GOOD HEALTH.

A JOURNAL OF HYGIENE.

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RESTORATION OF THE DROWNED.

Upon no subject is popular yet accurate and scientific knowledge more needed than upon that of the restoration of the drowned. Undoubtedly thousands of persons have perished *after* being recovered from a watery grave, simply because the rescuer was unacquainted with the simple principles of artificial respiration, and was unacquainted with the difference between suspended animation and actual death. How long a person may remain in a state of seeming death and yet recover consciousness and vital activity is not known; but many cases are on record in which persons who were apparently dead from drowning have been resuscitated after several hours of seemingly hopeless effort.

There are several methods of applying artificial respiration, some of which are quite complicated, and on that account are less practical than more simple methods. The plan employed by the United States Life-Saving Service is the most simple as well as one of the most effective. A description of this method is presented as follows by the assistant superintendent of the Life-Saving Service, in Appleton's Annual Cyclopædia:—

"It begins with the attempt to arouse the patient, who must not be removed, unless there is danger of his freezing, but his face exposed to the fresh air, the mouth and nostrils wiped dry, the clothing quickly ripped open so as to expose the chest and waist, and two or three quick, smarting slaps given upon the stomach and chest with the open hand.

"If the patient does not at once revive, a bit of wood or a cork is placed between his teeth to keep the mouth open, he is turned upon his face, a large bundle of tightly rolled clothing is placed beneath the stomach, and the operator presses heavily upon his back over the bundle for half a minute, or as long as fluid flows freely from his mouth. (See Fig. 1.)

FIG. 1.—THE FIRST STEP TAKEN, BY WHICH THE CHEST IS EMPTIED OF AIR, AND THE EJECTION OF FLUIDS IS ASSISTED.

"The mouth and throat are then cleared of mucus by introducing into the throat the end of a handkerchief wrapped closely around the forefinger; the patient is turned upon his

back, under which the roll of clothing is placed so as to raise the pit of the stomach above the level of any other part of the body. If an assistant is present, he holds the tip of the patient's tongue, with a piece of dry cloth, out of one corner of the mouth, which prevents the tongue from falling back and choking the entrance to the windpipe, and with his other hand grasps the patient's wrists and keeps the arms stretched back over the head, which increases the prominence of the ribs and tends to enlarge the chest. The operator then kneels astride the patient's hips and presses both hands below the pit of the stomach, with the balls of the thumb resting on each side of it and the fingers between the short ribs, so as to get a good grasp of the waist. (See Fig. 2.) He then throws his weight forward on his hands, squeezing the waist between them with a strong pressure,

FIG. 2.—THE POSITION AND ACTION OF THE OPERATOR IN PRODUCING ARTIFICIAL RESPIRATION.

counts slowly one, two, three, and, with a final push, lets go, which springs him back to his first kneeling position.

"This operation, which converts the chest of the patient into a bellows, is continued at a rate gradually increased from four to fifteen times in a minute, and with the regularity observable in the natural motions of breathing which are thus imitated. If natural breathing is not restored in three or four minutes, the patient is turned a second time upon the stomach in an opposite direction from that in which he was first turned, the object being to free the air-passages from any remaining water. The artificial respiration is then resumed and continued if necessary from one to four hours, or until the patient breathes, and when life appears the first short gasps are carefully aided by the same method.

"From the first, if assistants are present, the limbs of the patient are rubbed, always in an upward direction toward the body and with firmness and energy, the bare hands being used, or dry flannels, or handkerchiefs, and the friction kept up under blankets, or over dry clothing. The warmth of the body is also promoted whenever possible by the application of hot flannels to the stomach and armpits, and bottles or bladders of hot water, or heated bricks, to the limbs and the soles of the feet.

"As soon as breathing is established, the patient is stripped of all wet clothing, wrapped in blankets only, put to bed comfortably warm but with a free circulation of fresh air, and left to perfect rest. For the first hour a little hot brandy and water, or other stimulant, is given every ten or fifteen minutes, and as often afterward as may be expedient. After reaction is established the patient is in great danger of congestion of the lungs, and unless perfect rest is maintained for at least forty-eight hours he may be seized with difficulty of breathing, and death ensue if immediate relief is not afforded. In such cases a large mustard plaster is placed upon his chest, and, if he gasps for breath before the mustard takes effect, his breathing is assisted by the careful repetition of the artificial respiration. In connection with this process the surfmen are instructed to consider the clinching of the jaws and semi-contraction of the fingers, which have been considered signs of death, to be, on the contrary, evidences of vitality, and to borrow from them hope and confidence for redoubled effort in the work of resuscitation. This is a discovery of Dr. Labordette, of the Hospital of Lisieux, in France. He found by numerous experiments that the jaws and hands relax when death ensues, *rigor mortis* supervening later."

—Sir Walter Raleigh introduced into Europe the most useful vegetable, the potato, and the most useless weed, tobacco.

INFLUENCE OF READING UPON HEALTH.*

BY PROF. R. B. ANDERSON.

THAT vicious and immoral literature has a tendency to poison the mind and heart, and that these in turn, through the passions, act most injuriously upon the physical health, I suppose may be considered as an axiom. That, on the contrary, good, wholesome reading, by giving direction to and controlling the passions, has a beneficial influence upon the physical health, is also a truth so self-evident that no one will presume to question it. The subject in its full extent is an important one, the treatment of which deserves far more ability, time, and labor, than I can give it.

Our country is full of a sensational, flashy literature, prepared especially for juvenile readers, which they are greedily devouring. They read about young heroes who demolish more foes than Don Quixote, and achieve more brilliant adventures than the celebrated Baron Munchausen, and finally return home loaded with wealth, to magnanimously forgive their enemies, foremost among whom are their parents. Who can be surprised that such a course of juvenile reading in process of time brings us a bountiful harvest of vice and licentiousness, burglars and murderers. As you sow, so you shall reap.

Books that teach boys to be vulgar, rowdyish, and cruel; that teach them to cheat their parents; that make them familiar with the life of criminals, gamblers, and low people generally; that instruct them that it is necessary to carry revolvers; that show them the way to the saloon; and that hold up before their minds a vagabond life of adventure rather than obedience to parents and teachers, cannot help having a most injurious influence not only upon their minds but also upon their physical health and passions. The tendency of this sort of books is to lead our young men into intemperance and licentiousness, and thus to ruin.

But the books and periodicals described are not the only ones that have a corrupting influence upon our youth. There is a large amount of literature of "far higher pretensions" that participates in that influence, and that is more dangerous because the poison is not so easily discovered.

In the first place, many of the books in the Sunday-school libraries are of a kind of "goody" sort, that, by showing how good little children die poor, crippled, and afflicted in every way, torture young, sensitive minds, and leave them painfully in doubt whether a good life is worth living at all.

Then there are books of the nature of some popular detective stories, that tell of terrible adventures in hovels and dungeons, of hair-breadth escapes among robbers and murderers, and of neck-breaking catastrophes by land and by water. We hold our breath in suspense and our "hairs stand on end," while we read these "thrilling" descriptions. I believe such books tend to break down the nervous system. They make people timid in the dark, and when alone in a house they start at every noise they hear. I sincerely believe that much of the lack of courage that is so prevalent, especially among our most cultivated classes, can be traced back to dime novels, and similar unwholesome stories. And this fidgety, nervous state is certainly evidence of a more or less impaired health.

Many of our frontier stories, notably those which send the young hero out from a bright, cheerful home to seek his fortune on the plains, in the mines, and among wild beasts, and bring him back a rich and famous man, have a tendency to make the young reader rebellious against authority. He is not content to follow the advice of loving, indulgent parents and teachers, but longs to imitate the example of the hero of his book. At best, such reading produces a restless, discontented and feverish state of mind, which is incompatible with a vigorous, healthy, physical growth and development.

Finally, there is a class of romantic, sensational novels, or rather love stories, that ought never to be read, especially by young people. They kindle the passions and develop precociousness. The premature development of the animal passions is injurious to both the man and the woman, even when it does not degenerate into base licentiousness, as is very often the case. Parents should examine carefully *every* book before giving it to their sons and daughters to read.

*Abridged from a paper by the author, in the "Annual Report of the State Board of Health of Wisconsin."

If more care and attention were bestowed upon our reading, there would be less of anger, less of fear, less of hatred, and less of grief. These are the passions that are the most influenced by what we read, and these are the passions that act most directly and severely on our physical health. They overrule the reason, and the result is disease.

Instead of this unnatural and highly-wrought fiction, let our young people read *books of travel, discovery, biography,* and *history.* . . . . Science primers will guide them by easy and fascinating steps into the mysteries of nature, and teach them many valuable lessons of life and living.

Again I say, then, that our reading may be made to contribute in a thousand ways to our intellectual, moral, and physical happiness, or it may bring about a reel of the passions, unstring the nervous system, prostrate the mind and the body, so that both are lost.

NEED OF PHYSICAL CULTURE AMONG WOMEN.

ALONG the country lanes of England, any and every fine day, are seen as many women as men enjoying their horseback exercise; and in the streets of the cities they are familiar sights, riding alone occasionally, but more frequently attended by a groom or carriage with friends. In New York the sight is growing to be a more familiar one, yet it is rare enough to provoke comment, and a good horsewoman is one of the rarest of sights, even in that most metropolitan of American cities. The pleasures of outdoor exercise are more talked of than experienced; for, as a rule, women are not fond of long walks, or even of driving for any other than a fashionable duty. When all the fine turnouts are in the Park, those who have such order them out for the purpose of joining the throng; but beyond this there is no display of riding made. Long drives, for the pleasure of driving and of taking all the sunshine and air possible, are not rated among the "pleasures" of the average American woman's life; and the sharp criticism made by a disgusted Benedict, that a woman would have nothing to do with outdoor exercises as long as she could get trimmings to sew on dresses, or friends to gossip with, is not so unjust as it would at first appear. Women have nerves, and all that is calculated to disturb their action they decline to undertake. A walk in the morning ends with a headache in the afternoon; a walk in the afternoon unfits one for the evening's sociability, is the argument used by the opponents of physical exercise. The notion is a fallacy; but what has that to do with changing the decision of those most concerned? Perhaps some few have tried the plan for one day, overdoing the business, and have then given over the effort and voted it a mistake. Wrinkles and increased nervousness do not convince them that something is lacking in their daily regime, nor does the quiet assertion of the physician, to the effect that what they need is exercise, make any more than a passing impression upon them. Everything else but exercise is what they will take—that is too common a remedy to be adopted.

Walking, the best of all exercises for the well, because the most natural, should be a duty, just as are eating, drinking, or sleeping; and the cares and supposed duties of the home should be laid aside until it has been enjoyed. Within a prescribed circle—dwelling upon unworthy cares oftentimes, allowing duties to magnify until they become curses, dwarfing the soul to gain a passing show for the body—these are the things that women indulge in too often.

Physical exercise is the panacea for these ills. Open doors and plenty of air are of more value in a house than fine furniture, and an atmosphere in which flowers will bloom than one in which plants die because of the absence of these factors. Societies ought to be formed for the purpose of teaching women this art of outdoor exercise—no matter what form it takes, whether it be riding or walking, or archery or rowing. The latter, of course, in midwinter is impossible, but the gymnasium might take its place and the calisthenic exercises be its substitute. The short, loose dress used for the gymnasium, worn even for an hour, would give some women a new idea of liberty, and would dispel many mistaken notions of helplessness.—*Ex.*

—Joys are the flowers dropped into our path by the hand of Providence.

THE STAFF OF LIFE.

[The following excellent article we clip from the London *House and Home*.—ED.]

BREAD was formerly, in strict truth, the staff of life. The bread in common use in our times is mostly a broken reed, not fit to lean on. When women took bright, good wheat and crushed it between two stones, or bruised it in a mortar, and baked it in cakes of sweet brown bread, it was, with fruit, and in pastoral lands with milk, the healthiest food in the world. Our bread to-day is made of a fine flour, from which the best elements of the grain have been separated. It is evident that whole-meal bread must have been the common food of man before the invention of the machinery necessary for making fine flour. During the wars in which England was engaged in the early years of this century, wheat became very dear, and as a measure of economy brown bread was supplied to the army. At first the soldiers grumbled, and in some cases threatened mutiny; but as soon as they were reconciled to the sight of it, they found it sweeter and more satisfying than the white, and its effect upon their health was such as to almost empty the hospitals. The following from a number of the *Pall Mall Gazette*, is to the purpose:—

"We are not advocating a bread diet, but only the purification of bread, that it may be restored to its proper function as the staff of life to those who can ill afford fancy props. Our people overfeed themselves, and drink too much in consequence, without deriving from their mixed diet a tithe of the sinew which their forefathers drew from sound bread. Would it surprise our modern working man to hear that the yeomen of Elizabeth's reign, who drew their bowstrings to their ears, and sent a cloth-yard shaft whistling through a barn door at eighty yards, ate meat about once a week, and lived the rest of the time on whole-meal bread and cheese?"

The Northern nations which live on rye bread are able to stand the rigors of a climate much more severe than ours. They tell us that they could not live on our fine wheaten bread, and that it has no staying properties for their stomachs—very nice to eat, but they are hungry again directly. It may well be, then, that there is something wrong in the great bread question, and that we should inquire and go back to the days of our forefathers, before this fine white and adulterated compound which we call bread was invented.

Wheat consists, roughly speaking, of an outer husk, which forms the bran; of the innermost "starchy" substance, which forms white flour and white bread; and of certain valuable intermediate products, separated from white flour and now usually given to fatten pigs. These intermediary mill products inclosing the white flour are denominated respectively, specks, toppings, fine middlings, sharps, and pollard, and are all much richer in nitrogen, oil, and mineral matters than the central or floury portion of the grain. Physiologists and physicians tell us that the human body must have its various constituents presented to it in its food; but Nature knew that before they did, and when she made the wheaten grain she packed into it all that was needed for healthy nutriment. Good whole-meal bread, in fact, supplies in itself the nourishing properties of many kinds of food—it contains albumen, fibrine, gluten; it makes bone, muscle, blood, and tissue; and even the woody fiber contained has a favorable, slightly irritating effect on the intestine, and so is preventive of constipation.

