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MEDICAL GYMNASTICS, OR SWEDISH MOVEMENTS.

BY THE EDITOR.

Fig. 1 is a movement calculated to increase the strength of the muscles of the back. The trunk is kept perfectly rigid,

while the body is maintained in position for a few seconds, or until the muscles begin to show signs of fatigue.

Fig. 2. The body is supported by the toes, which rest upon the floor, and the hands are placed upon a stool or platform raised about a foot higher than the floor. The effect of the movement is

to increase the volume of the chest by throwing it forward.

Fig. 3. This movement is somewhat similar to the preceding, but its action is different, the tension being brought chiefly upon the abdominal muscles. Excellent



F10. 2.

effects are obtained by its use in cases of prolapsus of the pelvic organs, rectum, etc. The body should be brought slowly into position, the feet being retained in

position for a moment and allowed to fall again. After resting a minute or two, the movement should be repeated, until the body has been elevated five or ten times.



Fro. 3.

Fig. 4. In this movement the body is wholly supported by the head and heels, which rest upon platforms raised a few inches from the floor. This movement calls into vigorous action all the muscles of the neck, trunk, and legs. A little assistance will at first be required by the patient in getting into position. The position should be maintained for a few



seconds, and then the body may be let down to the floor to rest. After three or four minutes the movement may be repeated. The number of repetitions must, of course, depend entirely upon the strength of the patient. Care should be used not to strain the muscles too violently, which may easily be done in taking this movement, especially by beginners.

Fig. 5. The trunk is supported upon a platform in such a way that the lower end

of the spine just reaches to the end of the supporting surface. The limbs are held



rigidly in the position seen in the cut. This is a powerful means of exercising the muscles of the abdomen and thighs.

Fig. 6. In this movement the position is reversed, the legs being supported and held in position upon a platform by an attendant, while the trunk is sustained in the



air by the muscles of the abdomen and thighs. This movement should be used cautiously at first by those who are unaccustomed to such exercise.

Fig. 7. This is a modification of the preceding, in which the trunk is sustained with the face downward. In this move-



ment the principal strain is upon the muscles of the back instead of the abdomen.

MISCELLANEOUS MOVEMENTS.—Fig. 8, which represents toe-standing, requires no explanation. It is an excellent means

of increasing circulation in the lower extremities. The body should be slowly elevated into the position shown, the patient rising as high as possible upon the toes while slightly supporting the body by the finger placed against the wall or a



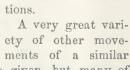
post. The elevated position should be maintained as long as possible, and the body slowly lowered to its natural position. The movement, in order to be effective, must be executed very slowly, so as to give time for the desired changes in the blood-vessels.

Fig. 9 represents an excellent exercise for the feet. The position of the feet is well shown in the cut. The exercise is produced by bending the knee and

throwing the weight upon the forward limb. This movement should also be exe-

cuted slowly, being repeated ten or twelve times with each foot.

Fig. 10 represents a light form of exercise consisting of rotation of the limbs. The limbs may be twisted together, both in the same direction, or in alternate directions.



character might be given, but many of



these are included under the head of gymnastic exercises, which will be fully described in this series of articles.

-Dean Stanley, one of the most noted of

modern English clergymen, probably died of poisoning from sewer gas.

THE TOBACCO HABIT.

BY THE HON. NEAL DOW.

The tobacco habit has become an evil so great in many ways that serious efforts ought to be made to check, if not to eradicate, it from good society. I do not think there is in the world any custom or habit more absurd than this or with less reason to be. There is none which shows its victims to be the more abject slaves of foolish example than this.

A great many years ago there was cast away at Nootka Sound, on the northwest coast of America, an American ship, of which an account was published under the title of "Jewett's Narrative." At that time all that region was an unknown land. Among the curious customs of the Nootka Sound savages, Jewett says, was that of wearing a stick about eight or ten inches long, thrust horizontally through the gristle of the nose, projecting about four or five inches on each side. The sailors called it the "spritsail yard," and sometimes, accidentally, would hit one end of it or the other, almost tearing it away from its insertion. The natives of some regions have in the under lip a long horizontal slit, into which is inserted a broad piece of wood which extends the lip and makes a sort of shelf of it. The negroes of some African tribes have the two upper front teeth extracted. Of some other tribes the front teeth are filed exactly to resemble saw-teeth. Some savages are tattooed, and others have the head flattened by compression in infancy between two pieces of board. Not one of these customs is more absurd and without reason than the tobacco habit.

It is far more absurd than the alcohol habit. I do not say more injurious to society or to the victim, but more absurd. The victims of the latter are originally, in most cases, drawn into the habit by the example and influence of others, which they cannot resist. But the moderate indulgence in alcoholics is pleasant to the taste and agreeable in its effects from the very first glass, so that it is easy for a weak or thoughtless youth, without experience or opportunity for observation, to be drawn

on, step by step, until he finds retreat to be so difficult as to be practically almost impossible.

But it is not so with the tobacco habit. At the very first the use of tobacco is a dreadful disgust. It is even worse than this. It inflicts upon its future victim a nausea, a retching, a vomiting, a headache, to which the horrors of sea-sickness are not to be compared. There is the blue upper lip, the livid, ghastly hue of the face, the eye like that of a dead fish, the limbs limp and powerless, the muscles pulpy and flaccid, a violent and painful vomiting, every symptom of death, which it would soon be in reality if the unutterable horror of the suffering did not compel the poor fool to postpone the attempt to become a man in that way. Here endeth the first lesson. The silly youth resolves always that he will never touch tobacco again, and holds to his purpose until he has entirely recovered from the effects of the first lesson. Then he sees other youngsters like himself who have succeeded in conquering their disgust for tobacco. They have done it. Why not he? They laugh at him as white-livered; they assure him that the worst of it will be over in a few days, or at most, in a few weeks. They strut through the streets or other public places so grandly; they have such manly ways with them; there is such a grace in their style of holding the cigar between finger and thumb, and striking off the ashes with the little finger. When they put their cigars into their mouths again, it is with such a flourish, and their heads are thrown back, a little on one side, with so much self-consciousness, their eyes at the same moment cast slily right and left to see who observes and admires them! Ah! this is quite irresistible; and our poor, foolish youngster goes off behind the barn, or into some other out-ofthe-way place, and takes a second lesson. All this is carefully concealed from the parents, so the tobacco-pupil must go to bed before supper, under pretense of headache. Pretense? It is no sham. He has a racking, splitting headache, with the return of the dreadful nausea. In a few

weeks, more or less, our youngster has learned to smoke or chew, as the case may be.

Now, in doing this, he has expended far more resolution and downright hard work than would be necessary to acquire a fair knowledge of geometry, French, German, or Italian. But what has he acquired, in fact? Any good? None whatever. Any means of good? None. Any pleasure or means of gratification of any kind? None whatever. Then what has he really acquired? The tobacco habit. Is that all of it? Yes, that is absolutely the whole of it. But surely there must be some result to it, else we would not see people smoking or chewing through life? Yes, there is a result to it. What is it? This, and only this, that the victim of the tobacco habit has acquired an absolute need, which he cannot forego. He is in an agony if by any mischance he loses his tobacco. The need of it to him is as imperious as that of food or drink to others. He suffers more, cut off from tobacco, than if he were cut off from food or drink. On an expedition of any kind, to lay in a store of tobacco is as absolute a necessity to him, as a store of food and drink is to others. But then, surely he derives a great pleasure from tobacco? No. There is no pleasure in it whatever. The smoking or chewing does to him this and only this,—it prevents the suffering he would experience without it, or he is relieved from the suffering if it has already set in.

A gentleman told me this story, which exactly illustrates the condition of the victim of the tobacco habit. He was subject to headache. In a small spot over the right eye the pain was excruciating, but it disappeared instantly when his wife laid her hand upon it. I was in his house one day, when he came in and threw himself down into a rocking chair in an agony of pain, with his feet upon a stool. His wife ran to him, and put her hand upon the spot. Instantly he exclaimed, "How delicious that is! The dreadful pain is all gone, and I am so comfortable."

"But how long must your wife's hand remain there to drive off the headache?" I asked.

"Perhaps fifteen, twenty, thirty minutes," he said.

Now that exactly describes the condition of the tobacco victim. Without his smoke or chew he is in an agony of pain; but with his tobacco there is no pain, or the pain, if any, passes away. Here are two men just from dinner, one with a eigar, the other with none. Why is this? One has acquired the tobacco habit; the other has not. One would be most miserable without his cigar, in spite of the good dinner; the other is perfectly comfortable with the dinner, without a cigar. The one would take the cigar without the dinner, if he could not have both, because he would suffer far more from want of the tobacco than from want of food. The other would not accept a shipload of the best cigars in the world for his own use. The one would give his last dime for a cigar, and go without food, if he had fasted for a day; the other would sooner put into his mouth a pebble from the roadside than a cigar.

But, surely, there must be some pleasure, some real gratification in the use of tobacco, else sensible men would not addict themselves to so nasty a habit? No, there is absolutely no pleasure, no gratification whatever in the use of tobacco, except that which results from preventing or relieving the great suffering that would come from the want of it. Here we are on a steamer this fine summer's day, upon an excursion up-river, across the lake, or among the islands,-a large company of gentlemen and ladies. We see some gentlemen (?) around the deck smoking. Why do they do this? Because they would be most uncomfortable or, in fact, in great suffering without it. They cannot endure abstinence from tobacco until the return home. They are tobacco slaves without knowing it.

Some of them are around among the ladies and other non-smokers, with their disgusting smell. Why is this?

These are men whose moral sense is dulled, if not deadened, by the tobacco habit. They do not even consider, they do not think of it, that these people have

a right to the pure, fresh air, so important to their comfort and health, and they poison it with tobacco smoke. The pure air is as much their right as the purse in their pocket, and the forcibly taking it away by the tobacco smoke is as much stealing in the moral sense as picking the pocket; but these tobacco victims do not think of it, or do not heed. The eminent English doctor, B. W. Richardson, says that lying is a symptom of the alcoholic habit—an utter disregard of truth, a perfect indifference to it. In the same way and to the same degree the tobacco habit so deadens the moral sense that its victim will not hesitate to inflict any amount of discomfort upon others in gratifying his sensual appetite. He does not even think of the comfort or rights of others, or he has become indifferent to them.

Why should not the Sabbath-schools be increased in value and importance to the young by utilizing them in teaching, at proper times and in a proper way, the great evil sin many ways coming inevitably from the tobacco habit, while no good whatever results from it?—The Independent.

EFFECTS OF ALCOHOL ON MENTAL AND MUSCULAR STRENGTH.

The following is an extract from an excellent paper, read by Dr. A. F. Kinne at the Sanitary Convention at this place one year ago. We quote from the *Physician and Surgeon*, in the February number of which the whole paper appears.—Ed.

Among the many popular errors with regard to the nature of alcohol, the idea that it is a stimulant of muscular and mental ability is perhaps the most common. It is the chief of the exhilarants, as has been admitted; but that it is anything more than this, there is not a scrap of genuine evidence to show.

Muscular strength can be accurately measured, and all observers agree that its uniform effect upon the muscular system is to weaken, whenever enough is drank to produce any effect. ("Cantor Lectures;" New York, 1876, page 118.)

We shall best understand the action of

alcohol upon the brain by taking a few illustrations from common life.

Here is a company of "jolly good fellows," all standing on their feet, their faces red and radiant, and all swinging their arms and talking and vociferating at once. These men have been taking alcohol, and surely you will say it has stimulated them. But if we will attend for a moment to what they are saying, we shall see there is no true brain stimulation about it. We shall be reminded, rather, of what Addison says of the difference that exists between the mind of the wise man and that of the fool. "There are infinite reveries, numberless extravagances, and a succession of vanities which pass through both. The great difference is, that the first knows how to pick and cull his thoughts for conversation by suppressing some and communicating others; whereas the other lets them all indifferently fly out in words." The case with these revelers is precisely this; the poison which they have taken has paralyzed their conservative faculties, and the talking propensity is running on without anything to hold it in check and regulate it.

Sir Joshua Raynolds having maintained that wine improved conversation, Dr. Johnson replied: "No, sir; before dinner men meet with great inequality of understanding, and those who are conscious of their inferiority have the modesty not to talk; when they have drunk wine, every one feels himself comfortable, and loses that modesty, and grows impudent and vociferous; but he is not improved, he is only not sensible of his defects."

It is one of the saddest of the entailments of alcohol, that so many men of transcendent genius, the brightest ornaments of the race, have been numbered among its victims. And, by a strong but not quite unaccountable perversion of reason, their best works have been frequently ascribed to their alcoholic drinks. Leigh Hunt, for instance, states that "Don Juan" was written under the influence of gin and water, leaving us to infer that without such assistance Byron never could have accomplished it. Nothing could be wider from the reality than such

ideas; while at the same time, there is seeming truth in them. The case is precisely this. The habitual inebriate is, to all intents and purposes, a sick man; being all the time in the one or the other of these two diseased conditions. He is either under the influence of the narcotic, or the drug having more or less completely spent itself, he is, to a greater or less extent, in that state of nervous prostration that immediately follows. And while he is in neither case quite up to his normal condition, he may in some instances come nearer to it in the former state than in the latter, and thus lead superficial thinkers into the error that alcohol is a cerebral stimulant, and that he could never have done his very best without it. Before this is admitted, we have a right to insist that the comparison shall be instituted, not between Byron in the one, and Byron in the other of his disordered mental states, but between Byron, the inebriate, and the same great poet, as he might have been if alcohol had never laid its leaden finger upon him. Later in life, (but not much later, for he died at thirty-six,) its effect upon his mind was apparent to all. "Midnight draughts of ardent spirits and Rhenish wines" says Macaulay, "had begun to work the ruin of his fine intellect. His verse lost much of the energy and condensation which had distinguished it." (Edinburgh Review, 1831.)

