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A HAUNTED HOUSE.

BY MRS. M. F. ARMSTRONG.

(*Concluded.*)

THE fact that I did not find in the cellar what I had thought might exist there, that is, the evidence of defective drainage, only strengthened my conviction as to the root of all the trouble, and I wasted no more time in looking about me.

On one side of the kitchen was a pump, which I found brought water from a well in the garden at some distance from the house, and it was to this well that my suspicions were now all directed. It was evident that from it the entire supply of drinking water had been obtained, and I only wanted a few more facts to change my suspicions into certainty.

It was now near noon, and I told Henry to go home to his dinner, and not to come back till after dark, when he was to bring the tools which I wanted and a couple of blankets for the night.

As for myself, I pumped diligently till the water ran fresh and clear from the well, and then pouring some of it into a bottle which I had brought with me, I went back to the hotel, where, with the aid of a little microscope which I always carried with me, I had no difficulty in detecting that the water was, in its present condition, so impure as to be actually a slow poison to any who might drink it. This fact being established, it only remained for me to prove that this impurity existed during the years when the various deaths had taken place. If I could do this, I felt that I was justified in putting Henry and his family into the house at once, provided I could ensure them a supply of pure water, which I thought could easily be done, and then the rest of my experiment would take care of itself. Now in order to prove that the water from this well had been just as impure ten or fifteen years before as it was at the time of my analysis, I had to discover the cause of this impurity, and it was just this of which I had from the beginning felt very sure. The whole village was built, as I have said, on a hill-side, and the haunted house stood just at the beginning of the rising ground. The well from which came all the water consumed by the occupants of the house had been dug at a good distance from all the outbuildings, etc., but quite near the fence which bounded the property on that side. On the other side of this fence stood a small house, the surroundings of which were not in very good order, and I had found from inquiry that its condition had been much the same for the previous twenty years. Now it struck me at first that the well, from its position almost at the bottom of the hill, might catch the drainage not only from the small house, but also from several other buildings which stood just above it. I thought that this could be easily demonstrated; but I also thought it quite possible that by a little digging I might find that there was even a more direct cause than this for the poisoned water of the well.

I wanted to do this digging at night, partly because I did not want to be watched, but mainly because I thought it would be a good test of Henry's courage. So when he arrived about nine o'clock, I told him what my analysis of the well water had told me, viz., that in its impurity was to be found full cause for the illness and death of any one who should drink of it for any length of time. I then carefully explained to him my idea as to the sources of the impurity, and his own common

sense assured him that I was probably right, so that when, between eleven and twelve o'clock, I shouldered a spade and started out of the back door to commence my digging, I was glad to find that I had in Henry as steady and clear-headed a companion as heart could desire.

We began our work at a little distance above the well; but an hour's digging showed me that we were in the wrong place, and in a low voice I told Henry to stop for a moment while I looked about me.

Our digging was no easy work, for the night was dark and hot, and the air so close and heavy as almost to make us feel that some ghostly presence was surrounding us, and forcing us in spite of ourselves to believe that we saw strange shapes, and heard unearthly sounds. The little town was fast asleep, not a whisper nor a foot-fall broke the stillness of the garden; it seemed that not even a leaf rustled, and I think it was something else than fatigue that made Henry's hand tremble as I took the lantern from him. I wanted to jump the fence and walk up for a short distance on the other side, but it was evident that Henry had no idea of being left alone in the darkness, and I can't say that I thought his nervousness at all unusual. However sure I might be of what was before us, I could hardly expect a man to whom the existence of this haunted house had for years been a familiar fact, to give up his belief all at once, and in truth I was not myself altogether free from excitement, though in my case the cause was very different. Henry feared a supernatural visitor; I felt, with every nerve in my body, that we were fighting death; and the closer we came to his hiding-place, the more determined I was that our night's work should end his reign.

So taking the lantern and telling Henry to follow me, I walked up along the line of the fence some thirty feet, and after a quick examination of the ground, said cheerfully to my half unwilling companion, "Come on, Henry; we'll make another attack here; it's too soon to give in, you know." In silence we cut away the sod and began our work again, and for another hour there were not many words spoken between us. My arms ached with fatigue, and I began to think that we were again on the wrong scent, when all at once I turned up a spadeful of earth which settled the whole matter in a twinkling. By the light of the lantern I could see what my nose had already informed me of, that we had come upon the drainage from a cesspool, and ten minutes more of vigorous digging showed us that this cesspool, which had evidently been for years left to take care of itself, leaked directly into the spring which formed the main supply of the well. We had our ghost now at close quarters, and no white-robed skeleton could be half so terrible to a reasonable man, as was this silent, stealthy, merciless demon of dirt, who, unseen and unsuspected, had for so long been doing his awful, irreparable work. I had no need to say much to Henry, he had seen and smelled for himself; and we walked quietly, almost solemnly, back to the house, from which we believed our night's work had lifted the curse that for years had hung over it. We did not sleep, for dawn was close at hand; and when half an hour later we parted at the garden gate, Henry had definitely accepted the offer I had made him, with all its provisos; and as soon as I arrived at the hotel, I wrote a note to Mr. Harper, asking him to prepare a lease of the house for two years at the very low price at which he had already offered it to me. Before the week was out, Henry, Lizzie, and the baby were established in the house, which for them had now lost all its terrors, I making the only alteration which I considered necessary, that is putting down at the cost of about $12.00, a drive or artesian well in the rear of the garden, entirely out of the way of any drainage from the slope above.

Through this well I obtained plenty of pure, wholesome water, and my tenants well understood the importance of using no other so long as they staid in the house. There was really nothing more for me to do except to give them in detail those directions in regard to their manner of life about which I had already spoken to them in a general way, and this I wanted to do at some length. So the evening before my departure from the village in which, instead of one night, I had spent ten days, found me sitting in one of the rooms which Lizzie's busy hands had already in a plain way made bright and comfortable. As a matter of fact I had no fear but that the house would now prove to be as wholesome as any in the village; but I wanted my young couple to feel how much depended upon themselves, and I was very much in earnest in desiring that they should make their

housekeeping a model for all the young couples about them. They were beginning with great advantages; they had a large, airy house, with plenty of space about it, and in good order, and as they had it rent free, they could afford to buy all that they needed in the way of furniture and clothing.

I felt that their future was in their own hands, and it was with a strong desire that they should feel it too that I said, "Lizzie, I hope you realize how much depends upon you during the next year?" Lizzie was undressing the baby, and she stopped to give him a toss and a half-dozen kisses before she answered, "I've only to look at baby to know that, sir. You may be sure that I'll do my best to take care of him and Henry." I knew Lizzie meant what she said, and I replied, "I don't think that I need be afraid to trust you and Henry; I am sure, in fact, that you will do your best to fulfill your part of our bargain; but I want to-night to go over carefully the terms of the compact, and to tell you just what I mean by them. You know I agreed to put this house in good order, and give it to you rent-free for a year, provided you would live during that year just as I direct. If at the end of that time I shall return to find that you have done so, and that all has gone well with you, then I will advance you the amount of the rent for another year, which will give you an excellent start, if you are sensible and clever enough to take advantage of it." The young people assented to this eagerly enough, and Lizzie, who was always the first to speak, said, "You've only got to tell us, sir, what we are to do; we trust you as much as you do us." "The foundation of all that I require, Lizzie," I replied, "is that you should be clean, and I am going to tell you just what I mean by cleanliness.

"In the first place, the house must be clean; there must be no decaying vegetables or fruit, no rubbish of any kind, kept in the cellar; the air must be kept perfectly fresh and sweet, for you must not forget that it affects the air of all the rest of the house. Then be sure that your sink is clean; once a day, at least, wipe it out thoroughly clean and dry, and don't let the drain get stopped up. It is a good plan occasionally to put a little chloride of lime down the pipe of your sink or wash tub; but in using lime or carbolic acid, or indeed almost any disinfectant, you must be very careful on account of their poisonous properties.

"Don't let rubbish of any kind collect in the house; keep all your pantries and cupboards clean; don't get into the habit of pushing things away into holes and corners; and be sure that your beds are well aired, and that the bedsteads are occasionally wiped off with hot water and soap. The only way to ensure your bed's being properly aired is to shake it up thoroughly when you first get up, turn back the mattress (I take it for granted you are not so unwise as to sleep on feathers), then open all the windows, and leave the room for at least an hour before you make the bed. Empty all the slops every morning, and wash out slop pails, etc., with clean water, taking care that any vessel which is used in the room during the night, is kept covered. By-the-by, it is a bad plan to let such vessels stand in a wooden washstand or commode, for the wood soon becomes saturated with the smell, which is both disagreeable and unwholesome. Don't be afraid of fresh air, by night or day; drafts are not such bad things as they get credit for being, and you ought always to sleep with plenty of air in your room; for the more you accustom yourselves to the air, the less likely you will be to take cold. Another safeguard against colds is warm clothing, and I advise you, both in summer and winter, to wear woolen underclothes, heavy or light, according to the season.

"But then, you know, if you don't take care of your skin, putting on flannels won't help you; and if I insist upon washing yourselves thoroughly every day, or at least three times a week, you must not think that I am making you a great deal of unnecessary trouble. If you want to be well and keep the baby well, you must look out not only for dirt which comes from the outside, but also dirt which comes from the inside, and you must keep the pores of the skin open so that all the waste matter for which they are the proper channel of escape can easily be gotten rid of. Wash yourselves and the baby often and carefully, and change all your underclothing at least once a week, oftener, if you find you can afford it.

"As to your food, I should like to say a good deal, but I can only give you general directions, and then trust to your common sense. Eat oatmeal, mush, hominy, rice, and all that sort of thing, with all the milk you can get; potatoes, and

indeed almost all kinds of vegetables and fruit, boiled, baked, or uncooked, as may be, are excellent; and remember, Lizzie, that you are not to waste time and material in making pies and cake. Plain puddings you can always have; but in cooking food of any kind, you must realize that everything depends on the cook. Don't fry when you can help it,—

> "'Boil, broil, or bake,
> For health's and economy's sake.'

Have your meals always at regular times, and don't eat between meals. Take hot milk instead of coffee, tea, or cocoa with your meals, and don't drink anything but water between meals—no Henry, not even an occasional glass of whisky, though about that I shall perhaps have to make a special bargain." Henry looked at me a little uncertainly, and I went on more seriously, "Yes; you'd better not take anything stronger than Lizzie chooses to give you; you can trust her, and I shall trust her too, to see that the money that might go for drink is kept for something better." As I said this, I laid my hand on Henry's shoulder, for I knew that he was not entirely safe in this respect, and I wanted my words to have full weight.

"Well," he said, slowly, looking at Lizzie as he spoke, "I'll engage to drop it; it's in the bargain, I s'pose, and besides, I should like to see for myself how a man can get on without any drink."

"That's a wise resolve," I replied, "and your head will be all the clearer for it. Shake hands on it, for I must be off, or I shall miss my train. One word more—remember, both of you, that this experiment is not merely for your good and my satisfaction; but, if it succeeds, it is for the good of the whole village. If you prove that you can live in this house and be well, and, in every sense, do well, merely by obeying a few simple laws which he who runs may read, why, I think you will be giving a good lesson to the whole village. Once more, good-bye; in a year from to-day I shall come back, and in the meantime, if you want me, send for me;" and with a hearty shake of the hand I left my two friends, and for twelve months turned my back on the whole matter; for I did not mean to interfere any farther in the experiment, and, as the event proved, there was no need for it. Henry and Lizzie were, as I had judged them to be, an intelligent, energetic young couple, and the two letters which I received from them during the year following my visit, were full of good reports.

Time flew, as it always does with busy people, and on the appointed day I found myself at the gate of the haunted house. I had sent no warning of my coming, and I was glad to get my first impressions of the changes before I saw either of my friends. How pretty and neat the garden looked, with the paths clean and the shrubs trimmed; and as Lizzie, with the baby toddling beside her, came down the steps of the porch, I had no need to ask any questions as to their health and happiness.

"Is it all right, Lizzie?" I asked, holding out my hand. The beaming smile on her face answered me better than words; but the words came, too, and fast enough, "Come in, sir, come in and see for yourself; isn't the house pleasant?" The story of the year was on her lips, and I was almost as pleased to hear as she to tell it.

"You see, sir," she said, as I followed her into the bright room, "we had n't been here three months before folks knew all about it; and some of the clever ones, they said that if we'd laid the ghost with a shovel, they'd no call to be afraid. And everything was so pleasant and convenient that before long some of the overseers came to see if we would n't board 'em; so we took the money we'd saved for rent, and bought some furniture, and now, sir, every room in the house is full, and last Tuesday, Henry took a hundred dollars to the bank." Here Lizzie fairly broke down, and between laughing and crying was hardly able to speak, though she managed to say, "And I've got the name of being the best housekeeper in town, and it's all because I've done everything just as you've laid out for me."

"And what does Henry say?" I asked.

"I guess he won't be long in speaking for himself, sir; he'll be home in a few minutes. Won't you look about a little, and see how things are?"

It was with real pride that Lizzie led me through her clean kitchen and sink-room, and out of the back door into the garden, where everything showed that Henry had been true to his promise, and that he and Lizzie were fairly started on the right road. They had found, as anybody may find who will try it, that though they were poor and not very wise, they could live clean, orderly, temperate lives, and that in every sense such lives "pay." As

Lizzie had said, her husband was not long in coming; and when I looked at their happy faces, and at the rosy baby, and at the cheerful house, I could well believe Lizzie's stories of the effect their experiment was having in the village, especially as it was evident that Lizzie preached as well as practiced. In a word, all I had hoped for was accomplished, and the time of my visit was spent rather in hearing their experience, than in giving any further advice. I renewed my offer to advance them the rent for the next year, but they both refused, feeling that they were quite able to pay it themselves; and when we parted, it was with thorough satisfaction that I promised to visit them again the following year.

So last night I found myself once more within their gates, in the well-kept garden whose brilliant autumn flowers were not brighter than the faces of the little household gathered to greet me. All was well with them still; instead of any ghastly ghosts, another laughing, healthy boy had come to them, and had found warm and loving welcome. They had, as before, only to tell me of a year of peace and prosperity; the terrible shadow of disease and death which had so long hung over the house had vanished, and instead was the sunshine of a happy home. "And how has this home been made?" I asked myself, as, after I left my two friends, having drunk their healths in a glass of pure water from what we still called "the new well," I stood looking back at the house with its windows ablaze in the light of the setting sun. Will not my readers answer as I did? "It is the work of a husband and wife who have undertaken in earnest to learn and keep the laws of God. They have learned that dirt and filth mean disease, that intemperance in food and drink means ill-health, that impure air and water mean poison, and they have learned that almost any one who chooses can avoid these things."