The wandering Arab lives almost entirely upon bread, with a few dates as a relish; and this not because meat is scarce in his part of the world, but because he feels no need for it. He would soon have to alter his diet, though, if an enterprising wholesale flour-producing company were to set up its mill in the desert. Liebig says that whole-meal flour, or bread made from the whole meal, contains 200 per cent more nutritive salts than white flour, or 60 per cent more nutritive salts than meat, and that whole meal is the staff of life. The loss to the nation by using only the central portion of the grain, namely, white flour, can thus be imagined.

Our paupers are fastidious, and might rebel; but the poor rickety children one sees about would be all the better for whole-meal bread, with plenty of silica and phosphate for their bones, of nitrogenous matter for their muscles, and of phosphorus for their brains; nor would they require to have the butter laid on thick as they do to make white

bread palatable, the butter being, alas! even more adulterated than the wretched white commodity.

It has been remarked, too, by many eminent physicians, that the unsoundness and early loss of teeth so common now among all classes is largely due to the absence of phosphates and bone-forming material in the fine white bread which is generally eaten. The poor seamstress, on her scanty earnings, hurries home with the adulterated white loaf under her arm, and washes it down with equally poor tea, when for the same money she could obtain very much more nourishing and satisfying food. White bread gets dry and chippy in a day; whole-meal bread will keep fresh often a week.

We may add that porridge is only a form of whole-meal bread more quickly and easily made. Coarsely ground wheat or oats stirred into *boiling* water cooks perfectly in half an hour to an hour. We have been informed that this kind of food is gaining in daily favor at the Alpha Food Restaurant, 429 Oxford Street, the proprietor of which, we believe, was the first to publicly introduce in London this now thoroughly satisfactory breakfast dish when properly prepared.

In the matter of bread, the criminal prisoner has much the better of the honest laborer, and even of the well-to-do classes. He does not feed upon the "white" bread of the bakers, nor on the "brown" bread they sell, which, by the way, is a mere deception, being made of the same dough as the white bread, with a little bran, a mere flinty irritant, thrown in—no! prison bread is made of "whole meal," which contains all the nutritive and sustaining properties which reside in the grain of wheat.

Further, according to Dr. Grover, "experiments upon animals have proved that they can live upon whole-meal bread without any other food; but if fed upon white bread alone, the health first suffers, and death ensues. It must be allowed, however, that, like all changes at first, the whole meal might not prove so palatable. The crust, as a rule, is thicker, and the bread cannot be cut in such delicate slices as white bread allows of; but then, by continuing with the genuine article, you will usually end by caring for no other, since the whole-meal or old farm-house bread has the sweet flavor of the wheat itself, which no white bread ever has. It must also be remembered that the outermost, flinty or branny layer contains silex, and is less digestible and less nutritious than the parts of the grain it incloses, and some delicately-lined stomachs would be, perhaps, better for not being too much irritated by this branny portion.

There is another advantage in whole-meal bread—it requires due mastication. In the country and suburbs, where it is difficult to obtain the genuine article, the best plan, perhaps, would be to buy a hand mill, and grind one's own wheat for making bread and porridge.

APOSTROPHE TO WATER.

[The following beautiful tribute to "the only drink," has been so often published that its author's name has been lost, but it is well worth preservation.—ED.]

WHERE is the liquor that God the Eternal brews for all his children? Not in the simmering still, over smoky fires choked with poisonous gases, and surrounded with a stench of sickening odors, and rank corruptions, doth your Father in Heaven prepare the precious essence of life, the pure cold water. But in the green glade and grassy dell, where the red deer wanders, and the child loves to play, there God brews it. And down, low down, in the deepest valleys, where the fountains murmur and the rills sing; and high upon the tall mountain tops, where the naked granite glitters like gold in the sun; where the storm-cloud broods, and the thunder storms crash; and away, far out on the wide, wild sea, where the hurricane howls music, and the big waves roar the chorus sweeping the march of God: there he brews it, that beverage of life, the health-giving water. And everywhere it is a thing of beauty—shining in the ice-gem; singing in the summer rain; gleaming in the dew-drop, till the leaves all seem turned into living jewels; spreading a golden vail over the setting sun, or a white gauze around the midnight moon; sporting in the cataract; sleeping in the glaciers; dancing in the hail shower; folding its bright snow-curtains softly around the wintry world; and weaving the many-col-

ored iris, that seraph's zone of the sky, whose warp is the rain-drop of earth, whose woof is the sunbeam of heaven, all chequered over with celestial flowers by the mystic hand of refraction. Still always it is beautiful, that life-giving water; no poison bubbles on its brink; no madness and murder; no blood stains its liquid glass; pale widows and starving orphans weep no burning tears in its depths; no drunken, shrieking ghost from the grave curses it in the words of eternal despair. Speak out, my friends; would you exchange it for the demon's drink, alcohol?

SOMETHING ABOUT TEA.

THE Troy (N. Y.) *Times* recently published a very readable article about tea, from which we make an extract as follows:—

"Tea has been used as a beverage in China from very remote periods. Tradition speaks of it as early as the third century. The legend relates that 'a pious hermit, who in his watchings and prayers had often been overtaken by sleep so that his eyelids closed, in holy wrath against the weakness of the flesh cut them off and threw them on the ground. But a god caused a tea-shrub to spring out of them, the leaves of which exhibit the form of an eyelid bordered with lashes, and possess the gift of hindering sleep.' A similar story is told concerning the introduction of coffee into Arabia. Both legends were probably invented long after the qualities of tea and coffee were known. It was after the year 600 that the use of tea became general in China, and early in the ninth century (810) it was introduced into Japan.

"The real history of tea begins with its taxation. In 781 an impost was levied on it in China by the Emperor Te-Tsang. It was introduced into Europe by the Dutch in 1591, and was used in England on some rare occasions some years prior to 1657, and sold at from $30 to $50 per pound. At about the same period, a Russian embassy to China brought back to Moscow some carefully packed green tea which was received with great acceptance. And in 1664 the English East India Company considered it a rare gift to present the Queen of England with two pounds of tea. In 1670, during the reign of Charles II., the tax on tea was eighteen pence on every gallon made and sold, paid by the makers of the tea. This taxation lasted seventeen years; heavy custom dues on the imported tea were then substituted, and from 1688 to 1745 was an era of excessive taxation on tea. Yet it gradually forced itself into domestic use in spite of such crushing taxation.

"Its use is described in 1678 as a 'base, unworthy Indian custom.' The tea-drinkers of that day were frightened by physicians and ridiculed by the wits. The *Grub Street Journal* attacked it with considerable violence, declaring that even 'were it entirely wholesome, as balsam or mint, it were yet mischief enough to have a whole population used to sip warm water, in an effeminate, mincing manner, once or twice every day.' Jonas Hanway wrote a treatise against tea, and came forward to speak for the thousands who honestly believed tea was slowly 'poisoning' the whole nation. 'The weak digestions, low spirits, and bad teeth of the other sex,' said Mr. Hanway, 'are to be attributed to their use of tea. Men have lost their structure and comeliness, and women their beauty; your very chambermaids have lost their bloom; I suppose, by drinking tea.' This accusation was made in Dr. Johnson's time, and that vast consumer took up the cudgels for 'that elegant and popular beverage.' Johnson was an utterly insatiable tea-drinker, 'hardened and shameless,' whose kettle scarcely had time to cool; 'who with tea amuses the evenings, with tea solaces the midnights, and with tea welcomes the mornings.'" On one occasion he was reminded, upon his calling for another cup of tea, that he had already taken *eleven cups!*

It is a fact worth noting, that tea, coffee, and tobacco, were introduced into general use in Europe about the same time. These three narcotics too often go together, each creating a demand, sometimes almost a necessity, for the others.

—The great secret of avoiding disappointment is not to expect too much. Despair follows immoderate hope, as things fall hardest to the ground that have been nearest the sky.

"WHAT BEAUTY'S LINES IN HER DESTROYS."

WHAT is it makes a lady's head
Feel heavy as a lump of lead?
What makes her nose's tip so red?—
Tight-lacing!

What makes her cheek burn like a coal,
Her feet as cold as arctic pole?
What cramps her body and her soul?—
Tight-lacing!

What makes her temper short and sharp?
What causes her to fret and carp,
And on the smallest ills to harp?—
Tight-lacing!

What checks her proper circulation
And dulls her ordinate sensation?
What blights the babes bred for the nation?—
Tight-lacing!

What makes her waist a wasp-like thing,
And gives her tongue a waspish sting?
What balks her when high notes she'd sing?—
Tight-lacing!

What is it, with its vice-like squeeze,
Destroys its fated victim's ease,
And brings her doctors countless fees?—
Tight-lacing!

What is it makes her gasp for breath,
And—so stern modern science saith—
Dooms her too oft to early death?—
Tight-lacing!

What brings a "corn upon her heart,"
And makes her—spoiled by cruel art—
Unfit to play the mother's part?—
Tight-lacing!

What tortures her into a shape
Which "ruts her liver" past escape,
And which at most makes *gammeux* gape?—
Tight-lacing!

What beauty's lines in her destroys,
And fashion's powerful aid employs
To crush from out her life its joys?—
Tight-lacing!

What ages her before her time,
And makes her feeble ere her prime?
What tempts to a self-suffered crime?—
Tight-lacing!

What, quite ignoring nature's facts,
Her waist so cruelly contracts,
That each inch saved fresh pain extracts?—
Tight-lacing!

And what bad fashion of the day
Is it that ladies now should say
They'll spurn without an hour's delay?—
Tight-lacing!

—*London Truth.*

INTERESTING FACTS ABOUT VEGETABLES.

KITCHEN vegetables were very scarce in England till the end of the sixteenth century. No salads, carrots, turnips, or other succulent roots, were cultivated by the inhabitants of Britain till the close of the reign of Henry VIII. Up to that time, the little they had was imported from Flanders and Holland. Our ancestors had winter-cresses and water-cresses, and used common Alexanders instead of celery, together with rampion and rocket. Aramanthus and goose-foot, or good Henry, with sprout-kales, were used instead of greens; and they put the young leaves and pretty blue flowers of borage into their cool tankard. They had very few fruits, and those which they had were not good—gooseberries, currants, strawberries, apples, pears, and cherries. The latter were bad, although they were introduced from Italy and planted in Britain as early as A. D. 800.

Several of our ordinary kitchen vegetables seem to have been unknown to the ancients; indeed, it is probable that they did not then exist, but are the result of subsequent cultivation and improvement. Borage, spinach, and the variety of cabbages which we now possess, are never mentioned, although they were acquainted with curly greens and broccoli. The latter was brought from Italy to France at the end of the sixteenth century. Cauliflower was brought from the Levant to Italy at the same time, and did not reach Germany till the close of the seventeenth century. The culture of the turnip was well known to the Romans, and it is probable that they introduced it into Britain. The carrot was known to the Greeks and Romans, but was not much used by them as food, either for man or for beast.

Several kinds of vegetables contain poisonous substances, which are treated by animals in a remarkable, if not eccentric manner. For instance, cattle will not eat plants of the labiate kind; goats, oxen, and lambs refuse all the solanaceæ; and the horse objects to nearly all the cruciferæ, while he can eat monkshood with impunity. The goat shows no indisposition after feasting on hemlock, and the rabbit seems rather to enjoy a dinner off belladonna!—*Ex.*

PRACTICAL HYGIENE.

How singularly ignorant the majority of people are concerning the laws of health. We boast of our superior educational privileges, and of the advantages we are able to give our children. Physiology is taught in all our high schools, and in many of our country schools; and we sometimes fondly hope that this generation will better understand the nature of their own beings than did their predecessors; but, after all, how much does the average student know of the care required to keep the delicate machinery of his physical constitution adjusted so that there may be no friction or strain upon any of its parts? Teachers themselves have very little practical knowledge of hygiene. They teach it as found in the text-books, but the student is seldom impressed with the fact that these principles taught must be lived out every day, or a loss of health or shortening of life will be the consequence.

I have often, at boarding schools, seen a teacher come from the class room with a score or more of girls and sit down to a dinner of meat gravies, vegetables swimming in grease, bolted flour bread, and rich puddings or pies; almost every article of which the text-book had condemned; but so little have they heeded the lesson that few, if any, of the class think of the danger of partaking of it. Hot coffee or tea, hot biscuit, butter, syrup, and pickles form the bulk of the supper, and the same with meat and fried potatoes make up the breakfast. This is no fancy sketch, for there is too much competition now between the schools to admit of the old starvation diet so much complained of in the past. These same young ladies study hard, have little exercise, and often sleep in poorly ventilated rooms; consequently, there are many headaches, colds, much biliousness, homesickness, and hysteria.

If the lesson in hygiene had been impressed and a desire for health aroused by the enthusiasm of the teacher, for a true teacher has power to do this, then we might have healthier, happier, handsomer girls, and the next generation would be an improvement on this, because the mothers would be a better developed class of women.

Much lies in the power of our educators; and if we could have earnest, enthusiastic men who would go over our country arousing them to a sense of their responsibility, what a power for good might they become!

MRS. L. M. SNIFF.

