

GOOD HEALTH.

A JOURNAL OF HYGIENE.

MENS SANA IN CORPORE SANO.

VOL. 17.

BATTLE CREEK, MICH., OCTOBER, 1882.

NO. 10.

HON. NEAL DOW.

THE following brief sketch of the life of the veteran temperance reformer whose portrait appears on this page, we quote from the *House and Home*, an excellent English paper:—

education neither better nor worse than that given to lads in the same station of life, young Neal was brought into the tannery, to which he busily applied himself. Mixing with the people, and in course of years taking part in public movements, Mr. Dow saw that intemperance was the



“Coming from an English Quaker stock early settled in the New England States, Neal Dow was born at Portland, Maine, on March 20, 1804. His father, a well-to-do tanner, decided that his son should follow him in his business; and after an edu-

ation neither better nor worse than that given to lads in the same station of life, young Neal was brought into the tannery, to which he busily applied himself. Mixing with the people, and in course of years taking part in public movements, Mr. Dow saw that intemperance was the bane of his fellow-citizens. The fact of Portland being a seaport favored the increase of drinking, while its attendant evils became more strikingly patent there than in other parts of the State. Tracing a large proportion of the drunkenness

which abounded to the 'rum shop' Mr. Dow was led to investigate the laws then existing for the regulations of the traffic. He came to the conclusion that under no form of license could the evil be remedied; and he resolved to devote his time and money to an effort to put down the trade altogether. In coming to this decision he was largely influenced by what he had seen in villages of his own State in which the sale of drink was not permitted. In 1841 he took the position that 'if the rum traffic could not be outlawed, no permanent ground could be gained; and that while moral suasion was to be used with the inebriate, the man who effected the ruin must not only no longer be licensed in this horrid work, but must be rooted out and driven from his premises by the strong arm of civil power, for it could be done in no other manner.' He conducted an agitation for ten years with great pertinacity, undeterred from his purpose by the opposition of enemies or the lukewarmness of friends; and in 1851 he succeeded in placing his famous law on the statute-book of Maine. He was Mayor of the town at the time the law was passed, and, as he had persistently labored for its enactment, so he set himself resolutely to carry it into operation. He seized and destroyed liquors offered for sale in violation of its provisions, and was not in the least affected by the rioting promoted and sustained by the 'rum party.' The law was for a time repealed, but it was, after a brief return to license, re-enacted and strengthened, and it is in full force at the present time.

"Although descending from a Quaker stock, when the great Civil War was raging he was appointed colonel to a regiment raised in Maine, and took the field against the South. In 1863 Mr. Lincoln offered him the command of a brigade. With General Butler he entered the city of New Orleans in triumph, and he became military governor of the district of Pensacola. At Fort Hudson he was wounded, and subsequently, when out with

a small party of followers, he was surprised, taken prisoner, and confined for eight months in Libby Prison, Richmond, where, in common with other war prisoners, he was nearly starved to death.

"Mr. Dow has made three visits to England in furtherance of temperance. In 1857 he came at the request of the United Kingdom Alliance, when he addressed large meetings in each of the principal towns, giving his services gratuitously to the movement. He was here again in 1866-7; and his last visit was paid in 1873-4. On each occasion his addresses gave an impetus to the work of the Alliance, and he made many warm friends on this side of the Atlantic."

Mr. Dow is still on the war path, and the enemies of reform tremble whenever he makes his appearance in the lecture field. His honest face and clear cut logic, render his arguments and his influence invincible.

Mr. Dow is as inveterate an enemy of tobacco as of liquor. On his visit to Michigan last winter we had the pleasure of meeting and entertaining him, and found him as simple-hearted and agreeable personally, as eloquent and convincing as a lecturer.

WHOOPIING-COUGH.

SYMPTOMS: Slight fever for eight or ten days, followed, sometimes accompanied, by violent paroxysms of coughing: coryza; hot, dry skin; restlessness; as fever subsides, cough acquires a peculiar shrill sound or whoop; expectoration of tough, viscid mucus; paroxysms of coughing often accompanied by vomiting; from three or four to six or eight times as many severe paroxysms occur each day.

This disease is contagious, remaining latent about six days. The same person is rarely affected more than once. At its beginning, it is generally mistaken for an ordinary cold; the mistake is discovered, however, when the cough assumes its peculiar character. The cough is often preceded by a sensation of tickling in the throat. After a paroxysm, the patient is much ex-

hausted, but in mild cases soon goes about as lively as ever. The cough is provoked by inhalation of cold air, laughing, crying, swallowing, and various other causes. The great cause of the cough, however, is the accumulation of tough, tenacious mucus in the throat. This stage of the disease may last only three or four weeks, or as many months. Finally, the tenacious mucus gives place to that which is thinner, less tenacious, and more easily expectorated. The cough is less severe and frequent, and the patient is beginning to recover, but the tendency to relapse is very great. With good care and proper treatment, the disease should not last more than four or six weeks. The results of the disease are sometimes quite serious. The violent coughing may give rise to hernia or rupture. Collapse of some portions of the lungs, and also emphysema or dilation of the air-cells is another not infrequent result. This is the cause of the permanent shortness of breath in some cases. Whooping-cough may also lead to consumption. In many cases, an irritability of the mucous membrane is left, which occasions a cough much resembling the peculiar cough characteristic of the disease whenever the person takes a little cold. The disease rarely affects adults, and is seldom fatal.

TREATMENT.

Avoid exposure to the exciting cause. Give special attention even to the slightest cold when the disease prevails, as a cold predisposes to the disease as does a diarrhea to cholera in cholera times. The testimony of most eminent physicians is that there is no specific for whooping-cough. The eminent Niemeyer declares that "we cannot ever ascribe any special curative influence to the belladonna, a drug which has acquired great reputation. . . . On the other hand, we attach great value to well-managed treatment by sweating." The disease must be treated like any other severe catarrh. The patient must be taken away from the source of infection with disease when possible, as continued

exposure to the cause will aggravate it very greatly. He should also be kept at as uniform a temperature as possible; and the temperature should be sufficiently warm to keep the skin in an active condition. Care should be taken to give the patient abundance of fresh air, but without exposure to drafts. In summer he may be out doors during the middle of the day, but must not be exposed to the coolness of the morning and the evening. He should wear warm woolen clothing, particularly about the chest, and should have the neck protected by a thick flannel bandage. Once a day, if the patient is strong, he may take, with advantage, a warm blanket pack. The vapor bath, and the vapor inhalations are also remedies of great value in this malady. Fomentations and compresses to the chest are of great value in children old enough to take them readily. The child must be taught to restrain the cough as much as possible. After the mucus is expelled from the throat by coughing, there is no more occasion for cough, and it may be controlled by an effort of the will. An eminent German lady, who had had much experience with the disease, declared that "whooping-cough was only curable by the rod." The child must be told to stop coughing, and if necessary, compelled to resist the cough, as this is one of the most effectual means of cutting short the disease. The cough itself aggravates it, and the more it is restrained the less will be the disposition to cough. Very little, if any, medicine is needed. Simple soda water is one of the most useful remedies. It should be taken just before the paroxysm. The following is equally good used in the same way: Saleratus, half a teaspoonful; water, a large teacupful; sweeten with sugar, and flavor with cinnamon or winter-green if necessary. This will shorten the attacks of coughing by facilitating the expectoration of the tough mucus; "it loosens the cough." The common use of narcotics in this disease, especially in children, is to be condemned, since they are "apt to

cause hyperæmia of the brain." If used at all, their employment should be restricted, to use the words of an eminent German author, "to those cases in which danger from the disease outweighs danger from the remedy." When the amount of mucus is so great as to threaten death by obstruction, it may be necessary to cause vomiting for the purpose of relieving the lungs of the accumulated mucus. This should be avoided until absolutely necessary, and the mildest means possible should be used for the purpose.—*Home Hand-Book.*

MENTAL EQUALITY OF MEN AND WOMEN.

THERE is no doubt but that school-life has an important influence on the health of young ladies, particularly those just entering womanhood. School-girls between the ages of twelve and twenty often suffer life-long injury as the result of too close application to their studies. They are stimulated by the spirit of competition which is fostered in most schools, or compelled by the rigorous discipline to which they are subjected in some schools, particularly young ladies' seminaries, and the ambition of teachers and parents to prepare them for graduation in the shortest possible space of time. The appearance on the stage, at the commencement exercises of some of our schools, of "young girl graduates" with frail forms and a hectic flush on their cheeks and a weak and over-stimulated nervous system, is an exceedingly common spectacle. Soon after graduation, if not before, these over-worked girls, having escaped from the cramming process to which they have been subjected for years, are turned over to the physician to be put in repair physically. Not infrequently the physician finds this by no means an easy task. The physical education has been so utterly neglected, while the nervous system has been overstimulated and overworked with the artificial educational process to which the patient has been subjected almost from early girlhood, that there is no

foundation upon which to build the superstructure of health. Such girls go through life weakly from suffering, and unable to make any use whatever of the knowledge which they have obtained, even if some portion of it may have been of a character likely to be of use, and too often the prospects for health and usefulness have been blighted by devotion to accomplishments of little or no practical value in life.

Girls have been charged with being unequal to boys in mental calibre, and their breakdowns in the midst of a course of study or just after its completion have been attributed to a natural mental inferiority. We believe, however, that a female brain is equally as capable of mastering the studies usually pursued in our schools and colleges, when the education of the boy and girl has been the same from early childhood. Unless the young lady's early training has been such as to dwarf her intellect and check the development of her mental faculties, she ought to be in every way the intellectual peer of her brother.

An argument for the mental inferiority of women has been based on the fact that the brain of man is larger than that of woman. A comparison of a large number of brains of both sexes has shown that in males the average weight is 49½ ounces, and in females 44 ounces, a difference of 5½ ounces, or about ten per cent in favor of the male brain. This fact has been used until it has become threadbare by those who oppose the coeducation of the sexes and the granting to women an equal share with man in the various walks of life. There is a certain class of men, and now and then a woman also, who delight to descant on the inferiority of woman, and dilate upon the asserted fact that she is a "weaker vessel," and hence unqualified to fill most of the positions of trust, responsibility, and honor after which men aspire. Some little time ago, a specious article upon this subject appeared in one of the popular monthlies under the heading "Science and the Women Question," in

which the author—a woman—took strong ground in favor of the position that woman is decidedly inferior to man in mental capacity. The general interest taken in this subject by both sides warrants us in devoting to its consideration a larger amount of space than would be otherwise justifiable. Let us consider some of the arguments advanced in favor of the position named. It is undoubtedly true that the average female brain is something like $5\frac{1}{2}$ ounces less in weight than the male brain; but those who use this argument with so much force carefully conceal the fact that the proper measure of brain capacity is not its absolute size, but rather its proportionate size, or the size or weight of the brain compared with the bulk or weight of the individual. The element of quality must also be taken into consideration, as we shall show presently. Now while it is true that the female brain is five ounces lighter than the male brain, it is also true that the average woman is something like twenty-five pounds lighter in weight than the average man, the average man weighing 145 pounds, and the average woman 125 pounds. Dividing the weight of the average man by the average weight of his brain, we very readily ascertain the weight of the male brain to be 1.47 that of the entire body. By a similar process, we ascertain that the average female brain is only a little less than 1.45 of the weight of the average female. It thus appears at once, that if the argument respecting the size of the brain amounts to anything, it proves that the female brain is superior to that of the male. The above conclusion would not be a just one, however, for, as all close students of psychology are well aware, the element of quality, as before remarked, must be considered as well as that of quantity in making a comparison between the brains of persons of different race or of different sex. The great naturalist, Cuvier, carried a brain weighing $64\frac{1}{2}$ ounces, 15 ounces more than that of the average male brain. Some years ago, a brick-layer died in London whose brain

was found to weigh 67 ounces. Notwithstanding the enormous size of his brain, this individual never manifested during his life any unusual degree of intelligence or mental capacity. Dr. Morris, who made the autopsy at University College Hospital in 1849, states that the man's height was five feet and nine inches, his frame robust, that he had a good memory, and was fond of politics, but could neither read nor write. Dr. Büchner records the brain weight of a man who was an epileptic and whose brain weighed $64\frac{1}{2}$ ounces—exactly the same as that of Cuvier. The largest female brain of which we have any record weighed $61\frac{1}{2}$ ounces. It was possessed by a woman who was a monomaniac.

Some recent studies in the subject of brain weight in the Chinese race show very interesting results which have a direct bearing on this subject. The observations were made by Dr. Clapham, and reported by him in the journal of the Anthropological Institute. Dr. Clapham found the average weight of the brains which he examined to be: in males, $50\frac{1}{2}$ ounces; in females, 45 ounces. The possessors of these brains were not in the higher classes of Chinese, but were Coolies, who are the lowest class of Chinese society. Notwithstanding this fact, the average weight of the brain in the males was one ounce greater than that of the average European man, and in the females one and one-half ounces greater than that of the average European woman. Now if the premises upon which the arguments for the supposed mental inferiority of woman are based, are good for anything, they will prove beyond a possibility of doubt that the average Chinaman is greatly superior intellectually to the average European male, and the same for Chinese women.