Our own countryman, Allen Poe, was an inebriate also; but it could never be said that he drew his inspiration from drink. On the other hand, it was on account of his dissolute habits that he wrote so little. According to his biographer, R. W. Griswould, his "Raven," his "Annabel," his "Eureka," and indeed, all his best poems and essays, were written during lucid intervals, snatched from his crazy debaucheries, and after his nervous system had had time, in a measure at least, to right itself. Thus it appears that although it has been frequently and flippantly claimed that alcohol is the stimulant of genius, there is really no valid ground for the assertion.

We have now concluded what we had to say. And it is much to be desired

that persons who are not yet prepared to accept these views because they are new and strange, or because they are so directly opposed to long-cherished opinions, will try the experiments referred to, for themselves. It will not be difficult to do so, and the result cannot fail to be a favorable one.

Suppose, for instance, you measure your muscular strength with a "health lift," or with a dynamometer, and then take some of the drink in the strength-inspiring power of which you have most confidence; and when you are exhilarated by it, and feel as if you could shoulder a large fragment of Mount Olympus, measure your strength again. The drink has fooled you, that is all. You felt that you were stronger than natural; you find that the narcotic has been true to its paralyzing nature, and that you are weaker. Then, after a time, when the drug has spent itself, and reaction (so called) comes on, and you feel weak and prostrated, measure your strength once more. Fooled again. The stuff has fooled you twice. When you felt yourself strong, you found yourself weak, and now when you feel yourself weak, you find yourself stronger; your natural strength is returning, and what you have called reaction, is in reality recovery from the weakening effects of the narcotic.

Many questions bearing upon the health and welfare of individuals and communities will present themselves to the minds of the sanitarian and philanthropist; but upon the present occasion we shall not have time to enter upon this branch of our subject.

One thought is prominent. Alcohol is not the warming, cordial, and invigorating stimulant that it seems to be. And there is matter of great encouragement in the fact, that the essential oneness of its nature can now be demonstrated, and need no longer be regarded as a mere opinion.

It is to be expected, however, that these views will make their way slowly. For there is a world-full of preconceived opinions to be met and overcome, and the opposing influences are numerous and immensely potent. But the truth must pre-

vail at last. Its true place is not along with the displays of wealth and luxury, upon the side-board, but in the medicine chest along with hasheesh, henbane, opium, stramonium, and so forth, labeled as a Poison.

SCARLATINA - SCARLET FEVER.

SYMPTOMS.—The disease begins with fever, lassitude, and headache; pains in the back; flushed face; coated tongue; nausea, or vomiting; in children, convulsions. On the second day, eruption appears in the form of numerous minute dots of a bright scarlet color, which rapidly run together and soon cover the whole body. At the end of five to nine days, the fever subsides, and the skin begins to peel off.

This is an intensely contagious and infectious malady. Unfortunately, this fact has not been recognized until recently, and is not now as generally known as it should be.

The first symptoms generally make their appearance from four to seven days after exposure. In addition to the symptoms mentioned above, one which is very characteristic pertains to the tongue. It presents what is termed a "strawberry appearance" after the white coating has begun to disappear, occasioned by the enlargement of the papillæ, causing them to project through the white coating.

The edges and tip of the tongue are usually red in all but mild cases of the disease. The throat is more or less affected with inflammation, sometimes at the beginning of the disease, at other times soon afterward. In severe cases, inflammation of the throat is the most serious symptom of the disease. glands under the jaw become swollen and painful, and thick, tenacious mucus clogs the throat and larynx. The inflammation may often extend into the nose. Occasionally the inflamed glands suppurate. In some instances, the inflammation is so intense that it is rapidly fatal, when it is said to be malignant.

Various complications are apt to occur in this disease, among the most common and serious of which are inflammation of the ears, meningitis, pleurisy, inflammation of the bowels, inflammation of the joints, and acute inflammation of the kidneys, giving rise to dropsy, which is one of the most fatal of all the infectious diseases in very young children. The mortality frequently reaches three-fourths of all who are attacked. The chances of life increase with the age of the patient.

TREATMENT.

Undoubtedly the great fatality of this disease is in a large degree attributable to improper treatment or in neglecting to employ efficient measures with sufficient promptness. Mild cases require only a simple diet, thorough ventilation, the use of tepid sponge baths, cool compresses to the bowels, or wet-sheet packs, and perhaps cool enemas, and other measures which have been recommended for reducing the temperature in fever, together with good nursing. If the eruption is a little slow in making its appearance, or shows a tendency to recede after it has appeared, a warm full bath and sponging of the skin with hot water, or hot and cold sponging, together with warm drinks, are the measures to be employed. When the other symptoms are very severe, ice compresses should be applied to the throat if possible, and the patient should be given pieces of ice to hold in the mouth. When the breath is very foul, a solution of chlorate of potash, two or three drams to the pint, or permanganate of potash, half a teaspoonful to the pint of water, may be used as a gargle. Carbolic acid, in the proportion of a dram to a pint of warm water, is also an excellent gargle. The other gargles recommended for diphtheria* are also indicated in this disease when the inflammation is high, and swelling and irritation of the throat become excessive.

Rheumatic symptoms in the joints require the use of the hot pack or warm full bath. In a majority of cases the principal danger is from the high temperature. This should be vigorously combated by means of the cold pack, tepid sponging, and other measures already indicated. The popular idea that the eruption "may be driven in" by this method of treat-

^{*}See Good HEALTH for June, 1881.

ment is a mistaken one. The same remarks made respecting water treatment in measles are equally applicable to this disease. When dropsy occurs from inflammation of the kidneys, the same treatment should be employed as for acute nephritis. The patient should be allowed no solid food, and if there are symptoms of suppression of urine, no food at all should be allowed for twelve hours. patient should be induced to drink as much water as possible, and the skin should be kept in a state of active perspiration by means of warm packs. The use of meat should be strictly prohibited until the symptoms of kidney disease have passed away. If vigorous treatment is employed at the very beginning of the disease, death will rarely occur, notwithstanding the serious character of this affection.

Owing to the gravity of this disease and its infectious and contagious character, the most thorough measures should be taken to secure isolation of the patient during the attack, and thorough disinfection of the sick-room. No one should be allowed to see the patient during his illness except the nurses and those who are protected from the disease by having previously suffered from it. At the very beginning of the disease, window curtains, carpets, and all other articles which may afford a hiding-place for the infectious germs, must be removed from the room to be occupied by the patient. All clothes used about the patient should be disinfected by dipping them into a solution of chloride or sulphate of zinc, or should be burned. It is a good plan to keep a tub two-thirds filled with a strong disinfecting solution, into which cloths soiled by use about the patient may be thrown as soon as used. It should be recollected that the patient is more likely to communicate the disease during the period of desquamation, when the skin is peeling off, than at any other time, as the little particles of dead skin which float in the air about the patient will communicate the disease if inhaled. This danger may be in some degree obviated by giving the patient frequent warm sponge baths during the attack, and during the period of desquamation, anointing the skin with vaseline, sweet oil, lard, or some other unguent twice a day.

When the patient has entirely recovered, the sick-room and everything contained in it, or which may have become infected by the contagious disease, should be disinfected by means of disinfecting lotions, and fumigations with burning sulphur or chlorine gas. Sulphur is much more convenient to use than chlorine, and is equally effective.—J. H. K., in *Home Hand-Book*.

MORNING WORK.

PERHAPS, on the whole, moderately early rising is now a commoner practice in cities than it was forty years ago. It seems strange that the habit of lying in bed hours after the sun is up should ever have obtained a hold on the multitude of brain-workers, as undoubtedly it has in times past. Hour for hour the intellectual work done in the early morning, when the atmosphere is yet unpoisoned by the breath of myriads of actively moving creatures, must be, and as a matter of experience is, incomparably better than that done at night. The habit of writing and reading late in the day and far into the night, "for the sake of quiet," is one of the most mischievous to which a man of mind can addict himself. When the body is jaded, the spirit may seem to be at rest, and not so easily distracted by the surroundings which we think less obtrusive than in the day; but this seeming is a snare. When the body is weary, the brain, which is an integral part of the body, and the mind, which is simply brain function, are weary too. If we persist in working one part of the system because some other part is too tired to trouble us, that cannot be wise management of self. The feeling of tranquility which comes over the busy and active man about 10:30 or 11 o'clock ought not to be regarded as an incentive to work. It is, in fact, the effect of a lowering of vitality consequent on the exhaustion of the physical sense. Nature wants and calls for physiological rest. Instead of complying with her reasonable demand, the night-worker hails the "feeling" of mental quiescence, mistakes it for clearness and acuteness, and whips the jaded organism with the will until it goes on working. What is the result? Immediately, the accomplishment of a task fairly well, but not half so well as if it had been performed with the vigor of a refreshed brain, working in health from proper sleep. Remotely, or later on, comes the penalty to be paid for unnatural exertion—that is, energy wrung from exhausted or weary nerve centers under pressure. This penalty takes the form of "nervousness," perhaps sleeplessness, almost certainly some loss or depreciation of function in one or more of the great organs concerned in nutrition. To relieve these maladies, springing from this unsuspected cause, the brain worker very likely has recourse to the use of stimulants, possibly alcoholic, or it may be simply tea or coffee. The sequel need not be followed. Night work, during student-life and in after years, is the fruitful cause of much unexplained, though by no means inexplicable suffering, for which it is difficult, if not impossible, to find a remedy. Surely, morning is the time for work, when the whole body is rested, the brain relieved from its tension, and the mindpower at its best.—Lancet.

HABIT AND APPETITE.

[The following article from the Safeguard strikes at the root of the great evil, intemperance, and suggests the true and only remedy. Tea, coffee, tobacco, and stimulating foods are the exciting causes of intemperance, and the great obstacles in the way of reform.—Ed.]

There are some persons who are occasional rather than habitual drunkards. They go without touching strong drink for weeks or months, until at length, a sort of frenzy seems to possess them, and they spend days together in intemperance and debauchery, after which they sober off and keep steady for a considerable time, and then fall into the old snare and have another "spree." Many reformed

men are subject to such occasional falls, and seem to find it impossible to resist temptation. Men will promise, and vow, and sign pledges, and take oaths to avoid strong drink; but in the presence of temptation all these things are forgotten and go to the winds.

Why is this? People say it is the force of habit. I say, rather, it is the power of appetite. A habit is one thing, and an appetite another. You have a habit of walking on a certain side of the street. You could walk just as easily on the other side, but you have habituated yourself to follow a certain path. Habit sometimes becomes exceedingly strong. A boy has a habit of biting his finger nails; he has determined twenty times that he will stop it, but the first he knows his fingers are in his mouth, and he is nibbling at his nails. He has no appetite for finger nails, but he has a habit of nibbling and biting them.

Now a habit is often difficult to eradicate. It has been said, "Sow an act and reap a habit; sow a habit and reap a character; sow a character and reap a destiny." But there is something stronger than habit, and that is appetite. A habit may be broken by patient and persistent endeavor; but an appetite grasps a man, and sweeps him down to ruin like a torrent. It is all very well to say, "Let every man take care of himself," and "A man who cannot rule his appetite deserves to suffer;" but people who talk thus flippantly do not fully understand the power of appetite.

Suppose, for instance, you find a man on a wreck at sea. He has been for a week without food and water, and is almost famished. Suppose you bring this man on board a vessel, seat him at the table, and say, "Here is food in plenty, food of all kinds, all we have, now help yourself. You have a good understanding; you know what is good for you; make yourself at home, and eat all you please."

How long would such a man survive such mistaken kindness? He would kill himself the first meal he atc. Sailors know better than to commit such a folly

as this; they would not thus allow a man to kill himself by yielding to his appetite for food. They know that appetite overpowers reason, and so they would reason for the man who was unable to reason for himself. They would give such a man food of the simplest kinds, and in the smallest quantities practicable; a little porridge, or biscuit, or broth, something that would nourish the enfeebled powers and restore the famished sailor to health and strength. They know that no man in that condition can be trusted to judge or decide for himself; they know that appetite is stronger than reason, and that they must restrain the victim of appetite from imperiling his life by indulgence.

Take another instance. Suppose the most intelligent man in town-a lawyer, a minister, a judge, no matter who-has passed through a course of fever. For weeks and weeks he has eaten almost nothing, until he is wasted to a skeleton. At length he begins to recover, and is possessed of an inordinate hunger. Who would say to such a person, "You know what is for your own good, you are not a fool nor a baby, you can take care of yourself; here is food, help yourself-eat all you please"? You know that there is not a sensible man in town who would dare to trust a minister, a lawyer, or a judge, just recovering from a long sickness, to help himself to all the food he chose to eat. You know he would almost inevitably make himself ill, and probably shorten his life. You would say to the invalid, "Would you not like a little broth?" and he would answer, "I don't want any broth! I want some beefsteak!" You offer him some gruel, and he will tell you, "I have had gruel for a month, I don't want any gruel; I want something to eat!" And you know that you must guard that man-with all his intelligence, his conscientiousness, and religious principle—you must guard him, or he will kill himself with overeating.