Hygiene in Germany.—At the last meeting, in the city of Berlin, of the German Teachers' Association, which now has a membership of about 20,000, one of the topics for discussion was "school-hygiene." Dr. Paul Niemeyer, member of the Board of Health, gave a short but excellent lecture upon the subject, clearly pointing out that many of the frequently occurring cases of consumption might be traced directly to the old and poorly ventilated schoolrooms. He did not fail in showing his intelligent audience the necessity of an unrestrained use of two of the most abundant elements throughout nature—*pure air* and *pure water*. After the lecture, the subject was generally discussed; and steps were finally taken recommending the introduction into all schools of an improved ventilating-apparatus. H. N.

Fat Men.—It is a striking fact that most persons want to weigh more than they do, and measure their health by their weight, as if man were a pig, valuable in proportion to his heaviness. The racer is not fat, a good plough horse has but a moderate amount of flesh. Heavy men are not those that experienced contractors employ to build railroads and dig ditches. Thin men, the world over, are the men for endurance; are the wiry and hardy; thin people live the longest. The truth is, fat is a disease, and as a proof, fat people are never well a day at a time—are not suited for hard work. Still, there is a medium between fat as a butter-ball and as thin and juiceless as a fence-rail. For mere looks, moderate rotundity is most desirable, to have enough flesh to cover all angularities. To accomplish this in the shortest time, a man should work but little, sleep a great part of the time, allow nothing to worry him, keep always in a joyous, laughing mood, and live chiefly on albuminates, such as boiled cracked wheat, rye, oats, corn, and barley, with milk.—*Trade Journal.*

—Labor brings pleasure; idleness, pain.

Influence of Tobacco on the Eye.—Recently several papers have appeared on the above subject, in which the authors assert, with great unanimity of opinion, that tobacco is frequently the cause of diseases of the eye. Disordered vision, which merges into amaurosis, and the general decline of sight, with nervous blindness, are mentioned as quite common.

Cases of delirium tremens have been noticed which ceased when tobacco was withdrawn. Facial paralysis and general neuralgia are often noticed. Atrophy of the optic nerve is a common result. All persons who use tobacco in any way, excessively, will have defective vision and color blindness. Myopia is also present, with changeable vision; at one time clear, then cloudy, or very sensitive when concentrated for any length of time on one object. Frequent congestions and weakness may be said to be present all the time. Nearly all the more common functional diseases of the eye are traceable to tobacco.—*Quarterly Journal of Inebriety.*

Moodiness in Women.—The editor of the *St. Louis Post* offers a few words on this subject which are so sensible and so suggestive to hundreds of overtasked women who pass their whole lives under a cloud of gloom which might easily be dispelled by pursuing the course suggested, that we take pleasure in quoting as follows:—

"Moodiness in women may almost always be traced to an overtaxed condition of the system, too much care and too long continued monotony in daily pursuits. A wife and mother, surrounded by family cares, is acted and reacted upon by the same sights, sounds, and labors, until the freshness and vivacity of the spirit become worn out. We are so constituted that our natures demand, for their enjoyment of life, and for the vigorous exercise of our powers, change, variety, and relaxation. For lack of these the interest in life diminishes, the mental horizon narrows, life becomes contracted, and seems not worth the living. Then come various unhappy moods and take possession of the mind. To learn to control and banish unhealthy moods, is one of the tasks that must be undertaken by every woman who would lead a happy and useful life. The first step is to recognize their existence and influence. Reason must be called to the aid to declare that feelings of despondency, hopelessness, complaint, and discouragement, are but the result of a mood, and, therefore, can be resolutely held in check.

"If one can only bring one's self to make the frank acknowledgment mentally, 'I feel mean, cross, and ugly, to-day,' and then to restrain speech and action accordingly, the battle is half won. But vigorous action must be resorted to in order to dispel the mood; and for this nothing is so effective for women as to leave home, even if but for an hour. Get away where other influences will act upon the mind and body. If despondency and a complaining mood are dominant, go to see some fellow-creature who is in real distress; the remedy is almost a specific for such a mood.

"Above all things, moods need to be dealt with objectively, not subjectively. Don't go to introspection; don't think about yourself; don't set it down to a sinful heart, or to any religious or irreligious cause. The cause of moods is a purely physical one, and must be reached through the physical nature. Change of occupations or surroundings, of air and exercise, are the remedies for moods."

Plain Living.—A lady writing to the *American Agriculturist* offers the following very sensible remarks on the advantages of plain living:—

"There are many good reasons for living on plain, simply-cooked but nourishing food. Variety is necessary; that is, a judicious mingling of dishes of grains, vegetables, fruits, and meats. There need be but few kinds at one meal if the family are agreed in their tastes. The larger the family, as a general rule, the more need of variety at each meal, that each one may follow natural instinct in selection, as far as can be done with due reference to the rights of others. Plain living reduces not only our expenses, but our labor in the kitchen.

"Another important thing I have been taught by both reason and experience: Plain living reduces our liability to diseases of all kinds. There has been but one case of absolute sickness (down sick in bed, undressed all day) in our little family of four children dur-

ing the more than dozen years since the eldest was born. I think this is due to care in regard to the general rule of health, as no preventive or curative medicines—not even catnip tea or camphor—have been used.

"Yesterday a daughter complained of a slight sore throat—a very unusual complaint here—and I felt some little uneasiness, as diphtheria is abroad in this part of the country. But I felt condemned for the dinner of the day before—hot bread pancakes, upon which I knew the little girl was eating quite too much butter in a melting condition, followed by pumpkin pie, which disgraced me because it was too sweet and spicy for health. She had the good sense (or cultivated instinct) to go without supper last night; and a wet cloth on her throat during sleep, covered by a dry one, perfected a cure of all sore throat.

"Children who live habitually on plain fare show evil effects from rich food much more quickly than those who live regularly on the latter, and some suppose this proves that their stomachs are weaker on account of plain living, but I think it is because they have a more correct or healthy tone."

Drunkards' Quarantine.—In Venice it was a law that every one who deliberately violated the regulations of the health-board should suffer by death. This is the true principle of society, making the individual conform to the needs and welfare of the masses. A small-pox patient going about the street is looked upon with horror, but an inebriate who is a terror to his family, and a constant menace to good order and society, is hardly noticed. It is a sanitary measure of the highest importance to quarantine the inebriate, and protect society; and until we recognize this fact all our efforts at sanitary reform will be defective.—*Sel.*

Jewish Morality.—A fact which speaks volumes in favor of the general morality of the Hebrew race has just been developed in England. One Jew killed another a few weeks ago, and it came out on trial that it was the first case on record in Great Britain in which one member of the Jewish persuasion had been charged with the willful murder of another of the same religion, and also that no Jew has been executed in that country for a period of two hundred years. The last one who suffered the penalty of death was hung just two centuries ago, and then not for murder, but for forgery.—*Sel.*

A Dog Drunk.—The following story comes from Australia by way of an English exchange:—

Sixty years ago, when I was a teacher in Kilmalcum parish, says John Fraser, I was using whisky bitters for my stomach's sake. One day I dipped a piece of cracker in it, and gave it to the dog. He ate it up, curling up his lips to avoid the taste. Ere long he became tipsy; he howled most piteously, and naturally looked up into my face as if for help. He began to stagger and fall like a drunken man. The appearance of his eyes and face was extraordinary. He lay on the floor and howled until the effect of the drink wore off. This was supreme folly—it was wicked. The dog never forgot the trick. Whenever after I went to the press for the bottles he hastened to the outside of the house. One day, the door being closed, he sprang with one bound through a pane of glass, to get outside the door. So much for the wisdom of the dog—infinitely surpassing foolish drinking men. If all men were as wise as the dog, there would be no drunkards in the land.

Value of Physical Culture.—Seldom has an old truth been more happily stated than by Dr. Farquharson, when he said the other day that the first requisite for success in life is a good animal training; that a too exclusive devotion to mental training will make one narrow-chested—if possibly broad-minded—and dyspeptic, unable to take one's proper place in the race of life for lack of physical power and from a sheer early breaking down of an ill-developed and ill-exercised machinery.

—Men's lives should be like day—more beautiful in the evening; or like summer—aglow with promise; and like autumn—rich with golden sheaves, where good deeds have ripened in the field.

LITERARY MISCELLANY.

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

"SIMILIA SIMILIBUS."

"There was a man in our town,
And he was wondrous wise:
He jumped into a bramble-bush,
And scratched out both his eyes.
But when he saw his eyes were out,
With all his might and main
He jumped into another bush,
And scratched them in again!"

Old Dr. Hahnemann read the tale
(And he was wondrous wise)
Of the man who, in the bramble-bush,
Had scratched out both his eyes.
And the fancy tickled mightily
His misty German brain,
That, by jumping in another bush,
He got them back again.

So he called it "homo-hop-athy,"
And soon it came about,
That a curious crowd among the thorns
Was hopping in and out.
Yet, disguise it by the longest name
They may, it is no use;
For the world knows the discovery
Was made by Mother Goose!

And not alone in medicine
Doth the theory hold good:
In Life and in Philosophy,
The maxim still hath stood:
A morsel more of anything,
When one has got enough,
And Nature's energy disowns
The whole unkindly stuff.

A second negative affirms;
And two magnetic poles
Of charge identical, repel,—
As sameness sunders souls.
Touched with a first, fresh suffering,
All solace is despised:
But gathered sorrows grow serene,
And grief is neutralized.

And he who, in the world's *mêlée*,
Hath chanced the worse to catch,
May mend the matter, if he come
Back, boldly, to the scratch;
Minding the lesson he received
In boyhood, from his mother,
Whose cheery word, for many a bump,
Was, Up and take another!

—*Mother Goose for Grown Folks.*

—Time wasted, is existence; used, is life.

ADVICE TO GIRLS.

Be content to strive for nothing less than all which a woman may become. Cease to think that pettiness and frivolity and insipidity are feminine accomplishments. Cease to think it a beautiful, a graceful, a womanly thing to be a fool. Strengthen the mind by study and the body by exercise. Store your memory with facts, and cultivate your judgment by reasoning. Fit yourself for the place which you select or accept. Be wife, mother, teacher, nurse, what you will, but be your best; and be always a woman first; be always higher than your work. Remember always that you must be before you can do. Scorn to contract your powers to the narrow circle of your personal contact, but comprehend with your interest all that touches welfare. Consider nothing human as foreign to you. Make home, so far as you have or can have power, a center of comfort indeed, but of light, of intelligence, of humanity as well, and count the whole country your home, and the whole world your country. Disdain to affect or to cherish an ignorant innocence, but wear an aggressive and all-conquering purity. Remember that the perfect woman is nobly planned, not only to warn and comfort, but to command. Learn to think nobly, to love nobly, to live nobly, and demand and enforce by your own nobility, from all who seek your friendship or companionship, the same outreach for noble thought and love and life.

Breadth and depth of culture are the only royal road even to good house-keeping. Granted that the majority of women do lead a domestic life, and should therefore be educated with reference to it; there is no employment in the world that needs thorough culture more than domestic employment. The position of a woman at the head of a family is more like that of a man at the head of a government than like any other. Every possible variety of mental training she

needs; every possible variety of intellectual furnishing will come into use. Without the liberality, the comprehensiveness, the wisdom, which education gives, she cannot administer the affairs of her kingdom well. Natural tact will do much, but it cannot supply the place of education. When a woman has learned to make a pudding, she has learned but the smallest and easiest part of her duty. She needs to know how to sit at the table where the pudding is served, and dispense a hospitality so cordial and enlivening that the pudding shall be forgotten. There are a thousand women who can make a pudding, where there is one who is mistress of her servants, of her children, of her husband, of her house, of her position. Granted that women need have no character on their own account,—that their glory and dignity and importance lie in being the mothers of men. Also on that ground they need the most thorough intellectual education. A woman can make a dress fit well though she have little knowledge of anything else; but she cannot fashion a soul for a worthy immortality without a worthy cultivation of her own soul. A woman who is not the equal of men is not fit to be the mother of men.

A woman should be strong and wise and cultivated, not chiefly because she becomes thereby a better wife and mother, but because wisdom is better than folly, strength than weakness, cultivation than neglect. A woman's glory is in herself. If she is wise, she is wise for herself. It is just as great for her to do a great thing herself as it is to have her husband or son do it; and husband and son are all the more likely to be great for her grandeur.—*Gail Hamilton.*

HOME-MAKERS.

THERE are very few persons in the world, and those few not to be envied, who are insensible to the delights of a happy home. Those who are fortunate enough to possess it are generally wise enough to prize it; while those who have it not, make it the nucleus of many an air castle, and the chief figure in many a future prospect. It is, however, far easier to enjoy or hope for this inestimable blessing than to secure the various elements that must combine in order to form it.

It is a prevalent idea that woman, and she alone, must always be the home-maker. This is her business, it is affirmed, while that of man necessarily lies outside. It is his part to provide the means of support, hers to supply a well-ordered, gladsome, refreshing, peaceful home. There is much truth in this view, but like many other truths, it has been run into the ground from the failure to perceive the other side. A home, like a person, has a dual existence; it has an outer and an inner life; it is formed by the circumstances that surround it and the characters that dwell within it. There is the house with its appurtenances, its opulence or poverty, its comforts or inconveniences, its loaded table or frugal board, its neatness and thrift, or disorder and waste. This is the outer life of the home.

To this both man and woman equally contribute. The division of labor, as usually maintained, is, upon the whole, quite equitable. His lies outside the home, hers within; but both are equally important, equally honorable, equally remunerative in the true sense of the word. Neither his earnings, nor her care, would alone make and keep the home, even in its outer life, while united they supply all it needs. Any shirking on either side is fatal. If the man, through self-indulgence of any kind, fail to do his part, the woman will be overburdened, and the family comforts curtailed or destroyed. If, on the other hand, she, through love of pleasure or lack of discretion, neglect the wise ordering of her household, or slide into fashionable extravagance, the result will be equally disastrous. Whatever be the resources, or the style of living they adopt, it requires all the abilities and painstaking of both in their respective spheres, to maintain this external domestic life with prudence, comfort, and consistency.