The investigation of physiologists have shown that the brain weight of the average negro is precisely the same as that of the brain of the average European woman. As the intellectual inferiority of the negro male to the European male is universally

acknowledged, it would follow, allowing the premises to be correct, that the average European woman must be intellectually inferior to the average European man; but the facts stated in the preceding paragraph conclusively prove that this method of reasoning is an incorrect one. As stated before, the element of quality must be taken into consideration, in investigations of this subject. The relation of brain quality to the brain function is well recognized by biologists in the study of the mental functions in lower animals, and why should not the same principle be applied to the study of mind in human beings? Dr. W. Lawder Lindsay, in his admirable and exhaustive work on "Mind in the Lower Animals," calls attention to this fact by numerous examples, one of the most striking of which we present in his own language:—

"The Nuehr and other savages depend for subsistence solely on what nature produces, therefore neither sow nor plant, and consequently are frequently on the verge of starvation. The Veddas of Ceylon live without any system of cultivation, and the Bushmen of Southern Africa have neither flocks nor cultivated grounds. On the other hand, according to the observations of Dr. Lincecum, who has carefully studied its habits since 1848, there is in Mexico, Texas, and other parts of North America an ant which has been distinctively called the 'agricultural' or 'harvesting' ant. It 'not only stores up seed, but cultivates the plants which are to provide it, and carefully gathers in its crop at the right season. . . . In the wet season the seeds in the ant granaries are apt to get wet and sprout; and accordingly on the first fine day the ants bring out all the damaged grain and set it in the sun to dry, returning to the store only such as is uninjured.' These ants may truly be said to cultivate their estates. They have grass paddocks around their estate nests, and they weed these paddocks. From their fields they bear off all herbage save *Aristida Stricta*, a grain-bearing grass, called by Dr. Lincecum

'ant rice,' and they sow the seeds of the same grass. When ripe, the grain is harvested and the chaff removed. Several other grains or seeds of grasses and other plants are gathered and garnered in a similar way. These ants, therefore, sow, reap, and store grain for winter use. If the grain is set sprouting by damp from inundations, it is dried in the sun on fine days—it is exposed, that is, only during the day and during sunshine, being taken indoors at night. According to Belt, certain leaf-cutting ants of Nicaragua cultivate fungi on decomposing leaves in their subterranean nests, 'the ants cutting and storing the leaves for the sake of the fungi which are subsequently developed in the debris!'"

It will not be disputed that the ants above described are in some respects superior to the tribes of savages with whom they are compared, notwithstanding that the brain of the ant, such as it possesses, is a mere atom compared with that of a Bushman.

J. H. K.

[TO BE CONTINUED.]

BROKEN LAWS OF LIFE.

THE following excellent article we copy from a recent number of the *New York Tribune*:—

An incident went the rounds of last week's papers as occurring in one of the interior towns of Pennsylvania, which was marked with peculiarly dark lines of tragedy. A young clergyman of exceptional talent and sensitive temperament, gave himself, during the last year, to hard study, setting extraordinary tasks for himself, such as committing the whole Bible to memory, etc. His brain suddenly gave way, and he became a violent maniac, and was carried to an asylum in sight of the sympathizing town, manacled hand and foot, and pleading wildly for his mother not to allow him to be taken from his home.

This is one of the hard problems of life which make skeptics inveigh most bitterly against the justice of God. Here was a man whose purpose doubtless was to serve

his Master, to convert souls from death ; but, because he overtaxed a physical organ, he drops, a useless wreck, by the wayside. There are plenty of similar instances about us in everyday life. In the colleges, for example, a young fellow becomes, by dint of natural ability and hard work, a first-honor man ; his classmates applaud every triumphant step ; his family, a mother and sisters, probably, dependent on his future success for support, hang eagerly on him, with proud devotion, his life is pure, his aims are high and pure ; but suddenly he staggers, and falls to rise no more. Four such instances we recall now ; two are in insane asylums, one is an imbecile, the other, knowing that his brain was hopelessly diseased, ended his life in the waters of the Potomac. Similar tragedies go on in every business and profession, though with different catastrophes. A man, let us say, is born with a peculiar talent, or gift, for music, art, literature ; some capacity for the high, fine expression of the truth, which would make him a power for good in the world ; but he cannot make money enough by it to keep wife and children in the social rank which he thinks they should hold. Hence he turns to some lower, but more remunerative work, or he degrades his art into the manufacture of salable wares ; paints cheap, false pictures, writes popular, trashy books or plays. When he grows old, he tries, perhaps, to take up his real work again, but the magic power is lost forever. "The mill will never grind with the water that is past." Then he himself, and all his friends, bemoan a wasted life, regard him as in some way a martyr ; and invariably, in a vague way, hold God accountable for it, and for the cruel injustice of the fact that a man cannot be Pegasus and a cart-horse at once, cannot carry grist to the mill for his family, and touch empyrean heights at the same leap. God, too, is held responsible for the failure of overworked brains, as in this last pitiable case.

Now the popular error in this matter is, that when a man's motive in life is good, the public expect God to work a miracle

in his behalf to help him to accomplish it, and are aggrieved with a sense of the Divine injustice if it is not done. No man who was not a fool, if he had a delicate machine for weaving lace, would go to work to make carpets with it, or be surprised, if he did, that it would break to pieces with the strain. Or, if he had an instrument of tone and compass fit for rendering divine harmonies, and chose to jangle only waltzes and discords on it for years, he would not be indignant at nature or God if it was out of tune, and forever incapable of echoing heavenly music. Yet every man of sense knows that his physical brain is a material machine, an instrument subject to material waste and injury just as much as any Cremona. If he persistently maltreats it, he alone is responsible for its ruin. God is not accountable. He does not work material miracles for any man, however good his motive in life may be. Christ himself would not throw himself down from the pinnacle, even to prove that he was the Son of God, in the hope that he would be miraculously held up. The man who put an intolerable weight on his brain, throws himself down in such a hope ; and the man who gives up his real, high mission for a while in the world in order to grub money, or to set his family on a fashionable basis, in the hope that he can go back to it at will, has thrown himself down a suicidal height, from which no angels will bear him up.

Each man and woman is set down here in the world with a stock of physical and mental capacity subject to inexorable laws, to which ordinary common sense will enable him or her to submit. If he chooses to break them, not all the faith of the patriarchs and apostles will save him from the punishment. If the son of a saint tipples brandy every day, his father's righteousness, and his own late repentance may bring his pardon from God, but will not keep off delirium tremens. When Pattison, the African missionary, exposed himself to storm and tempest for years in preaching Christ, he doubtless won a heavenly crown ; but he was racked no less

with neuralgia and devoured with fever. God's mercy is infinite in dealing with the soul, but, oddly enough, it is the skeptic only that expects it to interfere with physical laws which are inexorable. The earlier in life we recognize their strength and unalterable fulfillment, the better we shall serve the purpose for which we are sent into the world.

DISEASES OF THE EAR.

DISCHARGE FROM THE EAR.

WHEN a discharge from the ear is not accompanied by any marked interference with hearing, it is probably the result of an abscess in the auditory canal. When preceded by severe earache, and accompanied by marked deafness, and when of very long standing, the discharge probably comes from the middle ear, in which the process of suppuration is taking place.

TREATMENT.—Syringe the ear thoroughly one to three times a day, according to the amount of discharge, employing tepid water with the syphon or fountain syringe. Care should be taken not to use too great force, as the membrane of the ear may be ruptured. The ear should be drawn upward and backward, and the nozzle of the syringe should be introduced about one-fourth of an inch. If the discharge is very offensive, a carbolic acid lotion in the proportion of five drops to the ounce, or a solution of permanganate of potash, twenty grains to the pint, should be employed.

ABSCESSSES IN THE AUDITORY CANAL.

Small boils, or furuncles, sometimes form in the walls of the auditory canal, giving rise to impairment of hearing. They seldom occasion roaring in the ears, which is a symptom met with in nearly all other diseases of the ear.

TREATMENT.—Apply hot fomentations and the hot ear douche, and lance as soon as possible, continuing the hot douche afterward as before. The vapor douche is an excellent means of treatment when it can be employed. A cotton plug saturated

with glycerine and placed in the ear will often give great relief. The ear should be carefully protected from cold air, especially when out of doors. Attention should also be given to the general health, which is always more or less impaired in these cases.

EARACHE.

This is by no means so trivial an affection as is generally supposed. Pain accompanied by roaring or ringing sounds and a sense of fullness, is generally due to inflammation of the middle ear, which may result in permanent impairment of hearing if not given proper attention. In many cases, obstinate crying of children is due to earache. Earache is sometimes sympathetic with disease of the teeth. The most common cause, however, is taking cold in the head or ears.

TREATMENT.—The best remedy is heat, which may be applied by means of fomentations, rubber bags filled with hot water, flannel bags filled with hot sand, bran, or corn meal, or poultices. Whatever the applications are, they should be made as hot as can be borne. It is usually necessary to continue the applications for some time. In most cases, it is advantageous to employ fomentations of sufficient size to cover the whole side of the head and extend under the chin. The application of a roast onion to the ear is a very favorite remedy, but probably has no advantage over fomentations. The application of the hot douche to the ear is a very excellent remedy if used with care. The water should be as hot as can be borne. The hot foot bath, hot sitz bath, and the hot blanket pack, are often effective in relieving pain in the ear. They should be employed in connection with local treatment.

HARDENED EAR-WAX.

Hardening of the cerumen, or ear-wax, is a not very infrequent cause of deafness, and is by no means so harmless a condition as is generally supposed. In many cases the hardening is not the primary disease, but is due to chronic inflamma-

tion of the middle ear. The most prominent symptoms of this condition are impairment of hearing, roaring and pain in the ears. The practice of probing the ear for the purpose of ascertaining whether it contains hardened ear-wax is a very hazardous one, as it may excite inflammation of the canal of the ear, or even rupture the drum. Cleaning the ears with the end of a towel, or with a bit of sponge attached to a handle, is a bad practice, as the wax is crowded in. The wax sometimes becomes almost as hard as stone.

TREATMENT.—Hardened wax may be readily removed, in most cases, by the ear douche, with warm or hot water. In case the wax is very hard, it may be necessary to use quite strong soap-suds, or to place in the ear a few drops of a strong solution of bi-carbonate of soda. A good plan in these cases is to drop into the ear while the head is bent over, a small lump of bi-carbonate of soda, which can be easily pressed down in contact with the wax, after which a few drops of water should be added. Persons subject to hardening of the ear-wax should syringe the ears thoroughly every six or eight weeks.

RINGING IN THE EARS—TINNITUS AURIUM.

Under this head is included all cases in which there are unnatural sounds in the ear. The description of these sounds given by different patients is exceedingly varied. Some complain of sounds resembling the roaring of a waterfall, the rumbling of a carriage in the street, or a train of cars, etc.; while others are continually troubled with a snapping, crackling sound, and similar disturbances. This affection is often a very annoying one, sometimes resisting all remedies. Among the principal causes are hardened ear-wax, foreign bodies in the auditory canal in contact with the drum membrane, inflammation of the middle ear, etc. The most obstinate cases are probably due to disease of the nerve of hearing.

TREATMENT.—Hardened wax, or other foreign bodies, should be removed. When resulting from congestion, relief is some-

times obtained by pressure upon the large arteries of the neck. Electricity has also proved of great service in some cases, though in others it has not succeeded. The galvanic current is the most successful.

PARASITIC INFLAMMATION OF THE AUDITORY CANAL.

The external end of the canal is sometimes subject to inflammation in consequence of the growth of vegetable parasites of the nature of mold. The most common is some variety of the aspergillius. The principal symptoms are pain, dizziness, impairment of hearing, and a discharge from the ear.

TREATMENT.—The same treatment should be employed as has been recommended for the preceding disease. The persistent use of hot water will thoroughly destroy the parasites, but the discharge will still continue, in some cases, requiring the treatment recommended for discharge from the ear.

ACUTE CATARRH OF THE EAR.

This is an inflammation of the middle ear. It is the principal cause of earache. It occurs at all periods of life, but is especially common in young persons. The most frequent cause is taking cold in the head, or in the ears. When frequently repeated, it may lead to chronic catarrh and permanent impairment of hearing. Prolonged bathing, especially in cool weather, or ducking the head under water, is a frequent cause of catarrh of the ear. Prof. Roosa, an eminent aurist, also asserts that the use of tea and coffee, pastry, and other improper articles of diet, is a frequent cause of this disease.