There are more haunted houses than one in our land; but among them all there is not a ghost that cannot be laid, nor a demon which cannot be driven out, by intelligent and patient endeavor. At least, this is what Henry and Lizzie and I said to each other, the last time we met under the roof of our no longer "Haunted House."—*Hampton Tract.*

—Eat slowly, and do not season your food with care.

DRESSES FOR SCHOOL GIRLS.

ONE of the most gratifying signs of progress is the general awakening in regard to school-dress. It has heretofore been considered enough to discourage a lavish display of jewelry; but a girl could be thinly clad in cold weather; she could change from thick wool to thin silk; she could encase her arms in skin-tight sleeves, and pull her dresses together within a quarter of an inch of her life, and no one thought of protesting against her folly. But gymnastics in schools have accomplished something: they have established the fact that with ordinary dress the girl cannot raise or use her arms, and it has at last dawned upon teachers and intelligent mothers that she ought to be able to use them elsewhere than in the gymnasium. The principal of one of the most fashionable schools in New York will not permit her pupils to wear a dress of any material save wool or cotton—the former in winter, the latter in milder weather, if they choose. A girl wearing a velvet suit one day was sent home with a message that her dress must be changed to one adapted to school wear. The mother of the girl returned with a reply that it was a last year's suit which must be utilized, or it would be outgrown. But the teacher was inflexible. She said the school-room was no place for cast-off finery; that the moral effect was bad, and the final result worse than the present loss. The lesson was a salutary one.

A school in Massachusetts recommends to its two hundred girl-students a sensible school-dress, of which the following are some of the features: First, it is to consist of single layers of clothing, so that warmth shall be equally distributed over the body. Secondly, it should be sufficiently loose not to impose restrictions upon the free and active use of the muscles. Thirdly, the materials should be soft, unexciting in color, and unpretentious in pattern. Fourthly, the design should suggest rather than outline the figure, unless the material is elastic, and should be divided into few parts in order to be free from distractions. Fifthly, it should avoid whatever is unnecessary, or that takes time and strength that could be better put into work or play.

The combination undergarment of knitted wool or cotton, or both, the skirt of pleated wool attached to a lining waist cut with a spring over the hip, and a polonaise or woven "jersy" supplies all the

requirements for such a dress. If the polonaise is employed, the lining waist may be extended so as to require only a deep-pleated flounce of the wool to bring it to the length of the walking skirt, thus rendering it lighter and cheaper.

The polonaise should be pleated at the back, a part of the fullness being taken out of the waist, and cut with a whole sack front, which could be belted in. All sleeves should be cut very high, and somewhat full at the top, so as to surround the arm at the socket, and allow free movement. Dress skirts should be made of wool and attached to a lining waist, as this equalizes both warmth and weight.—*The Teacher.*

HINTS WITH REFERENCE TO THE REGULATION OF MOISTURE IN ROOMS.

BY PROF. C. F. BRACKETT, PRESIDENT OF STATE BOARD OF HEALTH OF NEW JERSEY.

I HAVE been requested to discuss briefly the question of moisture in the air of our living-rooms, with reference to its regulation. The object which it is desirable to secure is the maintenance of such a rate of evaporation from the surfaces of our bodies and respiratory organs as shall be requisite to keep them in proper condition for the discharge of their normal functions. Common experience teaches that very important relations exist between the temperature, moisture, and other conditions of the air, and our feelings of comfort or discomfort.

The bodies of living beings, while in some respects self-regulating, are yet subject to the same laws which control the actions of matter in general. The unceasing molecular and atomic changes on which life is conditioned are productive of heat in the body, as they would be if they took place without it. How this heat is expended so as to maintain the normal temperature, which is in all climates found to range between 98° F. and 100° F., will be obvious by considering a few facts which have been ascertained by careful observation.

Under conditions ordinarily favorable to health, it is found that 72.9 per cent of the heat given off by the body escapes radiation, 14.5 by evaporation from the skin, 7.2 by evaporation from the lungs, 2.5 by heating the air from breathing, and 1.8 by the solid and liquid excreta. It is thus seen that about 22 per cent of all the heat which leaves the body, passes off by evaporation. If such conditions supervene as shall tend to increase or diminish this evaporation, corresponding disturbances in the system result, and though it possesses powers of compensation which are called into action by such disturbances, their exercise may greatly interfere with our vocations, comfort, and health.

The quantity of water which is required to completely saturate a given space with vapor is dependent upon the temperature of the space alone, it being exactly the same whether air be present or not. Moreover, the amount is, for every given degree of temperature, definite, so that having once been reached, no more can be taken up. Suppose that we are in a room whose temperature is, say, 99° F., and that the room has been supplied with all the vapor of water which can be taken up at that temperature, plainly, although the surface of our bodies as well as that of our lungs may be completly bathed with moisture, no relief from evaporation can be had. If, however, less moisture is present than is required to saturate the space, the process of evaporation will be set up with corresponding abatement of heat and relief of discomfort.

If, again, we suppose the air of the room to be perfectly dry, a condition not met with in nature, but one which may be produced by artificial means, we shall experience equally disagreeable and injurious effects.

The atmosphere in which we live may for our present purpose be regarded as composed of two perfectly distinct gaseous bodies in a state of mechanical mixture, viz., air and water vapor. These, like all gaseous bodies, are subject to the laws of diffusion, so that they become uniformly mixed throughout. And we may, without error, speak of the air as saturated, when the space occupied by both contains all the vapor it can contain at the given temperature. The capacity of air, in this sense, rapidly increases with increase of temperature. Thus, if one pound of air at 32° F. were saturated with moisture, it would contain .00379 pounds of water. If the whole were heated to 42° F., it would no longer be saturated, since, at this temperature, a pound of air would be capable of holding .00561 pounds. Merely heating the pound of air, together with the vapor contained in it, has changed its hygrometric state from complete saturation to one which is only 68 per cent saturated. In like man-

ner, if the temperature were successively raised to 52°, 62°, and 72° F., the corresponding degrees of saturation would be 46, 32, and 23 per cent. If we assume that the temperature of our living rooms is to be maintained at, say, 72° F., our sense of comfort will depend on two factors, jointly, the warmth of the air and its condition as regards dryness.

If we rely on open fires, which radiate their heat without warming the air directly, but do so by first warming the walls of the room, which afterward warm the air moderately, we shall be obliged to admit so much moist air from without that there will be little danger of too much dryness.

But if we use stoves, the case is altered. Their more advantageous positions and dull radiations enable them to sufficiently raise the temperature without the expenditure of large amounts of fuel, and therefore with little necessity of admitting large amounts of fresh air; and it hence results that on the temperature being raised, the degree of saturation with moisture falls very low, and most uncomfortable dryness results. This is obviated by placing a vessel of water on the stove in such a position that it may be heated, and give off vapor more or less copiously. In order to present the principles involved clearly, let us suppose we have a stove in which we have to burn 40 pounds of coal in the course of ten hours, in order to maintain a temperature of 62° F. when the outside air is at 32°. Four pounds of coal per hour will require 1,200 feet of air for its combustion. This will weigh about 91.3 pounds, and will contain, at 32° F., 0.346 pounds of vapor. This would be intolerably dry, for the degree of saturation would be only .23. Let a vessel of one foot area contain water, and be so placed on the stove *that it will be kept at a temperature of* 122° F. This vessel will yield 0.538 pounds of vapor. We shall then have, altogether, 0.884 pounds of vapor brought into the room every hour. But 91.3 pounds of air at 62° would require for complete saturation 1.0764 pounds of water. We thus have an atmosphere too damp,—about 82 per cent saturation. If we reduce the size of the evaporating vessel one-half, we shall add, other things being constant, about 0.269 pounds of vapor to that brought in from without; and secure a degree of saturation of about 57 per cent. This may be called a dry atmosphere, since it could sustain much more vapor; accordingly, every article that is exposed to it will continually give off such moisture as it may contain. The same will be more emphatically true of less degrees of saturation.

It appears, then, that with the conditions supposed, we may, if we would secure a moderately dry and healthy atmosphere, so place an evaporating vessel as to secure the evaporation of somewhat less than half a pound of water in an hour (between 0.269 and 0.5381 pounds).

This may form a basis for regulating the amount of water that is to be evaporated on stoves. If we are to consider the case of furnaces, where a large amount of fresh air is to be heated and thrown into the dwelling, the case is complicated with the numerous details of construction, the rate at which the air is admitted to the heating chamber, etc. No doubt the most satisfactory plan is to have recourse to observation of the wet and dry bulb thermometers, and by their indications regulate the exposed surface as to extent and proximity to the fire-pot till the proper amount of evaporation is secured. —*Sixth Annual Report of New Jersey State Board of Health.*

BEARING OF ERRONEOUS APPETITES ON INTELLECTUAL CHARACTER.

BY L. B. COLES, M. D.

THE right balance of the mental organs very much depends on a right condition and action of the physical system. If such a course be taken as will unduly excite the animal portion of our being, the standard of intellect is depressed. The sure tendency of any unnatural stimulant or narcotic is to degrade the standard of our physical nature, and lower the tone of intellect. Any undue excitement of the nervous system jostles the mental forces; and this process, continued, weakens and prostrates them. After a while they come to depend on the physical stimulus to keep them from torpidity, and rouse them to life and action.

Those who have been accustomed to indulge in artificial stimulants, as a general rule, have only given signs of mental power upon exciting occasions. Instead of always being alive to the ready appreciation of everything that is passing, and the immediate aid of every enterprise and every call of humanity, they only now and then wake up to feel and act, when

the unusually exciting nature of the subject, or a large dose of some stimulating drug, breaks through the cloud that has darkened their mental vision. We sometimes meet with statesmen possessing great breadth and depth of intellect, but whose physical habits have been so at war with nature that their talents have become comparatively buried up in the mire of sensual indulgences; and it now requires a power of stimulus sufficient under other circumstances to produce a mental earthquake, to bring out their buried resources.

Those who have been long accustomed to excitants and narcotics have found themselves unable to perform much mental labor without them. When one steam of stimulus has become exhausted, another must be gotten up; and especially when some extra weight of care, anxiety, or labor is to be borne, then a fuller draught of alcoholic drink, or a stronger cup of coffee or green tea, or a larger plug of tobacco must be taken to bring out and goad up the weakened energies of the mind to their required bearings. If we would, on all occasions, have our mental forces awake and ready for action, we must preserve the nervous system free from all stimulants. Give to the system healthful nutrition, but no artificial excitement.

Depression of spirits is no uncommon result of continued stimulants and narcotics. Gloominess of mind is closely connected with prostrated nervous energies; and more or less will every nervous system suffer, perceived or unperceived, that is fretted by stimulants. Where there is extra excitement and its inevitable reaction continually alternating each other, there must be some degree of damage done to the nervous and mental forces; and when that damage becomes considerable, a degree of melancholy is very liable to ensue. This is true in regard to all stimulants, whether alcohol, coffee, tea, opium, or tobacco; and especially is it true of the latter.

One writer, relating his own experience in tobacco, says: "At times I had feelings which seemed to border on mental derangement. I felt that everybody hated me, and I, in turn, hated everybody. I often lay awake nights under the most distressing forebodings. I have often arisen in fitful and half-delirious slumbers, and smoked my pipe to obtain temporary relief from these sufferings. I have often thought of suicide, but was deterred by a dread of the hereafter. In a few weeks after entirely relinquishing this habit, all these things were gone, and my health fully restored." Many cases of a similar character, from the same and from a similar cause, have come under my professional observation during the last twenty-five years.

An irritable temper is another evil consequent on the use of stimulants and poisons. Excitants of all kinds, and especially narcotics, disturb the electrical currents of the nervous system. Electricity is constantly circulating in the nerves of the whole body; and on the healthy condition of this circulating substance depends not only the vigorous and healthy state of the whole body, but especially a happy and quiet disposition. A disturbed state of the electric circulation is not only constantly tending toward ill health, but to a fretful, dissatisfied, and peevish temper. If, therefore, any one would cultivate a quiet and unruffled temper of mind, let him carefully abstain from every unnatural appetite. Let him be satisfied with the instincts which God has made, and in the plentiful means he has furnished for the gratification of them in the varied fruits of the earth, which are palatable to the taste, nutritious to the digestive system, and unoffending to the vital principle.

Mental imbecility in perceiving and determining against the wrong, is still another result of wrong physical appetites. There is often found want of courage, when a wrong habit is seen, to take up arms against it with a determination to conquer or die. The indulgence practiced so enslaves the mind that its power to govern itself is comparatively destroyed. The reins of self-government have fallen from the hands of the higher man into those of the lower. The higher faculties in human nature have become slaves to the despotism of lust. Instead of judgment, reason, and conscience holding sway, appetites even lower than those of the brute have gained the ascendency, and they now sway the scepter,—appetites contrary to instinct, and such as no brute can be compelled to create. The mental attributes of him who was created a little lower than the angels are downtrodden and buried in the dust, under the iron heel of despotic lust. He who bows to this foul slavery is no longer a MAN, but has descended below the standard of the beasts of the field.

The people, especially the American people, do not apply philosophy to their eating and drinking. They do not take principle to enforce that self-denial which ought to distinguish them as moral beings; and failing to use principle here, shows signs of too little of it everywhere. He who will not, under light, apply principle to his eating and drinking, will not be likely to be very tenacious of its application anywhere. If animalism bears sway in one case, it is more likely to govern in another. If there be a want of regard for God's law in our physical nature, there will be less respect for it written anywhere else. If there be a disposition to disregard duty in this, there will be a tendency toward nullifying moral obligation in other directions. If men will avoid light shining upon one point of duty, they will probably try to shun it in others. If they will bury a living conscience to avoid its rebukes on their self-destruction, they will be likely to stifle its warning voice on other vices and other crimes. He who would have a clear mind to perceive these things, must have a body with right habits.

