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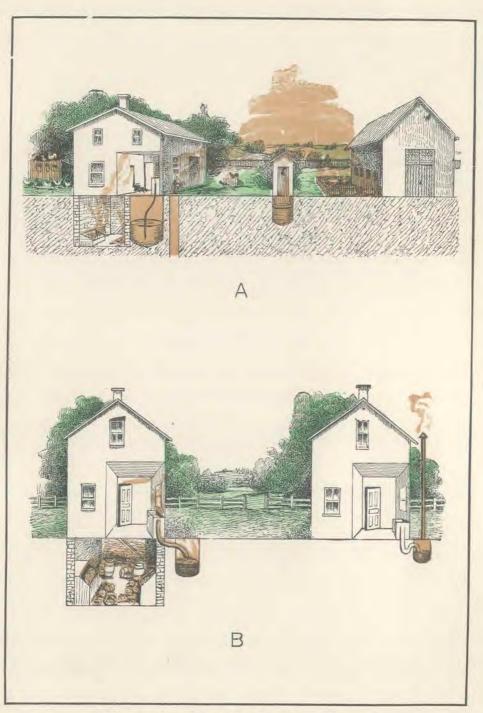
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Domestic Hot-Beds for Germs.

SEE PAGE 127.



BATTLE CREEK MICHIGAN.

APRIL, 1888.

CHRONIC NASAL CATARRH.

FOURTH LECTURE.

Chronic catarrh of the nasal cavity and adjacent parts may be divided into three stages, which are sometimes considered as distinct diseases, but are really different degrees of development of the same disease.

First Stage.—The first stage of chronic nasal catarrh is simply a continuation of the acute disease. Instead of getting well, the patient continues to be troubled with a profuse thick discharge from the nasal cavity, which obliges him to use a handkerchief frequently, and often annoys him by frequent dropping or accumulation in the throat. In some cases, the disease is confined almost wholly to the front part of the nasal cavity, while in others, it is chiefly located in the back, post-nasal, or naso-pharyngeal, region, At first the discharge is of a whitish color; but after a time it becomes greenish. The discharge is variable in quantity, sometimes disappearing entirely; at others, especially when aggravated by a cold, becoming exceedingly profuse. Indeed, the amount of mucus sometimes discharged by the nasal cavity in twenty-four hours is quite astonishing. Frequently the amount is so great as to seriously disturb the breathing, especially during sleep, and to give the voice a nasal tone. The patient finds, however, that this inconvenience may be relieved by vigorous blowing of the nose, and frequently resorts to this method of ridding himself of the obstruction. In many cases, this violent blowing of the nose is found to produce serious inconvenience, as a distress across the forehead, faceache, a stuffed-up feeling in the ears, and earache. These symptoms are due to the fact that in violent blowing of the nose, the air is forcibly driven into the various cavities of the nose, which have been previously described. The extra strain to which these cavities, and also the delicate structures of the ear, are subjected, produces the unpleasant symptoms mentioned; and it is possible, indeed, that through violent blowing of the nose, portions of mucus may be carried from the nasal cavity into the adjacent cavities referred to, thereby setting up the disease in new localities, and thus increasing its extent.

I ought, perhaps, to remark right here that catarrh is to some degree contagious,—that is, if we transplant a portion of the discharge from a catarrhal nasal cavity to a healthy nose, it may create the disease where it did not exist before. I would again impress the warning that the nasal cavity should never be cleared by violent blowing. We frequently

see persons, in blowing the nose, take first a deep breath, then, closing the nose, make such violent efforts to expel the air through it as to cause themselves to become so red in the face, through the distention of the blood-vessels, as to give one the impression that the head is about ready to explode. This is undoubtedly a very efficient method of clearing the nasal cavity, as the air is so compressed that when the nose is released, it rushes out with almost explosive violence; but it is productive of great mischief, and there are, undoubtedly, many cases of ear diseases and other serious troubles to which catarrhal patients are subject, that are due to this cause alone.

After a time, however, the patient finds that although the discharge may be lessened, the nasal obstruction still continues, especially in damp weather or when he has been exposed to a slight chill or dampness. There is also a noticeable change in the voice, which acquires a so-called nasal tone. Really this term is a misnomer, as the cause of the peculiar quality of voice referred to is a lack of nasal resonance, due to the obstruction of the nasal passages of one or both sides.

As time passes on, the nasal obstruction increases, until respiration during sleep is carried on almost entirely through the mouth.

The patient has now become an habitual snorer, much to the annoyance of those who sleep in his vicinity, and even to his own great inconvenience; for there are numerous morbid conditions and really serious diseases, which are directly traceable to mouth-breathing, as we shall take occasion to point out more fully at another time.

The Second Stage.—When the conditions we have just described are present, the disease has reached its second stage, which is characterized by thickening of the mucous membrane, and growths of various sorts. We have here a patient who presents so many characteristic features of the disease at this stage that I have asked him to allow me to examine him in your presence, so as to illustrate as fully as possible the conditions usually found present

in the second stage of catarrh. A glance at this gentleman's face is sufficient to discover to an experienced eye the fact that he has had catarrh for many years. First, we notice that his lips are held slightly apart, even when This is because he is he is not speaking. obliged to breath through his mouth, which is an evidence of nasal obstruction. I notice, too, that his nose seems to be uncommonly broad at the principal part, commonly termed the bridge of the nose. This is due to abnormal thickening of the bones of the nose at this point, or an enlargement of this portion of the nasal cavity from the presence of the thickened tissues within. You observe, also, that his nose is not perfectly straight with the rest of his face. It is twisted a little to one side. This, too, is a result of catarrhal disease, and is due to a deviation, or bending, of the septum of the nose toward one side, one of the most common results of chronic catarrh. If we ask this gentleman to speak, the decided nasal character of his voice is very conspicuous, and is especially noticeable if we ask him to utter such words as him, pudding, or other words containing the sounds of m or ng. Notice that he pronounces him as hib, and pudding as puddigh. The patient confesses that his friends accuse him of being a very loud snorer, and adds that he even sometimes wakes himself by his noisy breathing. He complains that he finds his mouth very dry in the morning, and his tongue covered by a brown coat which he charges to his liver, supposing it to be indicative of "biliousness." Very likely he will be quite surprised when I tell him that his liver has nothing whatever to do with the condition of his tongue, but that the brown coating is really a sort of mold, or fungus growth, which develops from spores, or germs, received from the air.