I once heard of a minister in the prime of life, strong, active, vigorous, and eloquent, who, after an attack of fever, was recovering. One day he saw his attendant with a piece of mince pie. He begged for it and was refused. He entreated, and urged, and wanted just one mouthful, but when he got it into his hands, he crowded it into his mouth and ate it up. That man went down upon his bed in a relapse, and died before his wife could get there to see him. He was not a fool, a fanatic, or a drunkard. He was an intelligent, sensible, and intellectual man; but he was a man with an appetite for food, and after long days of abstinence, no judgment which he possessed could hold him back from devouring whatever food was within his reach.

In like manner when we speak of a desire for strong drink, we say it is an appetite for, rather than a habit of, drinking; and there are few men who are strong enough to control themselves until their appetite is restored to its normal condition. Habitual drunkards are diseased, and their appetite for intoxicating drink is just as strong as a starving man's appetite for food.

We read of a vessel that was on fire at sea. There was a quantity of powder in the hold, and the flames were approaching. The crew made their escape in the boats, but while those flames were crackling and roaring, and no man knew how soon the vessel would be blown to atoms, one of those sailors went back to get some tobacco! Gold would probably have been no temptation, but any old tobacco chewer knows why he went back-he understands perfectly! While probably no money could have hired him to thus peril his life, that little black tobacco idol ruled him as with an iron rod. Just so men who have the appetite for alcohol or opium will run the risk of going to perdition for the sake of gratifying that desire, as a man recovering from a fever will sell his life for a morsel of food.

What, then, is to be done with men whose appetites are so perverted that neither they nor anybody else can control them? There are two standpoints from which to answer this question. First, it may be answered from a religious standpoint. Intemperance is a sin, and these acquired appetites are sinful from beginning to end. The sin has, as in olden times, induced disease. God can forgive the sin,

and he can, and often does, heal the disease. If a machine be broken or deranged, we prefer to take it to the one who made it for repairs; so when man is wrecked in constitution and weakened in will, when his whole moral nature is debased and dilapidated, there is no better thing that we can do than to take him to the Lord in prayer, and to seek the blessing of the mighty God upon him. He who can say to the poor drunkard, "Thy sins be forgiven thee," can also rid him of the terrible fetters of appetite, can remove the mania which possesses him, and can give him perfect soundness. This is one way in which men are relieved of this fatal appetite; and there is no doubt but persons who will sincerely cry to God for deliverance from its dominion, may be saved by the grace of God, and so renewed by the Holy Spirit that both body and soul shall be restored to health and soundness and integrity. Oh, that the poor victims of intemperance who struggle in the grasp of evil habits, might turn to the stronghold, and find deliverance by the power of Christ who came to break every yoke, and to bid the oppressed go free!

But with the exercise of faith comes also the exercise of common-sense, or the use of proper means for securing and retaining health. Most of our sicknesses and sufferings are the result of direct violation of physical law. If we seek relief from these consequences of our misdoings, we should at the same time cease to do evil and learn to do well, thus avoiding the causes which have brought disease and calamity upon us. The man who endeavors to abstain from the use of intoxicating drinks, while he at the same time persists in doing the very things which led him into intemperance, acts neither wisely nor consistently.

One of the great preventives against relapses into intemperance is a simple, healthful, nutritious diet. Doubtless many a man is overcome by habits of intemperance, through physical exhaustion. In the morning he has no appetite for food, but thinks he will take a cup of tea or coffee; after doing this he feels better, and goes to work supposing he has had his breakfast; three hours later he feels faint

and "all gone." Is it any wonder he is tempted and overcome by the appetite for strong drink? A simple and nourishing breakfast would have diminished the danger of temptation, and strengthened his powers of resistance.

ORIGIN OF HYDROTHERAPY.

BY DR. SPENHOLZ.

Translated from the "Badearzt," Vienna, by F. I. Apel.

HYDROTHERAPY, so much in vogue in our time, is regarded by many to be an invention of Priessnitz. However great his merits may be in the methods for the application of cold water in the treatment of diseases, he cannot be considered the author of this method. Centuries before him, physicians had treated their patients with cold water: we shall speak especially of the most ancient known at the time of the Roman Empire (29 B. c. to 37 A. D.). When at the downfall of the Republic, in place of frugal habits, luxury and intemperance prevailed, corrupting both body and soul, Roman medical science had not yet attained any standing, while Greece abounded in systems of medicine and numerous medical schools. One of those educated in Greece, Ashtepiades, a contemporary of Cicero, came to Rome, and considering the Roman habits with their evil consequences upon the health of the citizens, he conceived a new plan of therapeutics suitable to their conditions. Contrary to the prevailing custom of Hippocratian empiricists, with their abuse of cathartics and emetics, he recommended a system of dietetics, active and passive motions, massage, and the use of cold water, both externally and internally. His ideas found favor, especially with the aristocracy; and one of his students, Antonius Musa, becoming physician to the Emperor Augustus, had the good fortune to save the life of his august master by adopting the method of his teacher, -application of cold water. The recovery of the emperor caused a great sensation in Rome, and established a high reputation for Musa and confidence in his method, as it was even then the fashion to imitate the court.

The disease of the emperor appears to have been typhus fever. Whether Antonius Musa was the only physician in attendance upon the emperor, or whether he consulted with the numerous other court physicians, we are unable to say; but the merit of having saved the emperor's life was ascribed to him alone, and he was accordingly rewarded in a royal style. He found a grateful patient in the emperor, who directed, according to Cassius Dido, the payment of a sum which in our money would be equivalent to \$1,050,000 for his services.

This was the first period of hydrotherapy. It passed away; was forgotten. Cold water treatment has been enrolled in our day among the most useful of scientific medicines, and its activity and excellency in many diseases have been acknowledged so that a second forgetting need

not be feared.

HEAT AND HEALTH.

A SUFFICIENCY of heat is one of the most essential requisites to health; and in the administration of heat we have one of the most powerful curative agents. The sun furnishes a constant supply of beneficial warmth, of which we make much less use than we might and ought. Indeed, we too often shun that which we ought to seek, as when we deliberately and at considerable cost darken the rooms into which we ought to welcome the sunshine, and carefully exclude its life-giving rays with umbrellas and parasols. idea of a sun-cure, which was proposed by one of our physicians several years ago, was one of genuine merit, and has been strongly commended, after several years of observation in the East, by the late Mr. David Urquhart, M. P., and secretary to the British embassy at Constantinople, who has related many incidents illustrating its efficacy. Among them was that of a person who had been advised, at the baths of Gastein, to try air-baths in the neighboring forests. He received considerable benefit from lying undressed in the shadiest part of the forest, but finally concluded to expose himself in the full

sunshine. Although he had always supposed that the rays of the sun gave him headache and derangement of the stomach, he found that when entirely exposed he was not unpleasantly affected in any degree, but felt agreeable sensations of genial warmth. If, however, he covered any part of his body, the disagreeable feelings returned, and the covered part became intolerably hot. Occasionally a pricking and itching sensation and redness of the skin suggested the suspension of the baths for a day or two. Dr. Scanzoni, of Wurzburg, explains the freedom under these baths from the pains in the head and stomach which commonly follow exposure to the sun by the fact that the action is diffused equally all over the body. and the circulation is determined in a corresponding manner, instead of being drawn in excess to the head. Dr. Gosse, of Geneva, wrote in 1826 in high praise of the curative properties of heat, which he regarded as working by restoring the action of the skin. The hot-air bath has been used for twenty years in the Newcastle Infirmary with satisfactory results, and has been introduced into several lunatic asylums with most excellent effects in soothing and curing mania and the attendant diseases. Dr. Lockhart Robertson, of the Sussex County Lunatic Asylum, not only recommends it in those cases, but says that he has had several examples of its curative power in the early stages of consumption, and believes that, if used at a sufficiently high temperature, the results would astonish us all. Urquhart observes that a high temperature is more endurable when the heat is radiant than when it is brought in hot aircurrents .- Popular Science Monthly.

⁻A woman who carries around milk in Paris said a naive thing the other day. One of the cooks to whom she brought milk looked into the can, and remarked with surprise: "Why, there is actually nothing there but water!" The woman, having satisfied herself of the truth of the statement, said: "Well, if I did n't forget to put in the milk!"—Medical Advance.

HAVE WE THE RIGHT TO KILL?

REPLY TO AN OBJECTOR.

You seem to me right in treating Vegetarianism as a moral question; but I fear you may think my notions of morals peculiar. With Cicero, I hold that man is not made for himself alone, but for his family, for his country, for his fellow-men. Yet this does not forbid our saying that he is also made for himself as an individual, having his own rights and enjoyments. The like I say of women, and the like of all animals. They have a part to play in the complex of the world, but they have also a place and right as individuals. No one is made for another singly, but each both for the whole and for himself. So each race of animals has a function in the great world, often unseen by us. Beasts and birds of prey maintain the balance of species. Carnivorous birds and insects keep down the innumerable tribes that would devour all vegetable existence, thus doing good service. But to say that each lower animal is created solely for man, and not at all for itself, seems to me an arrogant theory, contradicted by obvious facts. Why scorpions and poisonous reptiles were created, is hard for man to ascertain, for no one thinks they were specially created for man's convenience. Still, if we believe in a wise Creator, we are sure there was a good reason for their existence, other than our service or convenience. The same I hold to be certain concerning those domesticated animals which are manifestly of service to us. You ask me what are fish for if not for man's food. Yet the depth of the ocean holds numberless creatures which never were and never will be man's food. There must be plenty other reasons (if even quite unknown to us) why they have been created besides that of furnishing us with food. Cows, sheep, ducks, geese, etc., you think can have no reason for existence except that we may eat them! In my belief they were primarily created each for its own sake, but also each for the whole world's sake, as all those creatures innumerable which lived and died before the

creation of man. At the same time, cows and sheep are valuable to us Vegetarians who do not eat them, and the bullocks (in nearly all nations, except with us silly English, for the last one hundred years) have worked on the farms. In Africa they largely serve to carry burdens on their backs. Ducks and other birds clear away snails, slugs, and other devourers of crops. Birds in general are the beauty and delight of creation, besides their services to the husbandman, and if we did not scare them, would be to us a tenfold delight. The question what food we ought not to take, with me is decided by learning what sort is not in harmony with our bodily structure. Anatomy and physiology show that man was not made to be carnivorous. To attempt to prove the contrary by quoting Scripture, seems to me as unhappy a use of Scripture as those have made who, by quoting texts, defend aggressive war, religious persecution, Jewish divorces, polygamy, and slavery. That suggests to me "the letter that killeth" and not "the spirit that giveth life" (such are your words). I am surprised that you think it worth while to consult me. My conviction is that much cruelty becomes normal to man, and half the beauty of the world is lost when man is incited to regard all animals as made only for his stomach. Again, you object that the animals "would quickly overrun the land" if not eaten. But horses, and asses, and dogs, and cats are not eaten, and do not greatly trouble us by their inconvenient number. You seem to forget that immense effort is used to multiply by artifice the animals which we eat; hence disease among the cattle and disease to the cattle-eaters. I do not see that I have a right to kill for food an animal whose flesh is not needed for my nourishment. It has a right to live as truly as I, and a good reason is needed before I claim to kill it .- F. W. NEWMAN, in Dietetic Reformer.

—The laws of Nature are just, but terrible. There is no weak mercy in them. Cause and consequence are inseparable and inevitable.—Longfellow in Kavanagh.



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THE RIVER OF TIME

OH! the river that runs forever, The rapid river of time! The silent river that pauses never, Nor ceases its solemn rhyme!

How swift by the flowery banks it rushes, When love and joy are at play, And stretch out their hands with laughter and blushes, And beg it in vain to stay!

How slow through the sullen marsh of sorrow, It creeps with a lingering pain; When night comes down and we long for the morrow, And longing is all in vain!

O'er sparkling shoals of glittering folly, O'er steeps of dreadful crime, O'er gladness and madness and melancholy, Through fears and hopes sublime.

Ruthlessly on in waking or sleeping,
Unheeding our wish or will.
Through loving and laughing, and wailing and weeping,
It bears us for good or ill—

Bears us down with a fearful motion,
In a current no eye can see,
Down to the vast mysterious ocean
We call eternity. — William W. Story.

MRS. PRINGLE'S CONSPIRACY.

"THERE'S grandmother, dear—run and bring her in."

Tiptoe toddled out to meet the brisk-stepping, fresh-faced, oldish (not old) lady who came in at the gate.

"Come to spend the day, have n't you,

mother? How nice of you!"
Young Mrs. Pringle had never

Young Mrs. Pringle had never yet discovered that her husband's mother was her "mother-in-law" in the popular acceptation of the term.

"Yes, I've come, Kate; but do n't stop your work; 't is a nice, cool morning for sewing—go right on."

So after ensconcing her visitor in an easy chair, and supplying her with fan and footstool, Mrs. Pringle resumed her basting and fitting, with an occasional ten minutes or so of rapid stitching, the only interruption to the stream of talk which seemed in no way to interfere with the motions of her deft fingers.

"There!" she exclaimed, as noon drew near.

"Come here, pet."

She proceeded to try on Master Tiptoe the

result of her morning's work, a jaunty thing of tucks and ruffles which hardly reached to the knees of the chubby morsel. It was duly pulled down, jerked around, patted smooth here, puffed out there, and quickly tied about with a sash improvised from a strip of lining-muslin snatched from the floor.

"Now," with a kiss and a shake, "run to grandmother, and say, 'Is n't I sweet, grandmother?'"

"Is n't—mamma—feet—ganmuzzer?" came with a heroic attempt at very precise pronunciation.

"No, no; that is n't it," laughed mamma; but "ganmuzzer" caught the merry urchin in her arms.