Intemperance of any kind will deaden the native acuteness of the perceptive organs. Overeating will not only blunt the vigor of bodily health, but stupefy the intellect. Even a moderate degree of habitual gluttony will turn the purest genius into mere animal lustings, which war against God and humanity. There are few men of real genius who will make a god of their belly, because elevated intellect will generally be disgusted with such low and groveling temptations. A high range of thought cannot come down to such sordid things. But there are a few of strange and incongruous compound, where elevated genius seems surrounded with groveling sensualities; where, like an oasis in the midst of the desert, mind has no adequate chance for development and expansion; where, though it may sometimes show its original gigantic strength, there is still no soul to guide it; where things purely philosophic can be deeply fathomed, but where the perception of the right and the wrong is weak, vague, and erratic.

Intemperance is of two kinds. One consists in the over-indulgence of natural appetites; the other, in creating and indulging those which have no origin in nature. The Creator has given us an inclination for food adapted to the nourishment of the body. Moderation in its use is temperance; immoderate indulgence is intemperance. But even moderation in the use of things as luxuries which God never made for such a purpose, and things for which he never authorized a taste, is intemperance. To be temperate in the use of natural appetites is to indulge them rightly; but to be temperate in regard to unnatural indulgences is to let them entirely alone. "Touch not, taste not, handle not." Temperance is total abstinence from wrong things, and moderation in right things. Either kind of intemperance is at war with the progress and prosperity of mind.

If we would keep the digestive powers of mind free and vigorous, we must preserve a healthy state of physical digestion. There are few things that will so derange and oppress mental efficiency as a deranged stomach. Gloominess and a foreboding of all imaginary evils, are common attendants. Deranged physical organs produce a morbid state of mind; and then a morbid state of mind increases the deranged action of the body; so that, when this wrong action is once established, the evil consequences increase by constant action and reaction. The origin of the whole difficulty may be in either species of intemperance. It may be by pushing the indulgence of natural appetites beyond their right boundary in respect to quantity, quality, or frequency; or it may be by the most moderate indulgence in things which the Creator never intended for such a purpose.

The use of meats tends to lessen mental activity. Those especially who are devoting themselves to intellectual pursuits, would gain great advantage by total abstinence from them. Their being required for the maintenance of a vigorous muscular system, which is a very popular idea, is a perfect delusion. The breadstuffs, and other products from the vegetable kingdom of nature, contain all the elements necessary for the replenishing of the body, and some of them more largely than the meats. Facts are stubborn things touching this matter. The laboring Irish, who literally use no meat till they come to this country, are among the most hardy men found in the world. They have constitutions as unyielding as brick-bats, and can withstand the hardest knockings like sledge-hammers. But after being here a few years, they often become infirm, and die in early life from adopting American habits.

If meats were essential to the sustenance of a vigorous body, then a due proportion might be necessary for mental vigor, because of the dependence of mental development on physical soundness. But if meats are not essential to bodily energy, then we can safely put away that which will embarrass the mental powers. In the course of my travels, several cases have come under observation where individuals, for different reasons, had abstained for a considerable time from the use of meats, and they uniformly have said that they had just as much bodily vigor, and a far greater amount of mental activity and force during that period.

But it must be remembered that when we leave our meats, we must not cease eating. The body must have sufficient nourishment. We cannot live upon mere air. But the more simple and unstimulating the food which sustains the body in its healthy and vigorous state, the more active and forcible will be the mental system; while that which deadens the elasticity of muscular fibre stupefies the intellectual forces.—*Philosophy of Health.*

OUR FIRST AND LAST CIGAR.

The time had come in our boyhood which we thought demanded of us a capacity to smoke. The old people of the household could neither abide sight nor smell of the Virginian weed. When ministers came there, not by a positive injunction, but by a sort of instinct as to which would be the safest, they whiffed their pipes on the back steps. If the cause could not stand sanctified smoke, you may know how little chance there was for adolescent cigar-puffing.

By some rare good fortune, which put into our hands two-pence, we found access to a tobacconist's. As the lid of the long fragrant box was opened, and for the first time we owned a cigar, our feelings of elation, manliness, superiority, and anticipation can scarcely be imagined, save by those who have had the same sensation. Our first ride on horseback, though we fell off before we got to the barn, and our first pair of new boots (real squeakers), we had thought could never be surpassed in interest; but when we put the cigar to our lips, and stuck the lucifer match to the end of the weed, and commenced to pull with an energy that brought every facial muscle to its utmost tension, our satisfaction with this world was so great, our temptation was never to want to leave it.

The cigar did not burn well. It required an amount of suction that tasked our determination to the utmost. You see that our worldly means had limited us to a quality that cost only two-pence. But we had been taught that nothing great can be accomplished without effort, so we puffed away. Indeed we had heard our elder brothers in their Latin lessons say, "*Omnia vincit labor!*" which translated means, If you want to make anything go, you must scratch for it.

With these sentiments we passed down the village street and out toward our country home. Our head did not feel exactly right, and the street began to rock from side to side, so that it was uncertain to us which side of the street we were on. So we crossed over, but found ourself on the same side that we were before we crossed over. Indeed, we imagined that we were on both sides at the same time, and several fast teams driving between. We met another boy, who asked us why we looked so pale, and we told him we did not look pale, but that he was pale himself. We sat down under the bridge and began to reflect on the prospect of early decease and the uncertainty of all expectations.

We had determined to smoke the cigar all up, and thus get the worth of our money, but were obliged to throw three-fourths of it away, yet knew just where we threw it in case we felt better the next day. Getting home, the old people were frightened, and demanded that we should state what kept us out so late, and what was the matter with us.

Not feeling that we were called to go into particulars, and not wishing to increase our parents' apprehension that we were going to turn out badly, we summed up the case with a statement that we felt miserable at the pit of the stomach. We had mustard plasters administered, and careful watching for some hours, when we fell asleep and forgot our disappointment and humiliation in being obliged to throw away three-fourths of our first cigar. Being naturally reticent, we have never mentioned it until this time.

But how about our last cigar? It was three o'clock (Sabbath morning) in our western home. We had smoked three or four cigars since tea. At that time we wrote our sermons, and took another cigar with each new head of discourse. We

thought we were getting the inspiration from above, but we were getting much of it from beneath. Our hands trembled along the line, and strung up to the last tension of nerves, we finished our work and started from our room. A book standing on the table fell over, and although it was not a large book, its fall sounded to our excited system like the crack of a pistol. As we went down the stairs, their creaking made our hair stand on end. As we flung ourself upon a sleepless pillow, we resolved, God helping, that we had smoked our last cigar and committed our last sin of night study.

We kept our promise. With the same resolution went overboard coffee and tea. That night we were born into a new physical, mental, and moral life. Perhaps it may be better for some to smoke, and study by night, and take exciting temperance beverages; but we are persuaded that if thousands of people who now go moping and nervous and exhausted through life, down with sick headaches, and rasped by irritabilities, would try a large dose of abstinence, they would thank God for this paragraph of personal experience, and make the world the same bright place we find it,—a place so attractive that nothing short of heaven would be good enough to exchange for it.

The first cigar made us desperately sick; the throwing away of our last made us gloriously well. For us the croaking of the midnight owl hath ceased, and the time of the singing of the birds hath come.—*T. De Witt Talmage.*

DR. DODD'S SERMON ON MALT.

DR. DODD was a minister who lived, many years ago, a few miles from Cambridge; and having several times been preaching against drunkenness, some of the Cambridge scholars (conscience, which is sharper than ten thousand witnesses, being their monitor) were very much offended, and thought he made reflections on them.

Some little time after, Dr. Dodd was walking toward Cambridge, and met some of the gownsmen, who, as soon as they saw him at a distance, resolved to make some ridicule of him. As soon as he came up, they accosted him with, "Your servants, sir!" He replied,' 'Your servant, gentlemen!" They asked him if he had not been preaching very much against drunkenness of late. He answered in the affirmative. They then told him they had a favor to beg of him, and it was that he would preach a sermon to them *there*, from a text that they should choose. He argued that it was an imposition, for a man ought to have some consideration before preaching. They said they would not put up with a denial, and insisted upon his preaching immediately (in a hollow tree which stood by the road-side) from the word M A L T. He then began, "Beloved, let me crave your attention. I am a little man—come at a short notice—to preach a short sermon—from a short text—to a thin congregation—in an unworthy pulpit. Beloved, my text is *Malt*. I cannot divide it into sentences, there being none; nor into words, there being but one; I must therefore, of necessity, divide it into letters, which I find in my text to be these four, M A L T.

"M—is Moral.
A—is Allegorical.
L—is Literal.
T—is Theological.

"The Moral is, to teach you rustics good manners; therefore, M—My masters, A—All of you, L—Leave off, T—Tippling.

"The Allegorical is, when one thing is spoken of and another meant. The thing spoken of is Malt. The thing meant is the spirit of Malt, which you rustics make, M—your Meat, A—your Apparel, L—your Liberty, and T—your Trust.

"The Literal is, according to the letters, M—Much, A—Ale, L—Little, T—Trust.

"The Theological is, according to the effect it works, in some, M—Murder; in others, A—Adultery; in all, L—Looseness of life; and in many, T—Treachery.

"I shall conclude the subject, First, by way of exhortation: M—My masters, A—All of you, L—Listen, T—To my text. Second, by way of caution: M—My masters, A—All of you, L—Look for, T—The truth. Third, by way of communicating the truth, which is this: A drunkard is the annoyance of modesty, the spoil of civility, the destruction of reason, the robber's agent, the alehouse's benefactor, his wife's sorrow, his children's trouble, his own shame, his neighbor's scoff, a walking swill-bowl, the picture of a beast, the monster of a man!" —*Sel.*

—A clear conscience with contentment is the best anodyne; and a merry heart is the best tonic.

TEMPERANCE AND MISCELLANY.

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

Conducted by MRS. E. E. KELLOGG, Superintendent of Hygiene of the National W. C. T. U.

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,
And 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 looms of God, let down from the place of the sun,
Wherein we are 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 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 will hear the voice of the Master, it will say to him, "Well done!"
And the white-winged angels of heaven to bear him thence will come down,
And God will give him gold for his hire, not coin, but a fadeless crown. —*Anonymous.*

—It demands more nobility of soul to obscure the importance of little things than to follow great things. Great events come from small beginnings; and he is the greatest workman who takes the trifles of to-day, and makes of them the foundation of the grand monuments of to-morrow.

SKETCHES OF TRAVEL, NO. 9.

BY MRS. E. E. KELLOGG.

PISA.

STARTING from the great Mount Cenis tunnel, a day's ride from Northern to Southern Italy, by way of Turin and beautiful Genoa, through smiling landscapes and picturesque Italian villages, the houses painted in a variety of neutral tints or adorned with frescoes on the exterior—no neighboring two alike—and surrounded with hedges of century plants and terraces of blooming cactus; past vine-clad hills and immense peaks of wooded mountain ranges on one side, and the shores of the blue Mediterranean on the other; through thrifty lemon, orange, and olive groves, and fields of luxuriant vegetation, where scarlet poppies grow as wild flowers amid the tall grass, brought us to Pisa just long enough before sunset to visit the four principal objects of interest,—the Cathedral, the Baptistery, Campo Santo, and the leaning tower, which, fortunately for travelers, are all grouped within a short distance of each other. Pisa is one of the oldest cities of Europe, having been a Roman colony long before the time of Christ.

The Cathedral, which was built to commemorate a naval victory over the Saracens, dates back to 1063. It is constructed of white marble, and is three hundred and ten feet in length and one hundred and nine feet high. Its front is a magnificent series of pillars and arches, and its interior imposing and exquisitely finished. It contains some fine paintings, most of which, like those of other Italian churches, are in honor of the Virgin Mary. But most interesting of all is the great bronze lamp that hangs pendant from the ceiling, and by its oscillations first suggested to Gallileo the theory of the pendulum, over three centuries ago.

The leaning tower, which for seven hundred years has been considered one of the architectural marvels of the world, is a beautiful, airy structure, rising in the blue Italian sky to the height of one hundred and eighty feet; and with its eight stories surrounded by pure white columns and ornamented cornices, it looks more like the work of some frost fairy than a solid structure of marble. Although so many years have elapsed since its erection, it presents scarcely any perceptible signs of decay. Its inclination, of a little more than fourteen feet from the perpendicular, was quite probably caused by the gradual sinking of the soil, as the ground in the neighborhood is porous and almost marshy, and the Cathedral has suffered so

much from this same cause that there is not a single vertical line in it. In the Campo Santo, a neighboring cemetery, are paintings on stucco, supposed to have been executed about the year 1300, more than a century after the tower was built, which represent it in an upright position, so that it is quite probable the inclination was not intentional. The tower was designed as a belfry for the Cathedral, and contains a peal of bells, the heaviest weighing six tons.

The Baptistery, or church of St. John's, opposite the Cathedral, is a four-storied rotunda of white marble, finished with columns, arches, and rich carving, and considered the most elegant structure of its kind in Italy. Its pulpit is the masterpiece of a celebrated Italian artist, and is adorned with bas-reliefs descriptive of the life of Christ.

The Campo Santo, or cloistered cemetery, is a vast rectangular space, inclosed by chapels and corridors adorned with paintings and sculpture, and filled with monuments, many of which are fine works of art. In the thirteenth century, when the crusaders lost the Holy Land, a pious monk of Pisa had fifty-three ship loads of earth from Mount Calvary brought here as a last resting place for those who mourned the loss of the Holy City, under the belief that the earth possessed the property of decomposing animal matter in the space of twenty-four hours. Whether the mourners for Jerusalem have all passed away, or whether the monks have lost faith in the virtue of the soil, we do not know; but no interments have been made here for so long that the ground appears a smooth lawn, edged with borders of flowers.

ROME.

We left Pisa just as the sun was rising over the Apennines, and in eight hours found ourselves in the Eternal City. No city in Europe is more interesting than Rome, the ancient center of western civilization. In its memorials of ancient grandeur are recorded the history of twenty-five centuries, nearly half the entire duration of the world.

In the valley between two of the seven notable hills upon which the city was founded is situated the ancient Roman Forum, (*Forum Romanum,*) where the Senate held its assemblies, and decreed protection to oppressed right and punishment to lawless violence, throughout the world, and where some of the most famous scenes in the history of the Roman Republic were enacted. Along the sides of the Forum were ranged shops occupied by butchers and other craftsmen, money changers and goldsmiths, and erected in various places were temples, public buildings, and monuments. An open space in the center, called the *Comitium* was the place where the popular assemblies were usually held. A multifarious business was transacted within the precincts of the Forum; and besides being used for political purposes, it was the place where the celebration of the funerals of the nobility occurred. As its original space was only 150 yards in length, it soon became too small for the increased traffic carried on there, and as the years rolled by the various rulers extended its limits, erected Basilicas, and adorned the grounds with columns, triumphal arches, statues, and works of art. During the Middle Ages the ancient Forum was destroyed, its temples spoiled of their embelishments, and the ruins gradually buried beneath rubbish and debris, in which condition it remained until the present century.