TREATMENT.—The treatment of acute catarrh of the middle ear is a matter of great importance for the reason just given. If prompt, energetic measures are not employed, the drum membrane is not infrequently perforated by ulceration. This is not an accident fatal to hearing, however, as openings of this kind generally heal quite readily with proper treatment. Essentially the same treatment should be

employed as has been recommended for earache, the most useful being fomentations and the hot ear douche. Simply breathing into the ear for a few minutes will sometimes check the disease in children. Pouring into the ear sweet oil, glycerine, molasses, laudanum, cologne water, etc., is not only useless, but in many cases harmful. There is also danger from the use of poultices if too long employed. Fomentations should be applied to the throat as well as to the ear. In severe cases, when a considerable amount of suppuration occurs, it is sometimes necessary to employ a competent surgeon to lance the drum membrane so as to allow the accumulated fluid to escape. As soon as the symptoms have disappeared, the ear should be inflated by grasping the nose so as to close the nostrils tightly, closing the mouth and then attempting to blow through the nostrils. By this maneuver, air will be forced up into the ears, and in many cases, the impairment of hearing will be at once relieved to a considerable degree, if not altogether. In cases of children who are unable to perform the experiment, the ears may be inflated by putting into the nostril one end of a piece of rubber tubing through which the mother or nurse should blow, while the mouth and other nostril of the infant are tightly closed. When the soreness and swelling have passed away, the ear should be carefully tested to determine whether or not the hearing is seriously impaired. Persons subject to inflammation of the middle ear should be very careful not to expose themselves to taking cold in any way. Special pains should be taken to protect the ears from exposure to drafts of cold air. In the majority of cases, complete recovery takes place.

THE PHYSICAL EFFECTS OF ALCOHOL AND TOBACCO.

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

BY DR. J. H. KELLOGG.

[CONTINUED.]

Now I think we have a pretty clear idea of what the vital processes are, and how they are performed, and we next direct our inquiries to discover what effect alcohol will have upon these processes when it is taken into the human system. These little creatures that we have been talking about are at work in the stomach

making gastric juice, and in the liver making bile; what does alcohol do to them? Before we can answer this question intelligently, we must first know what alcohol is.

About one thousand years ago alcohol was discovered by an Arab. You know that at that time the Arabs were noted as the greatest chemists as well as the greatest mathematicians. A great misfortune that discovery was, you will perhaps say; but you must remember that at first its intoxicating properties were not known. It was considered merely as a chemical compound and a curiosity. Finally, about the sixteenth century, Paracelsus—who, by the way, was the father of medical quackery—announced the discovery that alcohol was the long-sought *elixir vitae*, in search of which the alchemists and philosophers of the middle ages had been wasting their time for hundreds of years. The fact that Paracelsus died in a bar-room should be a warning to those of our own day who would have us believe that alcohol, if not the elixir of life, at least has strong claims upon our consideration as a medicine and food.

Alcohol is not an isolated substance, but is one of a large class of similar substances known to chemists as the "alcohol series." I have here a chart upon which you will see in order the names of some of the leading members of "the alcohol family." The first is known as *Methylic Alcohol*, or wood naphtha. It is obtained by the distillation of wood, and is slightly intoxicating in character. It has a bad odor, and that is one reason why people do not drink it.

Ethylic Alcohol, or wine spirit, is the next on the list. This member of the alcohol family is the essential ingredient of spirituous liquors. It is obtained by the distillation of fermented liquids, and constitutes the intoxicating principle of all the common beverages, such as wine, beer, brandy, etc.

Next we find *Butylic Alcohol*, a substance which is produced in the fermentation of beet root. An acid formed from this kind of alcohol is present in old cheese and rancid butter, and gives to them their peculiar flavor.

Amylic Alcohol, or fusel-oil, is the characteristic constituent of bad whisky. It is extremely intoxicating in character, and a few drops will produce as profound an effect as a large quantity of *Ethylic alcohol*, or wine spirit. It is this substance which

gives to bad whisky its infuriating character. You will notice that in the list the alcohols have been arranged in the order of their intoxicating power; wood naphtha being the least, and fusel-oil the most intoxicating. Besides these substances which I have represented as belonging to the "alcohol family," there are two others which are very nearly related to the former. They are cousins or second cousins, if you please. These are Carbolic Acid and Creosote, which every one knows to be powerful caustics and poisons.

You will see in the second column here the chemical formulæ of these different substances that I have mentioned, and an inspection of these formulæ will show how closely related one is to another. You will see that they are all made up of the same three elements, carbon, hydrogen, and oxygen, and the only difference between them is in the proportion of the several elements of which they are composed. The difference between wine spirit and wood naphtha, for instance, is one atom of carbon and two of hydrogen. The only difference between common alcohol and the poisonous carbolic acid, is four atoms of carbon. Does that seem enough to form the distinction between a poison and a food?

Alcohol is not a natural product, it is always produced by fermentation. It may not be known to you that alcohol is produced in the common process of bread-making. A baker in England found that he could save the alcohol produced in the fermentation of his bread by connecting a sort of still with his oven; and by this saving he was enabled to sell his bread quite a little cheaper than his rivals. He had a large custom until the baker across the way discovered his secret, and put up a sign "bread with the rum in it," when all his customers deserted him and patronized his rival.

I have here a test for alcohol: If you drop a little of this fluid into any substance containing alcohol, there will appear a very marked greenish color. Here is a glass vessel containing alcohol. I place a little of the test into it, and there is at once a perceptible change of color. Here is a vessel containing brandy. I need not tell you that it contains alcohol, for you see that the application of the test shows it at once. In the same way I will test the liquid contained in these other vessels which are whisky, ale, gin, and hard cider. You see that the green color is very deep

in each one. Here is some beer. I drop in a little of the test, and you see at once a green tinge spreading through the foam that rises up in the tube, and also gathering in the bottom. This is conclusive proof that there is alcohol in beer.

I have some other things here that I propose to test. There are a number of good people in the world who would not think of touching a drop of gin or whisky, who do not have the slightest objection to taking a glass of "bitters" every morning. They will recommend you to take a little bitters for your stomach's sake. Here is a bottle of Hostetter's Stomach Bitters. I pour a little of it out into this tube and apply the test. You see how green it turns. It has almost as much alcohol in it as Scotch Whisky. Look at this sample of Jamaica Ginger. I put in only a few drops of the test, and it turns as green as the gin. It has just enough ginger in it to flavor the alcohol.

Here we have a bottle of "Temperance Bitters," or at least it is advertised as such. This is Dr. Walker's California Vinegar Bitters. The proprietor is taking an active part in the temperance work on the Pacific Coast. He is one of the most zealous advocates of temperance in California, and publishes a temperance almanac to advertise his "bitters" which he declares contain no alcohol. Let me read to you what is printed on the paper that goes around the bottle; "Dr. J. Walker's California Vegetable Vinegar Bitters, The Great Blood Purifier and Life-giving Principle. A remedy for Dyspepsia, Indigestion, Consumption, sore eyes, stomach-ache, fits, palpitation of the heart, biliousness &c., &c., tape, pin, and other worms. No Alcohol enters into the composition of Vinegar Bitters. That curse is not offered for medicine. Nothing but invigorating and purifying herbs give them their wonderful powers to cure."

In order to determine the amount of alcohol contained in a bottle of the bitters, I had half a bottle distilled by a chemist, and in this flask you see the product of distillation. By means of the alcoholometer it has been found to contain 20 per cent of alcohol. Now we will apply the test. There is as beautiful a green as you could desire to see. I will guarantee this bottle of bitters to contain 5 per cent of alcohol.

Now let me call your attention to some of the physical properties of alcohol. It is combustible. You all know that alco-

hol will burn. I will touch a match to some of this Jamaica Ginger. See how it flames up. It continues to burn as I pour it from one vessel to another. In addition to this, alcohol is a *desiccant*, that is, it is drying in its character. I have been using some of it as a drier. I put this piece of steak into alcohol a few days ago, and I think it would now answer very well as a tap for a boot. After a few weeks it will become so dry that I could rub it in pieces with my fingers. This egg which I hold in my hand is a representative of an animal. The complete hen is here. If you place it under the proper conditions, that is, if you simply keep it warm—you know we have artificial "mothers" now-a-days—it will develop into a full-fledged chicken. We can take the effect of alcohol upon this egg as a sample of what it will do to the human body. I break this egg into a vessel containing whisky, and you see that it turns white, and it will soon become as hard as though it had been dropped into boiling water. If the vessel had contained pure alcohol, it would become so hard in a short time that I could turn the vessel upside down without spilling out the egg. Alcohol has the same drying and hardening effect upon the body that it has upon the egg. The liver, the heart, and in fact, the whole body, is made up principally of albumen and fibrine, the substances which compose the egg.

Besides its drying properties, alcohol is also an antiseptic, that is, it possesses the property of preventing decay in perishable substances. Some one may say that if alcohol prevents decay, it ought to be valuable in preventing the decay and death of the human body. In fact, a young man once told me that his grandfather had taken during his life a hog-head of Jamaica rum, and he was sure it had been the means of preserving him to a good old age. During the centennial year, while I was in Wilmington, Delaware, I heard of a man who was 117 years old on the fourth of July. I was paying a good deal of attention to the subject of hygiene just at that time, and I thought that perhaps he had lived so long because he was temperate in his habits. Upon inquiry, however, I found that he was an inveterate smoker, and that for one hundred years he had taken his toddy regularly. This was quite a disappointment, but I resolved to see him nevertheless. When I found him, I thought that whisky had not done so much for him after

all. He hardly looked like a human being, he was so dried and shriveled up. He looked like one of those strange creatures that Stanley saw in Central Africa. After seeing him, I came to the conclusion that he was a human pickle. He had been pickled by the use of alcohol, and had in reality been dead for the past thirty or forty years, though his friends neglected to bury him.

It is through its antiseptic properties that alcohol interferes with the process of digestion. The process of digestion is in some respects similar to that of fermentation. If you keep meat in alcohol, it will never decay. If, therefore, you take alcohol into the stomach after each meal, you will interfere with the process of digestion that is going on there, and will in time seriously impair the digestive functions of the stomach. Alcohol also destroys the pepsine of the gastric juice.

In the next place, alcohol is volatile. Many who use whisky wish it was not, for it is this property which enables any one to detect a man who has been drinking by the odor of his breath. That is the reason why some people carry cloves and things of that sort in their pockets to chew on frequent occasions.

That alcohol is an irritant may be readily shown by placing a drop of it in the eye. I recently had a patient who was suffering with a disease of the eye for which I prescribed a solution of atropia to be placed in the eye. The druggist used a solution of atropia in alcohol for making the lotion, and the effect on the eye of the patient was so irritating that she came very near losing it, although the solution contained not more than ten drops of alcohol to the ounce. If, then, it is irritating on the outside, how much more dangerous must be its effect on the inside, when it comes into direct contact with those delicate little cells which do our thinking and feeling for us and perform all the work of the body. Alcohol is often called a stimulant, and so it is if we use the word in its proper sense. A stimulant is well defined by an English physician as "something that gets strength out of a man instead of putting it into him." There is a general idea that drinking liquor will make a man stronger, but that is a mistake. A whip is a stimulant to a tired horse; it makes him go faster, but it does not make him any stronger. That is precisely the effect that alcohol has upon a man. Experiments show that a man is actually weaker, that he cannot lift

so much after he has taken a drink of liquor, as he could before. A man who has just had a glass of whisky feels as though he could run faster, lift more, or make a better speech than he ever did before in his life; but the fact is that both his muscular and mental powers have been impaired. The feeling of strength is apparent, not real. An eminent justice of a neighboring State, who was an inveterate smoker, told me that he always felt as though he could make a better plea just after he had smoked a cigar; but he had found by actual trial that he could not. He could not reason so closely, nor present his arguments so clearly as when he abstained from the use of tobacco. What is true of tobacco, is true of alcohol. Tobacco and whisky are twin evils.

Alcohol is a narcotic, benumbing both the physical and moral sensibilities. When a man comes home tired out with work or worry, and takes a glass of liquor, it seems to take away all the tired feeling. The man feels all at once completely rested. In reality, however, he is just as tired as he was before. The wasted tissues which cause the sense of fatigue, are not yet replenished, and the alcohol has no power to renew them, all that it does is to benumb the nerves of sensibility so that the man does not feel his weariness.

Finally, alcohol is an anæsthetic. When a man is dead drunk he does not feel anything. Before the discovery of chloroform, it was sometimes the custom to give a man whisky when about to perform an operation, and even now it is sometimes used for that purpose. I once had a patient who required an operation on both eyes. She had a serious heart trouble, so that I did not dare to give her chloroform. I gave her an ounce of brandy sling, and in a short time I was able to perform the operation without giving any pain whatever. She was not insensible, but knew what was going on all the time.