"That is it, exactly, Tiptoe. I declare, Kate, you are an industrious little soul as I ever saw! And what a knack you have at such things! and for everything else as far as I can see. I'm sure if Robert do n't get on it won't be your fault."

The kindly woman had never been blessed with a daughter of her own, and this son's wife of hers was well-nigh perfect in her eyes.

But the affectionate speech failed to bring an answering smile. A troubled expression rose to the younger woman's face, and tears slowly gathered in her eyes. She unbuttoned Tiptoe's slip, unmindful of his protest against having on his "ugly ol' dress" again, but compromised matters by tying on the the pink muslin sash over the buff chambery. The machine was righted and closed up, and the cuttings gathered from the floor before the unburdening came which the mother knew would come.

"I don't know, mother; sometimes I feel quite discouraged, and really think it is not much use for me to try."

"Why, Kate, dear, what do you mean? Are things going wrong with Robert?"

"Oh, no, mother! Nothing, I mean, for you to worry over. It's only that I am anxious about Robert smoking so much. I know it is hurting him in more ways than one."

His mother's face grew grave.

"Is he smoking more than formerly?"

"Yes; I'm sure it is growing on him. From what I see and what I can guess at, I think he smokes eight or ten cigars a day. I have known him to smoke a dozen in a day."

"Too bad," said his mother, with a sigh.

"Of course it must be a great injury to him in

time if it is not already."

"And then, he cannot afford it. I don't think he realizes at all what a drain it is. I know he needs every cent he can keep in his business, and I try my best to save in every way I can; but, mother, I do get out of heart sometimes when I see, that with all my pinching and scraping, I can't save as much in a week as he spends on cigars in a day."

"I see, dear."

"And I know it is a selfish way to look at it, but I often feel impatient and angry at going without so many little things that I would like to have. I'm perfectly willing to do without, you know, only I can't make it seem right that I should do all the going without."

"It is not right."

"Still, it is really Robert's only fault, so perhaps I ought not to complain. Think how much worse some men are? Supposing he drank, now?"

"That's a poor excuse, Kate. You would n't excuse a person for being a liar because he was

not a thief.'

"Well!" Young Mrs. Pringle drew a long sigh. "I don't know what to do about it, I'm sure. When I try to talk to him about it, he either puts me off or laughs at me, and tells me not to bother my head about things I do n't understand."

"Suppose, Kate, you ask him for the same amount he spends in cigars for you to spend

for your own gratification?"

"But I could n't have the conscience to spend money on superfluities, mother. I remember how Emily Brand used to do that. She thought she was quite justified in spending three or four dollars a week in trash, because her husband spent the same in cigars. So he smoked and she spent, and he broke up in business; and now they are living, nobody knows how, in some little western town."

"I think you might manage to open Robert's

eyes a little, though, Kate. Listen-"

Mrs. Pringle, the elder, smiled as if in admiration of some clever scheme within her brain, yet shook her head in solemn appreciation of the serious character of the subject. very earnest counsel followed, brought to a sudden end by the appearance of the son and husband, carrying his young heir, who had run to meet him, on one shoulder and a small parcel under his other arm.

"A new book, Robert?" asked his mother, glancing at it after greetings had been ex-

changed.

"Oh," put in Kate, "is it that 'Carlisle' we were speaking of? You said you'd bring one up."

"No, it is not. I went for a copy, but they

had none of the cheap editions, and I thought it hardly worth while to pay two dollars for one."

He leisurely unwrapped his parcel, showing Tiptoe a picture inside, untied various bits of yellow ribbon, giving them to him to tie on Carlo's ears; he then took out a cigar which he smelled critically before setting it approvingly between his lips.

"What does such a box as that cost you,

Robert?" asked his mother.

"About eight dollars and a half, ma'am," he answered, with a perfectly unsuspecting smile. "I frequently buy by the box because I find it quite a little saving, and, of course, I have to watch the corners, for our expenses naturally increase a little each year."

His look of virtuous frugality seemed, however, lost upon his mother, as she said, dryly: "I'm glad you appreciate the need of it. How

long does such a box last you?"

"Well,—I can hardly say. Perhaps a

month, perhaps not so long."

"But it seems to me, Robert, you spend more money on yourself than you do on Kate."

Mrs. Kate hid her face behind Tiptoe's curls to conceal a smile at her mother-in-law's light skirmishing.
"What!" said Robert, looking up in sur-

prise. "Do n't you have money enough, Kate?

Why did n't you tell me, dear?"

Her tender heart was disarmed at once, and she was about to protest that she never wanted anything; but Mrs. Pringle, the elder, struck in, with a warning glance at her: "You know, Robert, it is not pleasant for a wife to be always obliged to ask for what she wants for her own little fancies. Now I think it would be a very good plan for you to hand her the same amount you spend in cigars, monthly, sayfor her own personal gratification."

"That's a good suggestion, mother. I'll do

"Then bear in mind," Mrs. Pringle was very fond of clinching a thing when she went at it, "your best way will be to keep a careful account of your own expenditure, and hand her, regularly, the same."

"Agreed, ma'am."

He sat for awhile after dinner enjoying his mother's visit, chatting pleasantly, smoking three cigars meanwhile and putting a few more in his pocket as he started down town, never dreaming that, according to his wife's mental calculation, he could burn up more money in an hour than she could save by sewing all her spare time for half a day.

Robert Pringle conscientiously made an entry, in a corner of his private memorandumbook, of every cent he spent in tobacco during the following month, beginning with the box of cigars. It lasted exactly eleven days, but was promptly replaced, and smaller purchases made as convenient. To do him justice, his really generous and rather uncalculating disposition had gone far, as his wife had asserted, toward preventing, on his part, any fair understanding of his own extravagance; for he, by no means, smoked all he bought; but in the usual course of polite exchange which prevails among gentlemen, a man of his open-handed disposition was sure to bear the heavier burden.

"Phe-ew-w-!" he ejaculated, as he cast up the items for the month succeeding his

agreement with his mother.

He went over the short column from the bottom up, then from the top down. There was no mistake—figures never asserted themselves more vigorously than those which calmly stared him in the face, expressing:—

May 15th,			\$8 50
" 26th,		٠	1.75
" 28th,			75
" 29th,			8 50
June 10th,			175
" 13th,			$2\ 25$

\$23 50

It looked large. And when he came to writing out a check for the same amount for Kate, it looked very large.

"I've been going a little too strong on it this month, Kate," he said, as he handed it to

her.

He had a half-hope that she would decline to take it, but without showing any surprise at the amount, she laid it in her desk with a very matter-of-course "thank you."

A few days after, she challenged his admira-

tion of a lace collar she was wearing.

"Prettier than cigars, is n't it?" she asked,

areniy.

"Is that your cigar money, dear? Yes, very pretty, but they do manage to crowd a good deal of money into a very small show, eh?"

"That's real lace, Robert—not at all high for such a quality! But—what have you to

show for your month's money?"

He laughed and shrugged his shoulders, assuring her she should get less next month. By a heroic effort at self-sacrifice he lowered the sum by several dollars; but the following month it rose higher than at first, and Robert began to feel a little surprised at the nonchalant way in which Kate accepted so much money to lay out in mere superfluities. He was obliged to acknowledge to himself as she displayed a pearl brooch with great apparent satisfaction, that he was somewhat disappointed at her discovering so much relish for such trifles.

"Pearls, eh? My mother used to wear something like that."

"Ah? I suppose so; pearls are never out of style, you know."

Kate colored a little as she said it, and be-

gan to talk of something else.

In due course of time an encyclopedia appeared. This purchase met with Robert's hearty approval; for both had often felt the need of it, but he had never felt able to buy one. But when a fancy chair was set in the parlor where there was already no lack of fancy chairs; and a picture, small in every respect but the price, he thought, was hung in the sewing-room, he felt a little annoyed, more especially when Kate airily remarked: "I did n't need it, of course, but as I have just so much to spend, I thought I'd like it."

He was ashamed of himself for feeling so, for he told himself over and over again, that it was a perfectly fair arrangement. Kate's money made an important figure in his business, and if she had had none, he had chivalrous notions on the rights of industrious and economical wives. And then, what right had he to criticize her mode of spending, when she was not injuring herself or any one else by it, -which he knew in his very heart could not be claimed for his way? Still, he had rather hoped that it would occur to her to pay some of the house-bills, but it never had; they had continued to present themselves with their usual aggravating regularity, serving to increase an irritating consciousness of the presence of unnecessary articles about the house, the purchase of which was not warranted by his means. At all events, he might justly allow himself to fall back upon a little relief for his well-concealed annoyances, in his feeling of surprise that his wife had not taken the least advantage, so far as he knew, of this liberal supply of pocket-money to carry out any of her old desires for doing good. He had not observed that she had given a cent to any of the missionary societies, or to relieve the poor. In his own growing sense of discomfort at the view he was forced to take of the hitherto unimagined extent of the cost of his pet self-indulgence, there was some consolation in reflections on Kate's short-comings.

He sat alone one day looking over his accounts. He came across six "stubs" of checks

he had given her. They ran:— \$23 50

\$138 05

His own expenditure doubling the amount

gave \$276.10—this for six months, making

the yearly sum of \$552.20.

A blank expression overspread his countenance as he thought of his partner's strong desire to extend their business, and of his utter inability to co-operate in such extension unless his private expenses could be cut down. He looked again at the sum. It was twice the hire of a servant, one-third more than their house rent. And the blank expression on his face grew blanker as a further calculation showed him that this nice little game of "superfluities" between his wife and himself, was played at an expense amounting to the interest on a fraction less than eight thousand dollars, at seven per cent.

One month later he handed his wife a paper.

"Here's your check, Kate."

She opened it and found it—blank! Her arms were around his neck in a moment.

"O Robert, have you really given it up for good? I knew you were trying to stop it, dear; but do you mean it for always?"

"I hope so, Kate. I never quite took in, till lately, how far the thing was carrying me, but I find there is only one right thing for me to do, and the sooner I do it thoroughly, the better. But what will you do without your spending-money, little woman?"

With a ringing laugh she ran to her desk

and took out some papers.

"I do n't know what I should have done," she said, with a desperate little shake of the head, "if this money business had gone on much longer. Now, Robert, did you imagine I was fooling away all that money?"

"Why, I believed just what you told me."
"I never told you so, sir. I simply showed
you the things and let you believe—what your
mother and I intended you should!"

"Aha! A conspiracy against me, eh?"

"But it was all her doing, Robert. She set me up to it, and I should have stopped it long ago, for I could hardly bear to let you think me such a simpleton; but she domineered and domineered over me in the most dreadful manner, and I could n't. Here—" she laid the papers in his hand, "there are five of the checks, the other went for that cheap encyclopedia. That's the only bona fide purchase I've made."

"How came you by all the laces, and jewelry, and other stuff then?" asked Robert, in surprise.

"They all belong to your mother."

"Deceit! Treachery! Double dealing! What is the saying about a man's foes being of his own household? Really, Kate, I think an honorable man might entertain conscientious scruples against quitting tobacco as the result of such practices upon him!"

"Give me back the checks then."

But he kept them, and Mrs. Pringle, the younger, never got another to spend on "mere superfluities."—Sydney Dayre, in Arthur's Home Magazine.

CHEAP TEACHERS.

In a recent lecture the Rev. H. W. Beecher presented the following forcible arguments against the unfortunately too common system of selecting cheap teachers to instruct the youth of our land, which we quote for the readers of this journal.

"I put the teacher higher than any profession, higher than the lawyer, higher than the minister, higher than the statesman. I tell you that the proper society is the bottom of it, and they that work there are the ones that work nearest to God. I tell you, first God, next mother, next teacher, next minister, if he be worthy of his calling. And you are bound to give them such dignity that self-respect in men and women shall make them willing to adopt the business of teaching for life with a certainty, just the same certainty of an adequate support that the other liberal professions have. As it is, the common school is perpetually spoiled by raw material. Taking the country through—large cities are exceptional points—but taking the country through, nobody teaches because he means to be a teacher for life. The young man has gone to the academy, and he wants to go to the seminary or college, and he steps aside and teaches for a winter with the hope to do something else, because that is not going to be his business; he has gone through college and he wants to study the liberal professions. He is a little in debt, and so he thinks he will teach a year in order to raise the wind, not because he is going to make teaching a business. And so a woman goes into the schools, not to stay, but because it is a respectable place for her to wait until she sees what God is going to send her; when she finds out she resigns and opens a school of her own. Now, is this system best for your children—to keep them perpetually in the hands of raw material?

"What if an untaught sailor, at the end of a voyage should say: 'I cannot get another berth for six months, and I think I will practice medicine.' 'You would n't put a dog in his hands, unless it was for execution. What if a man should say, 'I hope for an office, and I will practice law until I get one.' He never studied it, and is n't going to study it, but he is going to practice it. Who would put a piece of property or anything he had an interest in,—who would put his business in the hands of a man that had not studied the law a good many

years and gathered experience and accumulated the wisdom which comes from study and

experience?

"You demand these for property, for the body; you demand experience in all these things, but for your children anything, only so it is cheap! 'If a man will teach for \$25 a month and found, he is the man for us, unless there is a fellow who will teach for \$20.' So you foist off upon the children the poorest and the meanest and most miserable teachers. But this must be changed; men must cultivate this profession; a man must go into it as he goes into the ministry, or into the law, for his life work. Of all parsimony, there is none like that of cheap schools."

NATURE'S UNDERTAKERS.