In the last few years, by means of extensive excavations, a considerable portion of its original surface, twenty-six feet below the present city level, has been cleared, and the remains of many celebrated temples and buildings have been brought to view. Rising in the center is one solitary pillar, the column of Phocas, which Byron terms the "nameless column, with a buried base," and which was the last new monument erected in the Forum.

On the east side are the remains of the temple of Cæsar, near which is a paved platform believed to be the oratorical tribune, where, at the funeral of the murdered Dictator, Mark Antony delivered the celebrated oration which wrought so powerfully upon the feelings of the excited people. It was here a funeral pyre was hastily improvised, and the unparalleled honor accorded the "noble Cæsar" of being cremated in view of the most sacred shrines of pagan Rome.

On the south side a circular erection of concrete marks the spot where the temple of Vesta stood, upon whose altars burned the eternal fire. The Forum was bounded by streets, the most important of which was the Via Sacra, ascending to the Capitol, and over which at one point rises the triumphal arch of Septimius Severus, an elaborately ornamented marble structure erected in honor of that emperor and his two sons, Geta and Caracalla, who had achieved victories in the East over the Arabians and Parthians. The erasure of Geta's name, which, after he had killed his brother, Caracalla caused to be erased from the arch, is still plainly visible. Near this arch stood the Golden milestone, on which was marked the distances to all the chief cities of the then known world, and from which as a center radiated roads to all parts of the Roman empire.

Eight fluted columns mark the place where rose the temple of Saturn, which from the earliest times was the seat of the public treasury. Ruins of the Rostra, and Basilicas, besides those of many other notable structures, serve to make this spot one of the most interesting to all lovers of history.

—There is great dignity in accepting the situation in which you find yourself placed, and greatness of soul in being equal to it. So the wise heads of the households will not sit down with hands folded when the emergency is pressing; they will look about them, take into consideration their surroundings, and adjust their actions accordingly.

—Fermented wine has been banished from the communion tables of all the Methodist and Baptist churches in Chicago, and from all the Congregational churches but two.

CARLO AND THE FREEZER.

WE sat in the country parsonage, on a cold winter day, looking out of our back window toward the house of a neighbor. She was a model of kindness, and a most convenient neighbor to have. It was a rule between us that when either house was in want of anything, it should borrow of the other. The rule worked well for the parsonage, but rather badly for the neighbor; because on our side of the fence we had just begun to keep house, and needed to borrow everything, while we had nothing to lend, except a few sermons, which the neighbor never tried to borrow, from the fact that she had enough of them Sundays. There is no danger that your neighbor will burn a hole in your new brass kettle if you have none to lend. It will excite no surprise to say that we had an interest in all that happened on the other side of the parsonage fence, and that any injury inflicted on so kind a woman would rouse our sympathy.

On the wintery morning of which we speak, our neighbor had been making ice-cream; but there being some defect in the machinery, the cream had not sufficiently congealed, so she set the can of the freezer containing the luxury on her back steps, expecting the cold air would completely harden it. What was our dismay to see that our dog Carlo, on whose early education we were expending great care, had taken upon himself the office of ice-cream inspector, and was actually busy with the freezer? We hoisted the window, and shouted at him, but his mind was so absorbed in his undertaking that he did not stop to listen. Carlo was a greyhound, thin, gaunt, and long-nosed, and he was already making his way on down toward the bottom of the can. His eyes and all of his head had disappeared in the depths of the freezer. Indeed, he was so far submerged that when he heard us, with quick and infuriate pace, coming up close behind him, he could not get his head out, and so started with the encumberance on his head, in what direction he knew not. No dog was ever in a more embarrassing position—freezer to the right of him, freezer to the left of him, freezer on the top of him, freezer under him.

So, being thoroughly blinded, he rushed against the fence, then against the side of the house, then against a tree. He barked as though he thought he might explode the nuisance with loud noise, but the sound was confined in so strange a speaking-trumpet that he could not have known his own voice. His way seemed hedged up. Fright and anger and remorse and shame whirled him about without mercy.

A feeling of mirthfulness, which sometimes takes me on most inappropriate occasions, seized me, and I sat down on the ground, powerless at the moment when Carlo most needed help. If I only could have got near enough, I would have put my foot on the freezer, and, taking hold of the dog's tail, dislodged him instantly; but this I was not permitted to do. At this stage of the disaster my neighbor appeared with a look of consternation, her cap-strings flying in the cold wind. I tried to explain, but the aforesaid untimely hilarity hindered me. All I could do was to point out the flying freezer and the adjoining dog, and ask her to call off her freezer, and, with assumed indignation, demand what she meant by trying to kill my greyhound.

The poor dog's every attempt at escape only wedged himself more thoroughly fast. But after awhile, in time to save the dog, though not in time to save the ice-cream, my neighbor and myself effected a rescue. Edwin Landseer, the great painter of dogs and their friends, missed his best chance by not being there when the parishioner took hold of the freezer and the pastor siezed the dog's tail, and pulling mightily in opposite directions, they each got possession of their own property.

Carlo was cured of his love for luxuries, and the sight of a freezer on the back steps till the day of his death would send him howling away.

Carlo found, as many people have found, that it is easier to get into trouble than to get out. Nothing could be more delicious while he was eating his way in, but what must have been his feelings when he found it impossible to get out! While he was stealing the freezer, the freezer stole him.

It was ice-cream for Carlo clear down to the bottom of the can, but afterward it was blinded eyes and sore neck and great fright. It was only eighteen inches to go into the freezer; it was three miles out.

Lesson for dogs and men: Better moderate our desires. Carlo had that morning as good a breakfast as any dog need to have. It was a law of the household

that he should be well fed. Had he been satisfied with the bread and meat, all would have been well. But he sauntered out for luxuries. He wanted ice-cream. He got it, but brought upon his head the perils and damages of which I have written. As long as we have reasonable wants, we get on comfortably, but it is the struggle after luxuries that fills society with distress, and populates prisons, and sends hundreds of people stark mad. Dissatisfied with a plain house, and ordinary apparel, and respectable surroundings, they plunge their head into enterprises and speculations from which they have to sneak out in disgrace. Thousands of men have sacrificed honor and religion for luxuries, and died with the freezer about their ears.

Young Catchem has a young horse, but wants six; lives in a nice house on Thirtieth Street, but wants one on Madison Square; has one beautiful wife, but wants four; owns a hundred thousand dollars of Erie stock, but wants a million; plunges his head into schemes of all sorts, eats his way to the bottom of the can till he cannot extricate himself, and constables, and sheriffs, and indignant society, which would have said nothing had he been successful, go to pounding him because he cannot get his head out.

Our poor old Carlo is dead now. We all cried when we found that he would never frisk again at our coming, nor put up his paw against us. But he lived long enough to preach the sermon about caution and contentment of which I have been the stenographer.—*T. De Witt Talmage.*

AN APT ILLUSTRATION.

"But, doctor, I *must* have some kind of a stimulant," cried the invalid, earnestly; "I am cold, and it warms me."

"Precisely," came the doctor's crusty answer. "See here; this stick is cold"—taking up a stick of wood from the box beside the hearth, and tossing it into the fire; "now it is warm; but is the stick benefited?"

The sick man watched the wood first send out little puffs of smoke, and then burst into flame, and replied: "Of course not; it is burning itself!"

"And so are you when you warm yourself with alcohol; you are literally burning up the delicate tissues of your stomach and brain."

OVERCOME EVIL WITH GOOD.

There are few more saddening reflections than the thought that there must be at the present time thousands of men and women, outcasts of society, who but for the want of *one* wise and kindly office at some critical juncture of their lives might have been among its most useful members, if not its brightest ornaments.

Many a man has been lost to society from his inability to retrace his first false step, through the public severity of its punishment, and who, had the Christian principle been applied to him, "If thy brother shall trespass against thee, go and tell him his fault between thee and him *alone*," might to-day have been living in the honor and esteem of his fellows.

The following incident from the life of Isaac Hopper aptly illustrates this more excellent way.

William Savery was a tanner by trade, and one night a quantity of hides were stolen from his tannery; and he had reason to believe that the thief was a quarrelsome, drunken neighbor whom I will call John Smith. The next week the following advertisement appeared in the county newspaper: "Whoever stole a lot of hides on the fifth of the present month is hereby informed that the owner has a sincere wish to be his friend. If poverty tempted him to this false step, the owner will keep the whole transaction secret, and will gladly put him in the way of obtaining money by means more likely to bring him peace of mind."

This singular advertisement attracted considerable attention; but the culprit alone knew whence the benevolent offer came. When he read it, his heart melted within him, and he was filled with contrition for what he had done. A few nights afterward, as the tanner's family were about retiring to rest, they heard a timid knock; and when the door was opened, there stood John Smith, with a load of hides on his shoulder. Without looking up, he said, "I've brought these back, Mr. Savery. Where shall I put them?" "Wait till I can light a lantern, and I will go to the barn with thee," he replied; "then perhaps thou will come in and tell me how this happened: we will see what can be done for thee."

As soon as they were gone out, his wife prepared some hot coffee, and placed pies and meat on the table. When they returned from the barn, she said, "Neighbor

Smith, I thought some hot supper would be good for thee." He turned his back toward her, and would not speak. After leaning against the fire-place in silence for a moment, he said, in a choked voice, "It is the first time I ever stole anything, and I have felt very bad about it. I don't know how it is. I am sure I did n't think once that I should ever come to be what I am; but I took to drinking, and then to quarreling. Since I began to go down hill, everybody gives me a kick; you are the first man who has ever offered me a helping hand. My wife is sickly, and my children are starving. You have sent them many a meal, God bless you! and yet I stole the hides from you, meaning to sell them the first chance I could get. But I tell you the truth when I say it is the first time I was ever a thief." "Let it be the last, my friend," replied William Savery; "the secret shall remain between ourselves. Thou art still young, and it is in thy power to make up for lost time. Promise me that thou wilt not drink any intoxicating liquor for a year, and I will employ thee to-morrow at good wages. Perhaps we may find some employment for thy family also. The little boy can, at least, pick up stones. But eat a bit now, and drink some hot coffee; perhaps it will keep thee from craving anything stronger for to-night. Doubtless thou wilt find it hard to abstain at first; but keep up a brave heart, for the sake of thy wife and children, and it will soon become easy. When thou hast need of coffee, tell Mary, and she will always give it to thee."

The poor fellow tried to eat and drink, but the food seemed to choke him. After an ineffectual effort to compose his excited feelings, he bowed his head on the table and wept like a child. After awhile he ate and drank with good appetite, and his host parted with him for the night with this kindly exhortation, "Try to do well, John, and thou wilt always find a friend in me." He entered his employ the next day, and remained with him many years, a sober, honest, and faithful man. The secret of the theft was kept between them; but after John's death William Savery sometimes told the story to prove that evil might be overcome with good. —*Anon.*

—Houses are built to live in more than to look at; therefore let use be preferred before uniformity, except where both may be had.—*Bacon.*

READING VERSUS KNOWLEDGE.

THERE is scarcely a greater mistake in connection with the desire of knowledge, than in supposing that reading—the reading of good books, of instructive books—necessarily brings knowledge. Not the amount of good reading, nor yet the method of reading, but the proper limitation of reading to begin with, and the use afterward made of that which is read, must settle the question of gain or loss as a whole from reading. As a rule, the men and women who know most are not great readers. And as a rule the men and women who read very much do not know a great deal. "Had I read as much as others," said the philosopher Hobbes, "I had remained as ignorant as they." And Milton had about the same idea of reading, when he said,—

> "Many books,
> Wise men have said, are wearisome; who
> Reads incessantly, and to his reading
> Brings not a spirit and judgment equal
> Or superior, uncertain and unsettled still
> Remains—deep versed in books, and
> Shallow in himself."

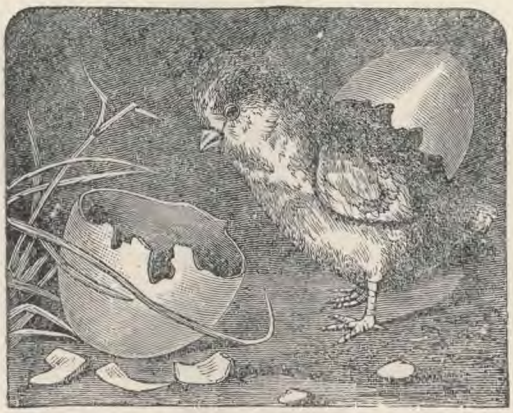
Continuous reading stands in the way of earnest thought, and forbids that study to which almost every well-filled page would prompt a thoughtful mind. To read right on, hour after hour, book after book, without stopping to consider and to follow out the facts, or the principles, or the suggestions brought before the mind in that reading, is like searching the beauties of a new country by whirling through it on an express train, never stopping to clamber a mountain, or to follow a winding stream, or to sit and watch a lovely bit of landscape in its changing hues. Go to any public library, and learn who of its visitants draw most books from its shelves. You will find that among the less informed readers are the all-devouring readers. Those who really gain from reading are so busy making their former reading profitable, and reading over again what they have read before, that they have not the time to read much new material.

> "Learning is more profound
> When in few solid authors't may be found.
> A few good books, digested well, do feed
> The mind. Much, cloys; or doth
> Ill-h .mors breed."

The man or the woman who can find time to read through a daily paper every day, and then to "keep up" with all the better

current literature of the times, gives proof, by that very ability, of an inability to gain much knowledge, without a change in methods of seeking knowledge.—*S. S. Times.*

Popular Science.



THE RATIONALISTIC CHICKEN.

BY REV. S. J. STONE.

Most strange!
Most queer! although most excellent a change!
Shades of the prison-house, ye disappear!
My fettered thoughts have won a wider range,
And, like my legs, are free;
No longer huddled up so pitiably;
Free now to pry and probe, and peer and peer,
And make these mysteries out.
Shall a free-thinking chicken live in doubt?
For now in doubt undoubtedly I am.
This problem's very heavy on my mind,
And I'm not one to either shirk or sham,
I won't be blinded, and I won't be blind.