I must say a few words before I close, about this substance mentioned at the bottom of the chart, that is, tobacco. I do not carry a tobacco-box around with me, but here is a bottle of nicotine, which contains the poisonous principle that characterizes tobacco. I tried an experiment the other day with this nicotine. It was rather a cruel experiment, but it was done in the interest of science. There was a certain cat which use to prowl around the Sanitarium, giving midnight concerts. A young man caught the cat, and I administered to it one-seventh of a drop of nicot-

tine. The cat sprang to the floor, shot across the room, and in less time than it takes me to tell it, was dead. I tried a similar experiment with a frog. You perhaps know that a frog is a very hard animal to kill. You can cut its head off, and it will go on kicking about for some time, as often as you stir it up. I took a healthy frog, and injected into its mouth one-fourteenth of a drop of the solution mentioned. It gave one last croak, stretched out its legs in a very respectable manner, and died. I have never tried it on a man, but I know several members of the human species who have tried it upon themselves. On my way home I saw in Chicago a man who is completely paralyzed on one side, there being no feeling whatever. If you tell him to look straight ahead, and pass your hand in front of his face, he cannot see it until it has passed the center of the field of vision. That man, when I first saw him, was smoking ten cigars a day of the strongest kind. He had them made of extra strength for his especial use. The consequence of the constant and excessive use of this deadly poison had been to cause degeneration of certain parts of the brain, resulting in the terrible paralysis I have described. Now I do not mean to say that every one who uses cigars will suffer from paralysis, but this case serves to show what deadly effects may be produced by this poisonous nicotine; and if that is the effect of a large quantity, it is only fair to suppose that a smaller quantity would have an effect proportionate to the amount used. The safest way, at any rate, is not to use any at all.

Ashamed of His Company.—A contributor to *Puck* says: "In one gutter I saw a pig, in the other the semblance of a man. The pig was sober, the man was drunk. The pig had a ring in his nose, the other animal had one on his finger. The pig grunted, so did the man. And I said aloud, 'We are known by the company we keep,' and the pig grunted and walked away, ashamed to be seen in the company of the drunken man."

—Sterne says in his *Koran*: "I never drink. I cannot do it on equal terms with others. It costs them only one day, but me three: the first in sinning, the second in suffering, the third in repenting."

—The wider the intellect, the larger and simpler the expressions in which its knowledge is embodied.—*Holmes*.



TEMPERANCE AND MISCELLANY.



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

THE TAPESTRY WEAVERS.

LET us take to our hearts a lesson—no lesson can braver be—

From the ways of the tapestry weavers on the other side of the sea.

Above their heads the pattern hangs, they study it with care.

The while their fingers deftly work, their eyes are fastened there.

They tell this curious thing, besides, of the patient, plodding weaver:

He works on the wrong side evermore, but works for the right side ever.

It is only when the weaving stops, and the web is tossed and turned.

And he sees his real handiwork, that his marvelous skill is learned.

Ah, the sight of its delicate beauty, how it pays him for all its cost.

No rarer, daintier work than his was ever done by the frost.

Thus the master bringeth him golden hire, and giveth him praises as well.

And how happy the heart of the weaver is, no tongue but his own can tell.

The years of man are the looms of God let down from the place of the sun.

Wherein we were weaving always, till the mystic web is done.

Weaving kindly, but weaving surely, each for himself, his fate.

We may not see how the right side looks, we can only weave and wait.

But looking above for the pattern, no weaver hath need to fear.

Only let him look clear into Heaven—the perfect Pattern is there.

If he keeps the face of the Saviour forever and always in sight.

His toil shall be sweeter than honey, his weaving is sure to be right.

And when his task is ended, and the web is turned and shown.

He shall hear the voice of the Master, it shall say to him, "Well done!"

And the white-winged angels of Heaven to bear him thence shall come down.

And God shall give him gold for his hire—not coin, but a fadeless crown.—*Anson G. Chester.*

WRITTEN FOR GOOD HEALTH.

SOLVING THE MODERATION PROBLEM.

BY JULIA COLMAN.

IT is almost inevitable in any great work of reformation that attention should be directed first to the grosser and more excessive forms of the evil. So in the matter of intemperance, drunkenness was the great sin which was to be corrected at first, and all shafts were aimed at that. Drunkenness was indispensable. The drunkard was morally, physically, socially, politically, and usually financially unable to defend himself, and indeed the case was so clear and so hopeless that he did not try to defend himself in the right, privilege, or duty of getting drunk.

The first notable and effective effort for temperance in the United States was the famous essay of Dr. Benjamin Rush, of Philadelphia, published in 1794, on "The Effects of Ardent Spirits," and it commences with these distinctive declarations,—

"By Ardent Spirits, I mean those liquors only which are obtained by distillation from fermented substances of any kind. To their effects upon the bodies and minds of men the following inquiry shall be exclusively confined."

Whether Dr. Rush intended it or not, the effect was to make a distinction between the alcohol of distilled and fermented liquors, and to direct the attention and the efforts of the first reformers against the use of ardent spirits only. In saying this I have no intention of uttering an adverse criticism against the noble Doctor, our grand pioneer; but the effect was to start the work on that basis, and so we find the first distinctive temperance society that lived and had much influence, (that which was organized at Moreau, Saratoga county, N. Y., in 1808), starting on the basis of the following pledge, which was article 4th in the Constitution of the Society.

"No member shall drink rum, gin, whisky, wine, or any distilled spirits or compositions of the same or any of them, except by advice of a physician, or in case of actual disease, also excepting wine at public dinners, under penalty of twenty-five cents; provided that this article shall not infringe on any religious ordinance."

There was a penalty of fifty cents for intoxication, and of twenty-five cents for offering said liquors to any other member, or urging any other person to drink thereof. Their meetings were annual and quarterly. The history is curious and instructive, but we refer to it only to show that the prevention of drunkenness was the aim, and moderation the method, of work at that time. Thus it continued until the movement crossed the water and took root in Great Britain, where it was soon vitalized by the principle of total abstinence from all fermented as well as distilled liquors. The change was not readily received in this country, and the few who saw that this was the only way to prevent

drunkenness were considered fanatics when they added the simple letters "T. A." (total abstainer) to their names on the old pledge.

That was changed in time so that none of the pledges of the prevailing temperance societies permitted the common use of fermented liquors, and some of our pledges, especially those for children, specify the exclusion of "fermented and malt liquors including wine, beer, and cider" which specification shows that they have not always been excluded.

It has been found, however, exceedingly difficult to enforce and defend this effective clause outside the ranks of active temperance workers. One proof of this is the frequency of the weaker-brother plea, through popularity of the text, "If meat make my brother to offend," and others of a similar character. Probably a large share of the best workers also would have said they had not taken the pledge on their own account, but for the sake of the example. They would have read Prov. 23: 31, 32 in some such way as this: "Look not upon the wine etc., for if you partake, at the last it will bite and sting—somebody else." All this came through ignorance of the nature and effects of the stuff. A little might be good, (was good when the doctor ordered it,) but more was worse. Still nobody could find a safe dividing line. The great Brooklyn divine said everybody must try it and judge for himself, forgetting that this was just what the world had been doing for centuries, thus plunging us all into the vortex of intemperance.

But the enemy, more keen than ourselves, saw a weak point and made the most of it in the great "moderation" movement resulting in the formation of the "Business Men's Society for the Encouragement of Moderation," which had a great wholesale liquor dealer and importer for a president, and Dr. Howard Crosby for an exponent.

It prospered greatly for a while, in numbers but not in effective work, boasting in the same breath of immense numbers, twenty-five millions of people who believed and practiced their trusts and whom the temperance people could not reach at all, and then complaining that we would not let them work. The most the temperance people ever did with them was to publish Dr. Crosby's "Calm View" and answer it. They are still in organized existence, and they publish a quarterly newspaper at twenty cents a year; but still, with their immense numbers of accessibles, the fact that they are unable to do much shows that all these moderate drinkers

are now doing just about what they wish them to, and that the "work" they would like to do is to turn us aside from our aims to fight them or to fall in with them. That they are in full accord and sympathy with the brewers as well as the wine dealers, is proved by the fact that the "Western Brewer" published in sheets one mill on copies of Dr. Crosby's sermon for gratuitous distribution, and finds much difficulty in disposing of it even at that rate.

It has not required a very keen eye to show us what aim we should take in this matter. The stronghold of the enemy is the ignorance of the people as to the nature and effects of these light drinks which our carelessness has left unexposed. We cry out against men and gin and whisky, and denounce drunkenness, many of our phrases originating in the times when these were the prevailing drinks; we talk about the *rum* traffic and the *whisky* bottle, and their effects are patent enough; but we have spent very little time in showing up the real nature and effects of alcohol, and still less in demonstrating that this alcohol is the same thing, and produces the same effects in *all* our intoxicating drinks, with some variations, owing to other ingredients. The people need these facts; they do not generally know them. Instead of denouncing the moderationist we must analyze his drinks and their effects, his favorite beer and wine and cider, and if we can prove that these are *slow poisons*, paralyzing the nerves so that the drinker does not perceive the mischief until it is too late, the people will not long wish to poison themselves even moderately; for really in their hearts they believe that total abstinence is the rule for *poisons*.

The Woman's Christian Temperance Union took this motto up as a specialty three years ago by commencing a series of Handbills on Beer. These have grown to the number of fifty-seven, and they have had a circulation of some millions. They are now arranged in a five cent pamphlet as a series of readings for societies at their regular meetings with additional readings from various authentic sources, so that the society can spend from twenty to thirty minutes at each meeting in studying up some particular aspect of the question such as "What is Lager Beer?" "Is there Food in Beer?" "Beer the Cause of Crime," "Beer as a Medicine," etc., etc. Then the handbills that formed the basis of the reading, or some one similar, can be distributed throughout the community, and the women who have attended the reading will be ready to sustain its arguments

with the proofs that they have hunted up and often times the subject gets discussed in the papers so that it becomes eminently a live subject; and the system becomes an educatory power of immense value. Eventually wine, cider, tobacco, etc., etc., may be brought out in a similar manner, but beer is the best for a primary course because it is more common than wine, an every-day drink, and a cheap drink, and because there is much more written by good authorities about it than there is about cider. It leads by direct reference to some of the best cheap temperance books and shows up their good points.

We are glad to observe that this study of the nature of stimulants and narcotics, and their dreaded effects, is becoming very popular. People are beginning to think that a habit which shows such tenacity as the drink habit, and which has so many phases, must have its roots much deeper in perverted human nature than we have been accustomed to suppose, and they are doubting whether they "know all about it." Hence the cordial reception and the careful attention accorded to well prepared lectures on the subject, the interest shown in charts and diagrams delineating the mischief done the internal organs by the use of intoxicants. The English are much ahead of us in this respect and such men as Drs. Richardson, Edmunds, Gill, Andrew, Clark, and many others, speak to crowded houses on these fascinating and instructive themes, and are listened to with the most eager and discriminating attention. There the moderate men are from this source rapidly getting their status fixed, ("small dose" men, they are often called,) and Dr. Richardson who was for some time in their ranks, and greatly regrets the mistakes he made while there, has on record this remarkable testimony against them. "The purely moderate man is never safe, neither in his own practice, nor in the advice which he gives to others." A temperance education for old and young we believe to be the only sure remedy for moderate drinking.

TAKING COMFORT.

BY MRS. C. F. WILDER.

A FRIEND ran into my house one day, years ago, late in the afternoon, and found me on my knees, not in devotion to my Maker, but to my kitchen floor. I rose and dropped wearily into a chair, saying: "I am too tired to take another breath."

"Don't, then!" she replied, laughingly. "You might as well stop breathing now as next year or the year after. Your

husband could find some colored woman who would do the scrubbing, so he would n't miss you."

"If I wasn't so tired I should be inclined to be provoked at you," I replied, as I looked at about two feet of the unwashed oil-cloth.

"Do finish up your day's work with that last stroke of scrubbing, and then come off this damp floor into the sitting-room and rest," she said tip-toeing over the clean carpet to another room. I followed in a few minutes, and lying down on the lounge actually shed tears from sheer weariness.

After a little rest, and a relief to my feelings which a "good cry" gives nervous, overworked women, I said, smiling forlornly, "If you had not expressed in words what I was thinking not two minutes before you came in, I should not have been such a goose as to cry at your remark."

"Why, you were not crying over what I said, were you?" she exclaimed in pretended astonishment. "I have said that same thing to you in as many different ways as my knowledge of permutation and combination could devise, and you never shed a tear over it before. I must say I begin to be hopeful. There isn't every one who has a friend as true to them as I've been to you. For five years I've worried, planned, and preached to you, trying to lift you from the life of a drudge to that of a sensible woman, and those tears are the first sign of encouragement I've seen in all these years. And yet I hardly dare take encouragement from them, for there is not a woman in the world that would not cry if you pointed your finger at her by the time she had been busy with her spring house-cleaning two or three weeks. Here you have cleaned every inch of your house because your servant, last year, spoiled your beautiful doors by using hot suds and a scrubbing brush on them. And it is not only at house-cleaning time, but all the year through you make yourself a slave to your house. I often think, when I look at you about your work, of the Indian Chief who took his squaw to Europe, where she died, and he said, when asked the cause of her death, "Too much wigwam." O my dear, if we put the truth on your tombstone it will have to be the same—"Too much wigwam."

"What *would* you have me do?" I exclaimed petulantly.

"Another sign of encouragement," she answered, laughing, "she has actually asked for instruction, though not in as meek a tone as I could have desired. But then, as long as I've set out to turn you into wisdom's ways I don't know as I ought to allow myself to feel uncomfortable over your manner of turning therein. 'Egotistical,' eh? Well, I don't know. I think, maybe I am, now you have turned my thoughts in that direction. I don't know but I do feel it rather a bright thing to discover that there are treasures of more importance than can be found in digging and delving all my life long in 'much serving' to my house and the fig-leaves. Whether I am egotistical or not I can't truly say, but I do know that whereas I was once blind I now see, and whereas I was once most uncomfortable I take genuine comfort and delight in my life-work.