How often do we hear the query, "What becomes of all the dead birds?" The secret of their mysterious disappearance was but just now half told by the buzz of those brown wings, and the other half is welcome to any one who will take the trouble to follow their lead. This beetle is one of man's incalculable benefactors. It is his mission to keep fresh and pure the air we breathe. He is the sexton that takes beneath the mould not only the fallen sparrow, but the mice, the squirrels, and even much larger creatures that die in our woods and fields.

Beneath that clump of yarrow I found just what I had expected—a small dead bird—and the grave-diggers were in the midst of their work. Already the rampart of fresh earth was raised around the body, and the cavity was growing deeper with every moment, as the busy diggers excavated the turf beneath.

Now and then one would emerge on a tour of inspection, even rummaging among the feathers of that silent throat, and climbing upon the plumy breast to press down the little body into

the deepening grave.

These nature-burials are by no means rare, and where the listless eye fails to discover them, the nostril will often indicate the way, and to any one desirous of witnessing the operation without the trouble of search, it is only necessary to place in some convenient spot of loose earth the carcass of some small animal. The most casual observer could not fail soon to be attracted by the orange-spotted beetles. Entomologists assert that these insects are attracted by the odor of decay; but from my own humble investigations I have never been able to fully reconcile myself to this theory.

If it were the question of odor alone in this dead bird, for instance, it would be difficult to explain the bee-line flight of these humming beetles, two of which came swiftly toward me even from the direction of the wind, and

dropped quickly upon these feathers hidden from sight among the grass. Perhaps in such an instance we might imagine that they had been there before and knew the way, that they had noted this clump of yarrow, maybe; but I have observed the fact before when there was every reason to believe that no such previous visit had been made.—WILLIAM HAMILTON GIBSON, in Harper's Magazine.

ONE GLASS OF RUM.

At a meeting where temperance experiences were given, a man arose and told what one glass had done for him. He said:—

"I had a little vessel on the coast: she had four men beside myself. I had a wife and two children on board; the night was stormy, and my brother was to stand watch that night. The seamen prevailed on him to take one glass to help him to perform his duties, but being unaccustomed to liquor, he fell asleep, and in the night I awoke to find my vessel a wreck. My wife took one of my little ones in her arms, and I took the other, and for hours we battled with the cold waves. After hours of suffering, the waves took my little one from my embrace; then after more hours of suffering the waves swept my other little one from my wife's arms, and our two little dears were lost to us forever. After more battling with the storm and waves, I looked at my wife, and behold she was cold in death. I made my way to the shore, and here I am-my wife, my children, and all my earthly possessions lost for 'one glass of rum.'"

UNDER COVER OF DARKNESS.

Speaking of the greater tendency to follow after sin in the night season under cover of the darkness, the Rev. Henry Ward Beecher says:—

"If you want to make the ruin of a child sure, give him liberty after dark. You cannot do anything nearer to insure his damnation, than to leave him liberty to go where he will without restraint. After dark he will be sure to get into communications with people that will undermine all his good qualities. I do not like to speak to parents about their children; but there are thousands who think their child cannot do wrong. Their child will not lie, when his tongue is like a bended bow; he will not drink, when there is not a saloon within a mile of his father's house where he is not as well known as one of its own decanters; he never does iniquitous things, when he is reeking in filth. Nineteen out of every twenty, allowed perfect freedom at night, will be wounded by it. There is nothing more im-

portant than for a child to be at home at night; or, if he is abroad, you should be with him. If he is to see any sights or take any pleasure, there is nothing he should see that you should not see with him. It is not merely that the child should be broken down, but there are thoughts which never ought to find a passage into a man's brain. As an eel, if he wriggle across your carpet, will leave his slime, which no brushing can ever efface, so there are thoughts that never can be gotten rid of, if once permitted to enter; and there are individuals going round with obscene books and pictures under the lappels of their coats, who will leave ideas in the mind of your child that will never be effaced. There are men here who have heard a salacious song, and they never will forget it. They will regret having heard it to the end of their lives. I do not believe in a child's seeing life, as it is called, with its lust and wickedness, to have all his imagination set on fire with the flames of hell. Nobody goes through this fire but they are burned, burned, burned; and they can never get rid of the scars."

THE TRUE EDUCATION.

A PHILOSOPHER has said that true education for boys is to "teach them what they ought to know when they become men." What is it they ought to know, then? —to be true, to be genuine. No education is worth anything that does not include this. A man had better not know how to read, he had better never learn a letter in the alphabet, and be true and genuine in intention and in action, rather than, being learned in all sciences and all languages, to be at the same time false in heart and counterfeit in life. Above all things, teach the boys that truth is more than riches, more than culture, more than earthly power or position. Second—to be pure in thought, language, and life,-pure in mind and in body. An impure man, young or old, poisoning the society where he moves with smutty stories and impure examples, is a moral ulcer, a plague-spot, a leper who ought to be treated as were the lepers of old who were banished from society, and compelled to cry "unclean" as a warning to save others from the pestilence. Third—to be unselfish; to care for the feelings and comforts of others; to be polite; to be generous, noble, and manly. This will include a genuine reverence for the aged and things sacred. Fourth-to be self-reliant and self-helpful, even from early childhood; to be industrious always, and self-supporting at the earliest proper age. Teach them that all honest work is honorable, and that an idle, useless life of dependence on others is disgraceful.

When a boy has learned these four things, when he has made these ideas a part of his being—however young he may be, however rich or however poor, he has learned some of the most important things he ought to know when he becomes a man. With these four properly mastered, it will be easy to find all the rest.—Home Arts.

HOUSEHOLD LIFE.

Says the Christian at Work, "Too many households are practically carried on as though they were merely lodging-houses and restaurants. The individuals composing them have their separate interests, and go on their different ways as though there were no common tie to bind them closely, and as though kinship were a rope of sand, convenient for some purposes, but easily broken at will. Now this is all wrong. . . . When father and mother have their life and friends quite apart from those of their children, when the boys are in a hurry to scatter in every direction after tea, and the girls prefer any place to their home, the home is in a dangerous state. It should be more than four walls, more than a roof, a shelter from the storm, and a place to eat and sleep in, and if it be only these and nothing more, it has failed in its mission. Sometimes people have so hard a time to get on from day to day, that they think they are excusable if they sacrifice the amenities of life to its grim necessities. But poverty need be no bar to love. Sometimes people are so intent on laying up money for their children, that they neglect their children's souls, and worldly advancement becomes the golden prize to which their energies are bent. Sordid ambition is inevitably a foe to domestic affection. It is a gross form of selfishness, and love withers when selfishness scorches its tender roots. Sometimes father and mother are so absorbed in society, or politics, or fashion, that they neglect their little children, and think they have done their whole duty when they have provided nurses and preceptors for them in their juvenile years. the swift hours pass, and the weeks and months and years roll on, and after a while the unnatural spectacle is presented of young men and women who are heartless, irresponsible, fast, lovers of pleasure, and devotees of their own wills. The artificial excitements of our day and generation are many. Temptations environ the path of the young. The family should be a bulwark, a defense, a representative of the most sacred principles of human nature, and a place of retreat to the sorrowful, the merry, the tired, and the ardent, alike. The very fact that so many ages, from the venerable grand-parents to the toddler of two

or three summers, may be gathered about a single hearth-stone, shows that the mingling of experiences, temperaments, and dispositions is meant to be beneficial all around.

—"I can't get up early," said a poor victim to his doctor. "Oh, yes you can," was the reply, "if you will only follow my advice. What is your hour of rising?" "Nine o'clock." "Well, get up half an hour later every day, and in the course of a month you will find yourself up at four in the morning."

—The child learns to walk by walking; so you must learn to live nobly only by acting nobly on all occasions. As he who practices in shallow waters will not learn to swim, nor have strength to breast the wave; so, if you practice only in avoiding trials, your heart will never have strength for the greater troubles. Your life must be a contest with self and evil. In this you must be the victor or go down.—Sel.

—The Rev. Dr. McCosh, of Princeton College, tells a story of a negro who prayed earnestly that he and his colored brethren might be preserved from their upsettin' sins. "Brudder," said one of his friends, at the close of the meeting, "you ain't got de hang ob dat ar word. It's besettin', not upsettin'." "Brudder," replied the other, "if that's so, it's so; but I was prayin' de Lord to save us from de sin ob 'toxication; an' ef dat ain't an upsettin' sin, I dunno what am."

-Nothing on earth can smile, so it is said, but the race of man. Gems may flash reflected light, but what is a diamond-flash compared with an eye-flash and a mirth-flash? Flowers are beautiful, but they cannot smile. This is a charm which even they cannot claim. Birds cannot smile; nor can any living thing. It is the prerogative of man-especially woman. It is the color which love wears, and cheerfulness and joy,-these three. It is the light in the window of the face by which the heart signifies to father, husband, and friend, that it is at home and waiting. A face that cannot smile is like a bud that cannot blossom, and dries up on the stalk. Laughter is day, and sobriety is night; and a smile is the twilight that hovers gently between both, and is more bewitching than either.—Sel. *

—The largest bell in the world recently made for St. Paul's cathedral, London, weighs seventeen and one-half tons.

POPULAR SCIENCE.

- -Sugar, oxalic acid, and dynamite are alike made from sawdust.
- —Two remarkable meteors have recently fallen, one in Switzerland, the other in Yorkshire, England.
- —A French company paid over \$400,000 for the exclusive right to use and sell the Brush electric light in France.
- —The salmon fishers of Oregon have invented a way of catching the fish by the wholesale by means of a big water-wheel.
- —Thirty pounds of corn make twenty pounds of glucose, which sells for 4cts. a pound, the residue paying the expense of manufacture.
- —An Italian expedition is exploring the Antarctic regions. There seems to be a mania in every civilized country for committing suicide by freezing.
- —An American has succeeded in ruling 1,000,000 lines to the inch. No microscope is able to resolve the finest of the lines, but the spectroscope is said to afford evidence of their existence.
- —The construction of the proposed tunnel between England and France, under the English channel, has been undertaken by the Southeastern Railway Co., which promises that the undertaking will now be pushed rapidly forward.
- —Experiments made by Dr. Siemens, famous as the inventor of the electric light, show that the light is a powerful stimulant of vegetation, and it is proposed to use it as a means of forcing early fruits and vegetables, and for various horticultural purposes.
- —The great marshes which surround the city of Mexico and make it a most unhealthy city, are to be drained by pumps worked by electrical engines, which are to be operated by water-power twenty miles distant. A New York gentleman is the originator of the plan.

—'Twixt the old-fashioned rush light
And the new-fashioned Brush light
The difference is mighty, indeed;
But yet there is one light,
The God-given sunlight,
That science can ne'er supersede.

—The highest railway bridge resting on piers, in the world is now being built across the deep valley of the Kinzua Creek, on the Erie Railway, about thirteen miles from Bradford, Pa. It will be 300 feet high, twenty-five feet higher than suspension bridge, and twenty-four feet higher than the Kentucky River bridge.

—Artificial pearls are now made in France which imitate the genuine so closely that they can with difficulty be distinguished even by experts. The most important element in the constitution of the artificial pearls is a pearly substance obtained from the scales of the white fish, 17,000 pounds of fish being required to make one of the "essence," as the pearly substance is called.

Water-Proof Coating for Brick.—Two solutions are necessary, the first composed of one pound of castile soap in a gallon of boiling water; the second, of two ounces of alum to a gallon of water. Apply the soap solution first, let it dry twenty-four hours, then apply the second, thus alternating until three or four coats of each have been applied. The soap solution should be applied at a boiling head; the alum solution at 60° to 70° F.

THE COLOR CURE.

A CONTRIBUTOR to the Atlantic Monthly in a somewhat racy manner writes up the "color cure," one phase of which was known some time since as the "blue glass mania." This, like the metalotherapy of more recent date, and several other similar remedies, is a therapeutical means which appeals solely to the imagination. No doubt certain persons are benefitted by the means referred to; but the same persons would receive equal benefit from an effort of the imagination excited in any other manner, as by magnetic treatment, the use of placebos, or in any one of a hundred other ways. We quote as follows, so as to give our readers a fair idea of this curious mode of treatment :-

"Does any one remember that a few years ago it was suggested that nervous invalids should go through a course of treatment called the color cure? It now being the fashion to put little faith in medicine, one naturally counts up the other resources of the profession. The field of therapeutics has widened in some directions in these later days, but it ought to cover a greater space than it does now before unscientific people will resign themselves contentedly to ignoring old-fashioned dosing. When one is in very bad pain, there is grim satisfaction in swallowing a large and disagreeable quantity of a historic and well-known drug. It seems like a much braver fight against the disease, and all theories vanish

at such times from our minds. It interests young doctors more than it does their patients to let ailments alone to see what will come of them. Leaving things to nature when it is illnature, seems sometimes most unkind. I have spoken as if I were very fond of dosing, but that is not true, since I am more ready than most persons to accept the agreeable alternatives which are now at the command of the medical profession. I caught eagerly at the idea of the color cure at any rate. It was proposed to make careful studies of the effect of different colors on the human mind and body, and then have little rooms painted with the brilliant and inspiriting or the quiet and depressing tints, and the patients were to be locked into them for a suitable length of time every day; perhaps confined altogether. Scarlet is most invigorating and cheering in its effect upon the human mind. Let us imagine a person in most feeble condition, who has suffered some terrible strain or other, who cannot bear even the most delicate treatment with tonics. The skillful doctor of this new school reads the case at a glance, and orders a very few minutes of the red room to be administered with great care. The light is shaded at first, and the duration and brilliancy of the color are increased from day to day, until the recovery is completed. For nervous people, who do not sleep or eat,-or think they do not, which makes them and other people just as unhappy,—for these sufferers, what adroit mingling of the red that cheers, and the blue that soothes and quiets, and the reddish-purple that enrages into a determination to escape from its discomfort into the light of day and sensible activity.