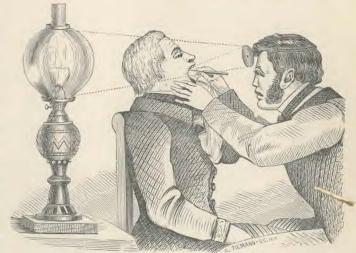
If we use the nasal speculum, to look into this gentleman's nose, we shall discover that the nasal passages seem to be entirely closed. A brownish red mass projects from the outer wall of the nasal cavity toward the septum, and completely closes the passage. If we press upon this red mass with a probe, we easily make a depression in it, which

quickly fills out again when the probe is removed. This is what is called an hypertrophy. If we examine the opposite side of the nose, we find another hypertrophy, though not so large as on the other side. The passage is quite as completely closed, however, on account of the bending of the septum of the nose toward this side. If, now, I throw into the nostrils a spray consisting of a solution of that new and wonderful anesthetic, cocaine, we shall presently discover that these

hypertrophies have, to a considerable extent, disappeared, so that we can look beyond them.

In the meantime, while waiting four or five minutes to allow this change to occur, we will have the patient open his mouth, and allow us to examine his Pressing down the throat. tongue, we get a view of the throat, and notice two red lumps, one projecting from each side. These are hypertrophied, or overgrown, tonsils. The mucous membrane of the entire throat is of a dark red color, and is usually thick, and in places hangs into the throat in

loose folds. The soft palate is also thick, and hangs down too far into the throat. The uvula is enlarged and elongated. The back wall of the throat, also, has a red and angry appearance. The blood-vessels are so much enlarged and stand out so prominently, that their course can be traced. The main trunks, with their many branches, look much like a great river with its tributaries, as seen, upon a map. Here and there we see little red patches, looking somewhat like warts. These are enlarged, or hypertrophied, mucous follicles. We notice that some of the larger patches are covered by a tough secretion, which we can wipe away with a probe having a little cotton wound around the end. If we make the patient draw up the soft palate so that we can see higher up in the throat, we see that these same red patches extend upward into the back part of the nasal cavity. By the aid of a little mirror set at an angle on the end of a long handle, and the strong light reflected from a large concave mirror, we may look up behind the soft palate into the back portion of the nasal cavity, which we find looking very much like the throat. We see masses of thickened tissue here and there, and in the middle we find standing out prominently a thick red growth looking somewhat like an enlarged tonsil; and, indeed, this is just what it is, an enlarged pharyngeal tonsil.



Examining the Back Part of the Nose.

Most persons who have chronic throat troubles are probably of the opinion that two tonsils are enough for one throat, but, as a matter of fact, we have three tonsils, one on each side of the throat and another high up in the middle, behind the soft palate. This third tonsil is also enlarged, like the rest, from chronic inflammation. By skillful use of the little mirror, we are able to find still other evidences of disease in the nasal cavity. We find, in the back part of the nose, several other hypertrophies similar to those which we found obstructing the nasal passages in front; and here and there are masses of green-colored mucus adhering to the mucous membrane. The method of examining the back part of the nasal cavity is shown in the accompanying cut.

Now, returning to the examination of the nasal cavity through the nostrils, we find that

under the influence of cocaine, the hypertrophies have disappeared to such an extent that we can look beyond them when the nostrils are stretched widely open; and in so doing we see two or three grey-colored masses hanging down from the upper part of the nasal cavity, and filling up the back portion of the air-pas-If we ask our patient to throw his head forward and attempt to blow his nose, we find that these masses come down near the entrance of the nostrils. When touched with the probe, we shall find them soft, almost gelatinous in character. These are what are termed polypi. Sometimes they are found growing straight out from the side, or septum, of the nasal cavity. Sometimes they are attached to the roofgof the nasal cavity by a long slender neck. They may be found singly, or in masses almost resembling a bunch of Some time ago I examined a patient who had between thirty and fortygof these growths in his nasal cavity, both sides being filled to overflowing with polypi. The nasal cavity was enormously enlarged, and the polypi were present in such numbers that they hung down at the back part of the throat,

When our patient speaks, we notice that his voice is not only nasal, but somewhat husky and weak. He has constantly to clear the throat from a thick and tenacious phlegm which accumulates in it. He savs that on rising in the morning he is greatly annoyed by "hemming" and "hawking" for half an hour before his voice becomes even tolerably clear. All these are the results of nasal catarrh in its second stage, as the disease extends into the throat, setting up there the same changes which occasion so much mischief in the nasal cavity.

A Mortifying Fluke.—Caller. (To Mrs. Wabash, of Chicago.) Were you at, the dinner party given by Mrs. Breezy last week?

Mrs. Wabash. Yes.

Caller. It was a success, of course? Her dinners always are.

Mrs. Wabash. Ye—es. Everything was very nice, but there were only nine kinds of pie. Mrs. Breezy explained that the baker had disappointed her.—New York Sun.

HYGIENE IN EQUATORIAL AMERICA.

BY EDWARD M. BRIGHAM.

(CONCLUDED.)

ALL of the better class of residences on the Lower Amazon have tiled roofs. The more pretentious have the facade, and sometimes the sides as well, faced with porcelain; and the bright, clean surface, though glaring with discordant greens, blues, yellows, and purples, makes a pleasing contrast to that of the dingy house which is often adjacent. Glazed vases and statues of the same gaudy colors ornament the gardens, the balustrades, and even the house-tops. Equally bad taste is shown, and worse suggested, by the use of bottles for bordering the grounds. The same tendency toward tawdriness of effect is seen in the decorations of the interior; but the prevailing dampness and the hordes of destructive insects unfortunately militate against its full development. Carpets and upholstered furniture are unknown, and tapestry of any kind is preserved only by constant vigilance. Colonies of termites build their nests in inaccessible places, from which their trails diverge in all directions. Nothing less durable than the hardest wood can resist their jaws. Window and door casings and all wood-work yield to these pests; and as they work only on the inside, their presence is discovered only after the object of their attack has been ruined.