It is, however, in the inner life of the home that we must look for its purest and most permanent happiness; and here also do we find man and woman to be equally necessary and equally responsible. Not the house, however richly furnished and judiciously arranged, not all the labor and thought of the man in earning and the woman in managing, however praiseworthy each may be, can alone

secure a happy home. They are, indeed, indispensable, but not sufficient. Not only must hand and brain construct the home, but *heart* must inspire it. There must be love, patience, self-sacrifice, sympathy, contentment, courage to bear, firmness to endure —in a word, all the qualities that go to make up character. If these be absent, so is happiness, however congenial and satisfactory may be the external home.

Just here a fatal mistake is frequently made. The busy man, wearied with toil, and harassed, perhaps, by the events of the day, comes home to find rest and refreshment. He feels that his labors abroad should be recompensed by comfort, ease, and freedom from care at home. This is, perhaps, natural; but he forgets that the wife and mother, if earnest and conscientious, has had her trials and labors also, and is probably in need of rest and sympathy quite as much as he is. The home is, perhaps, so peaceful and cheery that he takes it for granted that its constant inmate must be so too, and thus his thoughts become centered in what his home ought to yield to him, rather than in what he shall do to make a happy home for the family. The truth is, that home happiness is not a harvest for which one part of the household is to labor, that another part may enjoy. Each one must plant the seed, and water the ground, and destroy the weeds, and then each one will partake of the bounteous crop. As the husband and wife both contribute to form the external home, they must equally unite to fill it with the living presence of unselfish affection and thoughtful kindness. If either fail in this, if one be always striving to make the home, and the other only to enjoy it, disappointment is inevitable.

The children, too, should be encouraged and trained, from their earliest years, to contribute their share toward the home. Every boy and girl can add to the family joy in a multitude of ways, which will open rapidly to view when they are sought. The little kindnesses to one another, the willing deference to parental wishes, the plans laid for cheerful winter evenings, pleasant surprises, and gleeful reunions, small gifts of handiwork to grace the familiar rooms, with hundreds of other natural outpourings of affection and gratitude, will bind children to their homes and make them centers of happiness, far more than can ever be the case when they are merely recipients. It is the good we do, much more than that which is done for us, that promotes our highest enjoyment; and each member of the household who would taste the keenest delights of a happy home must constitute himself or herself, in the best sense, a "home-maker."—*British Workman.*

A CURE FOR SLANDER.

THE following very homely but singularly instructive lesson is by Philip Neri: A lady presented herself one day to him, accusing herself of being given to slander. "Do you frequently fall into this fault?" inquired Neri. "Yes, father, very often," replied the penitent. "My dear child," said Neri, "your fault is great, but the mercy of God is still greater; for your penance do as follows: Go to the nearest market, purchase a chicken just killed, and still covered with feathers; you will then walk to a certain distance, plucking the bird as you go along; your walk finished, you will return to me." Great was the astonishment of the lady in receiving so strange a penance; but, silencing all human reasoning, she replied: "I will obey, father; I will obey." Accordingly she repaired to the market, bought the fowl, and set out on her journey, plucking it as she went along, as she had been ordered.

In a short time she returned, anxious to tell of her exactness in accomplishing her penance, and desirous to receive some explanation of one so singular.

"Ah!" said Neri, "you have been very faithful to the first part of my orders; now do the second part and you will be cured. Retrace your steps; pass through all the places you have already traversed, and gather up, one by one, all the feathers you have scattered."

"But, father," exclaimed the poor woman, "that is impossible. I cast the feathers carelessly on every side; the wind carried them in different directions; how can I now recover them?"

"Well, my child," replied Neri, "so it is with your words of slander—like the feathers which the wind has scattered, they have been

wafted in many directions—call them back now if you can. Go and sin no more." History does not tell if the lady was converted; but we have the lesson, and all should profit by it.—*Sel.*

A Bad Memory.—To one who really desires to acquire knowledge, a bad memory is a serious defect, which should be remedied, if possible. I can tell you two secrets that will cure the worst memory. One is, to read a subject when strongly interested. The other is, to not only read, but think. When you have read a paragraph, or a page, stop, close the book, and try to remember the ideas on that page, and not only recall them vaguely in your mind, but put them into words and speak them out. Faithfully follow these two rules, and you have the golden keys of knowledge. Besides inattentive reading, there are other things injurious to memory. One is, the habit of skimming over newspapers, items of news, smart remarks, bits of information, political reflections, fashion notes, all in a confused jumble, never to be thought of again, thus diligently cultivating a habit of careless reading hard to break. The best memory must inevitably suffer by such a system.

Duration of Eternity.—Eternity is an awful word. The mind staggers when it vainly attempts to measure its boundless limits. It is only by illustration that the mind can gain even a hint of the vastness of never-ending time.

Various illustrations have been suggested to convey to the mind some idea of illimitable duration. It has been said, suppose one drop of the ocean should be dried up every thousand years, how long would it be ere the last drop would disappear, and the ocean's bed be left dry and dusty? Far onward as that would be in coming ages, Eternity would have but commenced.

It has been said, suppose this vast globe upon which we tread were composed of particles of the finest sand, and that one particle should disappear at the termination of each million of years, oh, how inconceivably immense must be the period which must elapse before the last particle would be gone! And yet, Eternity would then be in its morning twilight.

It has been said, suppose some little insect, so small as to be imperceptible to the naked eye, were to carry this world by its tiny mouthfuls to the most distant star the hand of God has placed in the heavens. Hundreds of millions of millions of years would be required for a single journey. The insect commences on the leaf of a tree, and takes his little load, so small that even the microscope cannot discover that it is gone, and sets out on its journey. After millions and millions of years have rolled away, it arrives back for its second load. Oh, what interminable ages would elapse before the whole tree would be removed! When would the forest be gone? And the globe? Even then, Eternity would not have commenced!

The Blessings of Labor.—In these days when there is a constant complaint of too much work, and a demand of shorter hours for labor, and more time for amusement and recreation, it is refreshing to see occasionally a journal like the *Atlantic Monthly* giving utterance to sentiments so true and timely as the following:—

"I believe that for most men more than eight hours' work per day is required for the maintenance of physical, mental, and moral health. I think that for most men, including operatives, mechanics, farmers, and clergymen, more than eight hours' labor per day is necessary, in order to keep down and utilize the forces of the animal nature and passions. I believe that if improvements in machinery should discharge men from the necessity of laboring more than six hours a day, society would rot in measureless and fatal animalism. I have worked more than ten hours per day during most of my life, and believe it is best for us all to be compelled to work. It would be well, I think, if we could make it impossible for an idler to live on the face of the earth. Religious teachers are not without responsibility for having taught that the necessity of labor is a curse. The world owes most of its growth hitherto to men who tried to do as much work as they could. Its debt is small to the men who wished to do as little as possible."

THE VAGARIES OF FASHION.

BY MRS. L. D. A. STUTTLE.

'Tis strange how Style, with ever-varying face,
Gains willing votaries 'mong our fickle race.
It matters not how foolish or absurd,
If Mistress Fashion only speaks the word.
Her will is law; and if she lead the race,
The masses follow at a headlong pace.

Since that unruffled covering of Eve's,
Made up of plain, unornamented leaves,
'Tis strange to note how various appears
The whims of Fashion in these later years.
She speaks the word, and, at her stern command,
Like huge balloon the graceful skirts expand,
Until the ladies, who these trappings wear,
Can scarce be seated in a common chair!

She speaks again; and "hoops" at once give way,
And "pull-backs" rage, the order of the day.
The dress must now be fastened back so tight
That surely 't is a mirth-provoking sight!
Enormous "bustles" lodge beneath the skirt;
And graceful "trails" go sweeping o'er the dirt.

The tender feet must then distorted be;
A number five must wear a number three.
Though corns and bunions bitterly complain,
The patient wearer never minds the pain!

Nor must the feet, alone, endure the smart;
One must be squeezed in a more *vital* part;
The cruel "Corset" with its iron clasp
Binds heart and lungs with unrelenting grasp,
Till dread disease, with all its grim array,
Shall mark the victim for its lawful prey.

Yet foolish mortals, ever slow to learn,
True Wisdom scorn, and all her counsels spurn.
In each new vanity they still partake,
And follow on, in Fashion's glowing wake;
Upon her altar sacrifice their wealth,
Their peace, their good, and e'en the boon of health.
Style must be followed at the dire expense
Of *brains*, and *time*, and *health*, and common sense;

Until, to-day, the belle parades the streets
A curious mass of loops and tucks and pleats.
Her sallow cheek is smeared with patent dye,
And *belladonna* sparkles in her eye;
While "Grecian-bends" expose themselves to view,
And prance our sidewalks like the kangaroo;
Till Common Sense, bewildered and perplexed,
Cries out in blank astonishment, WHAT NEXT?

FEMALE DRESS.—Female costume is, perhaps, the most expensive result of the fall. No sooner had Eve bitten the apple than she discovered she wanted a dress; and that want has been increasing in intensity and comprehensiveness among her daughters ever since that unfortunate hour.—*Sel.*

Talk at Home.—Endeavor always to talk your best before your children. They hunger perpetually for new ideas. They will learn with pleasure from the lips of parents what they will deem it a drudgery to study in books; and even if they have the misfortune to be deprived of many educational advantages they will grow up intelligent if they enjoy in childhood the privilege of listening daily to the conversation of intelligent people. We sometimes see parents, who are the life of every company which they enter, dull, silent and uninteresting at home among their children. If they have not mental activity and mental stores sufficient for both, let them first use what they have for their own households. A silent home is a dull place for young people, a place from which they will escape if they can. How much useful information, on the other hand, is often given in pleasant conversation, and what unconscious but mental training in lively social argument. Cultivate to the uttermost, the grace of conversation.—*Sel.*

"Too Like Tobacco."—The following anecdote confirms the truth of the physiologist's assertion that persistent indulgence in inordinate smoking results in the absorption of the actual essence of tobacco into the very tissues. Captain Wilkes, in an exploring expedition, interrogated a native of the Fejee Islands as to the fate of the crew of a vessel whose shattered hull still lay upon the beach. "All kill," replied the savage. "What did you do with them?" asked Captain Wilkes. "Eat 'em. Good," returned the cannibal. "Did you eat them all?" inquired the half-sick captain. "All but one," holding up a finger. "And why did you spare one?" "Cause him taste *too like tobacco;* could n't eat him no how."—*Food Journal.*

Building up Character.—It is sad to look at the ruins of a great building when the fire has swept over it. It is sad to follow in the tracks of war and see the devastation it has wrought. But it is infinitely sadder to see the wastes of life, of manhood and womanhood, which lie everywhere about us. Human hands can build again what the fire destroys, and restore the burnt streets to more than

their former beauty. Industry and energy can obliterate every trace of war's devastation. But no hand can ever build up again the manhood and womanhood which sin destroys. It is waste that is irreparable. Mark well how you spend your life. The acts of this moment are for eternity.—*Westminster Teacher.*

The True Wife.—Oftentimes I have seen a tall ship glide by against the tide as if drawn by some invisible tow-line, with a hundred strong arms pulling it. Her sails were unfilled, her streamers were drooping, she had neither side wheel nor stern wheel; still she moved on stately in serene triumph, as with her own life. But I knew that on the other side of the ship, hidden beneath the great hulk that swam so majestically, there was a little toilsome steam-tug, with a heart of fire and arms of iron, that was tugging it bravely on; and I knew that if the little steam-tug untwined her arms and left the ship, it would wallow and roll about and drift hither, thither, and go off with the influent tide no man knows where. And so I have known more than one genius, high-decked, full-freighted, wide-sailed, gay-pennoned, but for the bare, toiling arms, and brave, warm-beating heart of the faithful little wife that nestled close to him so that wind nor wave could part them, he would have gone down with the stream, and have been heard of no more.—*O. W. Holmes.*

The Affable Man.—A mother and her babe were among the many passengers waiting at a Western depot recently. She had the child carefully wrapped up, and this fact attracted the attention of a big fellow with a three-story overcoat, and a rusty satchel in his hand. Sitting down beside her he remarked,

"Cold weather for such little people, isn't it?"

She faintly nodded.

"Does he seem to feel it much?" continued the man.

She shook her head.

"Is it a healthy child?" he asked, seemingly greatly interested.

"He was, up to a few moments ago," she snapped out; "but I am afraid he has smelled so much whisky around here that he'll have the delirium tremens before night!"

The man got right up and walked out of the room, and was afterward seen buying cloves.

Slang.—It is lamentably easy to fall into the habit of using slang phrases. You first begin by using mild terms, such as "Good gracious!" "Mercy sakes!" etc. Soon you require something stronger, and still stronger, till, after using all the "by-words," you are on the brink of swearing, although when you first began you had no idea of such a thing. The habitual use of slang phrases should be classed with intemperance, and is generally found with it, as are also a great many other vices. Boys quickly form the habit by hearing it from their elders. Even the babe just learning to talk repeats them, and by some is thought smart or cunning, and is even encouraged in it. In after life, would not the parent have given worlds to have instructed that child differently?

—In the experience of life, a truth which sounds very much like a paradox often asserts itself; viz., that a man's worst difficulties begin when he is able to do as he likes. So long as a man is struggling with obstacles, he has an excuse for failure or short-coming; but when fortune removes them all, and gives him the power of doing as he thinks best, then comes the time of trial. There is but one right, and the possibilities of wrong are infinite.

—At one of the stations on a certain railway, recently, an anxious inquirer came up to the door of the baggage-car and said, "Is there anything for me?" After some search among boxes and trunks, the baggage-man rolled out a keg of whisky. "Anything more?" asked the wet-grocer. "Yes," said the baggage-man, "here's a grave-stone that goes with that liquor."