Now let me see:
First, I would know how I did get in *there?*
Then where was I of yore?
Besides, why didn't I get out before?
Dear me!
Here are three puzzles (out of plenty more)—
Enough to give me pip upon the brain!
But let me think again.
How do I know I ever *was* inside?
Now I reflect, it is, I do maintain,
Less than my reason, and beneath my pride,
To think that I could dwell
In such a paltry, miserable cell
As that old shell.
Of course I couldn't! How could I have lain,
Body and beak and feathers, legs and wings,
And my heart's deep sublime imaginings,
In there?

I meet the notion with profound disdain,
It's quite incredible; since I declare
(And I'm a chicken that you can't deceive),
What I can't understand I won't believe.

Where *did* I come from, then? Ah! where, indeed?
This is a riddle monstrous hard to read.
I have it! Why, of course,
All things are molded by some plastic force
Out of some atoms somewhere up in space,
Fortuitously concurrent anywhere.
There now!
That's plain as is the beak upon my face.
What's that I hear?
My mother cackling at me! Just her way,
So prejudiced and ignorant,—*I* say,
So far behind the wisdom of the day.
What's old I *can't* revere:
Hark at her! "You're a silly chick, my dear,
That's quite as plain, alack!
As is the piece of shell upon your back!"
How bigoted! Upon my back, indeed!
I don't believe it's there,
For I can't *see* it; and I do declare,
For all her fond deceivin',
What I can't see, I never will believe in.

CURIOUS FACTS ABOUT ANTS.

Sir John Lubbock makes the following interesting statements concerning these insects:—

"Ants have the power of recognizing friends, even when the latter have been reduced to insensibility by intoxication, or after long periods of separation, or when reared from the pupa state in the nests of strangers; but this power of recognition is not effected, as has been supposed by some eminent naturalists, by the use of a sign or quasi pass-word; it is not personal or individual, and is not due to the circumstance that each ant is individually acquainted with every other member of the community—sometimes numbering from 100,000 to 400,000 individuals—to which it belongs. They have some power of communicating their thoughts to each other, of giving information to one another, something approaching to language. If we ask ourselves whether they are conscious beings, it is difficult to deny them the gift of reason when we see them, often in the face of accidental conditions of which they could have had no previous experience, excavating chambers and tunnels, making roads, guarding their home, gathering and storing food, nursing their young, feeding and making use of domestic animals, holding slaves, recognizing friends, and manifesting aversion to strangers and enemies, and, on the whole, there is good ground for the opinion that their mental powers differ from those of man not so much in kind as in degree. Ants have the power of distinguishing light and colors, and of discriminating objects; but their perceptions of objects and their sensations of light and color must be very different from ours, since some colors affect their eyes which are imperceptible to ours, and the same may be true of objects. It would appear, therefore, that the colors and proportions of objects and the general aspect of nature must present to them a very different appearance from what they do to man."

GOOD HEALTH.

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

A HYGIENIST ABROAD.

AMONG THE ALPS.

(Continued.)

LEAVING a commission with the waiter to wake us at four o'clock, so as to enable us to make an early morning excursion to the Mer de Glace and other places of interest, we retired to rest, and slept so soundly that we seemed to have just fallen asleep when the obnoxious waiter was thundering at our door, announcing that we had already overslept our time. A warm breakfast was ready for us, which we ate with a relish while our guides were preparing for the start, and by five o'clock we were again on the road. An hour's driving brought us to a point where the ascent of the mountain could be most easily and quickly made, from which one may look out upon the *Sea of Ice*, and view it in all its splendor. Two hours' hard climbing brought us to the summit of the peak called the Chapeau; and spread out before us was the great river of ice, flowing down the deep mountain gorge so slowly that its motion is imperceptible to the eye, and yet with such resistless power that it grinds the hardest rock to atoms beneath its crushing weight, and carries before it every presenting obstacle. The deep blue of its precipices seem almost like a reflection of the sky. Deep seams penetrate far into the interior, and here and there, through some mysterious agency, huge caverns are formed, the entire depth of which the eye does not fathom. From its foot flows a great torrent of muddy water, formed from the melting of the lower portion of the glacier, as it decends to the warm valley. A little higher up, reached by a long, rude path, winding around a cliff, is the dangerous pass known as the Mauvais Pas, which a portion of our party visited. After resting a few minutes, we hastily retreated down the mountain, taking a shorter path, so as to join our carriage at a point a mile or so in advance, where we had left it. As we hurry along, the startled goats, who are nibbling the straggling blades of grass peeping out here and there from among rocks and snowbanks up the side of the mountain, spring nimbly across our path, and scamper up the mountain side, leaping from rock to rock with perfect ease, along the edge of precipices where the slightest slip would be destruction. Sometimes little kids, less timid than their mothers, would come close to us, begging for a biscuit.

After an hour's run down slippery rocks and winding paths, we reached the place where we had left our horses the day before. As we were to return by a route which might be traveled by a larger carriage, we made arrangements to pursue our journey in a more comfortable manner than that in which we had begun our first day's traveling, and accordingly started on, leaving one of our guides to follow with the small carriage, and bring our baggage and the extra horses. Dinner-time found us at the same place where we had dined the day before, with precisely the same bill of fare. Our guides tarried long over their lunch and bottles of wine; but we at last succeeded in getting off again, but at so late an hour that we felt grave fears that we should be too late for the train, with which we wished to continue our journey. The guide, however, assured us that we had ample time, and so jogged leisurely along. Our road this time led over the Tête Noire, one of the most celebrated mountains in this region, by a route so steep that our poor horses were tasked to the utmost to draw even the carriage, leaving our party to climb up on foot as best they might,—a bargain which was not mentioned when we made arrangements for a carriage. However, we arrived safely at the top at last, and then our guides insisted that we must stop again to feed the horses, although they had spent two hours in eating, only an hour and a half before. We strongly suspected that they were longing for another bottle of wine, and hence protested against further delay, but with little avail, until we made a few positive assertions to the effect that if we were not in Martigny in time to take the seven o'clock evening train, we should deduct a liberal proportion of the price agreed upon for our conveyance, as the time was stipulated in the bargain. This had the effect to liven up matters very considerably, and we were soon flying down the mountain at a speed almost frightful. Suddenly we saw our driver making great exertions to stop

his horses, in which he finally succeeded, though with considerable difficulty, when we learned that our carriage brake had given out, and would no longer hold back; and, as it was a single carriage, with an extra horse hitched along-side, the whole task of holding back the heavy carriage, with its load of six persons and a large lot of luggage, fell upon one horse, and depended entirely upon two frail straps. This situation was anything but pleasant, as the road was, in many places, exceedingly precipitous for long stretches, without curve or break. It seemed that the poor horse who was doing all the work had given out, so we were obliged to wait as patiently as possible, though every moment the time for our train was drawing nearer, until the rear guide came up with his extra horses. A change of horses was quickly made, and also a change of drivers, and again we started down the steep mountain road at as reckless a speed as ever.

Notwithstanding our fear of being late at the station, and no inconsiderable uneasiness concerning the condition of our carriage, we could not avoid noticing the charming scenery which now and then appeared through the thick trees which bordered the road. As we wound around the mountain side, the valley of the Rhone again came into view, with its level meadows on either side, stretching on and on as far as the eye could reach, or until a turn in the river hid them from view. Every few minutes, as we were rushing along, we passed little Swiss villages, stuck up among the rocks in every conceivable way, which afforded many most grotesque and long-to-be-remembered sights. The quaint little children, gathered in knots, looked at us with open mouths and wide-stretched eyes, as we dashed along. The older people dropped their work, and stood gazing after us until we were out of sight. Even the goats and the cows and the mules stopped their various employments to ascertain the meaning of such an extraordinary disturbance. Probably they were no more astonished at us than we were at them, especially at the way they lived, huddled together,—men, women, children, goats, cattle, horses, chickens, pigs,—all in the same house, or at any rate under the same roof, and with a door connecting the kitchen and the stable, so that practically there was but one suite of apartments for the whole community, the humbler members of which evidently felt as much at home in one apartment as in the other. Each house had two front doors, one opening into the stable, and the other into the family sitting-room; and it was not surprising to sometimes see the brute members of the family walk out of the stable door, and stroll in at the other. As a matter of course, the front door presented a very picturesque, but, to say the least, not a very sanitary condition. No graveled walks, no flower beds, no green turf, but here and there little heaps of such material as is usually found most abundant in barn-yards, and not infrequently a huge heap of the same material exactly in front of the principal entrance of the dwelling. Here are two milk-maids filling their bright tin pails, who quickly seize the horned members of the family by the caudle extremities to prevent their scampering off with fright, as we rattle by. One milk-maid, in a quaint Swiss costume, has dropped her pail, and is swinging her arms and shouting at the top of her voice something which we do not quite understand. But now we see: here is a girl clinging to a buxom calf which she has barely succeeded in getting out of the road before our carriage comes rattling over the spot where the creature stood. The girl seems satisfied with her success, and the calf kicks up its heels at us in spiteful resentment for having been disturbed in his twilight meditations.

All this time we are dashing along at an increasing speed; and now we are on level ground, with the station just in sight. Two minutes more and we shall be there; but it is already one minute past the time for the train to start. Has it gone? We cannot tell, but we dash up, leap out, and find that it still stands upon the track, having been delayed by a train from the opposite direction, which it meets at this point, and which just at this moment comes rushing in; so we dash across the track and tumble on board just as the wheels begin to move. Five seconds more and we should have been too late. Our guide stands looking after the train a little disappointed, however. He has had his full pay, but we did not give him anything *pour bois*. Well, we are bound for the Baths of Leuk, where we expect to take a community bath to-morrow, about which we will tell you some other time.

—An English laborer recently starved to death rather than go to the poor-house, which leads an influential English magazine to descant upon the evils of their poor-law system. From some experiences we have had, we are inclined to think that some improvements might be made in the American methods of dealing with the poor. Unfortunately for those suffering in poverty, the laws providing for their relief are made by those who have never felt the pangs of hunger themselves, and know nothing, practically, of the real meaning of poverty.

—A busy doctor sent in a certificate of death the other day, and accidentally signed his name in the space for "Cause of death." The registrar says he wishes the profession would be as accurate generally.

"DECEIVING AND BEING DECEIVED."

A FEW weeks ago we were called upon by a woman who introduced herself as a Dr. S—— ——, of Chicago, stating that she was stopping a day or two in the city, and called for the purpose of visiting the Sanitarium. Said she had been a reader of GOOD HEALTH for some years, and was much interested in it and its mission, adding that she always recommended it to her patients, and loaned her own copies. In the course of a few minutes' conversation we learned that our visitor was a clairvoyant physician. She claimed to be possessed of unusual abilities in this line, stating that she was often called upon by the most eminent physicians of Chicago to assist them in difficult and obscure cases.

We have several times met persons of this class, and never miss an opportunity to test their abilities. In this case the results were not different from what we have uniformly found them, and what they were the reader shall see. The following is a report of the conversation which occurred between the writer and the clairvoyant doctor:—

Writer. I have long been much interested in the peculiar phenomena of clairvoyancy and mesmerism, and have met a number of persons celebrated in this line, among others the noted Prof. Carpenter. Would you have the kindness to explain to me something of the manner in which you diagnosticate disease by your method?

Clairvoyant Doctor. Certainly. I usually place my hand upon the patient's head, take his hand, or look at him for a moment, then go into the clairvoyant state. While in this condition, I am able to see the patient's conditions as clearly as though he were transparent. Each part and organ of the body comes before my mind, beginning with the head and thence downward to the feet. I see what disease is present, and also what remedies are required to effect a cure.

W. Some clairvoyants require only a lock of hair to enable them to make a diagnosis and a prescription.

C. D. I also employ that method. It is much more difficult; but I am able to see the patient with such distinctness by "second sight" that I can select the one from whom the hair was cut from a number of persons whose hair may be the same in color.

W. I should like very much to see an exhibition of your power, and if you are willing to do so, would like to have you see one or two cases. One case, in particular, that of a lady, has been a source of great anxiety to me.

C. D. I shall be happy to accommodate you. Physicians often consult me in such cases, and I am often able to render them valuable aid. Most eminent physicians have often come to me for advice respecting their own individual cases.

W. If you will excuse me for a moment, then, I will bring the lady patient to the office. The other case, a male, I will not bring, but will obtain a small lock of his hair. [The writer retires for a few moments, returning with a lady whose health is good with the exception of partial deafness of several years' standing, and a fine, black, slightly curled lock of hair. Introducing the lady, we sat down to watch the program. The "C. D." gazed earnestly at her for a moment, then closed her eyes, stroked her forehead with her middle finger, and after two or three minutes began her diagnosis.]

C. D. This lady is a very peculiar case, very peculiar. She is very delicate, exceedingly sensitive, and does not breathe enough. She lives here too much [pointing to the lungs]. She needs to expand, to breathe more. She needs to breathe deeper, to expand her lungs. She has too little vitality; she needs to breathe more, so she will have more vitality. She does not breathe deep enough. She lives here too much [laying her hand on the chest over the heart], and does not breathe

enough, making herself too sensitive and delicate [etc., etc., etc., for five minutes].

W. What do you think of the condition of the vital organs?

C. D. Yes, I think she has.

W. But do you think there is any disease of the vital organs?

C. D. I think it is just about that way.

W. What do you think of the liver?

C. D. As I see it, the liver is in a very bad condition. It looks as though it had been bleached. It is sort of glazy. Very bad indeed.

W. How is the stomach?

C. D. The stomach is white, sort of dead like.

W. How are the special senses?

C. D. I think they are somewhat.

W. But I mean, How do you find the special senses?

C. D. Very much so indeed. Yes, as I see them, they are very much that way.

W. Do you find anything the matter with the sense of smell, or taste, or touch?

C. D. Oh, yes; the sense of smell is affected very much; sometimes exceedingly delicate, at others she cannot smell at all.

W. How is the sense of sight?

C. D. Just the same; she sometimes sees remarkably well, and then again is blind as a bat.

W. How is the sense of hearing?

C. D. Very uncertain; sometimes so delicate that no one can approach anywhere near her, so exceedingly sensitive, then deaf as a post.

W. Do you see anything more concerning her?

C. D. Only that she ought to breathe more; she lives here too much [pointing to the chest].

[The lady retires, and the lock of hair is brought in.]

W. This is the lock of hair of which I spoke.

[C. D. takes the hair in her fingers, and looks it over carefully for a few moments, as though counting the individual hairs.]