But the destruction from dampness greatly exceeds that from all other causes. The mirrors are dimmed, the gilt frames tarnished. the walls of the rooms discolored, and the piano-strings corroded. The curtains, wherever they are touched with the moist hands, are mildewed within twenty-four hours. At all seasons of the year the atmosphere has continually the humidity of a hot-house, and copious perspiration results from the least exertion in the steaming air, Clothing which has once been worn can be saved from mildew only by exposure to the sun or prompt washing; and in the latter case it must be repeatedly dried, for the parts which have absorbed perspiration soon attract moisture. Owing to these conditions, washerwomen in

Para are in greater demand than perhaps in any other city in the world. This explains the fact, mentioned in an earlier paper, that soap is a desideratum in Para. With many of the floors the aspect of bareness is relieved by an attractive arrangement of different kinds of hard native woods, in strongly contrasting colors.

On entering the parlor, the servant leads us to seats, which are arranged as though the children had been "playing house." The chairs are in two precise rows, facing each other, and range from the ends of a settee toward the middle of the room. If we are to be introduced, our host is sure to receive us with profuse cordiality in word and tone, but with such a lifeless, inane hand-shaking! If we are acquaintances, we embrace, patting each other on the back, give and take the same compliments and talk about the price of rubber or chances for government office. But whatever topic of conversation we may select, we are careful to avoid the weather. This, the never-failing resource for platitude with us, is there a subject so empty, so barren of suggestiveness, that even the Brazilian does not entertain it. There is an utter inappropriateness of such remarks as, "It is a very warm day, is n't it," where it is never anything else; or "It looks like rain," where the elements are so regular that one day's weather-phases repeat another's, with the monotonous exactitude of a chronometer.

Our host invites us to dinner, and we follow him to the dining-room. If it be the occasion of our first visit, we may be introduced to the ladies of the household; but they will not dine with us till our second or third visit. Later, when we are finally honored by their presence at the table, there is such an entire abandonment of reserve on their part as to prove its earlier appearance to have been conventionally assumed. The meal is begun with out ceremony, with an appetizer composed of one or more red peppers, crushed with a knife on the plates, a half teaspoonful of lime juice squeezed from the fruit, a little salt, and meat broth poured over them all. This mixture is eaten with a large spoon. Each person combines the ingredients to suit his own taste. If we imitate the natives, we shall wish we had forgotten to put the peppers into the mixture. I never think of the condiment without recalling an occasion when dining at the house of a wealthy cattle-owner, on the Island of Marajo. I ventured to try the least bit of one of those little red coals of fire, and immediately and with scalding tears expressed profound regret therefor. This amused my friends greatly; and a young lady present, to show me how much courage I lacked, crushed four of the peppers on her plate with her food, and ate the fiery compound without a tear.

There is never heard a wish expressed for "something fresh," as at home. Brazilians do not relish American or English dishes. Unless food be "strong," hot, somniferous or otherwise vile—something that effects abnormally—it does not appeal to their appetites.

Down the middle of the table is a row of meat dishes, and individual saucers of farinha are placed beside each plate. In addition, there may be one or two common dishes of little black native beans, or sometimes better ones, imported. Rice is boiled with one or more of the meat dishes; onions, garlic, redpeppers, and sweet-oil, with all. Dessert, though often wanting, may consist of any of a long list of tropical fruits. Pastry there may be, in the form of cakes and tarts, but pies are unknown. Usually, after the substantials of meat and farinaceous foods are consumed, comes "dolces" (sweets), and coffee. last, which is the theobroma of the Brazilians, concludes every meal. It is never drank during the meal. "Dolces" may consist of fried sliced bananas dipped in syrup of sugar, a saucer of rice, lightly sweetened and covered with a thick layer of cinnamon, or anything else very sweet.

The Brazilian table etiquette differs as radically from ours as does their menu. Every one is expected to help himself or call upon one of the unkempt mongrels in attendance. Spoons, knives, and forks are used with a method which respects convenience only. The spoon is the favorite, on account of its

capacity. The margin of the table-cloth is everybody's napkin.

As in all other parts of Brazil, only two meals a day are eaten. Café (coffee) is taken upon rising, or drank while still in the hammock before rising. In the city, a roll with a little foul French butter is often taken at café, but nothing more is eaten till eleven o'clock, when occurs the regular breakfast. The dinner hour is at six o'clock.

The meal is eaten rapidly and in noticeable quiet, till near the close, when there develops a common disposition to talk. They begin to discuss with animation, which usually increases to boisterousness, often to alarming heat, and, in extreme cases, to a frenzy. They manifest their excitement by trotting the feet, rocking the legs, cracking all the finger joints, and dancing like mad men, with wry faces and general contortions of the whole body. They are never satisfied unless something is fiddling on their nerves. time to prevent disaster, they begin to smoke. Gradually their exitement is subdued, and they betake themselves to their hammocks to slumber till the sun has begun to descend. Then they rouse and smoke again, and begin a less intemperate conversation. A Brazilian is a smoking machine. He seems most of the time either to be smoking or making cigarettes. He is so accustomed to the rolling up of tobacco in tissue paper, that his hands work automatically, and he need not look at them from beginning to end of the process.

Almost everybody sleeps in hammocks. Upholstered beds require so much care to protect them from dampness and insects that comparatively few could afford them, even if they were desired. In some houses a bed is kept for appearance's sake alone, all the household preferring to sleep in hammocks. Though Para is situated in the very path of the equator, the nights are always comfortably cool. Not only does no one lose sleep on account of the heat, but even a heavy woolen blanket is found none too warm in the hammock. It may be thought that hammocks are uncomfortable things to make beds of, and such undoubtedly is the case with the coarse meshed,

ill-shaped manufactures in use with us; but it is not so with the elastic, finely-woven rede of the Brazilian. Then, too, there is much in knowing how to use a hammock. The Brazilian knows how, and he likes it so much that not only his sleeping hours, but many of his wakeful ones as well, are spent wrapped in its net-work.