A New Cosmetic.—The best application for the improvement of the countenance is a mixture, in equal parts, of serenity and cheerfulness. Anoint the face morning, noon, and night.

POPULAR SCIENCE.

—An ingenious writer suggests that the earth has acquired much of its substance through the accumulation of meteoric dust, meteors, etc. By this theory he accounts for the fact that the continents taper toward the south.

—The twelve electric lights used for lighting Monumental Park in Cleveland furnish a better light at $100 less expense per year than was supplied by one hundred and ten gas burners.

—According to the *Scientific American*, the electric lights in the New York post-office furnish an amount of light for seventy-five cents, which, if produced by gas, would cost $50, at the rate of $2 per thousand cubic feet.

—A French firm have succeeded in producing an alloy which has the appearance of gold, and possesses all the properties of that metal, which makes it useful for ornaments, jewelry, etc., by combining in a peculiar manner 800 parts of copper, 25 of platinum, 10 of tungstic acid, and 170 of gold. They also manufacture an imitation of silver, employing 65 parts of iron, 23 of nickel, 4 of tungsten, 5 of aluminum, and five of copper.

Heavy Blasts.—In the extensive mining operations carried on in California, more than twenty-five tons of the most powerful powder are frequently exploded at a single blast.

Depth of the Sea.—The most recent investigations of the subject show the sea to be of an average depth of about two miles, more than ten times the depth estimated by Humboldt.

An eminent scientist estimates the average height of Europe to be about 1075 feet; Asia and Africa, 625 feet; America, 410 feet; Australia, 312 feet.

The volume of the water of the ocean compared with that of the land above sea level, is twenty two-times as great. Reckoning the volume of the land from the sea bottom, the volume of the ocean is only two and one-half times as great.

A comparison of the masses of the sea and of the land shows them to be in equilibrium.

Origin of Petroleum.—No question has puzzled the scientists more than the origin of petroleum. A recent observer thinks he has solved the problem. He finds that the shale in which petroleum usually occurs is almost wholly made up of the shells of microscopic animals. His conclusion is that the oil was simply extracted from these fossil mollusks by pressure. The great abundance of formations of this kind would readily account for the quantity of the oil, if the theory proves satisfactory otherwise. One specimen of shale examined yielded a barrel of oil to the ton of shale.

Progress.—Dr. Ira Remsen, professor of chemistry in John Hopkins' University, in an address on the relation of chemistry to medicine delivered before "the Medical and Chirurgical Faculty of Maryland," gave utterance to the following interesting thoughts:—

"The tendency of the present generation of physicians is, I think, to rely less and less upon the action of drugs and chemicals, and to pay more and more attention to the circumstances surrounding the patient, so the discovery of purely remedial agents is becoming day by day of less importance, and the accurate study of those substances which we all necessarily make use of—air, water, food in its various forms—is becoming the great problem in medicine. Thank Heaven! the day of the old woman who knows what is 'good for' everything is waning. She exists still in a thousand forms, sometimes in skirts and sometimes in trousers, but the natural growth of modern ideas will eradicate her, though the process will take generations for its completion."

Wonderful Accuracy of Electrical Science.—In no department of science have there been such varied and astonishing developments as in that of electricity. The following account of a recent accident to an ocean cable is a good illustration of the wonderful degree of accuracy of knowledge which has been attained in the study of this remarkable agent:—

"In the cable news of Monday it was stated that the French Atlantic cable was 'broken one hundred and sixty-one miles from St. Pierre, Miquelon, in five hundred fathoms water.'

"These few words show one of the many triumphs of modern electrical science. Here is a wire cord buried under three-fifths of a mile of the water of the ocean, and a hundred and sixty miles from land, and yet the people on shore can exactly locate the point at which it is broken.

"Strange as that seems, it is actually done, and has been time and again. The repairing vessels will go out to the indicated point, throw over their grappling hooks, and within a few hundred yards will find the broken ends and splice them.

"This wonder is accomplished first by exact knowledge of the laws of electricity, which make known what amount of current a wire of a given dimension will carry, and the resistance it must overcome in going a given distance; and next, by the instruments made by the mechanicians of our day, which will make the operation of both laws visible to the experienced observer, even if the break in the cable is a thousand miles away and two miles under the sea."

Cheap Light.—In these days of invention no branch of inventive industry is more active than those which tend to the cheapening of illumination. Mr. Edison promises to produce results in this direction which will astonish the world; but a possible rival is presented in a recent application of a well-known physical fact, the property which certain bodies possess of emitting light in the dark after a brief exposure to light. This property is known as phosphorescence, and is possessed by several substances, prominent among which is sulphide of lime. This substance is now used as a coating for clock dials, by means of which they become luminous in the night, making it possible to tell the time with ease in the darkest night without other aid than that furnished by the clock itself.

It is proposed to utilize this wonderful property of calcium sulphide for illuminating purposes by painting the walls of rooms with it. The only difficulty then would be to secure darkness; but this might be done by means of curtains which could be pulled down at pleasure. Painting the outside of houses and fences would obviate the necessity for lamp posts or street lamps. Used for painting the dials of town clocks, the time would be visible in the darkest night. Its employment in painting signs and show windows would still further economize illumination.

One interesting feature we have not mentioned is the fact that by different modes of preparation different colored phosphorescence may be produced.

INFLUENCE OF ELECTRICITY ON PLANT GROWTH.

SEVERAL years ago it was shown by Dr. Beard, of New York, that animal growth and development was accelerated under the influence of electricity. Two pups were subjected to observation, electricity being applied to one every alternate day while the other received no such vital stimulus. It was found that although all other conditions were precisely the same, the one which received the electricity far outstripped the other in growth. It has not been known, however, that a like effect was produced upon vegetables by this wonderful vital stimulant. A series of experiments conducted by a French gentleman at the School of Forestry, of France, seem to indicate that electricity has a like effect upon the growth of vegetables. Two rapidly growing plants of similar size and age being selected, both were subjected to the same conditions except that one was protected from the action of atmospheric electricity by a lightning rod. At the end of four months the plants were weighed, when it was found that the protected plant weighed about three pounds while the one which had been freely exposed to the action of atmospheric electricity weighed more than six, or double the weight of the protected one.

The conclusion arrived at is that atmospheric electricity is a powerful stimulus of plant growth; and the discoverer affirms that by means of properly adjusted conductors of electricity this powerful agent may be utilized as a sort of fertilizer; and that in the near future a farmer will consider it much more important to employ an electrical fertilizer for the benefit of his crop than a lightning conductor to protect his buildings.

—Anciently metals were believed to be generated in the earth by the sun's action.

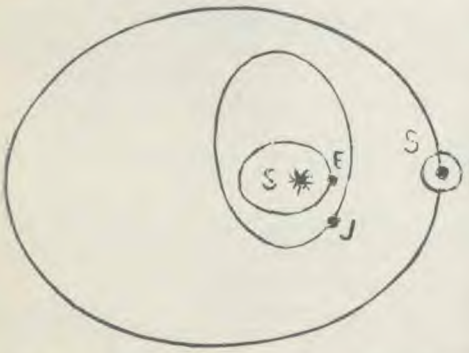
GOOD HEALTH.

BATTLE CREEK, MICH., JULY, 1879.

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

PERIHELION PESTILENCE AGAIN.

In the October number of the New York *Medical Journal* for 1872, an article appeared from the pen of Dr. Knapp, of Mexico, entitled, "Astronomical Etiology," by which we suppose the author meant to indicate that his article was concerning astronomical causes of disease. In this lengthy article, occupying twenty-nine pages of the magazine mentioned, Dr. K. advanced the novel hypothesis that the principal cause of famines, drouths, plagues, pestilences, epidemics, and various other mundane disturbances, was the approach to the earth of Jupiter, Saturn, and the two other large planets, Uranus and Neptune, but especially the first mentioned.



It is well known to all who are in any degree familiar with the general principles of astronomy, that the planets revolve about the sun not in circles, but in ellipses, the sun being at one of the foci, so that in its periodical revolution about the solar center the planet approaches somewhat nearer to the great luminary in a certain part of its course than in others. The near point is known as *perihelion*. In consequence of this arrangement, the large planets are nearest to each other, as well as to the sun, when they happen to be in perihelion at the same time. Dr. Knapp's theory is that in consequence of this approach of the large planets to the earth, we suffer from plagues, pestilence, and various other equally calamitous disturbances.

The relation of Jupiter and Saturn to the earth, when near their perihelia, is shown by the accompanying diagram.

The approach of Jupiter and Saturn occasions these dreadful results, according to Dr. Knapp, by the "*increase of planetary attraction*," and "*by the disturbance of its* (the earth's) *atmosphere* and the natural vital stimulants of all organized life."

We were much interested in this novel theory at the time it first appeared, and read with considerable care the article referred to, both at that time and subsequently. Recognizing its great importance, if true, we have taken no little pains since our first perusal of the article, to investigate with care the grounds upon which the theory was based, and the arguments advanced to sustain it. At the time of the appearance of the article, a writer in this journal was the first to champion the new theory; but as we had opportunities for investigating it, we became convinced that although very ingenious, and having a specious appearance of truth, it was really fallacious. Accordingly, when the views of Dr. Knapp were again brought forward by a sensational writer in the Chicago *Times*, a few months ago, we took occasion to call attention to a few of the weak points of the theory, criticising, however, the *Times* writer more than the author of the original paper.

As a somewhat distinguished writer has taken occasion to review our article in quite a personal manner, in a Boston journal, we have again noticed the matter, and will now invite attention to the facts which lead us to discard this theory, which, if true, we would

willingly, even gladly, accept, as we are quite as anxious as can be any of our opposing friends, to grasp and utilize every legitimate means for inducing men and women to forsake their evil ways, and conform to all the laws of physical, mental, and moral hygiene.

1. The theory is improbable, since its acceptance necessitates the belief that the Creator so arranged the planetary system and the mutual relations of the planets and their inhabitants, that we must inevitably suffer from periodical plagues, famines, pestilences, and other devastating influences, no matter what may be our own course of action, thus placing it entirely out of our power to avoid disease, since we cannot control the motions of the planets, and have no haven of safety into which to escape when a perihelion makes its portentous advent. Dr. K., being a believer in the doctrine of evolution, would, of course, see no objection to his view on these grounds. The objection is offered for those who do not accept the evolutionary hypothesis.

2. The Doctor does not show *how* an increase of planetary attraction would disturb "the natural vital stimulants," except through disturbance of the atmosphere through the action of gravitation. This action would also extend to all objects on the face of the globe. It is admitted—is, in fact, distinctly stated by Dr. Knapp—that the same effects which he attributes to Jupiter and Saturn are produced by all the other planets in proportion to their size or mass, and proximity, provided his theory be true. Evidently the Doctor had never taken the trouble to figure out the attractive influence of the other celestial bodies in proximity to the earth. It being well known that the force of gravitation diminishes with the square of the distance, it is obvious that a small planet near the earth may have much more influence upon it than a much larger one at a greater distance; applying this well-known law in this case, we find that although Jupiter exerts a somewhat greater attractive force than the planet Venus, the one nearest the earth, yet Venus exerts a greater attractive force than Saturn, Uranus, Neptune, and Mars, the other planets, combined. Yet Dr. Knapp has not discovered any relation between the occurrence of epidemics, or any other particular terrestrial phenomena, and the perihelion of this planet, which exerts its powerful influence every year, and so affords abundant opportunity for observation. Still, he claims remarkable effects from Saturn's perihelion, when that planet has only one-eighth as much "planetary attraction" for the earth. Neither has he observed any "planetary influence" from Mars, which attracts the earth, when in perihelion, with a force twenty times as great as does Uranus, to which he assigns a powerful influence.

Again, the moon, when at its nearest point, has an attractive force upon the earth more than one hundred times that of Jupiter when in perihelion. If serious consequences result from the approach of Jupiter, certainly, according to this theory, calamities a hundredfold more serious in character would result from the monthly arrival of the moon at its nearest point to the earth.

If it be urged that the difference in the moon's nearest and farthest points is not so great as in the case of Jupiter and the other larger planets, we answer that while this is true, the proximity of our satellite more than balances the difference, as computation will show that in the case of the moon the increased attraction is more than twenty times that of Jupiter.

The time once was when it was believed that Luna had much to do with the determination of terrestrial affairs. It was supposed, for instance, that a person insane was moon-struck, the ancient idea being still preserved in our word lunatic. Some people, even at the present time, believe that beet seed planted in "the dark of the moon" will produce red beets, and white beets if planted in the "light of the moon," with other equally absurd notions. Notwithstanding these ancient and modern errors concerning the influence of the moon, there are very few people who could be convinced that the moon is the "direct and indirect cause"—as Dr. K. affirms of planetary attraction—of plagues, pestilences, and other national calamities. But the theoretical evidence is better for the moon than for any and all of the planets together.

3. Not only is there no evidence that very considerable changes in the density of the atmosphere, and in other conditions dependent

on gravitation, will affect the health, but we have the most indubitable evidence that great changes of this sort may be made with impunity, as the following examples will show :—

Travelers often ascend to heights which subject them to more extreme changes than any planetary influence could induce. Indeed, people live year after year without detriment at altitudes at which they daily experience greater differences from the ordinary conditions of life on this planet than from Jupiter, Saturn, Neptune, and the whole planetary system combined, including even the moon. We have only to cite the case of the monks of St. Bernard, and the American Signal Officers, some of whom live at an altitude of more than 14,000 feet.