"How much real comfort do you take in life? You spend more than half your time in your hot kitchen with not one pleasant thing to look at. Every week you make at least a dozen pies. I don't wonder your husband looks as lean as Pharaoh's kine! You frost every loaf of cake and half your pies, you mold your bread three times as long as I do mine, you black your stove every day, you would not let any one wipe your oil-cloth for half you are worth. Your prettily furnished parlor you work and worry over and never enjoy. Your china closet is full of dishes too nice for common use. Your washing you must either do yourself or stand over the washer-woman, anxious and careful lest the hard-water dipper should get used when the soft-water one ought; lest the wash water be emptied into the sink instead of being tugged across the yard, and turned out behind the barn; or lest clothes get on the line without going through three sudsings and four rinsing waters. Your spoons and silver, your tins and windows, must all be cleaned every week whether you are alive or dead. The dusting must be done with brush and oiled rag if the wind blows dust so you can't see across the street.

"It seems to me as though I was neat enough; at any rate if I can't keep clean all through my house without wearing myself into the grave so that Edward can get a wife who will not always be 'too tired' to be a companion for him, I'll move the things out the house until I can. No mortal woman can do her own work, her washing, ironing, cooking, sewing, be

frugal as all we women have to be, doing her work as you do it, and be anything but a slave and drudge. Now my husband wants a companion in his wife, and I propose that he shall have one. I am not going to dry up every stream of beauty and comfort that could come into my life by turning my virtues into vices. I know women whose lives have become mean and poor, just because they have turned frugality and neatness into fussiness. They never read, they never attend lectures, they never visit or call sociably on any soul, unless it may be once in a decade upon some who live just as they live, and can recommend a new kind of soap or give a recipe for a cheap cake. They work, and work, and work, and save, and save, and save; they die and they are buried, and when they come before the Master and he asks them what they have done for him, they can only say, 'Lord, I put my talent in a napkin, which I have kept well mended and always white and clean, but of the talent which thou gavest me I have never thought.'"

"I really wish there *was* some way out of this," I said, "but what can I do?" and my tone was humble enough to suit even my friend. "If you will tell me what to leave out, and what to do, I'll follow your suggestions for one week at least."

"How willing you are, now that you are too worn out to work, to take life easy," she said, smiling at me. "But I'll do it. In the first place, as to-morrow is Saturday, I forbid your making more than one pie."

I held up my hands in horror. "Just one pie," she repeated; "a frosted lemon for Sunday's dinner. Make your graham, white, and brown bread, but don't you dare to make a cookie or a loaf of cake. In the afternoon take a copy of 'Stepping Heavenward,' and lie on the lounge, or take your husband's easy chair and foot-rest, and read the whole, long, blessed afternoon. Let John help you Sunday morning. He is more than glad to do so, don't you worry if he should make the bed and get the wrong blanket next to the sheet. Let him wait on himself, he knows where his clean clothes are. Monday let your washer-woman do your washing and you do your house-work. That is always hard enough on Monday without fretting over the dirty clothes. Make the ironing easy, partially pressing sheets and table covers under the ironing sheet while the other things are being ironed.

Serve the towels, pillow-cases, and napkins the same way, and finish ironing before they get dry. Don't break your back or worry your brain over the dessert. Good bread, cranberry, raspberry, or apple sauce, with plenty of fruit, is good enough for the Queen of Sheba. And about your getting time to rest and read, do both at once and just when you feel like it. "In the morning?" Yes, *in the morning*, if you want to; then you are sure of your reading and pleasure of it afterward when doing the work. If you put off the reading for a more convenient season, you never read; if you put off the work it hurts nobody and is sure to be done. You may make your tating in the evening, or do any other senseless thing you enjoy doing, but I never give up my evenings to anything but my books. I sometimes feel as though I ought to sew, but I'd rather wear my fig-leaves without ruffles and edgings, and have less of them, than not have a restful, happy evening which is sure to give a good night of real rest."

"What if company comes and you have no cake and only a plain dinner?" I asked.

"I do sometimes wish I could give the best the world affords to my friends, but I can't any more than I can have my span of horses and colored driver, all of which feminine hearts delight in. I'll serve my plain dinner with as much order and neatness as I can, and imagine how much nicer it is than a burnt soup, overdone fish, under done roast, and the vegetables cold and sodden. My tea shall be an 'aesthetic tea' with its thin slices of bread, or wafer biscuit, its dish of fruit, and thinly cut slices of meat. But do as you like, dear," said my friend rising, "I've given you a longer lecture than usual. I *wish* you could get more comfort out of life than you have in the past, and the only way I can imagine its being done—as we go this way but once—is to get it day by day as we go along."—*Christian Woman*.

SINFUL LUXURY.

PROBABLY the tide of luxury never reached so high a point in American life as during the past season. To plain people, accustomed to thoughtful consideration about expenditure, the sums lavished on useless decoration at entertainments, to name only one item, seem almost fabulous. Hundreds of dollars, for instance, have been paid by ladies of fashion for flowers

alone, with which to dress the table at a small luncheon party, and little trifles in straw or cheap gilt, denominated favors, have cost money enough to have built hospitals, educated beviacs of poor children, or sent missionaries by twos and threes to a foreign coast.

There are those who defend this recklessness in expenditure, on the ground that such caprices of the rich aid the poor, by setting in motion various industries. "Think," they say, "of the army of men, women, and children who must work to gratify these transient whims of the elegant and pleasure-loving. The luxury of the highest surely means daily bread to the lowest."

In a partial sense this is true, but only partially. To minister to the costly tastes of those who are living on the plan of ostentatious display, with no loftier aim, a host of people must indeed toil. But the large compensation goes into the purse of the favorite florist, caterer, or upholsterer, to his enrichment, and those below him do not reap his gains.

It is as true now as it was in the days of old Rome, when her wild riot of luxurious splendor preceded her fall, that thoughtless and selfish pomp at one end of the social scale implies ignorance and destitution at the other. In a republican land like ours, when self-respecting simplicity goes down, and irresponsible frivolity assumes the sceptre, with its cap and bells, we are in grave danger.

Hand in hand with other prodigality has come the custom of providing delicate and costly wines in great profusion; and this, strange to say, has been not infrequent at gatherings when only women were present.

Every one who looks over the record of the daily papers must at once see that intemperance is the great curse of our land. It is a vulgar fiend who leers at you from the tenement-house and cheap bar-room. The poison he drinks makes the working man a terror to his wife and children, brutalizing him and them. The drunkenness which gets its victims into the police courts, is abhorred by all. Rum, whisky, beer, whatever it is that the poor wretches drink till they become maddened and murderous, who does not turn from it with a shudder?

But is the ugly fact of intoxication one whit less ugly when it masquerades under the guise of some amber or ruby wine of foreign vintage and priceless worth? Surely not. That highly-bred,

beautiful, sweet-voiced, soft-mannered women should sip liquors at entertainments for the pleasure their stimulant affords, or that the same ladies, jaded and worn with too much pleasure, should resort to these as a spur to exhausted energies, is a perilous and ghastly menace to our civilization. It augurs danger to the coming generation, and is an ill sign to the present.

The higher the social position, the wider the privileges, the larger the wealth, the better the education, by so much is the accountability, in every case, increased.

"Mene, Mene, Tekel, Upharsin," wrote the shadowy hand upon the wall, when the Persian monarch, effete and ease-loving, was near the precipice of ruin. A like presage of doom will be ours if the sinful luxury of the day receive no check.

"What is the use of writing about it?" says somebody, who thinks that the class who need the warning are the last to accept it. Well, the use is this, that after all, a wholesome public opinion is like a breath of fresh air in a close and vitiated atmosphere. Open the windows and let the north wind sweep in, and come, thou south wind, blow into God's garden. There is need of evangelization for the higher as well as for the lower. There is always in society, a strong conservative and religious element, which may dominate, if it will. Arouse this to self-preservation, and its rebuke will affect the giddy and heedless, who are fluttering like moths near the candle of destruction. Wine-drinking, in whatever company, however dainty and delicate its environment, must receive the stern disapproval of the good men and women who make public opinion.—*Margaret E. Sangster in Christian Weekly.*

A PLEA FOR OUR GIRLS.

WE make bold to put in this plea, because we believe that America values the coming woman, as well as the coming man.

We are told that our strength lies in our boys, and that no pains should be spared to educate them, not only mentally, but morally and physically. They are taught that without a perfectly healthy body, they cannot develop a well-balanced mind to control our nation.

Herein lies the power of the temperance reform; and the hold it has on the minds of the people is seen by the thousands of children pledged neither to touch, taste, nor handle any stimulant.

The very best feature of all this training, is the great number of men and women who have adopted the same principles for the sake of their example to the boys.

How many men do we know who can take a glass of wine without ever creating an appetite, yet refrain in obedience to the Divine example,—“If meat make my brother to offend, I will eat no meat.” While girls are pledged along with boys, this is not the training specially needed to give *them* healthy bodies. They really are with them more for the influence above quoted, for, on the whole, girls do not meet with the same temptation to drink that boys do.

The great neglect to which girls are subject, is their manner of dress. Just look into the homes, especially those of cities, and what a large proportion have delicate mothers!

How frequent is the case that, when a boy and girl are in their teens, the time when they both need a mother's counsel and companionship, she, through ill-health, is unable to give either!

We inquire into the cause, and the majority of physicians tell us that the most prolific source of disease among women is the long-continued use of corsets. The majority of girls on reaching the age of womanhood, the time when they should have the most vigor, are “miserable” and “run down.” Some physicians give instances in which they refuse to treat the patient, because she will not lay it aside, her reason being, “Mother lets me wear it; she says it won't hurt me.”

One says, “Some physicians, and good ones, too, do not oppose it.”

True, but we know many good doctors who use a great deal of wine as a tonic; but they will not, when they turn their attention more to its abuse.

Another says, “That cannot be a cause of ill-health, for very few girls wear them.”

Now, a very few of your acquaintances may not, but a glance over a school-room, or any large assembly of girls, as well as the numerous corset factories, with all their employés kept busy, does not verify your statement.

The girl of fourteen puts on a corset, and what knowledge need you more than common sense, to tell you that her chest and abdominal muscles cannot grow properly under a bandage stiff and solid with whalebone and double steel. If you

want to know how comfortable they feel, try it on a boy. As to her wearing it "loosely," she thinks if she can put her hand under it, it is loose, when the poor child does not know how much space is required to allow the lungs to expand. Every intelligent person understands perfectly the physiological reasons for discouraging this practice, but how strange they so little heed them! It reminds us of a remark made by a professor of physiology, one noted for his scholarship and good judgment:—

"Well!" (with a sigh) "the ladies dress themselves up in stiff corsets, and silks, and walk out these July afternoons making calls—it would kill a man."

A mother says, "When I took off my corset my health was worse, so I had to put it on." But she does not think to say that when without a corset a load of heavy skirts hung from her hips, which, had they been properly suspended from her shoulders, would have been more comfortable than the corset. Then, the mother in her girlhood did not spend from five to seven years in school; she had more physical exercise to counteract the evil effects of the corset.

Another says: "I never wore one until quite old, and the doctor prescribed it for me."

Now, why not be consistent? You never touched wine; but at the decline of life, you lost health, and the doctor prescribed it as a tonic. But knowing the danger such an example might be to the young, especially the boys, you said: "If I cannot live without stimulants, let me die;" and you found a better remedy and recovered.

A young lady says: "I am perfectly healthy, and wear my corset loose, so it cannot hurt me."

Now, this young lady is more than likely a teacher, or one whose good sense has influence with those younger, and they may not inherit as strong a back as she, nor are they old enough to judge of the proper looseness. They excuse themselves with, "Miss So and So does it; hence it cannot be wrong for me."

Why cannot the text: "If meat make my brother to offend, etc.," be used to help the girls as well as the boys?

One says: "Why make such a fuss about corsets? You can say the same of any other article of dress." But there is the mistake; there is no other garment so injurious to the body. If our boys are trained to the highest standard of physi-

cal and mental vigor, the next generation will be weak and nervous, unless our girls are allowed to grow as strong as the Maker intended them. The blame falls not alone upon mothers, but upon every woman who has the care of girls.

A young lady expressed to her father her great desire to work for women. He referred to the two corset factories in the town, saying: "You have a wide and useful field before you if you stop the demand."

We do not blame the girls for wanting to look well; that is the right and duty of every woman. But have they ever noticed, that when critics praise a woman for beauty of form, it is the form of the woman who has never worn a corset? it is she who lets nature form the straight shoulders, full chest, and symmetrical waist.—*The Signal*.

POPULAR SCIENCE.

SCIENTIFIC SUICIDES.