"This subject seems to me to have been far less considered than it deserves. It never before occurred to me that some people's characters may have been deeply influenced because the color of their complexions led them to surround themselves with certain shades and tints. A person who from her childhood has constantly been looking at blue things-wearing blue bonnets and blue gowns and blue ribbons, who has had blue paint and paper in her house wherever there was any excuse for it-cannot be what she might have been, with reds and yellows about her. By-and-by we may learn to dress with a view to the moral influence upon ourselves. Other people have a right to expect that we use all the means in our power for the upbuilding of our characters, and it may one day seem a low aim to wear this color or that simply because it is becoming. 'I am so quick-tempered,' one conscientious harassed soul will say, 'that I try never to look at anything but blues. I notice the bad effects at once of even sealing my letters with red wax."



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

TERMS, \$1,00 A YEAR.

A HEALTHY SMELL.

Some years ago we had occasion to request a gentleman to give attention to the condition of his back yard, which was in great need of the services of a scavenger, containing in addition to a very foul barn-yard and a much neglected privy, the carcasses of two dead horses but a little beneath the surface. We expected that only a gentle hint would be necessary to secure prompt attention to the matter, as the party was almost a fanatic on the subject of diet. Imagine, then, our surprise when this radical advocate of vegetarianism and many other good reforms retorted, "Some people's noses turn up at every little smell. Why! a barn-yard smell is the healthiest kind of a smell, and I nave always been told was good for consumption."

There was a time when such notions seem to have been generally prevalent. A few hundred years back, the streets of London were in a worse condition than the back yard referred to,-a cordial invitation for the Great Plague, which came in due time. According to an eminent European authority, personal cleanliness was for a thousand years so universally disregarded "that scarce a man, woman, or child throughout Europe made a practice of daily ablution. During this carnival of filth, again and again the Black Death ravaged European countries. In the reign of Justinian, as Gibbon records, a large proportion of the human race was swept away by an epidemic which, with but slight intermissions, raged for fifty years. In Constantinople, 1,000 gravediggers, in constant employ, could not hide away fast enough the victims of this dreadful disorder. We have all been made acquainted through the ghastly picture drawn by Boccaccio, with the fearful plague that desolated Florence in the fourteenth century, and by Defoe, with the ravages of the 'great plague' in London."

As the spring approaches, it is important to be on the lookout for possible sources of air contamination when the winter ice is melted, and the conditions favorable for decomposition are developed. Let every nook and corner of the house, the cellar, the back-yard, and the entire premises be thoroughly inspected so as to eradicate every possible source for germs to germinate and multiply. The germ question has come to be an intensely practical one; and everybody ought to know enough about it to be fully awake to the danger from this source, and anxious to take every precaution to escape injury and secure safety to others.

A NEW HUMBUG.

For some time we have noticed the flaming advertisements of an "Ozone Preserving Co.," the claims of which were such as to indicate to us at once the fraudulent character of the concern. Nevertheless, at the request of a correspondent, we have taken the pains to investigate the matter, sending, as required by the manufacturers, \$2 for a sample package. We received a pound of a black powder which we at once recognized as a mixture of sulphur and charcoal, and a subsequent examination showed it to be practically nothing more. Everybody understands the preservative nature of sulphurous acid, which results from the

burning of sulphur, so there is no doubt but what the compound possesses preservative value; but it is not necessary to purchase the right to use sulphur in this way, even were it desirable; for the material can be bought in quantity for two cents per lb. instead of \$2. The charcoal is added simply to facilitate combustion and to hide the nature of the compound.

A still greater objection to this fraudulent article is the fact that sulphur is not a wholesome means for preserving articles of food.

COFFEE AND DYSPEPSIA.

For more than half a century hygienic writers have been trying to convince the people that coffee is a cause of dyspepsia, nevertheless its use has constantly increased. The scientists have come to the rescue at last, however, and now we have not only practical and theoretical arguments against the use of this fragrant beverage, but an absolute demonstration of its harmful character. A learned member of the Paris Biological Society recently made a report according to which he made a decoction of coffee, one ounce to four and one-half of water, and gave it to a dog. Three hours after, he killed the animal, and examined the stomach which he found pale and discolored. Only onethirtieth of the coffee had been absorbed, the blood-vessels having been contracted by the tannin, so that very little absorption could take place. Neither had gastric juice been secreted in any quantity, on account of the paralyzing effect of the coffee upon the peptic glands. It has been observed, also, that the tannin of tea and coffee precipitates and thus neutralizes the poison of gastric juice. According to the learned gentleman referred to, the English and Dutch, who consume great quantities of tea and coffee, are notoriously dyspeptic nations in consequence.

The same experimenter found, on examining the stomach of a dog which had eaten, six hours before, two and a half ounces of sugar with six ounces of other food, the mucous membrane red and highly congested. The liver was also

found greatly congested. From this he argues thus: Coffee drives the blood away from the stomach. Sugar causes it to become congested. If we combine the two, one will counteract the bad effects of the other; so he recommends people to make their coffee very sweet.

This sort of chemical reasoning will never lead to right conclusions respecting the needs of the body. The fact that two substances affect the body in an opposite manner is no proof, not even presumptive. that a combination of the two will be either healthful or innocuous. Sugar is, from a chemical standpoint, an acid as much as is tannic acid, and hence cannot neutralize the latter. The true conclusion is that if coffee is bad for the stomach, and sugar is unwholesome also, both should be discarded. As a general rule, sugar can be taken without injury by a healthy stomach, but there are many cases of disease in which it must be avoided.

But our experimenter discovered further, that coffee "increases the cerebral functions," that is, stimulates the brain. This is by no means a recommendation for its use, as such stimulation is the strongest ground for objecting to its use. Artificial cerebral stimulants of every description are wholly bad and in no way to be recommended, for they are inevitably followed by a reaction. Stimulation is not increased strength, but a means, to use the words of a distinguished English physician, of "getting strength out of a person." Coffee must go along with whisky, beer, wine, cider, tobacco, opium, and the long list of artificial stimulants.

MOLDY WALLS AND DIPHTHERIA.

There are pretty good grounds for the belief that the contamination of the air by means of the microscopic spores thrown off from mold, and various forms of fungus growths, is a not insignificant cause of diphtheria. Not many months ago we had under treatment a case of general debility from severe diphtheria in which the attack had been induced under such circumstances as to leave no room to doubt that the real cause was that which we

have suggested. The following case mentioned in an English medical journal points very strongly to the same conclusion:—

"A certain house, which had previously been dry, and its inhabitants in good health, suffered an extensive soaking with water during a heavy storm, after the gutters had been in some way thrown out of position. The walls of a room in which three young children slept were saturated, and in the damp wall-paper mold soon made its appearance, followed by small clusters of fungi. After a short time several children in the family were attacked by diphtheria.

"The drainage of the house was excellent, and so far as could be seen, the only external circumstance connected with the outbreak of the disease was the appearance of the fungoid growth. It has before been held that diphtheria is caused by the sporules of other plants of the kind, as the oidium of the grape and the potato-rot plant, and it is quite probable that the spores of many parasites may have the power of producing similar symptoms."

MEDICAL FRAUDS.

THE treatment of disease affords more and better opportunities for frauds and humbugs than any other business or profession. Medicine is an art of which the common people are supposed to know nothing, and concerning which there is probably less accurate knowledge among the masses than any other of the principal professions. There are few people who do not possess a little accurate knowledge of law, sufficient at least to enable them to distinguish a good and reliable legal ad viser from a shyster or a pettifogger. Legal quacks are not numerous, and never attain celebrity as lawyers. A man cannot succeed in the legal profession unless he has merit. No more can he in the medical profession. Men secure attention and patronage in proportion to their pretensions, rather than in proportion to their just merit, in the majority of cases. The greatest quacks attain the greatest success, financially. The people have

been educated to believe that the science of medicine is a subject so recondite, so enshrouded in mystery, so far beyond the reach of the average intellect that but few can master its abstruseness or comprehend its hidden mysteries. The public have been kept in the dark for ages, until they have come to regard the doctor almost as an oracle. Whatever he says or administers is to be accepted or swallowed without question by the unlearned patient. Many physicians even refuse to answer inquiries on the part of patients respecting the nature of the remedies administered. and the manner in which a cure is expected to be produced by the remedy.

This sort of education has laid the foundation for the great success of quackery. Possessing no knowledge themselves, and having been taught to believe that the science of medicine is full of deep mysteries which the uninitiated cannot fathom, and that they must accept what the doctor says or does without asking the why and wherefore of the same, they fall an easy prey to the hordes of medical sharks who hide their shameless ignorance behind the same rampart of mystery.

To attempt to expose all the nefarious schemes growing out of this unfortunate condition of things, would be to attempt an impossibility, as their name is legion. We will mention but one or two of those which have most recently come to our attention. A correspondent recently wrote us for a home prescription, and at the close of his letter asked if he should send us a slip of chemical paper which had been sent to him for the purpose of returning to the physician who sent it, a specimen of urine for examination. We of course wrote the gentleman that we had no use for any such absurd contrivance.

Almost every week we are asked what we think of such medical appliances as "Scott's Magnetic Brush," somebody's "Magnetic Belt," "Magnetic Ointment," "Magnetic Plaster," "Magnetic Water," or some similar humbug. We almost lose patience sometimes that people can be so simple as to give credence to the nonsensical claims made for these trinkets, the in-

ventors of which themselves have no confidence whatever in them, always availing themselves of the services of some competent physician whenever they find themselves in need of medical treatment of any sort. In several instances we have had the wives and daughters of the proprietors of these humbugs under treatment for the very ailments for which their meritorious wares are so unstintedly recommended. In some instances we have been consulted by the quacks themselves or by their physicians, with reference to their cases. Yet thousands of people daily patronize charlatans of the worst description, placing their lives in the hands of men to whom they would not think of granting the loan of a ten-dollar bill without other security than their word, or even a note without indorsers.

All of this grows out of the ignorance of the people on medical subjects. Educate the people respecting the fundamental principles of rational treatment, quackery will die a natural death. veil of mystery is a relic of the dark ages. Every other science but that of medicine long ago threw off this incubus and relegated it to the bats and moles of the superstitious past. There is no reason why this should not be done in the case of medical science. The underlying principles of rational medicine are sufficiently simple to be made intelligible to the common people if a proper effort is made to place them before the people in simple and untechnical language. This we believe is the only antidote to quackery, and hence we believe in popular medical education. If there are some evils which may grow out of the diffusion of medical knowledge among the masses, there are still greater good results. The evils must come from a wrong use of the knowledge, or an abuse of it, not from its proper use; and to refrain from imparting it on this ground would be to adopt a principle which, if followed, would close the doors of our public schools, colleges, and universities; for any knowledge on any subject may be put to a wrong, use either intentionally or unwittingly.

SMOKING CHRISTIANS.

THE Advance tells the following about the difficulties encountered by "smoking Christians" when visiting Oberlin, a place well known for its anti-tobacco proclivities:—

"Those acquainted at Oberlin know how seldom tobacco is used there by students or residents, and how many anecdotes are told of those who visit the place and attempt to take their smoke on the sly. At the time of the convention, held there some eight years ago, it was said that two prominent ministers from New England used to go down on the railroad track to smoke. I fear that it did not impress them as it did Dr. C., of St. Louis. He was in the habit of using tobacco, and told me that while there his supply failed him, and it was some time before he could find any in the place. At last he was told of a hostler who perhaps could let him have some. He found the individual and obtained from him a cigar, with the direction that he 'must go out behind the stable to smoke.' The difficulty of obtaining the article and the direction of the hostler so impressed him that he resolved never to use it again, and has kept his resolu-

If every smoking minister could have the same experience as the last named, we should hope that all could have the privilege of a visit there. It would pay any church with a smoking pastor, to pay his fare to Oberlin and back, and let his salary go on, if the tobacco could be gotten rid of so easily.

We are glad to see a growing feeling that smoking is incompatible with Christianity. We have never yet heard that the blasphemous assertion of Mr. Spurgeon that "I smoke to the glory of God" has ever been indorsed in this country, and we do know that a good many men have been debarred from entering the ministry of the Methodist denomination by the refusal of the conference to ordain or license for the ministry a habitual smoker. A friend recently told us of a minister in a Western State who professes sanctification, yet is not licensed to preach on account of his adherence to the filthy weed. Hon. Mr. Woodford, the eminent temperance orator, said to us the other day, "I do not believe a man can be a true Christian and use tobacco, and I believe any man addicted to the habit will promptly renounce it if he is truly converted." We believe so too. Tobacco is clearly "of the devil," and there can be no affiliation between right and wrong.

THE SIN OF IGNORANCE.