Dr. Knapp cites, in proof of his hypothesis that gravitation is a "vital stimulus," the peculiar combination of goiter with cretinism in the deep valleys of the Swiss Alps. This disease, he assures us, is due to the high altitude, which prevents proper oxygenation of the blood. This is a good illustration of the cursory manner in which the Doctor has investigated his subject, it being a well-known fact that while goiter and cretinism abound in the deep gorges of the Swiss Canton, Valais, and neighboring valleys, it disappears very rapidly as the observer ascends the sides of the neighboring mountains, finally disappearing altogether when an altitude far above the valley is reached. It is also observed that persons affected with the disease often recover upon going higher up the mountain. This fact has led the Swiss government to erect a hospital above the line where the disease disappears, where these unfortunates are treated. This illustration, then, it is readily seen, proves the contrary of what was intended, notwithstanding it is the only instance in which what is considered as actual proof is offered.

4. Lastly, the seeming practical proof which is offered by a comparison of the dates of a number of epidemics with the perihelia of Jupiter and Saturn will appear, upon examination, to be of an exceedingly doubtful character indeed. As another good illustration of the ready manner in which Dr. Knapp has mistaken coincidences for causes or effects, we may refer to his citation of the periodical character of cholera in Hurdwar, India, where it is said to have broken out every twelve years since 1783. Finding that these outbreaks correspond very nearly to the perihelia of Jupiter, he looks for no further cause, but at once accepts it as a strong confirmation of his views. In this case, happily, but unfortunately for the theory of an astronomical etiologist, we have possession of positive facts which point very distinctly to a much more tangible cause. The following quotation from an article published in this journal two years ago fully accounts for the periodicity of the Hurdwar epidemic, at any rate :—

"A writer in the American Cyclopædia adduces facts to establish a remarkable periodicity in the appearance of great cholera epidemics. It has been known for many years that epidemics of cholera originate in India. The natives of this country make periodical pilgrimages to Hurdwar, at the head of the Ganges. Hundreds make the Juggernaut pilgrimage every year. Much larger numbers make the journey every third year. Every sixth and ninth years the number is still greater; and once in twelve years an immense throng, numbering more than three million people, make this long pilgrimage.

"Poor food, impure water, together with depressing meteorological conditions and the entire absence of any sanitary precautions, result in the production of disease well characterized as Asiatic cholera. There is more or less of the disease every year. But once in twelve years, at the great pilgrimages, it assumes such proportions that it extends beyond the limits of its original habitat and carries devastation to thousands of households in the larger cities of Europe and even of this country.

"Once in sixty years there gathers at Hurdwar a throng of pilgrims still greater than is collected at the twelve-year pilgrimages. The consequence is the production of a still more formidable cholera scourge of sufficient malignancy and strength to sweep over the greater portion of the Western as well as the Eastern Continent before it is checked by the approach of the cold season."

In several other instances Dr. K. attempts to show a relation between the perihelia of

Jupiter and Saturn and certain epidemics which have occurred. Although some of the cases seem really remarkable at first sight, a little reflection will convince any one that a generalization formed upon such insufficient data must be very unreliable indeed. And when we consider that since the date of the first plague recorded there have been, according to Hadyn's dictionary of dates, and other authorities, only about forty notable pestilences considered worthy of special mention, there have been more than 220 recurrences of Jupiter's perihelia, and 44 of Saturn's. According to the theory, we ought to find a pestilence at every perihelion; and at least we should expect to find a perihelion occurring with each notable pestilence. Nothing could be more disappointing to the believer in astronomical etiology than such an examination. Of the whole forty pestilences, only one occurred simultaneously with a perihelion of Jupiter, and none with a perihelion of Saturn. Ten instances occurred within a year of a perihelion of Jupiter or of Saturn. In one case the perihelia of the two planets occurred at the same time, yet no pestilence appeared.

In view of the numerous facts which we have presented on this subject, is not "planetary influence" certainly a very flimsy basis upon which to ground so grave and important a theory? We leave our readers to decide. We have devoted much more space to this subject than we intended; but we thought best to canvass it well for once, and shall now dismiss it, feeling confident that some other agent besides an "increase of planetary attraction" must be sought to account for the devastating plagues which so often lay waste some of the most beautiful parts of the globe. It is not impossible that plagues and pestilences may abound between now and the close of the century, as Dr. Knapp predicts; but we see no evidence that the cause of such occurrences will be anything of the nature of "planetary influence."

BEER DRINKING.

THERE are those calling themselves temperance reformers who advocate and profess to believe that the acknowledged evils of intemperance can be overcome by encouraging the use of ale, beer, and light wines in place of the more intoxicating liquors.

This doctrine is a most false and pernicious one. In the first place, it will be impossible to diminish the prevalence of intoxication by increasing the use of the milder liquors. Ale, beer, and wine will produce intoxication as well as rum and whisky. A man may become drunk on hard cider. Again, the use of beer, wine, etc., will lead certainly to the use of stronger liquors.

A still more important fact is that the liberal use of beer, ale, wine, etc., is attended by the same physical injury to the system that results from the use of whisky, brandy, and other strong liquors; viz., degeneration of the liver and other vital organs, fatty changes in the heart and blood-vessels, producing a tendency to apoplexy, indigestion, obesity, and a gross condition of the blood, greatly increasing liability to fevers of all sorts, and to a fatal or unfavorable issue on the occurrence of any acute disease.

Inducing drunkards to drink wine instead of whisky, and beer instead of brandy, is not the kind of reformatory work that is going to forward the interests of temperance. The final results of such a policy would be still more universal inebriety.

A CAUSE OF NEAR-SIGHTEDNESS.

ONE of the recognized causes of near-sightedness is looking at near objects for too long a time without relieving the eye. The optical apparatus is, by a curious mechanism provided by nature, constantly adapted to the varying distances at which objects are viewed when the eyes are being employed in looking about at various objects. If near objects are looked at too long at a time, the result will be that the particular adjustment for short distances will become a more or less permanent condition. It is in this way that watchmakers, microscopists, proof-readers, compositors, writers, book-keepers, and especially students, are so liable to this disease of the eye. It should be recognized that a near-sighted eye is really a diseased eye. The idea held by many persons that an eye which has this peculiarity is an uncommonly strong one is an error. Short-sight is an evidence of weakness and disease rather than of strength.

The following very sensible remarks referring to the prevention of this defect in school children we quote from the *Educational Weekly* :—

"Encourage the pupil to look off the book frequently, to change the focus of sight by regarding some distant object. It is not enough to look around vaguely; the eye must be directed to something which is to be clearly seen, like a picture or a motto upon the wall, or a bit of decoration. The greatest damage to the eyes of students is the protracted effort to focus the printed page. It was simply barbarous, the way we used to be "waked" in school, when we looked off the book. It is easy for a teacher to know the difference between the resting of the eye and the idle gazing around that cannot be allowed. I regard this as most important, and the disregard of it as most prolific of trouble."

Hygiene in Congress.—Our friend, Congressman J. H. McGowan, of Coldwater, deserves the thanks of the whole country for his arduous labors in behalf of the bill providing for a national board of health. His speech in support of the bill was a masterly effort, and showed a thorough acquaintance with the merits of the question. It is a good omen for our country that our congressmen are becoming versed in sanitary science, and interested in promoting the public health as well as the civil and social harmony and prosperity of the nation. We doubt not that the promotion of the health of the masses would be found one of the most effectual means of repressing crime and elevating the morals of the lower classes. Let us have more of this kind of legislation in our congressional assemblies, and less political wrangling, and all the people will rejoice, and the cry of "hard times" will cease.

Man the Paragon.—An English paper says, "Man is undoubtedly the paragon of animals, for he can do what no other animal can; that is, snuff tobacco, smoke tobacco, chew tobacco, and, after sufficient practice, swallow tobacco juice. We do not believe that any other creature, by any amount of practice, could overcome its natural disgust for tobacco in any shape."

Sanitary Laws in Michigan.—Through the efforts of an excellent Board of Health, Michigan is being provided with a set of sanitary laws which will soon compare favorably with those of any country on the globe. At the last session of our legislature, several laws were enacted by the recommendation of the board, which will have a very important influence on the public health if well enforced. One law provides that the council of each city and village in the State shall constitute a board of health, if there is no other provision for the same. This will secure to every city and village a health board, whether there is interest sufficient to appoint and maintain one or not. Another very commendable law makes it the duty of the health officer to report to the prosecuting attorney all cases of neglect by physicians or others to report cases of contagious disease dangerous to the public health. Other equally important and serviceable laws were passed, and we hope will be enforced.

Treatment of Delirium Tremens.—According to the *Quarterly Journal of Inebriety*, "it is quite noticeable that the mortality from delirium tremens has fallen to a very small per cent comparatively. The fatal termination of this disorder is the very rare exception to the rule at the present day. Dr. Balfour, of London, thinks this may be attributed to the avoidance of harsh forms of medication, particularly the use of tartrate of antimony, bleeding, purging, and opium. There can be no doubt that the effect of these remedies was disastrous in many cases. Even digitalis and capsicum, so often vaunted as remedies, are dangerous, and have often complicated and hastened the fatal termination. It is the experience of physicians who have seen a large number of cases, that the Turkish bath, and strong nutrients, such as beef tea, hot milk, and gruel, are the most effectual remedies.

"Under no circumstances should alcohol be given. If the Turkish bath is not convenient, a hot water bath, with free massage after, will be a good substitute. In all cases, avoid too free use of medicines, and trust to the recuperative powers of nature, aided by such external appliances as baths, and exact hygienic surroundings."

Effect of Tea and Coffee and Bad Diet.—Dr. Bock, an eminent physician of Leipsic, writes as follows on the mental and moral influence of tea, coffee, wine, and other articles in common use:—

"The nervousness and peevishness of our times are chiefly attributable to tea and coffee; the digestive organs of confirmed coffee-drinkers are in a state of chronic derangement, which reacts on the brain, producing fretful and lachrymose moods. Fine ladies addicted to strong coffee have a characteristic temper which I might describe as a mania for acting the persecuted saint. Chocolate is neutral in its psychic effects, and is really the most harmless of our fashionable drinks. The snappish, petulant humor of the Chinese can certainly be ascribed to their immoderate fondness for tea. Beer is brutalizing, wine impassions, whisky infuriates, but eventually unmans. 'Alcoholic drinks combined with a flesh and fat diet totally subjugate the moral man, unless their influence be counteracted by violent exercise. But with sedentary habits they produce those unhappy flesh sponges which may be studied in metropolitan bachelor-halls, but better yet in wealthy convents. The soul that may still linger in a fat Austrian Abbott is functional to his body only as salt is to pork—in preventing imminent putrefaction.'"

Testing for Lead.—Dr. R. C. Kedzie, President of the State Board of Health, some time since called attention to the great danger of lead poisoning from adulterated tin, much of that which is used at the present time containing lead, and often in large quantities. At the last meeting of the Board of Health Dr. Baker called attention to a very simple and improved method of detecting the presence of lead, as follows:—

Moisten the tin with a drop of nitric acid, spreading it over a space the size of a dime. Warm it gently until perfectly dry, by holding over a stove, or above a lamp or candle, then place on the spot a drop of clean water. To this add a drop of water in which iodine of potash has been dissolved. If the tin contains lead the liquid will assume a distinct yellow color.

Any one can apply this test; and it would be well for all who are purchasing tin cooking utensils, pans, pails, etc., to subject the articles to the test before purchasing, as there is so much danger from the use of lead, and the test can be applied so easily.

Infant Deaths from Bad Diet.—The vital statistics of Scotland, for 1868, showed that of the children born in that country during that year, 2.7 in every thousand died of convulsions. In England, in the same year, the proportion of infant deaths from convulsions was 30 per thousand, or more than ten times as many. The cause of the alarming fatality of infants in England is, undoubtedly, bad diet, most of them being fed upon spoon victuals long before they are prepared to digest and assimilate that kind of food. In Scotland, mothers almost always nurse their children.

Tobacco and Cancers.—Dr. John C. Warren, one of the most eminent surgeons of Boston, in his time, states in his writings as follows: "For more than thirty years I have been in the habit of inquiring of patients who came to me with cancers of the lips and tongue, whether they used tobacco; if they have sometimes answered in the negative, I can truly say, that, to the best of my knowledge and belief, such cases are exceptions and not the general rule."

Danger from Kissing Pets.—We hardly think that kissing pet cats and dogs is quite as common a practice in this country as in Europe; yet there is no doubt that it is sometimes practiced and should be heartily condemned. A writer in the *British Medical Journal*, in writing on the causes of an epidemic of sore throat in Darmstadt, makes the following reference to this reprehensible practice:—

"It is well known that women and children are in the habit of kissing pet cats and dogs, especially when these favorites are ill with discharge from the nose, cough, and sore throat, and even use their pocket handkerchiefs to wipe away the secretion. I have seen this done frequently. As such mistaken sympathy is exceedingly dangerous, I think a notice in the *Journal* to this effect would

tend to its discouragement. It is a common saying that, 'There! the cat has got a cold; now it will go through the house;' and, as this remark has been repeatedly verified, it shows how careful people should be to avoid contact with such a mode of contagion. I do not affirm that this was the way in which the disease was contracted, either within or without the palace walls, but I feel sure the habit of kissing pets is a source of danger that should be widely known and prevented."

Oliver Wendell Holmes on Tobacco-Using.—In the Autocrat of the Breakfast Table this noted author offers the following advice to young men on tobacco-using:—

"I do not advise you, young man, to consecrate the flower of your life to painting the bowl of a pipe, for, let me assure you, the stain of a reverie-breeding narcotic may strike deeper than you think for. I have seen the green leaf of early promise grow brown before its time under such nicotian regimen, and thought the ambered meerschaum was dearly bought at the cost of a brain enfeebled and a will enslaved."

Antidote to Arsenic.—As poisoning by this agent is one of the most common forms of suicide, and also a frequent cause of death by accidental poisoning, it is important to know how to prepare an antidote in the most speedy manner possible. The following is a simple plan which is well recommended: Mix with a teacupful of tepid water a teaspoonful of tincture of chloride of iron. Add a teaspoonful of bicarbonate of soda (common baking soda). Let the patient drink it freely. This is a perfect antidote if given at once.