EVER since Sir John Franklin's fatal attempt to discover the North Pole, death by freezing has been a mania with a certain class of people. Every few years an epidemic of this form of mania breaks out, and two or three expeditions are fitted out for the purpose of transporting the anxious victims to the proper locality for their desired tragic end. When the frozen corpses are found by some venturesome whaler, or an expedition sent out for the purpose of bringing home the bodies for burial, the newspapers are rife with detailed accounts of the heroic manner in which the victims met their expected fate, and the intensity of the mania is increased.

Last year a project of this sort known as the Leigh Smith Arctic Expedition left England. Within two months the vessel was crushed in the ice, and the crew were offered a favorable opportunity for following the many illustrious examples afforded by the experience of the past twenty years; but we learn from recent reports that they failed to embrace the golden moment and were obliged to undergo the shame and mortification of being picked up and returned to their friends in good health and probably none the wiser for their foolhardy exploit.

Seriously, we wish, as one member of the general public, to know what is to be

gained by these repeated expeditions to a region which was long ago shown to be permanently buried under ice and snow, and as barren in scientific interest as in vegetation. The pretext of an attempt to discover "a North-west Passage" is no longer available, since it has been clearly shown that such a passage, if discovered, would be useless for commercial purposes on account of the great perils attending navigation through it, and the short period of the year during which it could at most be made available. Is it not about time that this form of suicide received the attention of our civil authorities? We would recommend that hereafter as soon as a man proposes a new expedition to the North Pole, he be at once put under surveillance, and if he does not speedily recover his sense under proper mental and moral regimen, that he be promptly confined in a lunatic asylum before he has an opportunity to infect others with the contagium of his malady.

Joseph's Pharaoh Discovered.—A learned gentleman recently read before the Society of Biblical Archeology a paper in which he endeavored to prove that the Pharaoh under whom Joseph ruled during the seven years' famine, was identical with the one known to modern Egyptologists as Amenhotep IV., who is chiefly famous as a disk-worshipping zealot who ruled at the close of the eighteenth dynasty. The gentleman showed a cast of the head of this interesting personage, which he had obtained from a tomb discovered by himself at Thebes.

Train Telegraphy.—An army officer has recently invented a device by means of which it is possible to communicate by telegraph with a train in rapid motion. The apparatus is thus described by an Atlanta paper:—

"A line of telegraph wire, broken at suitable intervals, is laid within or beside the railway track, and the disconnected ends of the wire are connected with key blocks placed upon the cross ties, thus forming a continuous telegraph line or circuit over the entire length of the track operated upon. The key blocks have exposed upon their surface two metallic rollers which form part of the circuit, but which by depression disconnect and break the circuit. In other words, while the rollers of the key blocks are in their nomi-

nal position, there is a complete circuit over the whole line; but if any one of them be depressed, the circuit at that point is broken. The second part of the device consists of an electric key-board or shoe suspended beneath a car at such height that as the car passes over the track it will rest upon and depress the rollers of the key blocks. This shoe also has upon it metal strips of such length that as the car moves along they shall at all times touch upon the rollers of one or the other of the blocks, and is also connected by wires with a telegraph instrument in the cars.

A Tree Cemetery.—The following is an account of the recent discovery of a Cemetery in the heart of an ancient tree in New Zealand, a country which affords so many curiosities that it has come to be considered quite unlike any other portion of the globe:—

"The recent fall of an enormous puketea tree near Opotiki, New Zealand, disclosed the fact that the hollow interior from the roots to the first fork, about forty-five feet from the ground, had been filled with human bodies. A confused heap of skeletons burst out of the butt of the tree when it fell. A local paper says: 'A more extraordinary sight than this monarch of the forest lying prone and discharging a perfect hecatomb of human skeletons can scarcely be conceived. Some are nearly perfect, while others are mixed up in a chaotic mass of heads, hands, feet, and arms, indiscriminately. All the Maoris here seem to have been quite unaware of this natural charnel house, and declare that it must have happened long before their or their fathers' time. Indeed, the appearance of the tree fully justified the supposition that it must have been some hundreds of years since this novel family vault was filled with its ghastly occupants.'"

—The interesting observation has been made that there is a very great scarcity of the remains of modern animals in the Arctic regions. It is said to be much easier to find the bones of species which became extinct hundreds of years ago than to find those of species which abound in that region at the present time. What becomes of the carcasses of the seal, bear, and other animals of that country is as yet a mystery.

GOOD HEALTH.

BATTLE CREEK, MICH., OCTOBER, 1882.

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

TERMS, \$1.00 A YEAR.

TEA BIBBERS.

A CORRESPONDENT of one of our contemporaries writes that one of his neighbors daily drinks "four cups of tea at breakfast, four at dinner, and four or five at supper." He raises the question whether his neighbor is not as bad a man from the standpoint of temperance as himself, who uses tobacco. The question is certainly a pertinent one, and there can be no question but that the use of tea in the quantities described is quite as bad as the use of tobacco in the quantities in which it is usually taken. It does not seem to be generally understood that tea and coffee are poisons; but the experiments of a large number of scientists show most conclusively that they both contain a substance known as caffeine or theine which is capable of producing death in lower animals and human beings. One observer found that one-seventh of a grain killed a frog in a very short time. Five grains killed a good sized cat and also a rabbit. Death occurs in lower animals in a manner almost the same as that in which death occurs in poisoning from strychnia. Strong convulsions are produced with the arrest of respiration, and in a short time the heart ceases to beat. Tea contains about three per cent of theine, or more than thirteen grains to the ounce. Every pound of tea contains enough of this poison to kill fifteen hundred frogs or more than forty cats. One case is on record in which a fine horse belonging to an English army officer was killed by eating accidentally a small quantity of tea. The largest dose of theine which is recorded as being taken by a human being, is twelve

grains, which produced very dangerous symptoms, and with the addition of a few grains more would undoubtedly have proved fatal. Yet it is well known that the use of half an ounce of tea containing six and one-half grains of the poison is often used in making a strong cup of tea. Thirteen cups of strong tea would contain a little more than eighty-four grains of the poison theine, or an amount sufficient, in all probability, to kill three or four men.

If tea contains such a poison, why does it not produce fatal results more frequently than it does, may be inquired. We answer, simply because a tolerance for the drug is established by use, just as in the case of tobacco. One-tenth of a grain of nicotine will kill a frog, and so small a dose as one-sixteenth of a grain has produced dangerous symptoms in a man; it has also been shown that the smoke from a half ounce of tobacco contains sufficient nicotine to produce death, yet sudden death from tobacco-smoking is not a very common result of the almost universal use of this poisonous drug. The wakefulness and increased mental activity which many persons experience from the use of tea, are evidences of its poisonous character. The same thing is observed in cats and other lower animals when tea is administered to them in a little less than the fatal dose, or when a fatal dose has been given, and before the fatal effects make their appearance. The poor creatures manifest sometimes the wildest excitement.

These facts ought to be more widely known than they are, and it duly appre-

ciated must have some influence in lessening the use of a beverage which under the guise of "the cup that cheers and not inebriates" has captivated almost the entire English speaking world.

TUBERCULAR CONSUMPTION A GERM DISEASE.

THE experiments of Prof. Koch and other scientists have finally demonstrated beyond reasonable doubt that the immediate cause of consumption is a disease germ similar to that which causes others of the maladies styled germ diseases. This discovery is one of immense importance, not only on account of the bearing which it has on the probable origin of other diseases which have not yet been so thoroughly studied as has tuberculosis, but because of the important relation which the discovery has to the hygienic management of the disease. The following remarks on the subject we quote from the *Chicago Medical Review* :—

"One of the most interesting observations and at the same time most practical results of Dr. Koch's experiments, thus far, is the development of spontaneous tuberculosis in healthy animals by association with those suffering from the disease by inoculation. Among hundreds of guinea-pigs recently purchased and killed, in other investigations, not a single one was found to be affected with tuberculosis. Spontaneous tuberculosis was manifested in this class of healthy animals, in isolated cases, and never before three or four weeks association with those animals which had been inoculated with the disease. In the cases of spontaneous tuberculosis the bronchial glands were found invariably very much swollen and broken down, and generally large caseous deposits in the lungs, broken down in the center, so that cavities had been formed, as in the human subject.

"The evident commencement of the process in the respiratory organs leaves no room to doubt that spontaneous tuberculosis in the animals was caused by the inhalation of the infectious germs. The

disease caused by inoculation progressed in an entirely different manner. The animals were inoculated on the belly, and upon post mortem examination the spleen and liver were more severely affected than the lungs, while in spontaneous cases the disease progressed much less rapidly, and the development of tubercles in the abdominal cavity was rare.

"In the examination of the sputa of phthisical patients, Koch has found the tubercular bacilli in abundance, and has successfully inoculated animals with the dried sputum after it was eight weeks old. Age and desiccation does not, then, destroy the virulence of the germ, and as the great majority of all cases of tuberculosis begin in the respiratory tract, it is, therefore, very probable that the bacilli are inhaled clinging to particles of dust, and that the sputum of tuberculous individuals, drying upon clothing or the ground, and entering the lungs as dust, is capable of causing the disease. While these experiments do not, as yet, present indications for treatment, they do, at least, point out hygienic rules which ought not to be ignored."

FASTING FOR RHEUMATISM.

PROF. WOOD, of the medical department of a medical college in Montreal, Ca., reports forty cases of acute rheumatism cured by abstinence from food. We have observed in the treatment of a large number of cases of this disease that there is always more or less disturbance of the digestive organs, and have had the best success in the treatment of the disease when we have given special attention to the digestive organs as an important factor in the disease. Many cases of chronic rheumatism we have found to be wholly dependent upon disorders of digestion, and we have been able to trace a large number of cases of this disease to indigestion as a predisposing cause. We have also found that a very abstemious diet is of paramount importance in the management of a case of acute articular rheumatism. Often we have known a serious

relapse to occur as the result of taking a full meal. In view of these facts, we are inclined to believe that Dr. Wood has introduced an important means of treatment to the profession. We cannot give him full credit as an originator of this method, however, as Dr. Shew and others advocated the starvation cure as a means of treatment in this malady almost a half century ago.

THE MEDICAL EDUCATION OF THE PEOPLE NECESSARY.

For some years back there has been much discussion among physicians respecting the propriety of encouraging the education of the common people in medical subjects. Among a certain class of the profession there has been great opposition to the popularization of medical subjects, it being claimed that more harm than good would be done by so doing, since unqualified persons would thereby be led to undertake the management of cases which required the educated judgment and skill which are possessed alone by the physician who has had a long course of training in the schools and an extensive experience at the bedside. We have long believed that this objection was based on a partial or prejudiced view of the subject, and that a consideration of its various bearings from a more liberal standpoint would lead candid thinkers to a different conclusion. It would not be urged that because every one cannot become proficient in all the abstractions of modern theology, the masses should be kept in utter ignorance of religious theories, notwithstanding the possibility that such knowledge might be used in an unwise manner under some circumstances. Every man who desires to do so has as good a right to learn all he is capable of comprehending of the science of medicine, as well as of the science of mathematics, astronomy, law, or any other department of human knowledge.

We are glad to be able to quote the following very sensible remarks on this subject from a paper read before the Mich-

igan State Medical Society, by Thomas N. Reynolds, M. D., of Detroit, Mich., Professor of Materia Medica and Therapeutics and of clinical Medicine in Detroit Medical College, and visiting physician to St. Mary's Hospital:—

In view of the fact that there is still in the world the most extraordinary misconception with regard to the true functions of medicines and medical men, it may not seem wholly unfit that we should somewhat briefly advert to it here.

As it existed among the people in earlier times, it amuses us now perhaps more than it surprises us; and when we recognize it still here and there among those in lowly favored circumstances of life, it usually makes little or no impression upon us; but when we so often see it among the refined and cultured of our time, we are sometimes led to inquire why it is. But this misconception is not confined entirely to the laity or to the crude charlatan, but more or less pervades the educated and legitimate medical fraternity itself; and it is no uncommon thing to see among the younger members of our profession men confidently attributing to medicines particular cures that they never produced. And even the older practitioners, with quite an abiding faith, sometimes prescribe remedies that serve little more than to mutually satisfy the mind of the patient and the doctor that the necessary and essential thing has been done in the premises.

This undue credit to the effect of the drugs prescribed, when it occurs among medical men, probably arises mostly from the habit and routine of always prescribing in certain approved manners in certain kinds of cases; and when improvement takes place, forgetting to allow sufficiently for the healing power of time and nature herself.

As it occurs in the masses of the laity, however, when they throw themselves unreservedly upon the mercies of some of the many artful impostors of the day, or almost regardless of the man, cling to some of the schools of medicine or forms of treatment with an ardor that often

amounts to fanaticism, it seems to arise from the fact that there is still in man an inherent tendency to rely alone on some mysterious or supernatural intervention in behalf of his physical as well as his spiritual welfare. Men in a great measure seem not ready to act upon the idea that while there may occur at times special and supernatural intervention in behalf of our spiritual welfare, it is nevertheless probable that the greatest amount of mental enjoyment is only obtained by the greatest amount of willing obedience to those social and moral laws of life which produce it. So with regard to our physical being, men largely rely upon medical aid and supernatural protection, and neglect to observe and conform to those natural laws which regulate and govern the functions of our organism in health and disease.