Books are not often seen in the dwellings. Considering the limited amount of reading indulged in, the average ignorance is not surprising. A young man who had studied law in Para for two years asked me if America was in London. I took peculiar satisfaction in answering that geographical question; and when I had finished, he probably thought America so much of the world that there was no room left for London.

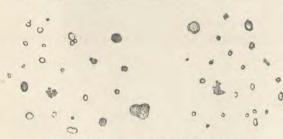
No thought is given to ventilation. Windows are usually on one side of the house only, and these and the doors are closed as tightly as possible at night. By reflecting on the heat and dampness and consequent mustiness of walls and furniture which must result from this practice, some idea may be formed of the state of the air in these houses after they have been closed for a night. But more shocking than all is the custom of closing the house for one week after a funeral, in sign of respect for the deceased. The state of that house at the end of the week can be better imagined than described.

The old Portuguese custom of the seclusion of women, which was brought to this part of Brazil by the colonists, still prevails. A Para senora is never seen on the streets unattended by some gentleman of the household; in the house, usually waited upon by a set of extremely lazy and slovenly servants, she leads a life of endless leisure. Much of her time is spent upon matters of dress, lounging in the hammock in most comfortable dishabille, and peering through the blinds at the street scenes. Her utmost concern is the costume for the next festa, the ball, or the theater. Their styles are Parisian. A few, who have been abroad, wear bonnets, but the majority go without them. Guitars and pianos are the favorite musical instruments—the latter being seen in the houses of a who can afford them, and in some besides. The home life of the Paranese senora is woefully monotonous. No wonder she longingly anticipates the *festas*, and makes the occasions as excessively gay as the intervals are dull. Perhaps the greatest evil arising from this seclusion of the women is the ignorance it entails of the ways of the men. The former are in houses, the latter are in the world.

With the exception of the few foreigners who have gone there to get rich in a hurry and leave, the men like the women, seem to have on their hands abundant time for leisure. Their morbid disposition to kill time is no more strikingly exemplified than in relation to courtship, which must needs be carried on in the presence of the parents. On the Amazon, time seems to have been mistaken for eternity.

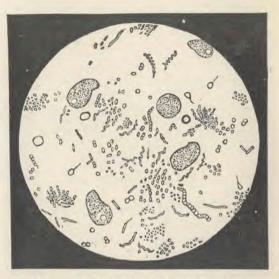
DOMESTIC SOURCES OF AIR-POISONING.

THE frontispiece in the present number is intended to be a graphic representation of some of the ordinary methods by which the seeds of death are sown through the contamination of air. At the present time, no intelligent person is ignorant of the fact that a large number of the most dangerous and fatal diseases are fairly attributable to the mis-



Atmospheric Dust Containing Germs.

chievous work of minute organisms termed bacteria, microbes, bacilli, or more commonly, though less technically, germs. Some of these germs are shown in the accompanying cuts, in which they are represented as they appear when magnified by a powerful microscope. These so-called germs are a low form of vegetable life closely allied to the fungi, or molds. They are found to be universally present wherever any kind of decay or decomposition of animal or vegetable matter is taking place. When received into the system

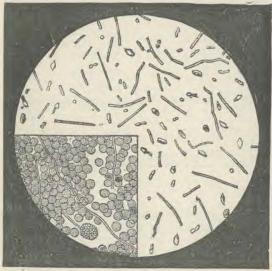


Germs Attacking the Blood Corpuscles.

through the air we breathe or the water we drink, these germs often multiply in great numbers. The body is undoubtedly able to dispose of a small number of germs, or to resist their attacks upon the tissues. It is claimed, indeed, that one of the important

offices of the white blood corpuscles is to devour the mischievous germs which may find their way into the blood. If, however, the white blood corpuscles take up too large a number of these organisms, the germs may destroy the corpuscles, instead of being themselves destroyed. Thus, in some germ diseases, the blood is found to be extensively disorganized.

The only safety, as regards germs, is to keep them out of the body. Although invisible, they are by all odds the most dangerous foes to life and health. Germs are always present wherever decay of any sort is taking place, as in the decomposition of animal or vegetable matter. On this account they are the most abundant in cities and villages, and close about human habitations. In the two figures of our frontispiece we have endeavored to show in a graphic manner some of the most common sources of air contamination. Figure A is intended to represent especially those sources of foul air which may often be found surrounding a human dwelling, such as barnyards, chicken-coops, hog-pens, and the invariable privy-vault, which seems to be nearly universal in small towns and country villages not provided with the sewerage system. Underneath



Germs of Chicken Cholera.

the house may be found the cistern, from which damp vapors ascend into the building and encourage the formation of mold upon the walls, and the development of germs in the close space usually found underneath the house.

During the winter season the processes of decay are checked by the low temperature; but when spring arrives, and the snow and ice are gone, the warm sun soon starts up a vigorous growth of germs, with the inevitable production of foul gases; and the air, which during the winter season is comparatively pure, becomes more or less contaminated according to the amount of decomposing matter present. In the cut the foul gases and accompanying germs present in the air are repre-

sented by a brown tint. These poisonous vapors, although invisible, are always found arising from any kind of decomposing matter. The smell of rottenness or decay always means that poisonous gases, and still more dangerous germs, are present in the air.

The engraving marked B represents more particularly some of the sources of air-contamination immediately associated with many human dwellings. In the cellar may be seen bins and heaps of vegetables, such as potatoes, cabbages, apples, etc., many of which, at this

season of the year, are likely to be found in a state of advanced decomposition, sending forth germs and gases in great quan-These readily find their way up through the door leading from the cellar to the living and sleeping rooms above. In many cellars may be found, not only the things mentioned, but barrels of soap, soap grease, dried meats, in a state of beginning or advanced decay, etc. The walls of such cellars are often found covered with green mold, or festooned with masses of white fungous growth, which indicate in a most positive manner the superlative unhealthfulness of the state of things present.

The reader's attention is also directed to the sink, in the figure at the left, in engraving B, and its connection with the cess-pool. As will be readily seen, the poisonous fumes from the cess-pool find their way up into the building through the open drain-pipe. Thousands of cess-pools are constructed precisely in this manner. In the figure at the right, a properly constructed cess-pool is shown.

