.

An outfit will be forwarded by mail on receipt of 25 cents.

A GIFT TO OLD SUBSCRIBERS.

THE publishers of GOOD HEALTH propose to offer to every old subscriber a New Year's present on the following terms: Every subscriber who sends us the sum of $1.25, with two three-cent stamps to pay postage, will receive the journal for next year, and a copy of our new premium book, which ought to be in every household in the land. The offer will remain good until Jan. 1, 1882. The premium is offered at less than actual cost; and, feeling sure that thousands will wish to avail themselves of this offer, we have provided several thousand copies ahead, to be ready to meet the demand promptly.

☞ The long and painful illness of our noble president has at last ended in the manner which has long been predicted by the most experienced physicians and surgeons who have had an opportunity to know much of his condition. His long illness has afforded a fine opportunity for a most disgusting display of ignorance, arrogance, and bigotry, on the part of doctors, great and small, obscure and notorious; and the opportunity has been well improved. Quacks of every description, from the vile nostrum-vendor to more pretentious charlatans, have seized upon this opportunity to advertise themselves, their wares, or their institutions. The autopsy, however, revealed the fact that no method of treatment, whether quackish, or in the highest degree scientific, would have availed.

☞ We would call especial attention to the article in this number on "Typhoid Fever." This disease is usually most prevalent at this season of the year; and this year it is unusually prevalent everywhere. Fevers of all kinds are prevailing in all parts of the country, according to reports, and now is a good time to call the attention of the people to the importance of hygienic habits. Those who may wish to send copies of this number to their friends, can obtain them at the rate of twenty for $1.00, twelve for 75 cents, and seven for 50 cents.

☞ The annual meeting of the stockholders of the Health Reform Institute will be held Nov. —, 1881, at 9 A. M., for the purpose of electing officers for the ensuing year, and transacting the usual annual business. All stockholders who do not expect to attend in person, should see that their stock is represented by properly authorized persons, empowered to vote by proxy.

☞ The Sanitarium is still crowded with patients. Those who are waiting to come "when there is not so large a crowd," should delay no longer, as the present prospect is that they would be obliged to wait all winter.

☞ Those who may wish to act as agents for GOOD HEALTH, should send soon for premium and clubbing lists, which will be forwarded with outfit for 25 cents.