With medical men the hope to at last hit upon the lucky remedy or successful plan has in all ages led to the adoption, at times, of many absurd modes of treatment that have been discarded, after more careful observation and riper experience—sometimes to excessive dosing and too heroic treatment; and sometimes to the other extreme, as in high dilutions once generally indorsed and still sometimes used by some of those who pursue what is called the homeopathic plan.

When, then, there are in the minds of those who devote themselves specially to the science and practice of medicine so many absurd notions with regard to it, and so much faith in much of it that is not warranted in fact, it is not a wonder that the masses, and even the educated portions of the laity, should treat us now and then, as they do, to such sublime exhibitions of their faith in some particular drug, plan of treatment, or school of medicine, while they evince often only very little knowledge or concern as to the proficiency or character of the man himself prescribing it.

As nothing but hard-learned experience and frequently disappointed hopes in his scientific prescriptions will ever thoroughly convince the young practitioner

of their frequent inutility, so nothing but the proper kind of education on these matters will ever convince the people of their frequent too great confidence in the efficacy of drugs alone.

To this end, the study of anatomy, physiology, hygiene, and particularly the laws of life, with the influence thereon of habits, conditions, and surroundings, should enter largely into, and be assiduously carried all the way through the education of the young, even if it be to the exclusion of almost no matter what other branch besides. And if the use of drugs be referred to at all in their education, it should be with an especial care that they be taught the facts as they are,—that the essential and useful drugs are really few and their administration rarely necessary; that in the aggregate in the world it is probable enough that more harm is being yearly done by their indiscriminate and unskilled use than there is good by their timely and judicious employment.

Physicians can do much more than is usually done in this direction by their individual influence in practice. Each physician should constantly endeavor to establish in the minds of his patrons the fact that they should seek intelligent opinions and skilled advice more than prescriptions. And even at an occasional risk of losing patronage, when medicine is not required at all, he should dare to say so, and give the right advice instead. Doctors should be educators more than physic-mongers. Whatever time the occasion demands should be taken to fully explain the trouble for which persons present themselves, and the best regulation of living to be adopted under the circumstances; and for this opinion and advice alone, when kindly given, they should and generally will expect to pay.

Physicians should endeavor at all times to divest their practice of every appearance of mystery; and in this connection they should certainly abolish the common practice of retiring from the family and holding private conversation after having seen a patient in consultation. They should rather insist on some members of

the family or persons most concerned being present when conversation may not advantageously be had with the patient; otherwise such mysterious movements and awe-inspiring manners tend not at all to enlighten, but very much to becloud the minds of many people, and leave them a ready prey to the quack, who can as well, and always does with effect, imitate those and all kindred mysterious ceremonies.

Physicians can with the utmost politeness to each other and the very kindest consideration for the opinions of each, discuss conditions and agree on treatment in the presence of some of those concerned; and it is the people's right to see and know exactly what their physician thinks and does in their case, either alone or in consultation.

If imposition and quackery are ever removed or lessened at all, it will be in exact proportion to the amount of correct information and thorough enlightenment the people may obtain on this entire subject, for it can never avail very much that a few educated and honorable practitioners labor to bring the comparative few whom they reach, up to a reasonable and correct estimation of the practice of medicine, while the masses remain unable to discriminate between the imaginary and what is real in it, or between the artful and unscrupulous pretender and the genuine medical man. As long as there is a general and popular demand for the different forms of quackery, there will always be found an ample supply; and legislation, though necessary and good as far as it goes, can never entirely prevent it. The early and continued education of each individual on the subject is the only successful remedy.

And since none can see and feel as well as physicians the need of the people with regard to it, it becomes us and would seem our direct and humane duty to interfere, and move to the extent of our opportunity in establishing if possible somewhat of a medical education in all the common schools throughout the country. This is perfectly practicable, and probably would be nowhere unfavorably received.

Let the people become properly and generally enlightened on the medical subject, and we will not see them cajoled and carried away with extravagant advertisements and pretentious modes of cure, nor even hear them ask much more concerning a physician: "Is he a homeopath or an allopath?" but only hear them inquire of him, as they should of one assuming that capacity: "Is he an educated, trained, ingenious, industrious, and in every way competent and upright medical man?"

CAPNIZOMANIA.

AN uncontrollable propensity to steal is known as kleptomania. A similar propensity for the use of liquor is termed dipsomania; so an uncontrollable disposition to smoke the pipe may be termed capnizomania. There are a few kleptomaniacs, a good many dipsomaniacs, and a still larger number of capnizomaniacs. It is not surprising that thousands of persons who are addicted to self-indulgence as a matter of habit should acquire a taste for liquor by the use at first of light alcoholic drinks, such as wine or small beer or cider; but it is a marvel that any human being should ever become so perverted in his instincts as to acquire a mania for such a sickening and nauseating drug as tobacco. We have, however, met hundreds of persons who were as completely enslaved by tobacco as ever any human being was by the use of alcohol or opium. Thousands of those who become addicted to the use of this drug never abandon it, even after they become thoroughly convinced of its harmful character. Parents will do well to see that their children do not contract this dangerous form of insanity. We say dangerous insanity, for we are thoroughly convinced that there is no form of insanity from which the world is suffering so much at the present day as the pipe-mania.

—The long list of tobacco suicides is almost daily augmented by one or more additions. The latest reported is that of a

young man in Brooklyn, N. Y., who perished from cigarette smoking. He had been taken very ill in consequence of his indulgence in the poisonous weed, but was in a fair way to recover when he got hold of a cigarette and smoked it, with the result of bringing on a fatal relapse.

Milk Adulteration in Paris.—Adulteration seems to be a world-wide crime, and recently has been carried on in milk very extensively and successfully in Paris. The following is an account of the plan adopted by the police authorities of that city for the purpose of discovering the perpetrators of the fraud:—

“Paris authorities for some time suspected that the milk of that metropolis was watered. Then they decided to stop it, but first to assure themselves that it was watered. The milk cans are all unloaded in a large warehouse at the side of the Batignolles Station, and twenty-five policemen were posted outside, loop-holes having been made in the wall to enable them to watch the movements of the milkmen. Just when they had brought in the water, and were beginning to make their customary mixture, the police rushed in and caught them. They were at first inclined to resist, but the presence of the commissary with his tricolor scarf seems to have overawed them, and they allowed him to make a very important capture. They were also found to have a large quantity of bi-carbonate of lime, together with a contrivance for removing the sealed covers which some of the milk cans have, and for putting them on again after the contents have been adulterated.”

Healthy Teeth in Siberia.—A newspaper correspondent who accompanied the exhibition in search of the lost crew of the Jeanette, remarked the wonderful beauty and perfection of the teeth of the natives of Siberia. He reports having seen old men of seventy with their teeth as pearly white, polished and even as those of young persons. The extraordinary health of the teeth of these people is attributed by their

native physicians to the habit of cleansing the teeth after every meal, which is universal with them. After every meal, the native Siberian cleanses his teeth from every vestige of food by chewing for a short time a small bit of a resinous substance produced by the fir tree. It is also remarked that sugar is not used in this country, to which fact the peculiar healthfulness of the teeth is also in part attributed.

Cure for the Tobacco Appetite.—The *New York Witness* recently published the following cure for the appetite for tobacco:—

“On first rising in the morning rinse the mouth with cold water, and after each meal, and during the day as often as the hankering for tobacco returns, retaining the water in the mouth as long as convenient. In a short time the desire for tobacco will be entirely removed.”

Cold water is the best of all substitutes for tobacco as well as whisky; but we suspect that in order to make it effective it is necessary that it should hold in solution a large amount of will and resolution.

Tin in Canned Fruits.—It has generally been supposed that fruit put up in tin cans might be relied upon as perfectly wholesome, provided that the tin were not contaminated with lead. It appears, however, that from recent investigations made by Dr. G. H. Palmer, Ph. C., of Bellefontaine, O., and published in a recent number of the *Physician and Surgeon*, that tin is by no means free from danger, even when pure, as the acids of the fruit act upon tin as well as lead and other metals, although less rapidly, so that fruit which has been put up for a long time is pretty sure to be contaminated with tin to a greater or less extent. Tin is not so poisonous a metal as lead, but is nevertheless capable of producing serious disease when introduced into the system in any considerable quantity. From this it appears that fruits canned in tin should be regarded with suspicion and that fruit that has been long canned should never be used at all.

As yet, no easy test for tin in canned fruits has been devised, so that we are unable to give our readers any better means for avoiding danger from this source than to discard altogether the use of fruits canned in tin.

A Test for Drains.—In England and Scotland it is customary to test drains by forcing into the sewer a quantity of smoke. If there is any defect in any of the connections or in the traps, the smoke will soon be seen issuing from the defective places. This is a very simple and efficient means of determining the extent and location of defects in a sewerage or drainage system, and ought to be introduced into general use in this country.

A New Test for Mineral Acids in Vinegar.—An Italian journal suggests the employment of an aniline dye known as Hoffman's purple as a test for mineral acids in vinegar. The test is very simple in its application. Make a very dilute solution of the purple, and then add the acid vinegar to be tested. The test is a very delicate one, the purple color being changed to an ultramarine blue, even when the solution contains so small a proportion as one-tenth per cent of the coloring matter. This test is recommended for both sulphuric and muriatic acid, and if reliable, is a very convenient means of detecting this form of adulteration.

Tobacco and the Heart Muscle.—The scientific evidence against the use of tobacco is becoming constantly accumulated and we trust the time will soon come when the tobacco user will be so frightened at the formidable array of facts, that he will abandon the poisonous weed and assign it to its proper place as a vermin-killer. The following is the testimony of a distinguished physician, Dr. Deschamps, given in an article in an English magazine:—

“Degeneration of the cardiac muscle is often caused by tobacco. So long as the rest of his organism remains in good working order, the smoker only experiences in-

termittent palpitation, and the grave injury done the heart remains unperceived until some trifling cause brings into relief the irremediable disorders produced by the prolonged use of tobacco.”

A Common Source of Skin Diseases.—All persons are not aware of the fact that a very common and sometimes a very obstinate form of skin disease known as favus is frequently contracted from mice and other small animals. The disease seems to be particularly at home with mice, who communicate it to the cats that make a meal of them, and these, in turn, communicate it to children, who are much more subject to the disease than adults.

Use of “Tobacco among other Nations.”—A scientific monthly in an interesting article on the use of tobacco, has the following respecting the consumption of the weed by various nations:—

“The greatest smokers in the world are the Germans, who usually prefer the cigar, although the pipe and cigarette are not far behind in popularity. Smoking there is confined to the men, although the fair sex rarely object to smoke; hence it is not customary to ask their permission before lighting a cigar. On express trains one compartment is usually reserved for “non-smokers,” and marked accordingly, smoking being permitted everywhere else. Professor Hinds says, that during a six months' residence at Berlin he met with but one German who did not smoke. But the German never chews; he is too decent for that. In England and France the cigar is a necessary accomplishment, and snuff still holds its sway. Russia follows close behind, and the cigarette is quite popular among the ladies there. In the East all smoke without regard to sex or age, and in Burmah it is said that the children smoke in the mother's arms. In our own country, smoking and chewing are mostly confined to the stronger sex, although our good old grandmothers enjoyed the pipe as well as their husbands. The cigarette is now growing in favor

with the ladies, but at present it rests under the ban of being considered *fast*. The use of snuff is rapidly dying out, except at the South, where "dipping" is much practiced by the women, especially those of African descent. Chewing is a common habit among soldiers, sailors, printers, and others whose occupation interferes with handling a pipe, or where sparks might do injury."

Potato Poisoning.—Everybody ought to be made acquainted with the fact that there is danger in the potato as well as in many other kinds of vegetables when unripe or when advancing toward decay. When the potato is not fully ripe, its skin contains a considerable quantity of a dangerous poison known as solanine. The same is true when the potato has become old and begun to sprout. Such potatoes are wholly unfit for food, and are absolutely dangerous.

For the Sick Room.

THIS department will be devoted to the consideration of topics of special interest to invalids and those who have the care of the sick. We shall endeavor to make it in an eminent degree practical, and think it will prove to be a valuable addition to the journal. Questions of general interest coming under the head of the subjects to which this department is devoted will be answered as heretofore in the "Talks with Correspondents."