It will be noticed that the drain-pipe is curved somewhat in the form of an S placed horizontally. This allows an accumulation of water in the bend, which prevents the air from passing from the cess-pool to the sink, while the ventilating pipe allows accumulating gases to escape from the cess-pool into the open air, where they are disposed of by natural agencies, instead of being carried into the house to be breathed. Cess-pools are not the most sanitary means

for the disposal of house-slops. If they are used at all, they should be made water-tight, and should be provided with a ventilating pipe as shown. This pipe should be at least four or six inches in diameter, so as to give the gases free exit.

In a future number we will present illustrations showing some of the most frequent and dangerous sources of water-contamination.

Very Dissipated.—There are a good many persons who might be said to be dissipated and "all broke up" according to the Japanese use of the word, illustrated in the following anecdote:—

"They are telling in Boston of two or three Japanese students of rank who have been in the habit of dining each Sunday at the residence of one of the solid citizens of the Hub. On a recent Sunday one was absent, and when the host asked why, one of the guests said solemnly: 'Oh, he cannot come. He very, very dissipated!' The host thought it best not to make any further inquiry at the time, but after the meal he ventured to ask the same young man in private, 'You say Mr. Nim Shi is not well?' 'No, he not very wellhe very dissipated.' 'He hasn't been drinking?' 'Oh no, no! he no drunk.' 'Not gambling?' 'No, no! he no gamble.' 'May I ask what he has been doing, then?' 'Oh, he very dissipated. He eat sponge cake allee time-he all broke up now."

Dangerous.—An English lady, taken sick while touring among the Canary Islands, gives an amusing description of one of the strange notions of her nurse. The opinion that "nothing is so bad as water," is lived up to by some who have never put it into words:—

A few days after the commencement of my illness, feeling able to raise my head off the pillow, I innocently asked the senora for some warm water, and my brush and comb. I little knew the storm I was bringing down upon myself.

"You must not wash; it will kill you; and it is very bad to do your hair."

"But," I said, "it is warm water I want; I am not going to use cold."

"Hot or cold, there is nothing so bad as water."

I explained that we always used it in England, in our hospitals as well as in private houses, for those who were ill. Yet nothing would induce the senora to give me water.

"Supposing one were in bed a month," I said, "do you mean to say that one should not wash, or use a brush?"

"Certainly not!" the senora replied.

Argument was useless; but an hour later the servant came in, and I made my husband ask her for hot water, which she brought in all good faith, thinking it was for him. When, however, she returned a few minutes later, and found me at my toilet, her grief and consternation were really comical.

I learned afterward that she went to the senora, and, with despair in voice and gesture, exclaimed, "The senora Inglese will die; she has washed!"

An Unpleasant Reminder.—Scene. Thanksgiving dinner, everybody commenting on the immense size of the turkey. An appalling silence fell upon the crowd when Tommy cried out: "Mamma, is that the old sore-headed turkey?"

Does anybody know what becomes of the numerous "sore-headed" turkeys, and chickens, and oxen, and sheep, hogs, and all sorts of animals with sore stomachs and sore livers, and sores of many kinds, outside and inside of their diseased bodies?

A Bad Practice.—Dr. X is called to see a patient. "Things are not all right with me, doctor."

"What is the matter?"

"Why, all night long I seemed to be flying around through space; could n't sleep—bad dreams."

"What did you eat for dinner?"

" A pigeon."

"Ah, that accounts for it! One of those carrier-pigeons, too, no doubt. Bad practice, my dear sir; don't do it again."



MURDEROUS FASHIONS.

WE hear now and then about fashions in suicide; the Frenchman perfers carbonic acid gas, which he generates by means of a charcoal furnace, with which he shuts himself up in a tight room till his life and the fire go out together. In this country there are both fashionable suicides and murderous fashions. The carbonic acid gas method is, perhaps, as popular as any. It is not generated in a furnace, however, but in the body of the victim. How many women have died for want of the lifegiving oxygen which they resolutely keep out of their lungs by the iron barriers of their corsets. A person who dies from the accumulation of carbonic acid gas in her body is just as much poisoned as the one who breathes the gas into her lungs.

Mrs. Lucy Stone, who has written so many sensible things, speaks as follows about "clothes that kill":—

"The advice to women to promote their health by out-door exercise is never wanting. But no amount of fresh-air exercise can save women from the evil effects of their present style of dress. It is their clothes that kill them.

"With every step a woman takes, her foot contends with her skirt. She lifts it on the instep, and she lifts it on the heel. The weight may be ounces or pounds, but it is taken at every step. The heavy skirts, with flounces, overskirt, and other trimmings, hang their many pounds, flapping around the feet and legs of the wearer. The corset does not allow space to take a full breath, and the tight

sleeves cause the muscles to cry for room. Dressed in this fashion, the wearer comes back from her walk for "fresh air and exercise" tired through and through, and is the worse for it, because she has lifted and carried hundreds of pounds.

"Stand at any city street corner, and watch the women as they pass. How tired they look! How their dresses flap around them! Contrast them with men. Men's feet lift no weight of clothes. Men's steps contend with nothing. Every muscle has its natural exereise. Out-door air and exercise are good for them.

"The advice women need is for shorter, lighter, and looser dresses. Mrs. Jenness Miller has not come a day too soon with her better costume, if the health of women is to be improved. Mrs. Celia Whitehead has shown "what's the matter." Before her, Mrs. Amelia Bloomer, nearly forty years ago, set the example of short loose dresses.

"That style was adopted by many women, among them Mrs. Elizabeth Cady Stanton, Miss Susan Anthony, and the present writer. How light, and comfortable, and neat it was! How easily we went up stairs without stepping on ourselves! How we came downstairs without fear of being stepped on! A walk on a rainy day or in a muddy street had no terror, for there were no draggled skirts to clean. We had room to breath, and freedom for our feet. But this healthful dress was "despised and rejected" by the great public. On one occasion, Miss Anthony, in company with me, started to go to the post-

office in New York, in the Bloomer costume. But we were surrounded and wedged in by a crowd which hooted and jeered. We escaped only by a carriage sent by a friend who saw our dilemma.