Mortality of Inebriates.— During the communistic troubles in France in the early part of 1872, an eminent physician who had charge of the wounded communists observed and published the fact that the mortality among them was fearfully great. Hardly any of those who were obliged to undergo any operation, lived. The doctor attributed this to the poisonous effects of alcohol, which so weakened the system that a mere flesh wound which would not confine a healthy man to his bed almost invariably proved fatal.

Death from Poisoned Water.—An Eastern exchange says that "at Newark, Vt., a few days ago, a party of nine children drank water from a brook, the waters of which had been polluted by the carcasses of a horse and several sheep, and were poisoned, from the effects of which seven died soon after, their bodies becoming putrid and demanding immediate burial. The others cannot survive."

A New Anæsthetic.—M. Pert, of the French Academy, has discovered that the inhalation of a mixture of nitrous oxide, or laughing gas, and oxygen, if breathed under a slightly increased atmospheric pressure, will produce anæsthesia without disturbance of the pulse or nervous system, either during the insensibility or afterward. He asserts that this anæsthetic has the further advantage of being perfectly safe.

THE AMERICAN HEALTH AND TEMPERANCE ASSOCIATION.

SINCE its organization last New Year's, this new temperance association has been making steady advancement, having now a membership of about fifteen hundred, with five State Societies and others being formed. Local clubs are also being organized. At the last meeting of the association a local club was organized in this city, with an initial membership of over five hundred. We expect soon to be able to number our temperance workers by thousands.

The following is a blank form of constitution and by-laws prepared for the use of local clubs:—

CONSTITUTION.

ARTICLE I.—NAME.

THIS organization shall be known as the ——— Health and Temperance Club.

ARTICLE II.—OBJECT.

1. To promote the health of those who become members of it.

2. To advance the interests of the cause of temperance in its truest and broadest sense, by the circulation of health and temperance literature, by securing popular lectures upon those subjects in various parts of the country, and by the wide circulation of suitable pledges and earnest efforts to secure numerous signers.

ARTICLE III.—OFFICERS.

The officers of this Club shall consist of a Leader and a Secretary, who shall be elected by vote of a

majority of those present at any regular annual meeting.

ARTICLE IV.—MEMBERSHIP.

SECTION 1. Any person of good moral character may become a full member of this Club by paying an initiation fee of twenty-five cents and signing the Constitution and one of the three pledges.

SEC. 2. Any person may become a pledge member of this Club by signing one of the three pledges.

SEC. 3. Two grades of membership shall be recognized, as designated in Sections 1 and 2 of this article.

SEC. 4. Every person who becomes a member of this Club shall be required to sign one of the following pledges :—

TEETOTAL PLEDGE.

I do hereby solemnly affirm that, with the help of God, I will wholly abstain from the voluntary use, as a beverage, or in any equivalent manner, of alcohol, tea and coffee, and from the use of tobacco, opium, and all other narcotics and stimulants.*

ANTI-RUM AND TOBACCO PLEDGE.

I do hereby solemnly pledge that, with the help of God, I will wholly abstain from the voluntary use of alcohol in any form, as a beverage, or in any equivalent manner, and from smoking, chewing, or snuffing tobacco, or using it in any other form, and from in any way encouraging the use of these poisons.

ANTI-WHISKY PLEDGE.

I do hereby solemnly affirm that, with the help of God, I will totally abstain from the voluntary use, as a beverage, or in any equivalent manner, of all liquids or substances containing alcohol.

ARTICLE. V.—ANNUAL DUES.

Each full member of this Club shall annually pay into the treasury the sum of ten cents, to create a fund to defray the incidental expenses of the Club, and such other sums, not exceeding twenty-five cents annually, as may be assessed by the Executive Committee when authorized by a two-thirds vote of those present at any annual meeting of the General Association.

ARTICLE VI.

This Constitution may be amended by a two-thirds vote of the full members present at any annual meeting of the Club, provided said amendment does not in any way affect the relations of the Club to the State Society or General Association; otherwise the consent of the Executive Committee of the General Association must be obtained before the amendment can be made.

BY-LAWS.

ARTICLE I.—DUTIES OF OFFICERS.

SECTION 1. The Leader shall preside over the meetings of the Club, and shall perform all other duties usually devolving upon such an officer.

SEC. 2. The Secretary shall perform the duties usually required of such an officer, and in addition shall perform the duties of Treasurer, collecting initiation fees and assessments, and appropriating the funds of the Society as directed in Article IV of these By-Laws, unless otherwise directed by the President of the State Society. In case of the inability of the Leader to perform his duties, he shall perform the duties of that officer.

* By the term stimulants are meant what are commonly known as such. Salt and other condiments are not included.

ARTICLE II.—DUTIES AND PRIVILEGES OF MEMBERS.

SECTION 1. It shall be the duty of each member of this Club to keep most religiously the pledge which he signed upon becoming a member of the same; to exert himself to the utmost of his ability, as consistent with other duties, for the advancement of the interests of this organization, in the promulgation of correct ideas of health and temperance, by the circulation of health and temperance literature, by the circulation of pledges, and by all other proper means.

SEC. 2. Members who have paid the initiation fee of twenty-five cents will receive a certificate of membership and will be entitled to all the rights and privileges of members.

SEC. 3. None except those who sign the teetotal pledge will be eligible to office.

SEC. 4. Those who sign the pledge but do not pay the initiation fee will be considered as "pledge members," and will not be entitled to hold office nor to take part, as members, in the proceedings of the Association. They can become full members at any time by paying the initiation fee.

ARTICLE III.—MEETINGS.

SECTION 1. An annual meeting of the Club shall be held at such time and place as shall be appointed by the Leader. Special meetings may be called by the Leader and Secretary.

SEC. 2. Monthly, or at least quarterly meetings of the Club shall be held for the discussion of health and temperance topics, listening to lectures on those subjects, reports from members, and other interesting and instructive exercises.

ARTICLE IV.—USE OF FUNDS.

Whatever moneys shall accrue from the collection of initiation fees, annual dues, and assessments, shall be used in meeting incidental expenses, any surplus being expended for health and temperance literature for gratuitous distribution.

ARTICLE V.—VIOLATION OF PLEDGES.

SECTION 1. The Leader and the Secretary, with three additional persons who shall be annually appointed by the Leader, shall constitute a Committee of Discipline.

SEC. 2. When a person has committed a breach of discipline, by violation of his pledge or otherwise, his case shall be referred to the Committee of Discipline, which shall consider the case, and shall report upon it to the Club. If the decision of the committee is in favor of dismissal, the member may be dismissed from the Club by a two-thirds vote of the members present at any regular meeting.

SEC. 3. For the first violation of the pledge the name of the person shall be placed upon the roll of dishonor, and shall be read at the next meeting of the Club. For a second offense it shall be read twice ; and for a third offense the person shall be liable to dismissal, at the discretion of the Committee of Discipline.

SEC. 4. Persons who have been dismissed from this Club for violation of the pledge may be taken back on trial, on recommendation of the Committee of Discipline, and a vote of two-thirds of the members present at any regular meeting.

ARTICLE VI.

These By-Laws may be amended by a two-thirds vote of the members present at any regular meeting.

FARM AND HOUSEHOLD.

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

—The side openings of children's underclothing should be bound with a narrow strip instead of being hemmed; this will prevent their tearing down.

To Clean Knitted Shawls.—A white knitted shawl may be cleaned, without making it yellow, by rubbing it thoroughly with dry, fine flour.

To Extract Grease from Floors.—A very good way is to apply a paste of wood ashes and quicklime to the grease spot, and allow it to remain several days before washing off.

To Boil Potatoes Successfully.—When the skin breaks, pour off the water and let them finish cooking in their own steam. Old potatoes may be freshened up by keeping them in cold water over night before cooking them.

To Keep Clothes from Moths.—One of the simplest and most effectual methods for protecting clothes from moths is the use of brown paper. Furs and other articles wrapped in brown paper are safe from their ravages. This is the plan employed by many professional furriers.

A Remedy for the Carpet Beetle.—Steep one pound of quassia chips and one-fourth of a pound of cayenne pepper in two gallons of water. Strain the liquid into a shallow vessel. Before unrolling a new carpet, set the roll on each end alternately in the liquid long enough to insure the saturation of its edges for at least an inch. An old carpet should be first beaten, then rolled, and each seam treated in the same manner.

Marble Statues.—Marble statues should never be handled, as sculptors say the oil in the hand discolors the marble. In washing them, only pure cold water should be used, and a painter's brush employed to clean them. If any insects get to them, alcohol will be required to remove the stains; but never use soap or warm water. Good artists say the light should fall on statuary from such a height as to leave but a hair's breadth between the shade of the nose and the upper outline of the upper lip.

To Remove Oil Stains from White Cloth.—Dip a clean brush into a strong solution of borax water, one table-spoonful of powdered borax to a pint of boiling water, and rub the oil stains well with it. This can be easiest done by placing the goods on a table or some flat surface. If the spots are of long duration, a little soap may be added with the borax water; rinse well with clean hot water, and rub dry with a clean soft cloth.

Planting in Orchards.—The *American Agriculturist* says no questions are more frequent than those that relate to crops in the orchard. There seems to be a reluctance to give up the soil to the trees. Those who do not care enough for an orchard to give the land to it should not plant one. But there is a time, between the planting of the trees and their coming into bearing, when the soil may be planted with other crops to the benefit of the trees. When an orchard is properly planted, the trees, when full grown, need all the soil, and no crop should be taken from the land in a bearing orchard; but the trees, at first, can occupy but a small share of the soil with their roots, and the spaces between them must be kept clear of weeds. This may be advantageously done by growing a crop at the same time, provided it is one that leaves the soil in as good condition as at first.

To Preserve Ice in the Sick-Room.—An English journal gives the following hint for insuring a supply of ice for use in the sick-room during the hottest nights without disturbing the patient:—

"Cut a piece of flannel about nine inches square and secure it by a ligature round the mouth of an ordinary tumbler, so as to leave a cup-shaped depression of flannel within the tumbler to about half its depth. In the flannel cup so constructed, pieces of ice may be preserved many hours: all the longer if a piece of flannel from four to five inches square be used as a loose cover to the ice-cup. Cheap flannel, with comparatively open meshes, is preferable, as the water easily drains through it, and the ice is thus kept quite dry. When good flannel with close texture is employed, a small hole must be made in the bottom of the flannel cup; otherwise it holds

the water and facilitates the melting of the ice, which is, nevertheless, preserved much longer than in the naked cup or tumbler. In a tumbler containing a flannel cup made as above described, of cheap, open flannel, it took 10 hours and 10 minutes to dissolve two ounces of ice, whereas in a naked cup, under the same conditions, all the ice was gone in less than three hours."

Uses of Aqua Ammonia.—Ammonia is a most invaluable cleansing agent, and greatly facilitates labor in many ways. Repeated applications of ammonia will remove ink stains in marble, wood, or paper.

A half-teaspoonful added to the water in which silver and glass ware are to be washed will give them a fine polish.

A little ammonia in a few teaspoonfuls of alcohol is excellent to sponge silk that has grown rusty, also for woolens; nothing cleanses so quickly, and it will not injure the most delicate color, unless used too strong.

Ammonia is excellent for washing the hair, and a few drops in water will clean hair-brushes better than anything else; they should be rinsed in clear water and hung up to dry.

It is better than soap for removing spots in linen; clothes will wash much easier if a little ammonia is used in the water. It will aid much in cleaning windows, and gives them a better polish than anything else.

HINTS ABOUT PLANTS.

Care of Plants.—Plants must be allowed air, light, warmth, food, and drink, and if these are furnished them in proper quantities they will grow and thrive; even those plants which cannot bear the outer air must have plenty of air by ventilation to preserve them in health. Care should be taken, however, not to allow them to stand in a draught, for some plants are so sensitive that a strong wind will often prove sufficient to destroy them. The temperature should not be above sixty-five in the day, and not above fifty at night. The leaves should be sprinkled every morning.

Blossoms.—It is said one blossom allowed to mature or go to seed injures the plant more than a dozen new buds. Cut your flowers before they begin to fade, and adorn your rooms with them. You will find the more you cut off, the more you will have.

All roses, after they have ceased to bloom, should be cut back, that the strength of the roots may go to forming new roots for next year.

Ivy.—Ivy leaves turn yellow more from poorness of soil than from lack of water. The ivy requires the best garden-soil with good drainage—pieces of broken charcoal for the depth of two inches in the bottom of the dish are best—and a large pot to give the roots plenty of space.

Roses in Pots.—Small pots are more favorable to the culture of roses than large ones, as a rose will not bloom much till the pot is well filled with roots. A rich, mellow soil is necessary; that made from old, decomposed sod is best. If manure is used, it should be old and thoroughly composted, as fresh manure is injurious to the plant. The same charcoal drainage recommended for the ivy will greatly facilitate growth, and increase the richness of the color of the flowers.

Many persons fail in attempting to pot roses because they water them too freely. Too much water is worse than not enough. The plant should not be allowed to wither for want of water, but very little is needed until the plant starts to grow.

Cactus.—Cactus slips should be potted in dishes half filled with rich earth and the remaining portion with sand. They should be placed in the sunniest spot available, where they can bake in the hot sun, and allowed no water from the time they cease blooming until the next spring, when they should be treated to plenty of water and hot sunlight. They may be kept in the cellar during the winter.

Insects.—Washing the plants frequently with soap-suds, and occasionally with a little tobacco water, or a decoction of quassia chips, will rid them of the green fly, or aphis. The appearance of red spiders shows that the plants are in too dry an atmosphere. The fumes of a little sulphur burned under the plant will kill the spiders, and, afterward, care should be taken to keep the stems and leaves well moistened. Occasionally worms appear in the pots. Ammonia water, five drops of liquid ammonia to a gallon of water, will sometimes be of benefit.