C. D. This man is very conceited. He thinks and talks about himself all the time. He is all the time talking about his case.

W. He is a sort of hypochondriac, you think?

C. D. Yes, that's it exactly. He is a very disagreeable patient to have. He makes others discontented. [Growing very confidential in her manner.] He is in a very bad condition sexually. He has been a very licentious man, and has been addicted to vicious habits.

W. Do you really think he has been so very bad?

C. D. Undoubtedly; as I see him, he has been very bad indeed, and is suffering in consequence. He has associated much with low women.

W. Madam, you have gone far enough. I cannot listen longer to such abuse of my poor dog, a lock of whose hair you hold in your fingers. He bears an excellent reputation, and is worthy of it. He could not possibly be guilty of such crimes as you attribute to him, for I have known him well from his puppyhood up. He is a first-class dog, and I must say frankly that you are a first-class fraud.

C. D. But you said the hair was from a gentleman.

W. I said nothing of the kind. I said "a male," not *a man*. You ought to have known it was a dog's hair by the appearance, and certainly your "*second*" sight should have shown you the difference between a dog and a man.

C. D. Yes, but I was not looking for anything of the sort. I have a friend who was once caught in the same way.

W. You may be able to impose on ignorant people with your tricks; but you should have known better than to have attempted such an imposition on a physician. You have probably learned a lesson, however, which will make you more crafty the next time. Allow me to show you the door.

Items about Trichinae.—A German physician reports a case of trichiniasis occasioned by eating the flesh of a wild hog.

Some time since an epidemic of trichiniasis occurred in a small town in Germany, in which more than three hundred persons fell ill at once, of whom one hundred died.

A family of five persons were infected by eating a ham which had been pickled, smoked, and then boiled for two hours.

A physician of Erie, Pa., reports seven cases infected by eating home-fed and cured ham.

A case is on record in which a poor woman was infected by eating her dog, which she was led to do by pressing hunger.

Every trichina received into the stomach may become the parent of a thousand young parasites.

Cases of trichiniasis are daily becoming more common.

Cigarettes and Consumption.—The record of evil against tobacco is daily growing more and more formidable. The most recent observations indicate that the use of cigarettes is a common cause of consumption. It has long been known that coal miners are subject to a peculiar form of consumption due to the lodgement of little particles of carbon in the lungs, which set up an irritation, resulting finally in a breaking down of the lung tissue, and death. Chimney sweeps are subject to the same form of disease. It appears also that the use of tobacco in the form of cigarettes produces the same result and in the same way. The little particles of carbon present in the smoke are retained in the lungs, and the continuance of the habit results in just such an accumulation of soot as may occur in the lungs of the professional chimney sweep; the lungs break down, and the victim of a depraved practice dies.

If a man were compelled by circumstances beyond his control to live in an atmosphere charged with an ill-smelling smoke, he would receive the profound sympathy of his fellow-men, and no effort would be spared to rescue him from his unhappy position. And yet we see thousands of men who live continually in a smudge, voluntarily subjecting themselves to a martyrdom by smoke, scarcely breathing one breath of pure air during their waking hours, preferring to take the life-giving fluid which Heaven has provided in such purity and abundance, filtered through "a stinking pipe." Nature evidently abhors smokers, and adopts every possible means of getting rid of the nuisance as soon as possible.

An Interested Doctor.—A few years ago we had a call from ex-Governor Bagley, whose portly figure and roseate countenance suggested somewhat free indulgence in conviviality, of which the governor himself was often made quite conscious by pungent twinges of gout and rheumatism. He was just returning from the great banquet held at Chicago in honor of President Grant, at which the guests spent several hours in testing the merits of the long list of viands and choice wines provided for the occasion. The governor remarked that he never allowed himself to leave home for such an occasion without providing himself with a supply of colchicum pills, which he produced from his pocket, as he was otherwise pretty certain to be laid up with his old enemy as a penalty for his imbibing. This led to observations respecting the numerous remedies which he had tried without benefit, and the relation of an amusing story for the sake of which we have mentioned this incident.

A few years ago, when suffering with a particularly severe attack of rheumatism, he called upon one of the leading physicians in Detroit for a prescription. The doctor wrote one, which was filled at the drug store and taken for several days, but with no benefit. He accordingly called upon the doctor again, who wrote another

prescription, which was tried with no better results. After a few days he called again, reporting that he was no better. The doctor wrote still another prescription, with which the governor started for the nearest drug store. He had gone but a few rods when he was stopped by the doctor's voice.

"Hallo! governor."

"Yes; what do you want?"

"If that medicine does you any good, please let me know right away. I've got a little touch of the rheumatism myself."

No comment is necessary. It only remains to be added that the governor found no occasion for reporting, and naturally became a confirmed skeptic regarding the efficacy of drugs.

Smoking Statistics.—Somebody has been looking up the statistics of tobacco-smoking, with the following results:—

"For every five persons who use tobacco in England, France, and Russia, there are fifteen in Germany and North America, twenty-four in Belgium, twenty-eight in Holland. In Mexico nearly every one is a smoker; and it is said that while the school-master is seldom without a cigar in his mouth, his pupils who have done well in their studies are rewarded by being allowed to smoke a cigar as they study."

Getting Even.—Since the closure of most European ports to American pork on account of the danger from trichinæ, our government officials have been looking about for some way of "getting even" with the fastidious foreigners who devour green oysters, snails, and even earth worms, but are unwilling to eat American trichinæ, even when well smoked and fricasseed. A satisfactory plan has at last been suggested. It is proposed to prohibit the importation of adulterated liquors. It may be that the pork parasite will prove to be a useful member of society after all.

Corset Voices.—A woman that wears a corset cannot employ the voice with that freedom and naturalness possible when the action of the abdominal muscles is unrestrained. A Cincinnati paper recently described the voice of a *prima donna* with unintentional accuracy by remarking that her voice issued "as from a corset," which was a literal fact, rather than from a "cornet" as the reporter intended to say.

A Woman's Definition of "Women."—The almost universal prevalence of invalidism among women justifies the following definition of women by Mrs. Jane Swisshelm: "The things we call women are simply small packages of aches and pains, done up in velvet and lace, and topped out with ostrich plumes."

The Champion Eater.—A French author gives an account of a soldier who required quadruple rations, and ate besides large quantities of scraps, waste meat, etc. He is said to have eaten twenty-four pounds of beef in twenty-four hours on several occasions, and at one time swallowed thirty pounds of liver and lungs at one sitting.

—A prominent California newspaper suggests that there is danger of the importation of that most horrible disease, leprosy, through the large quantities of Hawaiian sugar which are being brought into this country. It is stated that the disease has been introduced into California by this means, and it is barely possible that through this means the appalling cry, "Make room for the leper," may become as common in some parts of this country as in those parts of the world where the disease has prevailed for thousands of years.

—An exchange records a new danger from cigars. It seems that an English sparrow recently carried a lighted cigar stub to its nest, under the eaves, and burned up the house.

DOMESTIC MEDICINE.

THE TRAINED NURSE.

It will never be known how many lives are sacrificed annually to incompetent nursing. When the physician or surgeon, after doing his best for the patient, closes the door behind him, it is often with the unpleasant feeling that all the good that he has done may be undone before his next visit by the stupidity, neglect, or injudicious kindness of those who are left to take care of the patient.

A doctor once said to the writer, that he considered a patient's chance of recovery ninety per cent better with a trained than with an untrained nurse. A well-known physician of Boston said in a public lecture that when he saw a trained nurse standing by the bedside of a patient, he felt almost sure that the life would be saved.

In every serious illness the critical time always comes when life hangs in the balance. A little neglect, a slight carelessness, or constant watchfulness and promptness will incline it one way or the other, and the life is saved or lost. It is then that the trained nurse shows how invaluable training is. She recognizes the crisis, even if the doctor is not at hand to tell her that it is upon the next few hours that life or death depends. She is calm, because she knows what to do, and she does it. She has resources. When a thing is to be done, like the administration of nourishment or medicine, if one way fails her, she has another. Instead of helplessly giving up at the first difficulty, and considering it an impossibility, she brings her knowledge and experience to bear upon the point, and carries it.

"I ordered a cooling lotion," said a doctor once, with a gesture of resigned despair, "and when I came back, I found a poultice. Nothing could induce the nurse to cover the inflamed part with only one fold of wet linen, because it dried up so fast!" As it was precisely the object of the lotion to relieve the inflammation by evaporation, it was trying to find the part covered with several thicknesses of cloth, which effectually prevented evaporation, and entirely defeated the end in view.

In a surgical operation, trained assistance of some kind is absolutely necessary to the operator, and in many cases it can be supplied by a properly-taught woman. The preparation of the patient can be left to her entirely. The arrangement of the room and of the different articles likely to be required, devolves upon her; and at the time of the operation, knowing exactly what is required, she can often render all the aid that is needed. The after-care of the patient is of the greatest importance, and cannot with safety be left to an unprofessional person.

It is usually impossible for the surgeon to devote himself exclusively to one case; and if he has no one upon whom he can rely to watch it for him, some apparently trifling accident may cause it to terminate fatally. A slight hemorrhage, a chill, a misplaced bandage are like the first little breach in a dike—not serious if attended to at once, but if unobserved or neglected, end in ruin and desolation.

No doctor, and especially no country doctor, who has had to contend with the nursing that usually falls to the lot of his patients, will deny that there is a great need of trained, qualified women as nurses,—women who can faithfully, efficiently, and intelligently carry out his orders, and assist him in what is the aim and object of all his efforts, the cure of the patient. For such women there is ample room, and work in abundance.—*Boston Globe.*

For Constipation.—In cases of chronic constipation due to want of desire for movement of the bowels, without excessive dryness of the stools, the following prescriptions, used by enema after breakfast, will often prove very serviceable:—

Brown sugar, a tablespoonful; cold water, one pint.

Common salt, a teaspoonful; water, one pint.

Glycerine, two tablespoonfuls; water, a large teacupful.

Spirits of camphor, fifteen drops; water, four tablespoonfuls.

Sometimes cold water alone will be sufficient to accomplish the desired result. The quantity should not be large, not more than one-half pint.

Some time ago we had for treatment a patient who had been under the care of a magnetic doctor whose treatment for this condition was

a small roll of raw cotton smeared with sweet oil passed into the rectum on retiring. Of course the cotton was "*magnetized*;" but it might prove beneficial without the magnetism. In the case referred to, it seemed to be effective.

How we Captured a Tape-Worm.—A tape-worm in a child is often one of the most disagreeable of tenants to expel. The medicines administered for the expulsion of the tape-worm are necessarily of a poisonous character, and sicken the patient as well as the worm. The ordeal is a trying one, even to a very strong man; and when it is considered that as large a dose of sickening medicine is necessary to kill a tape-worm in a child as in a full-grown person, while a small fraction of the medicine is sufficient to sicken a child, it at once appears that a child must necessarily suffer much more acutely than a grown person while undergoing the treatment.

One of the most interesting cases of tape-worm we have ever treated was under our care a short time ago. The patient was a lad of ten. He had entertained the very disagreeable tenant for two years. Every three months during this time he had been put through the usual several ordeals for expulsion of the worm, and with the result of getting rid of hundreds of feet of worm, but no head, so that the worm speedily grew again.

The little fellow had suffered so much that he stoutly declared that he would rather keep his "T. W." than endure the medicines administered to drive out the undesirable lodger. His stomach was so sensitive that vomiting occurred almost as soon as the medicine was administered. To relieve this, treatment consisting of local fomentations, massage, and local applications of electricity was applied for a few days. The diet was made to consist chiefly of bread and milk. On the morning of the day selected for the attack, the little patient was ordered a light breakfast of bread and milk, as usual, instead of being made to fast as is generally done. At 12:30 P. M. the anthelmintic dose was administered. It consisted of three-fourths of an ounce of the *pelleterine de Tauret*, a preparation of the active principle of pomegranate root. An hour later a half-ounce of tincture of jalap was given in sweetened water, and future developments were waited for. After about two hours, movements of the bowels began, and pretty soon the little fellow exclaimed with delight, "Mamma, he is backing out fast." And sure enough Mr. "T. W." was literally backing out. But pretty soon matters came to a standstill. A good many feet of tape-worm were visible; but the size of the worm gave reason for believing that a very large portion still remained. An enema, consisting of one quart of warm water containing two drams of tincture of assafetida, was now administered, with the effect of advancing matters a little; but soon they were at a standstill again, and another enema was administered, two drams of turpentine being added this time. A vigorous action of the bowels ensued, and, as careful search afterward showed, the worm came away entire. The parasite was bottled in alcohol, and put away in the museum of the institution, along with other similar trophies. Our little patient and his friends were exultant, and we felt well paid for a pains-taking effort.

Electricity.—The most suitable form of electricity for use at home is that known as the faradic current. The most generally useful mode of application is that termed general faradization. In making this application, place the patient on an ordinary stool, with the face toward the battery and the feet on a sheet of copper, to which the conducting cord connected with the negative pole is attached. Patients who, through paralysis or for any other reason, are unable to sit up, may receive the treatment while lying in a bed or on a lounge, the sheet of copper being supported against the feet by means of a pillow or cushion. Except in cases where there is a special indication for the application of electricity to the lower limbs, the negative pole may be applied to the lower end of the spine instead of the feet. This plan is a better one with infants, with whom difficulty may be experienced in keeping the feet upon a metallic plate. The right hand of the operator should be placed upon the forehead of the patient, while with the left he touches the sponge of the positive pole of the battery. The sponge should not be grasped at first, but simply touched with the tip of one finger. Then, if the patient does not feel the current as desired, it may be taken in the hand and pressed with sufficient firmness to obtain as much strength of current as is needed.

After applying the current to the head for a minute or two, the positive sponge should be passed slowly down the spine a few times, then over the back, chest, abdomen, arms, and legs, and over every part of the body.

In applications to the spine, the negative pole is placed at the lower end, and the positive is

passed slowly down the spine twenty-five or thirty times. In applications to the chest, stomach, womb, or other internal organs, the positive pole is held upon the spine opposite the organ, and the negative placed over it. The time required is usually five to fifteen minutes. In cases of vomiting during pregnancy, this means is sometimes invaluable, and the current may be employed several hours at a time.