"It was so difficult to wear this dress, with the odium that was cast upon it, that we returned sorrowfully to the bondage of our bodies for the sake of freedom to live unmolested. That was long ago. Now women may accept the light, sensible dress which Mrs. Jenness Miller wears and commends, without fear of unpleasant comment. In it they may take fresh air and exercise, and gain health." woman. The bustle seemed determined to drive her along faster than she wanted to go, and she looked pale and tired out in trying to hold herself back.

The bondage of bustles is getting to be a servitude from which all intelligent women must be getting anxious to escape. By the way, why shouldn't men wear bustles, too. They have heavy trousers to hang on their poor shoulders, and besides they have to carry the family pocket-book, another onerous load, and then they have to lift and dig, and carry big loads on their shoulders, and walk long distances, and stand all day behind counters.





BUSTLES AND BACKS.

Bustles, or panniers, or dromedary humps, whatever they may be called, followed close on the heels of the now obsolete balloon "hoops." After a few years their popularity seemed to wane a little, but again bustles have bustled into greater prominence than ever, and threaten soon to outrival the hugest crinoline in proportions, if some obstacle does not arise to prevent further growth. The other day the writer saw an enormous bustle propelling a poor woman along the street. The bustle acted as though it had some kind of an oscillating machine inside of it that pushed her along, just as a sculler propels a boat, or a fish moves itself with its tail. We felt sorry for the

How their poor backs must suffer! Certainly they must need a bustle to brace up their backs, and carry some of the load for them. How would a man look with a bustle! Mrs. Jenness Miller, who does n't believe in bustles, has had a picture made, just to show how a poor masculine human would look harnessed up with a pannier like a beast of burden. Here it is. Is one figure any more monstrous than the other?

But the *looks* of the bustle is not its most objectionable feature. It is positively harmful, even in its most improved form. Here is the experience of a woman who tried a woven wire bustle, which, being sold with a health waist, she supposed to be perfectly hygienic.

and one of the modern improvements of "dress reform:"-

"I don't deserve one particle of sympathy, and I'm not soliciting any. I only want to unburden myself, and help some poor unfortunate who may be suffering from the same cause. While I have never been strong, I have kept fairly well by wearing loose clothes. My trouble always was a weak back; but I have borne children, washed, ironed, scrubbed, and done all manner of things without suffering the least pain in my back while dressed in my flowing habiliments. In an evil hour, though, I bought a health waist, and pinned thereon a small woven wire bustle. At the end of three months' constant wear of aforesaid bustle, my poor old back was a wreck, and I was all undone. We are so situated now that we entertain more of my husband's chums than formerly, and a desire to appear ready for company at all times when they 'drop in' on us, made me invest in that disastrous bustle. It does n't add any more to my appearance or any other lady's appearance than it would to the statue of Venus de Medici; but it's fashionable, and I was foolish enough to conform to a senseless custom.

"A recent magazine writer tells how to support the weight of one's skirts from the shoulders by the aid of the bustle. It was the weight of my skirts pressing that unnatural hump into my back that caused my back to ache. After taking it off at night, it would be several minutes before I could straighten myself and screw my spine back into its natural shape, as it were. I see so many girls eleven and twelve years of age wearing corsets and bustles; in fact, nine-tenths of them do. If the bustle warps the muscles in an old back like mine, what must it do to the young, unformed backs of those little mothers to future generations?"

—Unhealthy dress is always extravagant. Heavy skirts, tight waists, and high heels being expensive doctor's bills.

THE CORSET PEDDLER.

"How d'ye do, ma'am?" she asked, talkin' as if her life depended upon it, an' never waitin' for an answer. "Ain't it a nice day? How's your health? Are your folks well? Did I understand from a lady up the road, here, that you had seven children? How are they all?

"Oh! you are n't the one? Never mind.

"I have here, ma'am," [she'd been unrollin' her leather case all the time, and here took out a roll of something], I have here a new style of corset that gives a most stylish air to the stoutest figger. This is the most remarkable corset ever produced in this age, or any other.

"Why, it makes a stout person look slim as a girl, or a slim one look nice an' plump!

"I should advise you as a friend, ma'am, to buy this corset. It has an electric spring in the back, that will keep you warm in the coldest day, and so equalize the temperature as to prevent your becoming overheated in the warmest weather. It has galvanized-iron springs in front, that are so comfortable you'll hate to take them off at night, while they impart a grace and beauty to the female figger that is unequaled in the history of corsets in Just let me put one on you. You've no idea how it will improve your figger. Why ---," Just here I smelt my fat burnin',-I was making candles that day,and rushed out there in hot haste; but she follered. "It will impart a truly marvelous charm to your manner, and you will be admired by everybody. You know men just love an elegant figger."

She said this last in such a lackadaisical way, it maddened me, and I broke in:—

"Men!" says I. "Men! An' I a married woman! What business have I goin' round incitin' the admiration of men? Hain't I a pardner? Don't he admire me just as much in a loose calico sack as he would in a set of electric-spring, galvanized sheet-iron corsets? I don't want to hear no more such talk, an' I won't neither!"

She see she was on the wrong track, so she begun over again.

"Well, you wear corsets? All ladies do, of course. We sell ——."

[—]Bad dress, bad drinks, and bad diet kill more than war, famine, and pestilence.

"No ma'am," says I, "I do n't wear corsets, nor never did. I put on some once, an' felt as if I'd been run into a plaster-o'-Paris mold, such as they put on folks with spinal an' kindred diseases."

"Oh; but these you could wear, I'm sure!" she went on, determined to get round me some way. "You would n't be without them a single day, if you realized how they would improve your figger."

"My figger," I went on, calmly pickin' up my choppin' tray, "is just as the Lord made it. If he'd wanted a galvanized strap round me, he'd a-built one there to begin with. So long as he and my Johnson are satisfied with it, I be."

The woman laughed, an' said in a good-natured way that she guessed we could n't trade much, an' she'd better go. I did n't dispute her, an' soon I was alone once more."—American Magazine.

THE DOMINION OF DRESS.