THE adage, "Where ignorance is bliss 't is folly to be wise," if true at all, is certainly not true in sanitary matters. We doubt whether ignorance in itself is ever blissful; but certainly there is nothing blissful in being ignorant of the causes of disease which grow out of unsanitary conditions, and of the dangers which not infrequently crowd thickly about us in unsuspected forms, though not infrequently they appeal loudly to our seeing and smelling faculties, if not to our reasoning organs. An esteemed correspondent, an earnest advocate of hygiene and all reforms looking toward human improvement, writes as follows respecting the condition of matters in the village in which she resides: -

"We are having in our village another marked illustration of the sin of ignorance and inattention in regard to causes which produce disease. I am going to surprise you for the thousandth time, probably, with the facts. In a pleasant and generally healthful part of our town, known as the 3d ward, last summer an enterprising individual planted an acre of cabbages,—an act well enough in itself had it been well followed. The season was an unfavorable one, and the vegetables, not being worth the gathering, were left standing. All this warm, open winter, that field of cabbage has been poisoning the air with decaying vegetable matter to such a degree as to be very offensive to passers by; and now, six cases of scarlet fever are reported as occurring in that immediate locality, all of a threatening type, one child having died during the past week. The children attacked with the disease were taken sick so nearly at the same time as to prove conclusively that the cause was a common one, and that no child took the disease from another. The school has closed, sanitary measures are being considered, and that cabbage lot has now, in its last stages, become a subject of fresh interest."

Whether decaying cabbage can produce scarlet fever or not is a question which might give rise to not a little discussion before it would be accepted affirmatively, even by the majority of sanitarians; but no one will deny that rotting cabbages are in the highest degree unsanitary and unwholesome, and it is without doubt true that the noxious germs and gases pouring forth from such a field as the one described would render those subjected to their influence an easy prey to any other diseaseproducing element which might be brought to bear upon them, thus becoming the remote, if not the exciting cause of serious maladies.

DANGER IN ICE.

For some years it has been strongly suspected that impure ice was a possible cause of typhoid fever in many instances, and we have often called attention to the importance of securing the greatest possible degree of purity in water in every form, solid as well as liquid. Some experiments and investigations recently made by Prof. Pumpelly of Newport, by request of the National Board of Health, confirm the suspicion above referred to, and establish beyond room for reasonable doubt the fact that freezing does not destroy, the germs which give rise to various maladies. We quote from an abstract of his report as follows:-

"Upon being questioned as to ice conveying disease, he said that he thinks there is no doubt that ice can convey any disease that the water from which it is frozen can convey, in so far as such diseases arise from the germs of low vegetable organisms. Ice in freezing does not destroy or free itself from these organisms, as shown by the fact that samples taken from the center of blocks of ice in every instance infected steralized beef infusions with the germs of putrefaction. He even thinks that there may be more danger from ice than from the water from which it is frozen, since sewage and other organic matter is much more rapidly oxidized and decomposed in summer than in winIn view of these facts it is of the utmost importance that the ice supply laid in during the winter should be from sources above suspicion of contamination.

ABSINTHE DRUNKENNESS.

The use of absinthe seems to have originated in France, where it is rapidly increasing; but we have often seen it offered for sale in this country. In certain parts of New York City, absinthe is displayed in bold letters and brilliant colors over the doors of certain establishments devoted to the sale of this drug. The following description of this peculiar drug may interest our readers as it has us. We give it on the authority of the British Medical Journal:—

Absinthe is a yellowish-green liquor which contains as a peculiar ingredient a poisonous oil having a deleterious effect on the nervous system. The oil is called wormwood oil, and is produced in nature by the Artemisia Absinthium. Other flavoring oils are always added, such as peppermint, angelica, cloves, cinnamon, and anise-seed. The color is produced by the juice of nettles, spinach, or parsley, or, in other words, is due to the common green "chlorophyl" found in all green plants. Most samples of absinthe contain sugar. The average composition of absinthe is as follows: absolute alcohol, in 100 parts, 50.00; oil of wormwood, .33; other essential oils, 2.52; sugar, 1.50; chlorophyl, traces; water, 45.65. Alcohol drunken sleep; alcohol and absinthe combined produce convulsions. The poor wretches given to absinthe-drinking suffer from a peculiar train of nervous symptoms the most prominent of which is epilepsy of a remarkably severe character, terminating in softening of the brain and death. The last moments of the absinthe-drinker are often truly horrible. M. Voisin records a case in which a man was picked up in a public street in an epileptic fit. He was known to be a large consumer of absinthe. The convulsions lasted until death, -four days and four nights. During the last five or six hours of life the skin of the face became almost black.

—There are many troubles which you cannot cure by the Bible and hymn-book, but which you can cure by a good perspiration and a breath of fresh air — Beecher.

HYGEIO-THERAPY AND ITS FOUNDER.

The following article has been sent us for publication, and we present it to our readers at the risk of provoking a discussion of some points touched by the writer, but wish it distinctly understood that the columns of this journal are not open to such a discussion, which could not possibly yield any useful result, and would consume valuable space and precious time in an unprofitable manner:—

In the August No. of Good Health, in an otherwise excellent lecture by the editor, appears the following statement, which is the more remarkable being in a journal (Health Reformer then) to which Dr. Trall for years contributed a "Special Department," and from one of the graduates and practitioners of his system:—

"The attempt has been made in the last quarter of a century to found an exclusive system of medicine, known as the Hygienic or Hygeio-Therapeutic System. The attempt has been a futile one, however, the inadequacy of the system being thoroughly exposed by the death of the would-be founder, from malarial fever."

It is but justice to the silent dead, who freely gave his life work in the establishment of a medical system based upon scientific principles, as well as of interest to its adherents, that some explanation be given of what might otherwise seem at least inexplicable.

First, Dr. Trall did not die of malarial fever. Second, his death, be the malady what it might, could not result in "the inadequacy of the system being thoroughly exposed," since, as was most unfortunately the case, he could not be said to have had its benefits, not having treatment as he should have had. Gathering grapes from his vineyard in the early mornings, and, what seems most probable, not being sufficiently mindful of the damp condition of his clothing on going to his desk, he finally took cold, was a little feverish-an unusual thing with himfor which he took some treatment, not however remitting his daily labors. His old throat difficulty came up, and later, congestion of the brain and lungs. His condition seemed to make him irritable and averse to having things done for him suggested by his son, who as it happened at the time was alone with him-they occupying a cottage near the Cure—and who, being young and inexperienced, and withal, accustomed to obeying his father, was afraid to urge treatment lest it might irritate him and do more harm than not to give it.

Thus he went beyond the power of counseling. Had prompt, efficient derivative treatment for the inflammation been given, such as he would have prescribed for a pitient in like condition, the result would without doubt have been far different.

The death of Dr. Trall, under the circumstances, in no wise refutes Hygeio-Therapy, while its unparalleled success confirms the wisdom of "the attempt made in the last quarter of a century, to found an exclusive system of medicine," and confers lasting honor on the founder.

Vinemont, Pa. ELLEN BEARD HARMON, M. D.

The clause quoted by the writer of the above was uttered in a lecture given by

request in the amphitheater of the medical department of the University of Michigan, on the subject of "Simple Therapeutic Measures." We on that occasion, as we have on many others, distinctly disavowed any connection with what is known as "the hygeio-therapeutic school." We spent a few months at Dr. Trall's College -so-called, -and gave the course of lectures on chemistry, at the same time attending Dr. Trall's lectures, or a part of them, never expecting to enter the profession. After we left the institution, Dr. Trall sent us a diploma, which was unsolicited on our part, and for which we never had any examination whatever. We were asked no questions as to length of medical study, and had no conversation with the Doctor on the subject. We were, in fact, averse to receiving a diploma, not believing that it could justly be given to persons who had never pursued the study of medicine more than six months, and that under not the most favorable circumstances, and some of whom were considerably under legal age. Feeling thus, we never made any use of the diploma received, or of the title supposed to be conferred by it, believing it to be an illegal and worthless document, as were all others given under similar circumstances, directly contrary to the requirements of the law.

We continued our scientific studies, begun at another college, and at the earnest solicitation of friends, took subsequent medical studies at the medical department of the Michigan State University and Bellevue Hospital College, New York City, with private studies with various specialists. After fully complying with the requirements of the law, and endeavoring to secure a thorough preparation for the work, we entered upon the practice of medicine under a diploma which is broad and liberal enough to allow us to employ any remedy we may deem proper, no matter how simple or how complex. We never pretended to practice as a hygeio-therapeutist, but as a rational physician, whose armamentary includes every useful agent in nature, no matter what its name or source. We never considered ourself entitled or qualified to practice medicine from any diploma or other qualification received at Dr. Trall's institution, though we have good evidence for believing that our condition in this respect was at least as good as that of the majority of its graduates.

But we do not wish to reflect upon a man who, with all his faults and errors, accomplished much good, and need say no more on this point, though we might do so were it necessary. Now with reference to the remark in question as to the cause of Dr. Trall's death. The language of the writer is quite ambiguous, and leaves us still in doubt as to the real cause of death, unless it was a cold, with some congestion of the lungs,-hardly sufficient to cause the death of an active, temperate A few days after the Doctor's death, we received a letter from one of his intimate friends, which was evidently intended as an official account of his death, in which we were informed that malarial poisoning was at least one of the causes of his death, and as no other adequate cause was given, we felt justified in drawing the conclusion which we did.

With reference to the treatment, we can say but little, as so little seems to be accurately known; but we have frequently known patients to die in the attempt to carry out the method of treatment prescribed by Dr. T. for malarial fever, when there was every reason to believe that a small dose of some good anti-periodic remedy would have interrupted the paroxysms of the disease. The facts in our possession, or what we supposed to be facts, were such as seemed to us would justify our position.

With reference to Dr. Trall's connection with the Health Reformer, now Good Health, we have only to say that his connection with the journal was dissolved in accordance with the wishes of the managers of the journal, who became satisfied that it was not desirable that it should be longer continued. As a result, the circulation of the journal, which had run down to a few hundred, notwithstanding the best efforts of its friends to sustain it, rapidly increased to ten or twelve thousand.

We believe exactly what we have said, that the attempt to found a hygienic system of medical treatment was a failure, because its platform was not broad enough. Hundreds of men and women were sent out upon the world as doctors with the merest smattering of anatomy and physiology, still less practical knowledge of disease, and even less of surgery and special diseases, but an immense amount of that overweening conceit which too often characterizes the newly fledged doctor. With triumphant zeal these fledgelings flew furiously at the doctors of every other school whenever opportunity af-The triumph was short-lived, forded. however, in most instances, for a few bad mistakes in diagnosis, through want of scientific knowledge, soon occasioned one of two results in the majority of cases. The medical bantlings were either driven from the field entirely, and adopted some honest trade as a means of obtaining a livelihood, or, with a determination to complete the medical education for which a splendid foundation had been laid, resorted to some regular medical college for the purpose. The fact is that at the present day not one in twenty of the graduates of the Hygeio-Therapeutic College can be found in practice unless under diplomas from other schools, and probably five-sixths of that small number have departed so greatly from their original principles that the founder of the system, if alive, would be unwilling to own them.

Hygeio-therapy, like hydro-therapy, electro-therapy, metallo-therapy, aerotherapy, and a variety of other therapies, is too narrow to constitute a complete system of medicine. Rational medicine includes all of hygeio-therapy and all the good of every other system known or possible. A great deal that passes for rational medicine we consider irrational and do not indorse, neither does our adherence to this system require that we should do so. The term rational does not, as do hygeio-therapy, electro-therapy, etc., limit the number or kind of remedies to a certain class, but allows the physician to employ such remedies as his own judgment and experience teach him are the best. We do not believe that drugs cure. Nevertheless, we believe in the use of some remedies under some circumstances which our critic would term unhygienic. We do not believe that water cures. We say the same of electricity, of swedish movements, massage, sun-baths, and every other remedial agency, but still make use of them all. Nature cures. Various remedies are useful as supplying essential conditions, ameliorating symptoms while the work of cure is taking place, and this is why we make use of them, and for no other reason.

We believe that Dr. Trall himself, before he died, became satisfied that some of his positions were somewhat ultra. He once said in our hearing in response to the question "Is there no possible condition in which alcohol might be of use as a remedy?" "I can conceive of such a case." Not very long before he died we received from him a circular announcing that he had formed a partnership with a surgeon who made a specialty of treating cancers, and that they employed a "specific" remedy or one which came nearer being a specific than any other.

But we have devoted more space to this subject than we deem it worthy of, and beg pardon of our readers for so lengthy a digression from the chief business of this journal, which is to teach the people how to keep well, rather than how to get well, leaving the latter question chiefly for consideration in special treatises on the subject.

A STUFFING MACHINE.

For many years a curious business has been carried on in Strasburg and the neighboring parts of France and Germany, consisting of stuffing fowls with food under such conditions as to produce disease of the liver, which is the only part of any commercial value after the operation is completed. Geese, ducks, or other fowls are placed in dark rooms, either with their feet nailed down to boards, or secured in some other way so that all exercise is prevented. Every three or four hours, regularly, the poor creatures are fed. Of

course they soon lose their appetite, and so will not take food voluntarily; but this makes no difference, as the woman who cares for them is prepared for such obstinacy. A little pellet or pill of cooked commeal is made, and thrust down the throat by means of a stick for this purpose. By this stuffing process the poor fowls soon become diseased throughout, the liver particularly becoming a great mass of disease, filling nearly the whole of the abdominal cavity. Out of these diseased livers is concocted that famous imported dish known as pate' de foie gras.

Somebody who had become tired of doing the stuffing by hand has recently invented a machine for the purpose. It is worked by the foot, a tube being thrust down the throat of the poor bird; then by working the foot, the desired amount is pumped into the stomach.

Food Adulteration Laws.—The commissioner of Internal Revenue, G. B. Ramn, recently addressed a letter to the Secretary of the Treasury in which he favors very strongly the passage of certain bills providing for the restriction of the manufacture and sale of glucose and oleomargarine. The commissioner takes strong ground against adulteration, and quotes the following from Appleton's Annual Encyclopedia for 1879:—

GLUCOSE.