Sick-room Precautions.—In cases of illness from typhoid fever, diphtheria, and many other febrile diseases, as well as from small-pox and other diseases well known to be dangerously contagious, the rights of the well as well as the needs of the sick should be kept in mind and regarded. It is heroic for a person to face death in caring for a fellow-being, but it is neither heroic nor sensible for a person who is obliged to incur the risk of taking a dangerous disease in caring for another, to increase the hazard more than is necessary, or to neglect to take such precautions as may be taken for self-protection as well as for the protection of others from the ravages of the malady. The idea that many people hold, that certain aromatic substances, such as assafetida and other

odoriferous herbs, possess the power to neutralize the virus of disease and thus prevent contagion, is a grave fallacy. The only effective means are common sense hygienic measures, such as thorough ventilation of the sick-room at all hours of the day and night, perfect cleanliness in relation to everything pertaining to the sick-room, and especially proper care of the discharges of the patient, which are in many cases the most efficient means of communicating the disease. The discharges from both bladder and bowels should be promptly and thoroughly destroyed by the use of disinfectants. The night-vessel should constantly contain a solution of copperas, or a strong solution of chloride of zinc or permanganate of potash. This will secure disinfection of the discharges as soon as passed. Immediately after it has been used, the vessel should be removed from the room, and its contents buried in the earth, at a safe distance from any well or cistern. The discharges of a patient suffering from any contagious or communicable disease, should not be placed in a common privy or water-closet. A neglect to observe this precaution has often resulted in the wide dissemination of infectious maladies.

A Seasonable Hint.—As winter approaches, the nights become longer and cooler and the mornings chilly, making necessary the putting on of warmer clothing, at least during some portions of the day. The habit many people have of waiting till a certain day of the month or the year before putting on warm flannel underclothing, is in the highest degree absurd and unphilosophical. At this season of the year flannel underclothing should be worn by old and young, and both sexes. The frequent changes in temperature, and chilly mornings and evenings, render this precaution necessary to avoid the dangers to health incident to this season of the year. Those who will adopt this suggestion will find themselves less liable to contract a cold to stick by them during the whole

winter and perhaps even longer. We have met many cases in which a failure to clothe the body sufficiently at this time of the year had been the occasion of a cold which resulted in fatal pulmonary disease. If necessary, the flannel clothing can be removed during the middle portion of the day and put on again at night. A little time spent in changing garments will be more than saved in the avoidance of sickness.

Suggestions to Nurses.—The following directions for self-care for the benefit of those who are obliged to overtax themselves while nursing the sick at the same time that they are obliged, in many instances, to expose themselves to the morbid influence of the disease from which the patient is suffering, will be considered opportune by those for whose benefit they are offered :—

“To those who are called upon to nurse the sick through a long and severe illness, it is of the utmost importance, not only to themselves but to their patient, that their own health should be preserved and their own strength maintained not only throughout the critical stage, but during the period of convalescence, oftentimes so tediously prolonged. To all such we submit the following simple precautions to aid them in preserving their own health while nursing the sick :—

“If the malady of the patient be such as to cause any marked odor of the breath or noticeable exhalations from the skin, take care always to sit on that side of the bed or sick person which is opposite to or away from the direction which the effluvia takes toward the windows or draught of a fire-place. Sit so that their breath, etc., is carried away from you. Do not sit too close to them, or take their breath if you can avoid it.

“To keep one’s own strength in a case of prolonged care, and particularly if obliged to sit up all night for many nights in succession, great benefit will be derived from taking a warm bath early in the morning, and putting on fresh under-

garments every second morning; or, if the disease be particularly infectious in its nature, it is best to change the under-clothing every morning. It will be found that the warm bath, followed by brisk rubbing of the whole body with a course Turkish towel or flesh brush, will refresh the wearied body almost as much as sleep.”

Feeding through the Bowels.—In certain cases of disease, it is sometimes necessary to maintain the patient by the introduction of food through the bowels,—a process known as rectal alimentation. Experiments have shown that food thus introduced is by an anti-peristaltic movement carried up to the upper part of the alimentary canal, and there digested. Life has been sustained in this way for months at a time. We have frequently sustained patients thus for weeks at a time. The following is a useful preparation for use in this manner :—

Pancreas and Meat Solution:—Take fresh beef pancreas, carefully remove all fat, cut two ounces, about two heaping tablespoonfuls, into very small pieces. Take finely scraped or ground beef, also free from fat and sinew, double the quantity of pancreas. Mix with two-thirds of a teacupful of warm—not hot—water. Stir until well broken up. Inject into the rectum through a large tube. About half should be injected at once, and the injection should be made slowly, so as to prevent its discharge before absorption has taken place. If necessary, a napkin should be held against the anus until the disposition to move ceases.

LITERARY NOTICES.

THE *North American Review* for October opens with an article on “The Coming Revolution in England,” by H. M. Hyndman, the English radical leader, giving an instructive account of the agitation now going on among the English working class for a reconstruction of the whole politico-social fabric of that country. O. B. Frothingham writes of “The Objectionable in Literature,” and endeavors to point out the distinction between literature which is *per se*

corrupting, and that which is simply coarse. Dr. Henry Schliemann tells the interesting story of one year's "Discoveries at Troy." Senator John I. Mitchell, of Pennsylvania, treats of the rise and progress of the rule of "Political Bosses." Prof. George L. Vose, of the Massachusetts Institute of Technology, contributes an article of exceptional value on "Safety in Railway Travel;" and Prof. Charles S. Sargent, of the Harvard College Arboretum, contributes an instructive essay on "The Protection of Forests."

We have just received a copy of the summer number of the *London Graphic*, which, like all other of its special season numbers, is beautifully illustrated in colors, many of the illustrations being excellent representations of some of the best masterpieces of European art. In a recent number of this journal, over 160 tons of paper were consumed, and as the illustrations are all printed in many colors, each sheet having to go through the press separately for each color, the total number of impressions for that issue were more than 15,000,000. Published at 190 Strand, London.

CITY AND COUNTRY.—We are in receipt of the September issue of this interesting journal, and find it as usual full of interest and variety. The illustrations are fine, and the different departments filled with matter both pleasing and instructive. Subscription price, 50 cents per annum. Published at Columbus, Ohio.

The October number of the "*Popular Science Monthly*" is one of great excellence. While all its articles deserve to be well spoken of, several of them are unusually fitted to attract attention; among these are "Massage: its Mode of Application and Effects," by Douglas Graham, M. D.; Matthew Arnold's Lecture on "Literature and Science;" "Mozley on Evolution," by Herbert Spencer; and the "Annual Address," of Prof. G. J. Brush, retiring President of the American Association for Science.

Published by D. Appleton & Co., New York, 1, 3, 5 Bond St. Subscription price, \$5.00 per year.

"**THE VOICE,**" edited by Edgar S. Werner, Albany, N. Y., is an international review of the speaking and singing voice, with special attention to oratory, the Del Sarte Philosophy, stuttering, stammering, singing, and visible speech. Its contributors include leading foreign and American specialists. Published monthly at \$1 a year; single copy, 10 cents.

THE SANITARIAN. New York: A. N. Bell, M. D.

As an exponent of the most advanced views in all the departments of sanitary science, this journal takes the lead of all others in this country. It is especially designed for the professional reader, to whom it is almost indispensable, yet its pages always contain much of value and

interest to the general public. The leading article in the August number which is before us, is "The Status of Education in the United States." The article on "Tree Preservation" is of especial interest to every one. A fine portrait of David Dudley Field, and a short sketch of his early years and work, are to be found in this number. Subscription price, \$3.00 per year.

THE LANSING REPUBLICAN. Lansing, Mich: W. S. George & Co.

This paper well deserves the reputation it has gained of being the neatest and most reliable newspaper in the State. It is issued in two forms, weekly and tri-weekly, and is strongly republican in its character. Its columns are filled with items of news given in such a clear, terse manner as to be of more than usual interest to the reading public.

THE TEACHER. Philadelphia: Eldredge & Bro.

Few journals published in the interests of education and the needs of educators are more worthy of patronage than *The Teacher*. Its appearance is very neat and pleasing, and its columns are filled with excellent hints to teachers and pupils.

THE THERAPEUTIC GAZETTE. Detroit: G. S. Davis, publisher.

This is an excellent journal, devoted to the interests of the medical profession. The September number presents a rich variety of instructive and interesting articles from the pen of able contributors.

THE BEE KEEPER'S MAGAZINE. New York: A. J. King & Co.

An ably conducted monthly, which is full of information on the subject of bee-keeping. All who are engaged in the business should have it, for it is always full of suggestive hints and information.

THE DIETETIC REFORMER. London: F. Pitman.

This interesting journal, now in its ninth volume, is an English magazine devoted to information on subjects relating to dietetic reform, setting forth the advantages of a vegetable diet, and especially presenting the moral aspects of the flesh-eating habit. We recommend it as a most excellent exponent of vegetarianism, and sincerely wish for it a large circulation.

THE MEDICAL BRIEF. St. Louis: J. J. Lawrence, M. D.

A copy of this medical periodical comes monthly to our table. It is full of short, interesting bits of medical information. The articles are never prosy, but always instructive. No article of over 500 words is allowed in its columns. It is certainly a model of its kind.

Publishers' Page.

☞ An unusually large number of surgical operations have been performed at the Sanitarium during the last month. Scarcely a day has passed without one or more important cases on hand, and one day the number reached seven cases in all.

☞ The Sanitarium is as full of patients and as prosperous as ever. The new magnificent Holtz machine for the administration of statical electricity is doing wonders for some patients, and there never was a time when patients as a whole were making better improvement than at present. The cold weather of the present season has been very favorable for invalids.

☞ Our medical students have taken their annual departure for their College studies again, to the great regret of both physicians and patients. All have been so courteous and helpful that they will be missed by all who have known them here; but we anticipate their return at no distant day with augmented stores of knowledge by which their usefulness will be increased. Miss Sanderson, with her friends, Miss Tolman and Miss Curtis, each of whom has been with us a part of the summer, returns to the State University. Mr. Smith and Mr. Mills-paugh have gone to Philadelphia, and Mr. Maxson anticipates going to Bellevue Hospital College, N. Y. City.

☞ Dr. Lamson, who has been spending a part of the summer with friends in Saratoga, N. Y., received a warm welcome from all the old patients on her return home a few days ago. Dr. L. is the pioneer of the institution, being the only person now connected with it who was here at its organization sixteen years ago. She was greatly in need of the respite from her taxing duties, and the vacation seems to have almost rejuvenated her.

☞ We are glad to see the prosperity which attends the work of the Vegetarian Society in England. This organization is doing a vast deal of good in that country and also in others to which its influence is extended through the medium of its monthly periodical, the "Dietetic Reformer." We should be pleased to see this excellent monthly have a wide circulation in this country, believing that its influence would be salutary on the moral as well as the physical health of the nation. Those who may wish to become subscribers to the journal may send their subscriptions to Eld. J. N. Loughborough, Ravenswood, Shirely Road, Southampton, Eng. The subscription price is seventy-five cents a year.

☞ There seems to be a lively waking up on the subject of reform at the Sanitarium just at present. At a recent meeting of the helpers, all committed themselves heartily in favor of the principles of health reform and willing to carry out the same in their lives, by a rising vote. By request we have begun a series of lectures on the subject of health reform for the special benefit of the helpers and those of the community who may wish to attend. The lectures are held in the evening and are illustrated by means of the magic lantern, charts, black-

board drawings, etc. The interest has been such that the new large Gymnasium, which has been temporarily seated for the purpose, is nearly full each evening.

☞ Peoria, the headquarters of the distilling interest for the world, is largely represented at the Sanitarium just at present. Notwithstanding the fact that this little city contains the largest distilleries in the world and converts more grain into alcohol than any other city on the globe, if we may judge from the character of the people who represent the city here, we must pronounce Peorians to be among the finest people we have ever met. It is possible that the presence in their midst of so great an evil has led to unusual efforts in an opposite direction. We are credibly informed that more interest is manifested in Mission Schools by the citizens of this little town than by those of any other town of its size in this country, and probably in the world.

☞ By a letter from Dr. Chase, in charge of the newly organized health institution at St. Helena, Cal., we learn that although recently opened, quite a number of patients and twice as many boarders are already enjoying the fine air and scenery of Napa Valley at this pleasant home for the sick, together with the excellent advantages for the recovery of health and the recruiting of wasted energies which are there offered.

☞ By request of the late publishers of "Science and Health," we have arranged to send GOOD HEALTH to those of their subscribers whose subscriptions have not yet expired, in place of the above-named journal, the publication of which has been suspended for want of support. We are sorry to see a worthy contemporary meet with so undeserved a fate, and trust that the publishers will not be discouraged by the failure of this venture, but will remember the old adage, "If at first you do n't succeed, try again."

☞ Owing to the hurry in which the last number was made ready for the press, several errors occurred, one of the most annoying of which was the omission to credit the *Popular Science Monthly* with the quotation made on page 260 in the article entitled, "The Physician of the Future." The Monthly is one of the most interesting and reliable popular journals published, and we are often glad to give our readers a taste of the good things which it serves up for its readers each month, but never intentionally omit to give due credit.

☞ We are pleased to hear of the prosperity of the new college at Healdsburg, Cal., under the principalship of our friend, Prof. Brownsberger. According to latest reports, the attendance is over seventy, which is very flattering for the second term, before the school is a year old.

☞ W. D. Condit & Co., who have in charge the sale of the Home Hand-Book of Domestic Hygiene and Rational Medicine, report a most gratifying degree of success. Although it is scarcely a month since this firm began business, they have already ordered several hundred copies. For persons who are competent to engage in the business, the sale of this work offers a fine opportunity to make a reasonable amount of money while doing much good.