Wrong fashion is to be charged with many of the worst evils of society, and its path has often been strewn with the bodies of the slain. It sets up a false standard by which people are to be judged. Our common sense, as well as all the divine intimations on the subject, teaches us that people ought to be esteemed according to their individual and moral attainments. The man who has the most nobility of soul should be first, and he who has the least of such qualities should stand last. No crest, or shield, or escutcheon can indicate one's moral peerage. Titles of Duke, Lord, Esquire, Earl, Viscount, or Patrician ought not to raise one into the first rank. Some of the meanest men I have ever known had at the end of their names, D. D., LL. D., and F. R. S. Truth, honor, charity, heroism, and selfsacrifice should win highest favor; but inordinate fashion says: "Count not a woman's virtues; count her adornments." "Look not at the contour of the head, but see the way she combs her hair." "Ask not what noble deeds have been accomplished by that woman's hand? but, Is it white and soft?" "Ask not what good sense is in her conversation? but, In what was she dressed?" "Ask not whether there was hospitality and cheerfulness in the house; but, In what style do they live?"

Proclamation has gone forth: "Velvets must go up, and plain apparel must come down;" and the question is: "How does the coat fit?" not, "Who wears it?" The power that bears the tides of excited population up and down our streets, and rocks the world of commerce, and thrills all nations, Transatlantic and Cisatlantic, is clothes. It decides the last offices of respect; and how long the dress shall be totally black; and when it may subside into spots of grief on silk, calico, or gingham. Men die in good circumstances, but by reason of extravagant funeral expenses are well nigh insolvent before they get buried. Many men would not die at all, if they had to wait until they could afford it.

Wrong fashion is productive of a most ruinous strife. The expenditure of many households is adjusted by what their neighbors have, not by what they themselves can afford to have; and the great anxiety is as to who shall have the finest house and the most costly equipage. The weapons used in the warfare of social life are not Minie rifles and Dahlgren guns, and Hotchkiss shells, but chairs, and mirrors, and vases, and Gobelins, and Axminsters. Many household establishments are like racing steam-boats, propelled at the utmost strain and risk, and just coming to a terrific explosion. "Who cares," say they, "if we only come out ahead?"-T. De Witt Talmage.

Keep the Feet Dry.—Whenever the walks are moist, as they almost always are at this season of the year, the feet should be protected by rubbers or overshoes when out-of-doors. This extra foot-covering should, however, be worn only when out-of-doors. If worn all the time, the feet are made to perspire, and are more liable to be cold than if not protected at all.



"GATHER UP THE FRAGMENTS."

On! waste them not, the minutes God has given;
Use them to soothe poor hearts by sorrow riven,
Use them to teach whom ignorance has 'slaved,
Use them to warn the wayward and deprayed,
To lift the crushed, and bravely help the wronged;
There is not far to seek, the ways are thronged;
Use them to learn thy God, and how to blend
Thy will with His—grow liker Him. Life's end
Draws daily near,—'t is short, man's earthly lot:
Fragments of time! O mortal, waste them not!

Oh! waste them not, the blessings God has given, Guerdons of toil when thou hast nobly striven,—
Rest, plenty, peace, a home with comfort crowned,
Rich stores of knowledge, loving friends around;
Or the more common gifts thou shar'st with all,
Use them, that in thanksgiving thou may'st fall;
Use them, that thou may'st grow thereby in grace,
In rev'rent cognizance of thy Father's face,
To honor God, to gladden some worse lot:
Fragments of happiness! oh, waste them not!

Oh! waste them not, the powers that God has given To work on earth, to press on up to heaven.

It may be that thou dost in trembling stand,
With failing health, and fears on either hand;
Yet hast thou something left of life and power,
Oh! fail not to employ it, 't is God's dower:
Use it until He takes it all away,
Let nought be lost of gifts so costly—stay
Not in regrets, back-glancing o'er thy lot:
Fragments of health and power! oh, waste them not!

—Prof. Proctor figures that the earth is shrinking about two inches a year. That accounts for the nervous anxiety manifested by some people to possess it while it is of some size.

AUNT POLLY'S EXPERIMENT.

BY FANNIE BOLTON.

"On dear!" sighed Mrs. Marvin. "Look at this room, I am tired out with the children. My nerves are all of a-tremble. The children tear through the house like so many wild cats. There! hear that scream. Some one is hurt or in a passion. I am sure, Polly, my children are certainly harder to manage than ever we were."

Polly was Mrs. Marvin's youngest sister. She stood silent for a few moments, and then said: "Yes; they are wild enough for the woods, and you are worried out with them. Let me take them for a few months. I am just egotistical enough to think you would see a change in them."

"O Polly! old maids always think they can bring up children just right. I used to advise before I was married; but allow me to say you don't know what you are talking about."

"Well," said Polly, with a blush, "you know I won't be an old maid much longer, and ten years of school-teaching have not left me without some idea about the disciplining of other people's children. I have come to the conclusion that children as well as the fathers and mothers are greatly influenced by diet, exercise, and ideas; and you know I have some pet plans that I would like to see carried out."

"Really, Polly, I never could live as you do

much less the children. They have always had whatever they wanted, the best we could afford. I let them eat whenever they feel like it, because I think nature certainly knows when they are hungry better than any one else. I know I get faint between meals, and even now I have such a gnawing that I must go and get me a cup of tea and a relish of some sort."

Suddenly a door burst open, and four children rushed in like a whirlwind. "Mamma, can't John stop teasing us;" yelled Millie, while she held a great sticky lump of molasses candy out of John's reach.

"I ain't teasing," screamed John. "Millie took my ball and lost it, and I'm only paying her up."

Ethel, the youngest child, was besmeared with bluing, tear-stained, and tired. "Mamma, me wants a piece," she whined.

"Where is ma?" cried Ed; "I want to go to the circus."

"Hush; your mamma is not well. Be still," said Aunt Polly.

"Do n't care if she is n't; I'm not going to have a little snipe like Millie lose my ball;" and John raised his hand to give her a box on the ear. Aunt Polly caught his hand in hers.

"Let go," he said, angrily. "Let go, I tell you."

"Children, I want you to help me bring about a nice vacation for you," said Aunt Polly.

"Hurrah"! cried Ed. "Let's hear what it is."