The adulteration of sirups with glucose is a practice which has recently spread alarmingly. The extensive use of glucose, or the grape-sugar of commerce, is held to be the main origin of Bright's disease of the kidneys, and the cause of the present prevalence of that malady. The importations of glucose increased tenfold between 1875 and 1877, and at the same time extensive factories were established for its manufacture in the Western States. The article sold as grape-sugar is manufactured by boiling corn-starch with sul-phuric acid (oil of vitriol), and mixing the product with lime. A portion of the sulphuric acid and sometimes copperas, sulphate of lime, and other noxious principles remain in the glucose. In the analysis of seventeen samples of table sirup by Dr. Kedzie, fifteen were found to be made of glucose, one of them containing 141 grains of oil of vitriol and 724 grains of lime to the gallon, and one from a lot which sickened a whole family containing 72 grains of vitriol, 28 of sulphate of iron (copperas) 363 of lime to the gallon. The cheap sugars sold in Michigan are stated, on the same authority, to be adulterated with poisonous substances. Analyses of the sugars sold in New York reveal the presence not only of glucose with its inherent poisons, but of muriate of tin, a formidable poison which is employed in the bleaching process. Mr. Fuller, a retired importer of sugar, called the attention of the United States Board of Trade, in their meeting held in New York in November, 1878, to the dangerous adulterations practiced with sugar, honey, and molasses. Glucose is largely used to adulterate maple sugar, candies, jellies, honey, and other sweet food.

"Oleomargarine, which is now extensively manufactured from animal fat as a substitute for butter, is dreaded as a vehicle for infecting the human system with trichinæ and other internal parasites. The fat is not subjected to a higher temperature than 120 degrees Fahrenheit. John Michels, a New York chemist, states that the refuse fat of one pork-packing establishment is to his knowledge sent to the artificial butter-factories, and Prof. Church found in oleomargarine horse fat, fat from bones, and waste fat, such as is ordinarily used in making candles."

Trichinosis in Minnesota.—An epidemic of trichinosis has broken out in Minnesota. Four persons have died, and many more are ill. The State Board of Health of that State has taken the matter in hand, and prohibited the sale of pork without careful inspection. It is high time the hog was abandoned altogether as an article of food. In an age which many people call "barbarous," the hog was considered unsuitable food for human beings. Why should we be so far behind Moses and his contemporaries?

—The Minister of the Interior of France has issued a decree giving the lady medical students of Paris an opportunity to compete with gentlemen for the position of house surgeon in the various hospitals of the city.

LITERARY NOTICES.

THE PLAGUES ALCOHOLIC AND NARCOTIC. By T. De Witt Talmage, D. D.

PROHIBITION IN KANSAS. By Gov. J. P. St. John of Kansas, and Gov. A. H. Colquitt, of Georgia.

TWENTY-ONE HISTORIC LANDMARKS. By B. W. Richardson. New York: National Temperance Society.

These are three excellent pamphlets from a publishing house which has done more for the dissemination of first-class temperance literature than any or all other publishers combined. These latest additions are all in the highest degree valuable, and ought to be in the hands of every temperance worker in the land. The first, by Dr. Talmage, is written in the peculiar, pithy style of that eminent orator and writer, and is full of telling hits against alcohol, opium, and tobacco, about ten pages being devoted to the last-named "filthy weed" and its use. We shall make further reference to these excellent works in quoting some portions of them for future numbers.

SECRET VICE. By Rev. James Baillie, of Bath, Eng.

A little pamphlet of thirty-six pages, containing instruction for the want of which thousands of young persons are annually ruined. The work is a most commendable effort in the right direction, and we hope it will have a wide circulation on both sides of the Atlantic.

TRANCE AND MUSCLE READING. By Geo. M. Beard, A. M., M. D.

This little monograph of forty pages discusses two subjects of very great interest, to which the author has devoted such an amount of special study as entitles him to consideration as an authority second to none other. Dr. Beard refers to the phenomenon known as "mind reading," as "muscle reading,"—a term suggestive of his explanation of the curious phenomena which a few years ago attracted such a great degree of attention.

LIFE CRYSTALS. Mrs. C. F. Long, Editor, Oakland, Cal.

A new sixteen-page magazine, devoted to health. The editor is earnest and enthusiastic and we hope will succeed in her efforts to establish upon the Pacific Coast a prosperous health journal. Terms, \$1.00 a year.

THE SCIENTIFIC AMERICAN.

We are glad to be informed that the Scientific American came out of the late fire in New York, like the fabled Phænix, with renewed life. The subscription lists, account books, patent records, patent drawings, and correspondence were preserved in massive fire-proof safes. The printing of the Scientific American and Supplement was done in another building; consequently the types, plates, presses, paper, etc., were unharmed, and no interruption of business was occasioned. The new Scientific American offices are located at 261 Broadway, corner of Warren Street, a very central and excellent situation.

ARTHUR'S HOME MAGAZINE.

This excellent magazine ranks among the periodicals of the day as one especially adapted to the interests of every-day home life. Nothing is admitted to its pages which, according to the discrimination of the editor, "can give false ideas of life, or weaken the bonds of virtue;" and we have been pleased to find among its articles some especially adevoted to the dissemination of hygienic truths and principles. Published by T. S. Arthur & Son, Phila., Pa. Subscription price, \$2.00 per year.

HOUSE AND HOME. Published at Dr. Johnson's house, Gough Square, Fleet St., London, Eng.

We are glad to see that this paper, which some few months since was discontinued, has resumed its place among the English hygienic literature of the day. Health and Sanitation, food reform, social reform, and temperance are to be among the prominent features of the new series. There can be no subjects of greater importance to mankind than those relating to health and well-being; for, as stated by the prospectus of the House and Home, in a quotation from Dr. Richardson, "health is the all-in-all to man. The gate of health leads to the truly good in politics, art, science, letters, aye and religion, not less than the least of everything."

OUR HOME AND SCIENCE GOSSIP.

This is a monthly paper devoted to art and literature. It contains abundant suggestions for beautifying the homes of its readers, and gives some excellent articles each month on Archæology, Geology, Mineralogy, and other interesting scientific subjects. The publishers have recently issued a set of premium pictures of President Garfield, Mrs. Garfield, President Arthur, and Queen Victoria, which are really very fine.

Subscription price \$1.00 per annum. Published at Rockford, Ill. This journal, together with premium pictures, is offered with GOOD HEALTH for \$1.50

MICHIGAN AND ITS RESOURCES.

This is a sketch of the growth of Michigan, its industries, agricultural productions, institutions, and means of transportation, together with a description of its soil, climate, timber, and financial condition, which has been compiled under the authority of the State, by Frederick Morley, Commissioner of Immigration. It is amply illustrated, and is withal a most interesting and instructive book.

THE POPULAR SCIENCE MONTHLY for March is especially attractive. The first article is by Miss Hardaker, of Boston, entitled, "Science and the Woman Question." Her aim is to fix woman's position by the laws of her constitution and her physiological destiny. "Muscular Expression of Nervous Conditions," by Dr. Francis Warner, is a most instructive paper on the action of the emotional mechanism. There is a capital article on "Sir Charles Lyell," by Grant Allen, accompanied by a portrait of the great geologist. "To Eat and to be Eaten," by Charles Morris, is a very graphic picture of Nature's remorseless ways. The remaining articles are varied, fresh, and practical. Published by D. Appleton & Co., New York.

Publishers'

We are sending out scores of outfits to agents in all parts of the country, and a splendid effort for increasing the circulation of Good Health is being made by its friends everywhere. The publishers are grateful for this indication of the favor in which the journal is held. There is still room for workers in this line, however, and we should be glad to send out five-hundred more outfits in the next thirty days We have still further reduced the price of an outfit, and will send a sample copy of the journal, book of subscription blanks, blanks for use in sending in orders, return envelopes, and a supply of our new prospectus sheets, for 15c. We have a new plan for getting subscribers which is working very well. A circular, giving full directions, is sent with each outfit.

We are making arrangements with several

talented contributors whose articles will add greatly to the interest of the journal. We expect to be able to publish a valuable article from the pen of a writer on health topics next week.

We have received several portions of our new temperance charts, (which are now being lithographed in Chicago,) and we feel sure that they are going to meet the most sanguine expectations of all. The work is finely executed, and most of the illustrations are wholly new, presenting to the eye the strongest of arguments against the use of alcohol and tobacco, most of which have never before been illustrated in this way. The set is a complete epitome of the subject, from a physical standpoint. The charts are more fully described in another paragraph.

We notice that the editor of a new health journal complains that the Home Hand-Book is "not a water cure book." The critic will not deny, however, that the work explains water cure principles and processes more fully than any other book in print. The work claims to be an exponent of "Rational Medicine," not of hydropathy only, which long ago lost its place in public confidence as an exclusive system. The book is a correct representation of the beliefs and practices to which we have been led by the careful study and treatment of more than 10,000 cases of disease in every form.

We are pleased to see the interest taken by the National Woman's Christian Temperance Union, and auxiliary Unions throughout the United States in the subject of health. At the last annual meeting of the organization, it was decided to make the subject of health a prominent feature in the work of the organization. We see by the various publications issued in the interest of the Union that this new departure is being followed up in such a manner as will be certain to secure magnificent results. The subjects of health and temperance are so closely allied, that they cannot be easily separated. Thoroughly radical temperance reform cannot exclude health reform. The dietetic reform offers the only successful means of reclaiming persons who have become habitual drunkards. These two reforms belong altogether to the National Women's Christian Temperance Union, and constitute, in our opinion, the longest advance-step which has been taken in the temperance work in the last half-century.

We have, from the first, been deeply interested in the work of this organization, and trust it will prove to be the most potent means for uprooting the evil tree of intemperance ever brought to bear upon this gigantic vice.

"Our Home Science Gossip," an interesting and entertaining monthly, offers four beautiful steel engravings as a premium to its subscribers. The subjects of the engraving are, President Garfield, Mrs. Garfield. President Arthur, and Queen Victoria. The subscription price of the journal, including premium, is \$1.00 a year. We have made arrangements with the publishers by which

we are able to offer, to old and new subscribers alike, this journal, with Good Health, at \$1,50 a year. This includes the engravings, but not the "Household Manual," offered as a premium with the Good HEALTH. Both the journals, with both premiums, are offered for \$1.75, with six cents for postage on Good HEALTH premium, provided it is to be sent by mail. This gives both journals, the subscription price of each of which is \$1.00, with both premiums, for \$1.81,—nineteen cents less than the combined subscription price. The steel engravings are very fine indeed, and large cabinet size.

The first edition of 10,000 copies of the Home Hand-Book completed just one year ago, is nearly sold already. Agents who are competent to handle the work do well with it. Those who may wish to undertake its sale should address, Home Hand-Book Pub. Co., Battle Creek, Mich.

Hon. T. J. Cox, of Iowa City, Iowa, is with us again for a few weeks, laying in a stock of mental and physical vigor. Mr. C. has been with us so often, he has become well-known to the invalid patrons of the Sanita-rium, many of whom have reasons to remember his many courtesies and kind attentions.

Mr. E. Loomis, of Algena, Ia., writes that he, with several others, is interested in the organization of a colony, to locate in Florida; the main object of which will be social and intellectual culture; the chief business, fruit farming. Any one wishing to learn further of the enterprise, can address Mr. Loomis, or Laura Varner, Harveysburgh, Ohio.

The series of health and temperance charts, which was announced some months ago, is in preparation, and is now nearly completed. The designs are in the hands of the lithographers, who promise to have the charts ready for sale in a few weeks. The set consists of ten separate charts, and is superior to anything which has ever before been undertaken in this line. No. 1, illustrates the chemical character and affinites of alcohol. No. 2, is a tomach. No. 3, magnificent repre shows the appearance of the stomach of a moderate drinker. No. 4, shows the stomach of an habitual drinker, representing to the eye the ulcerated and inflamed condition often present in those who habitually use strong liquors. No. 5, represents the appearance of a stomach in delirium tremens. No. 6, represents a cancerous stomach. Nos. 7, 8, and 9, illustrate in a most graphic manner, the effect of alcohol upon the nerves, muscles, heart, brain, liver, lungs, kidneys, blood, and blood-vessels, together with the effects of tobacco upon the blood and the eye, and a case of smoker's cancer. No. 10, shows the effects of alcohol and tobacco upon the pulse. With the exception of Nos. 1 and 10, all the charts are beautifully printed in chromo lithograph, and illustrate in a most graphic manner the evil effects upon the body of alcohol and tobacco. Each chart is 28x42 inches in size, all the figures being sufficiently large to be easily seen by a large audience. The charts will be well mounted in various styles, and will be offered at as low a figure as possible. The price will not be less than \$10 nor over \$15 per set, which is exceedingly low for charts of this character; the demand for them not being sufficient to justify large editions.

The sole object in their publication is to give the temperance societies, temperance lecturers and workers an efficient means of impressing some of the strongest arguments which can be adduced in favor of temperance. ments which can be adduced in favor of temperance. Several of the charts will be accompanied by a key, by the aid of which any one of ordinary ability can prepare a highly interesting and instructive lecture. Great pains have been taken to make these charts faithful to life, and their accuracy can be relied upon. Orders will be received at \$10 if forwarded within the next sixty days, by which time it is hoped the charts will be ready for delivery. We do not promise to furnish the charts at that price after that time. It will depend somewhat upon the number of orders received. We shall print but one thousand copies. Orders may be forwarded to Goon Health Pub. Co., or to the author, Dr. J. H. Kellogg.