Nasal Catarrh.—This disease is the result of frequently neglected colds. It is most likely to make its appearance in an aggravated form in scrofulous or rachitic children, in whom the ichorous discharge from the nasal cavities produces an irritation of the skin of the upper lip, which ultimately results in the thickening of the lip, producing one of the characteristic facial indications of scrofula in children. The disease is often neglected with the idea that the child will outgrow it, which is a very mistaken notion, as the malady is very seldom outgrown, though it passes through various stages, ultimately becoming in some cases less noticeable and offensive than when attended by a profuse discharge. Among the unfortunate results of this affection are, caries of some of the bones which project into the nasal cavity, deformity of the nose resulting from the division of the septum, extension of the disease into the throat and larynx, producing serious impairment or entire loss of the voice, and extension to the ears through the eustachian tubes, causing deafness. It ought to be mentioned in this connection that deafness is more frequently produced in this way than in any other.

TREATMENT.—Contrary to the general opinion respecting this disease, it is among the most readily cured maladies, provided the patient can be placed under proper conditions, and can receive proper treatment. Among the necessary conditions, we mention as of the greatest importance, warm clothing, which should be carefully regulated according to the season of the year. As a general rule, flannel should be worn next the skin both summer and winter. The skin must be kept active and vigorous by tepid or cool baths or saline baths. The general health must be improved by a simple but nourishing diet, proper exercise, sufficient sleep, and attention to all matters pertaining to health. It is also of special importance that the diet should be of an unstimulating and unclogging character. Animal food should not be taken too largely, and condiments and rich food should be avoided altogether. The bowels should be kept loose and regular by the abundant use of fruits and coarse grains. The patient should be protected as much as possible from sudden changes of the temperature. This is best accomplished not by keeping the patient in-doors, but by hardening the skin and accustoming it to daily out-of-door exercise at all seasons of the year.

In addition to the above measures, much can be done toward effecting a cure by the use of proper local applications. When there is an abundant discharge, a cleansing lotion, followed by a lotion of an astringent character, should be used daily by means of the air atomizer. When the discharge is offensive, a disinfecting lotion should be used in addition to the cleansing and astringent lotions. When there is dryness of the membrane and scabs are formed, cleansing and stimulating lotions should be employed.

Dandruff.—This is a condition in which branny scales are shed from the scalp in great abundance. It may be due to eczema or pityriasis, or may result from a disorder of the sebaceous glands, and from acne. The latter is the most common cause of the disease. In this form of affection, the abnormal secretion of the fat glands appears upon the scalp as yellowish scales. This condition is sometimes present upon the nose and cheeks as well as the scalp. It is often a very annoying complaint. When affecting the scalp, it sooner or later results in loss of the hair. This is not because the dandruff destroys the hair, but because the same disease which causes the dandruff, interferes with the nutrition of the hair, thus occasioning its loss. On account of its tendency to produce baldness, the disease should never be neglected. Dandruff is generally occasioned by disorder of the digestion, or some other debilitating disease.

Treatment.—Restore the general health by proper attention to the digestion and general hygiene. For dandruff of the face, apply the same remedies recommended for the skin. The scalp should be treated in the same way, by gentle shampooing with ordinary washing soap, once or twice a week. A very soft brush should be used. Neither a stiff brush nor a fine comb should ever be used for removing dandruff. For shampooing, a liniment composed of equal parts of castor-oil and alcohol may be rubbed on the scalp, or an ointment composed of a dram of tannin to an ounce of vaseline.

How to Cure Chilblains.—A gentleman called at our office the other day, suffering with what his physicians had termed eczema of the feet. The heels and sides of the feet were red and slightly swollen and exceedingly painful. The trouble began with freezing the feet several years ago, as we found by inquiry. The case was evidently one of chronic erythema, an inflammation or congestion of the skin, or what might not improperly be termed, chronic chilblains. We recommended the following: 1. To bathe the feet with very hot water for fifteen or twenty minutes every night; 2. After bathing the feet with hot water, to rub them well with *benzoated zinc ointment*, a soothing and slightly astringent unguent which can be obtained at any drug store. At the end of a week our patient reported himself practically well.

Hot Water for Torpid Livers.—Two Polish physicians have been making experiments for the purpose of ascertaining the effects upon the liver of alkaline mineral waters. Their results indicate that alkaline waters increase the quantity of bile when taken freely. These experiments also included observations upon the effects of hot water upon the liver, the conclusion being that hot water possesses the same properties as alkaline waters. We have proved in a large number of cases that the use of hot water is one of the most effective means of encouraging a torpid liver. When the liver is torpid, there is usually a red sediment in the urine. From six to eight glasses of hot water should be taken daily until the sediment disappears.

Oily Skin.—In some persons there is an excessive production of sebaceous matter or sebum, due to morbid activity of the fatty glands of the skin. The skin of such persons presents a shiny look. Little beads of oily matter may be seen at the mouths of the glands near the roots of the hairs. The forehead, nose, and cheeks are most frequently affected. When the scalp is affected, the condition may be indicated by soiling of the pillow. Acne is frequently accompanied by this condition.

Treatment.—The only treatment to be employed is the frequent application of soap. When many of the glands are clogged up, as indicated by the abundance of grubs, the surface should first be thoroughly rubbed with warm oil. Cocoanut or almond oil is the best. After half an hour, the surface should be rubbed with a flannel cloth, thoroughly saturated with soap moistened with warm water, and stretched over the fingers; or a soft sponge may be used. This is best done at night, just before retiring. When the secretion of fat is very profuse, the operation may be repeated two or three times a day.

Fœtid and Profuse Perspiration.—This condition is most commonly found in the feet, although the armpits and other parts of the body are sometimes affected. The following treatment will be found successful in most cases:—

Just before retiring at night, take a hot and cold foot-bath, dipping the feet first in cold water then in hot, allowing them to remain in each for about one-half minute, and repeating the operation fifteen or twenty times. Then wipe with a soft towel, and when nearly dry, rub with subnitrate of bismuth, using a large teaspoonful of the powder for each foot.

Bread and Milk Poultice.—Place in a basin a handful of crumbs of stale bread, from which the crust has been carefully excluded. Pour on boiling milk, stirring all the while, until the mixture becomes of the thickness of mush. Care should be taken to make the mixture perfectly smooth. Spread on a cloth, making the layer a quarter to half an inch in thickness, and sufficiently large to extend well over the part to be treated. The poultice may be applied directly to the skin, or a thin cloth may he placed between. A neat way of making the application is to put the poultice in a muslin bag of proper shape and size, and apply with a cloth between the bag and the skin. Much hotter applications can be borne in this way than when made in the usual manner. This is one of the most conveniently prepared poultices, and is not excelled in efficacy by any other.

Hot Milk is an excellent food for consumptives. From four to eight glasses should be taken daily. The evidences of benefit are, increase in weight and strength, lessened cough, and checking of bowel looseness.

To Relieve a Congestive Headache.—Press with the thumbs upon the large blood-vessels of the lungs.

Charcoal Poultice.—Sprinkle fresh, finely powdered charcoal over a bread and milk poultice in a thin layer, and apply as usual.

Talks with Correspondents.

THE following are a few of the questions we have received for answer. We are not able to notice all this month.

What is the best home treatment for nasal catarrh?

Ans. Recent cases of catarrh can be successfully treated at home; but cases of long standing are likely to be accompanied by some one or more of the numerous bad results of long-continued catarrh, such as hypertrophy of some of the processes of the nose, causing obstruction to the entrance of air, ulceration of various parts of the nasal cavities, polypi, etc. All these, and many other things present in old catarrh, require the careful attention of a skillful physician in order to effect a cure. A person who is unable to breathe easily through the nose, or finds the passages of the nose obstructed whenever a slight cold is contracted, will require something more than home treatment to perfect a cure. Many cases of ozœna and of foul breath involve conditions of the nose which require treatment at the hands of a competent physician. Of the simple measures of treatment, which can be successfully employed at home in recent cases of catarrh, the anterior nasal douche, the ordinary nasal douche, and the post-nasal douche are among the most efficient remedies. When there is a very profuse accumulation of mucus formed in the nose, a solution of soda, a teaspoonful in a pint of water, should be used once a day for cleansing. This should be followed by a solution of the same quantity of salt and water. We have found the hot post-nasal douche, with the addition of a teaspoonful of salt to the pint of water, to be the most effectual for relieving cases of catarrh when there is a dropping of mucus from the nose into the throat. The douche should be taken with a proper tube connected with a syphon syringe. The temperature of the water in the reservoir should be from 130 to 140 degrees. The present number contains a short article on the treatment of nasal catarrh in children. More lengthy articles on the subject will appear during the year.

Is it well for a person who has torpid liver to use milk freely?

Ans. Milk from a healthy source is a natural and healthful food. The popular notion that it has a tendency to produce torpidity of the liver, is probably based upon the fact that many persons suffer from what they term a "bilious attack" whenever milk is freely used. A careful observation for years has convinced us that the fault is not in the milk, but in making a bad combination of the milk with other articles of diet. The liver is seldom concerned in a bilious attack except as the result of the disturbance of the digestion. A bilious attack is in fact simply an acute catarrh of the stomach resulting from indigestion. Milk agrees best with grains. Persons who have a moderately good digestion can take both fruit and grains with milk without inconvenience. Milk is somewhat apt to disagree with vegetables, and should not be taken when meat is eaten freely, as both are highly nitrogenous in character, and if taken together would supply an excess of these food elements.

Would it be advisable for a person who has a torpid liver to eat meat?

Ans. Whether a person suffering with a torpid liver should avoid a flesh diet, depends upon his digestive organs. If he is able to eat of fruits, grains, and milk, and if his appetite is satisfied and his strength sustained, he had better abstain from the use of flesh food. When nitrogenous food is taken in excess, the excess is treated by the system like waste matter, and thus imposes extra labor upon both liver and kidneys. A person who has a torpid liver should aim to give the organ as little work as possible, and should certainly avoid imposing upon it extra work.

Which is better for a sick person, coagulated or uncoagulated milk?

Ans. The answer to this question, like that of the preceding one, depends upon the condition of the patient's stomach. When there is a tendency to the formation of large and hard curds in the stomach when milk is taken, it is better that the milk should be coagulated by a little lemon juice, or, perhaps better still, by the addition of a teaspoonful of the infusion of rennet. Milk prepared in this way is termed "slip." In eating milk thus prepared, the curds are broken up and finely divided, and when received into the stomach, are quickly acted upon by the gastric juice, instead of being slowly dissolved, as is the case with large curds.

Should hot water be taken at night in a case where, owing to indigestion, the stomach still contains undigested food?

Ans. This question is probably asked on the supposition that the patient takes but two meals per day. A free use of hot water is a very excellent means of relieving various disturbances of digestion, particularly those which arise from sluggishness of the stomach, such as acidity, contractions, heart-burns, etc. The object in taking hot water is to stimulate the stomach to contract, and thereby empty itself of its contents. A person whose digestion is so slow that food taken at dinner is still in the stomach at bed-time, may drink two or three glasses of hot water for the purpose of washing out the stomach, with benefit.

Should croton oil ever be used as a counter-irritant on the chest, for the relief of bronchial irritation?

Ans. We have never found it necessary to use croton oil for the purpose named. Sponging the chest with hot water, and the application of fomentations to the spine and shoulders, together with the inhalation of steam, are almost universally successful in relieving irritation of the bronchial tubes.

THE COOKING SCHOOL.

Conducted by MRS. E. E. KELLOGG,

A DINNER OF EIGHT COURSES.

WHAT shall we eat, and how shall it be cooked? is a question of the greatest importance; not that we wish to intimate that the compounding of rich viands and epicurean dishes ought to engross more attention than it does; but in the truest sense of the adage that "man eats to live," the proper selection and preparation of such food as can be most easily converted into healthy blood and tissue, is a matter of vital import. Men and women are the masterpieces of the infinite Artist, and are designed for the highest type of life and action; but unless the conditions governing health are complied with, and the materials required to keep the body in working order are prepared with care, it will be impossible for them to fulfill the purpose of existence in the best and truest manner. However excellent be the material selected, it may, by the manner in which it is prepared, be converted into something totally unfit to nourish the system; and vice versa, the most excellent culinary preparation cannot convert unwholesome or innutritious substances into wholesome and nutritious ones. The real object of cooking food is to render it more digestible; in fact, cooking ought to be a sort of partial preliminary digestion of the food elements; but the numerous inventions and devices of our modern *cuisine* quite as often render it indigestible as otherwise. Doubtless the reason why healthful cookery is the exception, is ignorance respecting the qualifications necessary to constitute a substance a fit food to supply the wants of the human system, together with the custom of catering to please the palate without regard to dietetic value. Very few persons, having once learned the value of a simple, healthful diet, would be willing to exchange it for one whose only merit is that of gratifying the taste. Many others would perhaps gladly adopt a more healthful regimen were they sufficiently conversant with the ways and means for doing so. It is with the hope of assisting those who may desire to become more intelligent on this all-important subject, that we purpose to present our readers with a dinner of eight courses, including soups, breads, grains, vegetables, desserts, fruits, etc., one of which will be served each month.

SOUPS.

Soup is justly entitled to a prominent place in the science of cookery as a convenient, economical, and, when properly prepared of healthful and nutritious material, a wholesome article of diet. The weak, sloppy, greasy compounds often served under that title, however, cannot be too greatly condemned. Pepper, salt, and flavorings may make them palatable, but only add to their indigestibility. Soup, to fulfill its true mission, should contain as small a proportion of water, and as large an amount of nutritive material, as possible. Soups containing a large amount of water are not so quickly digested as solid foods, since the fluid portion must be absorbed by the stomach before the process of digestion can be carried on. Scientifically prepared, however, the solid matter which enters into the composition of soups is so broken up in the process of preparation that it is readily dissolved by the digestive juices. Especially is this the case with soups made from dried peas and beans, both of which are very nutritious foods, and much more easily digested in a well-prepared soup than in any other form. Taken hot at the beginning of a meal, soup stimulates the flow of the digestive juices, and on account of its bulk brings the sense of satisfaction before an excessive quantity of food has been taken into the stomach.

The nutritive value of soup depends of course upon its ingredients, and these should always be chosen with reference to the maintenance of health. Great care should also be exercised in selecting for the remaining bill of fare such articles as will combine with the soup to supply the proper proportion of nutritive elements, provided the soup is one lacking in nitrogenous elements. For example, if the soup selected be one composed of potato, tomato, or any like ingredient largely composed of starch and water, the remaining bill of fare should include some article especially rich in nitrogenous elements, as whole-wheat bread, cracked wheat, oatmeal, and similar grains.