Lime for Phylloxera.—M. L. Digeon, a French vineyardist of experience, says that phylloxera can be destroyed by the use of lime. He recommends that the vines be treated with lime wash, early in spring, as soon as the leaves make their appearance, repeating the applications several times during the season.

NEWS AND MISCELLANY.

—Famine is still raging in Cashmere.

—The membership of Spurgeon's church now numbers 5,166.

—China is believed to be the native country for buckwheat.

—The Mohammedans have opened a school for girls in Beirût, Syria.

—Nearly one-half of the inhabitants of Italy can neither read nor write.

—The Russians are building a bridge across the Volga four miles in length.

—The treaty of peace between Great Britain and Afghanistan was ratified May 30.

—Limited portions of Minnesota are reported to be still afflicted with grasshoppers.

—The Universal Postal Union provided for an international two-cent postal card.

—A copy of the great Mentz Bible, printed in 1455, was recently sold in Paris for $10,000.

—Notwithstanding the popular fear of burial alive, there are only sixty-two cases on record.

—Prince Bismark has obtained a furlough of several months and gone to his estate at Varin.

—In the schools of the State of Mississippi, there are 158,156 white pupils and 190,088 colored.

—There are already 22,600 physicians in England, and about 1000 are added to the list each year.

—The decease of Prof. Grisebach, the famous German botanist and geographer, is announced.

—Since the middle of December last, 25 vessels have been lost from the port of Gloucester, Mass.

—Eugene Schuyler, of New York, has been nominated by the President for consul-general to Rome.

—Four hundred and ninety-four persons have committed suicide within the last six years in San Francisco.

—The Russian arsenal has just completed its 40,000th cannon. It has been in operation since 1774.

—The coinage of the United States Mint during the month of May was equivalent in value to $2,094,508.

—The New York legislature has passed a law reducing the legal rate of interest, in that State, to six per cent.

—A colossal bronze statue of Livingston, the explorer, 8½ feet high, has been recently unvailed in Glasgow.

—Baron Lionel Nathan de Rothschild, the last of the second generation of the London house of Rothschild, is dead.

—The only crematory in the United States, viz., that in Washington, Pa., has been converted into a factory for canning fruit.

—Alexander Scolorieff, who attempted the assassination of the Emperor of Russia on the 14th of last April, was hanged June 9.

—Mr. Gabbitt has been elected to the place in Parliament made vacant by the death of Dr. Butt, the Irish home-rule leader.

—It has been decided that, under suitable restrictions, women may be instructed in the medical department of Harvard University.

—Underground telegraph cables are now completed between the principal cities of Germany. The total length of the lines is 1,554 miles.

—The village of Abio, Sicily, and several neighboring villages, have been destroyed by the recent overflow of lava from Mount Etna.

—The government of Pekin is said to have issued an edict, to go into effect next year, making the use or sale of opium punishable by death.

—The Pope, having become alarmed at the spread of Protestant schools in Rome, is taking measures to organize a school board of his own.

—It is estimated that the U. S. Post-office Department loses a million dollars annually by the re-use of postage stamps that have been cancelled.

—New Orleans authorities have covered the city cemetery with earth two feet in depth, and sown it with grass, as a precaution against yellow fever.

—Seven thousand bushels of oats are used daily at the oatmeal factory in Cedar Rapids, Iowa. The hulls of the oats are utilized as fuel to run the machinery.

—The first sugar mill in Louisiana, driven by steam, was erected in 1822. The engine was imported from Aberdeen, Scotland, at an expense of $12,000.

—In France, 5,000 suicides are committed annually, one-half being by hanging. Suffocation by carbonic-acid from charcoal is the favorite method with women.

—Prof. Nordenskjöld has demonstrated the practicability of making a northeast passage from Europe to the eastern coast of Asia by sailing over the proposed route.

—An observatory is to be built this year, on Mount Etna, to be devoted to astronomical and spectroscopic observations. The observatory will be 9,652 feet above sea level.

—Gen. Fremont, Governor of Arizona, proposes to the government to reclaim the waste land of that country by a canal from the Gulf of California, costing $1,000,000.

—The Governments of Great Britain and Nicaragua, having decided to submit their differences respecting the treaty of 1860 to arbitration, have addressed themselves to the Emperor of Austria to arbitrate in the matter.

—A memorial statue is about to be erected, on the Thames embankment, to William Tyndale, the first English translator of the Bible. The total expense will be from £3,000 to £4,000.

—News has recently been received from Japan of the discovery of two very rich seams of coal in the celebrated Takoshima mines. It is estimated they will yield fully a million tons of coal.

—The Germans, French, and Italians are preparing for extensive exhibits at the Mexican Exhibition of 1880, with a view of interrupting the growing trade between the United States and Mexico.

LITERARY NOTICES.

THE CULTIVATION OF THE SENSES. Philadelphia: Eldredge & Bro.

This neat little volume of nearly 100 pp. is one of the series of "Manuals for Teachers" which have been prepared under the supervision of the English National Educational Society, and reprinted in this country. From the appearance of the first of the series which has come to our table, we have no hesitancy in saying that these manuals must fill an important place in the library of every teacher who is truly alive to the needs and requirements of his profession. The manual which has been placed in our hands contains invaluable information on its special subject, and of a character that cannot be readily found elsewhere. Every teacher who expects to keep abreast of the times, and who desires to apply to the advancement of his special calling every new development in mental science, should not fail to secure this excellent little work.

ADDRESS ON GENERAL SANITATION. Chicago.

This excellent paper was prepared by a committee appointed by the Sanitary Council of the Mississippi Valley, held in May, at Memphis, Tenn., at the suggestion of Dr. R. C. Kedzie, President of the Michigan State Board of Health, whose masterly knowledge of scientific sanitation has placed him in the front rank of sanitary authorities. The framers of the address, Drs. Holliday, Maury, and Kedzie, have certainly done credit to themselves and to the council in their address, which is a model of practical conciseness, and is eminently well calculated to accomplish the work for which it was designed, viz., the enlightenment of the people on the more important branches of sanitary science. The paper ought to have a very wide circulation. We shall take pleasure in reproducing the paper in our next issue.

Accompanying the address is a valuable directory of the sanitary organizations of the Mississippi Valley.

PERINEORRHAPHY. By Prof. E. W. Jenks, M. D. New York: Wm. Wood & Co.

This exceedingly interesting and valuable paper was read by the author before the Cincinnati Obstetrical Society at its last meeting. Its principal feature is the description of a peculiar mode of operation for the relief of the effects of an accident very common in child-birth, and in its slighter forms too often overlooked by the ordinary practitioner. Prof. Jenks has long been known as one of the most skillful operators in the line of his specialty, in the West; and the improved method of operating which he describes in this paper is only one of the many improvements which he has suggested in the department of gynecological surgery. We are pleased to note that the Chicago Medical College has been so fortunate as to secure the services of so able and eminent a specialist as Dr. Jenks to fill the chair recently vacated by Dr. Byford.

LECTURES ON PHYSIOLOGY. By Prof. J. T. Whittaker, M. D. Cincinnati: Robert Clarke & Co.

The author states that the object of these lectures is to place within the comprehension of the student of medicine the foundation facts and principles upon which the stately edifice of physiology is built, at the outset of his course of study. For this purpose we think the book admirably adapted. We have long felt it a great mistake in medical teaching that the student is left to grope blindly along during the greater part of his course of study, vainly seeking to find a substantial foundation for the various doctrines taught him, or to discover any means of associating together the numerous and seemingly contradictory facts brought to his notice in the study of human physiology. A knowledge of the minute anatomy of the human body, especially of the nature of protoplasm, of the structure of nerves and muscles, of the nature and properties of the blood, and of the relation of life and nerve force to the other forces of nature, is indispensable to a correct understanding of physiology. As an introduction to the subject of human physiology, we think the little work before us a most excellent treatise.

DIPHTHERIA. ITS RELATION TO FILTH CAUSES. By E. L. Griffin, M. D., Fond du Lac, Wisconsin.

A reprint from the Third Annual Report of the State Board of Health of Wisconsin, of which Dr. Griffin is the able president. The object of the paper is to show that diphtheria is distinctly a filth disease, besides being both infectious and contagious. This is a very important question, both from a purely medical and from a sanitary point of view, but especially from the latter. There are those who hesitate to accept the evidence which is offered to prove that diphtheria may originate from bad sanitary conditions; but we feel confident that few such can peruse Dr. Griffin's able paper without being convinced that this formidable malady is unmistakably dependent, in many instances, upon unhygienic conditions.

FOR FUTURE NOTICE.

WHAT TO DO IN CASE OF ACCIDENT. New York: Industrial Pub. Co.

TWENTY-FIRST ANNUAL REPORT OF THE WASHINGTONIAN HOME. Boston.

Publishers' Page.

☞ A blue cross before this paragraph indicates that your subscription expires with this number. We would be pleased to receive your renewal. Please notify us at once, that your name may not be removed from our list.

☞ Eld. and Mrs. White in a recent visit to this place, on their way from Texas to Colorado, addressed the public on two occasions on the subject of temperance, a theme on which they always seem to be wholly at home. Mrs. White especially is universally acknowledged to be one of the most forcible temperance speakers who has appeared before the public. One meeting was held in the interest of the Health and Temperance Association, which has its head-quarters at this place. The addresses of Eld. and Mrs. W. had a powerful effect upon the audience and the community, and were the means of doubling the membership of the Association in three or four days.

☞ BATTLE CREEK COLLEGE. This excellent educational institution has grown up in a manner equally surprising and gratifying to its friends. The last year its attendance of pupils has been over five hundred, and the prospect for next year is for a still greater patronage. Many improvements will be made in the various departments the next year, besides which the addition of a Commercial Department will add greatly to the attractions of the school. We know of no place which we could recommend to any young man or woman desiring to secure a thorough and practical education more strongly than this. For those in limited circumstances, it is especially favorable, as expenses are reduced to a minimum. By a system of boarding peculiar to this institution, excellent board can be obtained for $1.25 a week, in addition to cost of room, which is not often more than fifty cents a week.

☞ The American Health and Temperance Association is growing with surprising rapidity, thanks to the earnest efforts of scores of enthusiastic workers in all parts of the United States. At a meeting held in this city a few days ago, one hundred and twenty-five additions were made to the Association. At a subsequent meeting, a few evenings later, the membership was increased to five hundred. A short time ago, being unexpectedly called to visit the State of Kansas, we had the pleasure of assisting in the organization of a society in that State with a membership of about one hundred and twenty-five. We expect the newly formed organization will rapidly increase in numbers, and will be productive of much good in that State.

☞ Dr. W. B. Sprague, of the Sanitarium, upon his return with his bride from a flying trip to Colorado, was greeted with a very pleasant reception at the Sanitarium, about two hundred persons being present, and fine music being furnished by the Sanitarium orchestra. Prof. Hamill, an eminent elocutionist from Chicago, was present and entertained the company with several excellent recitations. Dr. and Mrs. Sprague were warmly greeted by their hosts of friends, who all wish and predict for them a happy future.

GOOD CANVASSERS WANTED.—The new edition of "Plain Facts" is now entirely printed, and the sheets are in the hands of the binder; they will be ready very soon, and a few good agents are wanted. The book is gotten up in the very best style, is elegantly bound, and cannot fail to sell. Only such agents are wanted as will push the sale of the work energetically. Those who wish to devote their time to the work and are prepared to enter upon it with zeal and with a determination to succeed, can make first-class wages in canvassing for this book. Only careful, judicious agents are wanted. Such should apply at once for circulars and territory.

☞ Those who wish can obtain copies of the Constitution for the local Health and Temperance organization by sending a stamp for postage on the same, addressing the Society at this place, or any one of the officers personally. The officers of the General Association are as follows:—

President: DR. J. H. KELLOGG. *Vice President:* PROF. S. BROWNSBERGER. *Secretary:* DR. W. B. SPRAGUE. *Corresponding Secretaries:* MISS M. L. HUNTLEY, MRS. E. E. KELLOGG, A. M., AUGUSTUS SWEDBERG, ARNOLD NIELSEN, A. B. OYEN. *Executive Committee:* JAMES WHITE, S. N. HASKELL, W. C. WHITE, W. B. SPRAGUE, J. H. KELLOGG.

☞ The lengthy article on "Perihelion Pestilence" in this number is of greater length than was intended at first; yet we hope the interest of the subject will excuse the tax upon the reader's patience. Our apology for the article is given in the article itself. We would invite attention to the subject by those who have heretofore accepted the views presented by Dr. Knapp, and who are confidently looking for a fulfillment, in 1880, of the dire prediction made by him.

☞ The following paragraph is from the Battle Creek *Journal* of June, 4th inst.:—

"Dr. J. H. Kellogg of the Sanitarium in this city, has been appointed by the Governor and confirmed by the Senate, as a member of the State Board of Health. It is an excellent appointment, as Dr. Kellogg is a gentleman of superior attainments in his profession and has paid especial attention to sanitary affairs and the methods of protecting the public from the inroads of disease."

☞ We observe that although many health resorts, mineral springs, etc., which have heretofore been well patronized, though too often little deserving of patronage, are closing their doors for lack of business, the Sanitarium of this place is in a most flourishing condition. Patients are arriving daily, and sometimes as many as ten or twelve in a single day. The thoroughly candid manner in which patients are treated, and the unexcelled facilities afforded, together with its numerous other attractions, place this institution far above all competition. In fact, it is the only institution in the country which can be said to be complete in every particular, and without objectionable features.

☞ Dr. J. S. Galloway, whose name is quite familiar to our readers as an old contributor to this journal, has recently opened an institution for the treatment of the sick at Kilbourn City, Wis. We wish him abundant success.