Beef, mutton, or chicken, well prepared, make wholesome soups, especially with the addition of the grains; but soups made from animal food are not more nutritious than those made from the grains only, or from some of the legumes, as peas, beans, and lentils. Indeed, if we compare the relative values of the two classes of food, as given by various eminent authors on food, we shall find that the legumes contain a larger proportion of nutritious elements and fewer objectionable features than flesh foods, while they have the added advantage of being less expensive.

Milk is a factor of no small importance in the preparation of vegetable or grain soups, and should be used largely in the place of water when available. It is in itself a perfect food, and consequently adds to the nutritive value of the soup, and serves the purpose of a fluid at the same time. In the preparation of soups from such vegetables as potatoes, parsnips,

and others of the class composed largely of starch, and containing but a small proportion of nitrogenous food elements, it should enter largely into their composition, as an addition to their food value, as well as to their palatable qualities.

For the preparation of soup, a soup pot which rests on standards, and in which a soup can cook for a long time on the top of the stove without burning, is the most serviceable utensil; but an ordinary kettle can be used. It is best, however, to devote it entirely to soup making, not using it for any other purpose. Soups are far better, as a rule, to simmer gently than to boil rapidly and hard. In preparing vegetable soups, it is best to use but a small quantity of water, and if it evaporates before the vegetables are done, that which it is necessary to add should be of a boiling temperature, in order that the boiling may not cease, as otherwise the vegetables are likely to become watery. In the preparation of soups from animal substance, the proper proportion of water to be used is about one quart to every pound of meat and bones. Both meats and vegetables for soups are better to be put to cook in cold water, and allowed to soak until the water reaches the boiling point, since the object is to extract as much of the flavor and juices as possible. When milk is added to soup just previous to serving, it is better to use hot milk rather than cold.

Soups should be of an equal consistency throughout, and in the preparation of simple vegetable soups the ingredients should be rubbed through a wire sieve or colander when tender, otherwise the mixture will be a sort of mushy hodge podge instead of soup. Good soups should be attractive in appearance, as well as agreeable to the taste, and must contain no broken fragments of the material of which they are composed. Shreded vegetables and grains, when used in soups, should be cooked only until tender, not till they are dissolved. In making soups of dried beans, peas, etc., the sifting is absolutely essential, since the skins are not easily digested, and should be removed.

If soups are too thick, they should be diluted with milk or water; if too thin, they may be thickened with a little flour braided with milk. Whole-wheat bread, cut into dice and browned in the oven, makes excellent *croutons* to serve with soup. Put a spoonful or two of them into each soup plate, and dish the hot soup over them when serving. Most soups are much nicer to turn through the colander a second time in pouring from the kettle into the tureen, as that will remove any lumpy substance that may have formed in them. Grain and vegetable soups are very easily made, and are among the most palatable of all soups. The following are a few of the many excellent ways in which they may be prepared :—

Cream Pea Soup.—Put three-fourths of a pint of dried peas to soak over night in a quart of water. In the morning, drain and put to cook in cold water. As soon as the water boils, skim carefully, cover closely, and let simmer gently four or five hours, or until the peas are very tender; when done, rub through a colander to remove the skins. If the peas are very dry, add a little water occasionally to moisten them and facilitate the sifting. Just before the peas are done, prepare potatoes, cut in thin slices, enough to make a pint and a half, and put them to cook in a small amount of cold water. Let them simmer until dissolved, and then rub through a colander. Add the potato thus prepared to the sifted peas, and add water or milk enough to make three and one-half pints in all. Return the soup to the fire, and add a small head of celery, or half a large one cut in pieces about a finger in length, and let the whole simmer together ten or fifteen minutes, until the flavor of the celery is extracted. Remove the pieces of celery with a skimmer, and add a cup of thin cream, and salt to taste. This should make about two quarts of soup.

Brown Soup.—Simmer together two pints of sliced potatoes and one-third as much of the thin brown shavings (not thicker than a silver dime) from the top crust of a whole-wheat loaf of bread, in two quarts of water. The crust must not be burned nor blackened, and must not include any of the soft portion of the loaf. When the potatoes are tender, mash all through a colander. Flavor with a cup of strained stewed tomatoes, a little salt, and return to the fire; when hot, add a half cup of cream, and serve at once. If care has been taken to prepare the crust as directed, this soup will have a brown color, and a fine pungent flavor exceedingly pleasant to the taste.

Tomato and Macaroni Soup.—Break a half dozen sticks of macaroni into small pieces, and drop into boiling salted water. Let it boil for an hour, or until perfectly tender. Strain two quarts of stewed or canned tomatoes, to remove all seeds and fragments. When the macaroni is done, cut each piece into tiny rings, and add to the strained tomatoes. Season with salt, and boil for a few minutes. Put a little cream into each soup plate, and turn the soup onto it to serve.

Potato Soup.—To each quart of soup required, boil a pint of sliced potatoes and a slice or two of white onion, in sufficient water to cover them. When tender, turn into a colander, and rub through with a wooden spoon or potato masher. Return to the fire, and add a quart of rich, sweet milk, part cream if it can be afforded, and a little salt. Let the soup come to a boil, and add a teaspoonful of flour, rubbed to a paste with a little cream; boil a few minutes, and serve. Instead of the onion, a stalk or two of celery or a little parsley may be minced and added for flavoring, thus making an entirely different soup.

Potato and Bean Soup.—Soak a half pint of dry white beans over night; in the morning, drain and put to cook in cold water. When tender, rub through a colander. Prepare sliced potato sufficient to make one quart, cook until tender in as small a quantity of water as possible; and when done, sift through a colander, and add to the beans. Add milk or water sufficient to make two quarts, and as much prepared thyme as can be taken on the point of

a pen-knife, with salt to taste. Boil for a few minutes, add a teacup of thin cream, and serve.

Scotch Broth.—Soak over night two tablespoonfuls of pearl barley and one of coarse oatmeal in water sufficient to cover them. In the morning, put the grains, together with the water in which they were soaked, into two quarts of water, and simmer for several hours, adding boiling water as needed. About an hour before the soup is required, add a turnip cut into small dice, a grated carrot, and one-half cup of fine pieces of the brown portion of the crust of a loaf of whole-wheat bread. Just before serving, rub all through a colander, and add salt and a cup of milk, and a half cup of cream. This should make about three pints of soup.

Literary Notices.

THE PANSY.—This is one of the most delightful magazines issued for children. The new cover just added makes a very attractive exterior, while the articles and pictures that make up the interior are well worthy the attention of the little folks. The editor, Mrs. G. R. Alden, the "*Pansy*" who writes so many wholesome stories for the boys and girls, carries on a series of Bible lessons in addition to the many other attractive and instructive features of the Journal, which are invaluable to teachers and parents.

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THE NORTH AMERICAN REVIEW for January presents a table of contents possessing in the highest degree the character of contemporary human interest. First, the opposite sides of the question of "Ecclesiastical Control in Utah" are set forth by two representative men, whose competence for the performance of the task undertaken by them respectively, admits of no doubt; viz , President John Taylor, the official head of the Mormon Church, and the Hon. Eli H. Murray, Governor of the Territory of Utah. Senator John I. Mitchell writes of the "Tribulations of the American Dollar," recounting the strenuous efforts of the people of the United States to extinguish the national debt, and contending that it is our imperative duty to-day to settle definitely the question, whether we shall have dollars of an unequal commercial value in circulation. Senator Henry W. Blair, taking for his theme "Alcohol in Politics," declares his belief that another irrepressible conflict is at hand, and advocates the submission to the people of an amendment to the United States Constitution prohibiting the manufacture, sale, and importation of intoxicating liquors. No one who read in the December *Review* the first half of "The Day of Judgment," Gail Hamilton's incisive review of the domestic life of Thomas Carlyle, will forego the pleasure of perusing the latter half in the current number. "Evils Incident to Immigration," by Edward Self, is a forcible statement of the mischiefs wrought by the importation into our social and political life of an enormous annual contingent from the lowest stratum of the population of Europe. Finally, the subject of "Bribery by Railway Passes" is discussed by Charles Aldrich and Judge N. M. Hubbard. Published at 30 Lafayette Place, New York, and for sale by booksellers generally.

THE SANITARIAN for January—the first number of the twelfth volume and year—appears as a monthly, instead of a weekly, enlarged to the dimentions of the first-class four and five dollar monthlies, 96 pages text, octavo. The leading articles of this number are: "What shall be Done with the Sewage?" by A. N. Bell, A. M., M. D., demonstrating the importance of the subject, the dangers of filth-storage in the use of numerous make-shifts, the defects in methods in common use, and how to overcome them—alike applicable to sewerage systems, village and domiciliary necessities; "Canning-Houses and their Relations to the Public Health," by W. Stump Forwood, M. D., is a deeply interesting paper on an extensive industry, particularly in Maryland, where it is much practiced; "Typhoid Fever in America—Its Nature, Causes, and Prevention," by R. J. Farquharson, A. M., M. D , Secretary of Iowa State Board of Health, is of universal interest, Dr. Farquharson showing comprehensively the causes of this disease, and the too frequent shortsightedness of those whose province it is to arrest it by attributing it to excrementitious filth alone, and the needful care of potable water, drains, the sick, etc., for its prevention; "Museums of Hygiene," by Medical Director J. M. Browne, U. S. Navy, illustrates the progress of hygiene, by the establishment of museums and libraries, and, in particular, the one founded in Washington in 1881 under the auspices of Surgeon-General Wales, U. S. Navy, which has already accumulated several hundred articles,—specimens, models, plans, etc., illustrating most of the mechanical devices used in practical sanitation, and nearly 6,000 volumes of sanitary works; "School Hygiene," by Charles F. Lundy, A. M., M. D., and "Physical Training," by Professor J. Madison Watson, are papers worthy of adoption as textbook lessons for boards of education, and of interest to every parent who has a child to educate and a life to protect; "Some Causes of Infant Mortality," by T. P. Corbally, A. M., M. D., is a suggestive paper on a subject of abiding interest, the perils of infancy and childhood, and there is no parent or nurse but may profit by a careful reading of this excellent paper: "The Disposal of House Refuse," by J. P. Spencer, C. E., is a subject of interest to every householder, and of specially practical importance to all country houses and small towns where there are no sewers or public scavengers. Besides the e leading papers, under the "Editor's Table" timely topics are discussed of general interest. mortality statistics in the chief cities of the United States and abroad, and three pages of review literature. New York: $4.00 a year, 35 cts. a number.

Publisher's Page.

☞ The next number of GOOD HEALTH will contain the first of a series of articles on the nature and treatment of nasal catarrh.

☞ We trust those of our old subscribers who have not already done so, will favor us by a renewal of their subscriptions for the journal for 1884. The small sum of one dollar can scarcely be expended in a better manner than in providing literature for the family, which will instruct its members how to avoid disease and maintain the highest degree of health. The information on the subject of diet, adulterations of food, ventilation, and other branches of domestic hygiene, is invaluable to any household. Persons interested in hygienic and sanitary reform, will also be grateful for the additional value which the journal has acquired by the accession of the two new departments, "DOMESTIC MEDICINE," and "THE COOKING SCHOOL."

☞ The publishers of the "Home Hand-Book" expect to put to press a new edition of this large work within a very few weeks. The work will be thoroughly revised by the author, and important additions made. It will be published in two volumes.

☞ For several years, the managers of the Sanitarium have experienced great embarrassment on account of insufficient accommodations for patients. It has been necessary to rent nine cottages in addition to the several cottages owned by the institution. During the winter time the accommodations have been quite insufficient to meet the demands of the patients for several years, and the rapidly increasing patronage renders the embarrassment greater with each succeeding year. After carefully considering the necessity of the case, the Board of Directors have decided to erect a large addition to the main building, plans for which are already nearly completed. The addition to the building will probably be 100 feet in length, 46 feet in width, and five stories high above the basement. The new addition will be entirely of brick, substantially fire proof. It will constitute the main part of the completed building. With this addition, the entire length of the building, including the rear extension, and exclusive of the porches, will be 336 feet, making this by far the largest and most complete structure ever erected for the purposes of a Sanitarium in this or in any other country.

The faith of the friends of the institution in the future success of the enterprise, is indicated by the fact that, though the project of the new building has not been publicly announced, and has only been matured in the last three weeks, nearly two-thirds of the amount of stock required has already been subscribed, and a sufficient amount paid in to begin building as soon as the weather will permit. It is expected that the new structure will be ready for partial occupancy before the coming summer is over, and that it will be entirely completed by Oct. 1 of the present year.

☞ The annual meeting of the stock-holders of the Sanitarium, held Nov. 15, 1883, was the most largely attended and the most enthusiastic ever held. The managers of the institution were glad to be able to report that the mortgage which has been resting upon the institution in consequence of the debt incurred in the erection of the new building, has been paid off in the past year. The number of patients has been greater than ever before. The only embarrassment at the present was on account of the insufficiency of rooms to accommodate those coming here for treatment. The following persons were elected to constitute the Board of Directors for the present year: S. N. Haskell, J. Fargo, A. R. Henry, W. H. Hall, G. H. Murphy, L. M. Hall, J. H. Kellogg.

At a meeting of the new Board, the following officers were elected: Pres., S. N. Haskell; Vice-Pres., J. H. Kellogg; Sec., W. H. Hall; Treas., G. H. Murphy; Matron, L. M. Hall; Medical Superintendent, J. H. Kellogg.

A Structure of Strength.—Manager Finney, of the Wisconsin Central Railroad, recently returned from a trip to Niagara Falls, the visit being made principally for the purpose of examining the new canti-lever bridge of the Michigan Central just completed there. He considers the structure a grand piece of work. He is profuse in praise of the engineer and contractor for their skill, and in congratulations to the railway gentlemen interested for having secured so desirable a property. The first trip over the bridge with a locomotive was made the 6th ult. Among those making the passage on the engine were Superintendent Ryland, of the Bridge Company; Engineer Schneider and wife; Engineers True and Son; Mr. Mitchell, contractor; Attorney Grimes, of the New York Central; A. S. Weston, roadmaster; representatives of the press; and others. The bridge seemed as firm under the engine as if built on solid ground. Shortly afterward a work-train of six cars and an engine, with probably 200 persons on board, passed over without the slightest swaying motion. The work was carefully inspected by Superintendent Burrows and the engineers as the trip was being made, and every thing pronounced satisfactory.