"Well, all sit down on the lounge. Here, John, sit beside me," as he began pulling Millie's curls. "You know next week I am to marry Superintendent McIntire. For two weeks after that we will be at the Dells, in Wisconsin; then we will return home to our pretty village. You know I have told you of the farm and garden, cows, ponies, chickens, and all the nice berry patches. There is everything to make one happy; and now, how many of you would like to spend the vacation months with me?"

"I," "I," "I," "me," cried four eager voices.

"Well, I will only have you on condition that papa and mamma are willing, and that you will do as your new uncle and I tell you."

"You don't catch me doing just as somebody else says unless I like to do it," said John. "Me neither," said Ed.

"Very well, those who won't come on these conditions may stay at home. Your new uncle is a fine gymnast. He can perform almost as many curious tricks as an athlete in a circus.

I think he will teach those who come, to swing Indian clubs and bells, and to do many other interesting things. You shall each have a garden of your own, and we'll do all that we can for your improvement and happiness."

"Well, I guess you can count on us coming, then," said John condescendingly. "We can tease pa and ma into anything we want."

And the children did tease, until Mr. Marvin was glad to consent in order to have a few moments to smoke in peace; and Mrs. Marvin found herself growing irritable and nervous under the continual cry of "go to Aunt Polly's."

"Why did you consent to their going?" she complained to Mr. Marvin. "You know Polly will put them on bran bread and oatmeal, and fill their heads with cranky hygienist ideas."

"Oh, well," said Mr. Marvin, "they are harmless, the bread and the ideas. That's more than we can say for some things they are getting here. I feel sure John is learning to smoke."

"Well, that's no wonder when his father sets the example," said Mrs. Marvin.

"The wonder is that Polly will trouble herself with the young teases. I can hardly believe McIntire will permit his honey-moon to be so invaded," remarked Mr. Marvin.

"Oh, Polly has taught school till it's become second nature to her to have a lot of young ones at her heels. No doubt he is of the same turn. Well, I suppose there will be no peace till they are gone."

"You see, dear," explained Polly to her

husband, "the children are going to ruin. I feel as though they must be helped now, or it will soon be too late. Sister Nettie means to do right, but she is racked with ills that spring from wrong habits. She is fretful, and worries herself and all in the house. She is president of a foreign missionary society, but when I have heard her lay out the needs of India or China, I have felt like getting up myself in the meeting, and laying bare the crying needs of some savage home fields I know of. Her children are little savages. They are into all kinds of mischief; know no habit of order; eat at all times in the day; drink strong tea and coffee; have highly seasoned food, rich pastries, candy, and everything bad for teeth and digestion. They attend and give evening parties, are up late, and eat ice-cream and rich cake. Then there are sick spells, doctor bills, and all modern improvements for making one an invalid.

"Do you know I sent Nettie a first-class health journal for a year? When I was there, I found most of them on a shelf unopened.

She said, with her society duties and missionary work, she had no time to read it. Really, I felt almost indignant. There she has four bright humant beings right at hand to train for usefulness and eternity, and is under solemn obligation to do so; and yet a few sallow savages out of her reach—well, there's no use talking. I suppose as long as Satan is loose, he will keep peoplet grasping for baubles, and trampling the lewels under their feet. Not that I don't believe in missionary work, when it is work; but a real missionary will appreciate the worth of humanity and the possibilities that lie in the hearts of those near her, as well as afar off."

"You have undertaken a very large affair, Polly but we will do all we can for your savages," said her husband.

Mr. and Mrs. McIntire were very busy the following week, fitting up the new barn for the children's use. Four pretty suits to be worn in the gymnasium were finished by Aunt Polly.

"Hello, Aunt Polly," screamed four voices; and four handkerchiefs fluttered in the wind, and four heads crowded out of two car windows.

"You're hurting me," screamed Millie, as Ed bent further out of the window; and Ethel sobbed, "I have lost my handkerchief."

Soon the new uncle was lifting them into the carriage, and Aunt Polly gave them each a hearty welcome.

"How is your mamma?" asked Aunt Polly.

"Oh, she is grunting 'round as usual," said John.

"Mamma said you would make "young hyenas" out of us all. Will you?" asked Millie.

Aunt Polly laughed; while uncle said," If Aunt Polly can improve the specimens on hand, she will do marvels."

"Stupid!" remarked John. "It was n't 'hyena'; hygienists was what she said."

"There is a pretty stream yonder, where we can swim and go fishing some day. Can you swim, boys?" asked uncle.

"No; but we can learn," said Ed. "Yes," said John, "lets take our first swim this afternoon, Ed." "No," said uncle, "it is not quite warm enough yet. It would not be healthful."

"Who cares for health," said John. "I'm going." The new uncle looked stern. "You came here on condition that you would obey orders. If you don't intend to, you may take your discharge before entering service." Then he added, more kindly, "You are to be regulars in Aunt Polly's hygienic brigade. She is commander-in-chief, and I am court-marshal, and you are under strict discipline."

Then uncle explained the working of an army, and the children grew interested, and learned, meanwhile, some things that were expected from them.

"Here we are at head-quarters," said uncle.

"You may have a furlough to examine the grounds."

Aunt Polly took them through the gardens, just getting green with new plants. "Here are your patches. You will work here an hour every day; and by the time you go home, you will have a nice lot of flowers and

vegetables to take with you. And here is the gymnasium we have fitted up for you. Uncle will be ready to show you what you are to do here."

Mr. McIntire stepped out in a regular costume for exercise, and gave them a little talk on the value of exercise. He then turned the poles, swung from the long ropes with his feet in the ring; and with his hands climbed the ladder fastened from side to side in the barn, thus interesting the children very much.

John and Ed, who were wholly unaccustomed to such sports, were permitted to try, thinking it must be quite easy. Their failure, however, caused them to think their uncle a wonderful man.

"Now," said uncle, as they left the gymnasium, "I want to tell you a story that I read not long ago, which illustrates the benefits of regular exercise on the character. I believe that such exercise is one of the best things to develop manliness, and to help the mind as well as the body. The story is this: There were four low-browed, brutal-looking men sent to prison for foul crime. had a slouching gait, and had spent most of their lives in doing nothing; and Satan, of course, found low business for them. They could not read or write, and were ignorant, lazy fellows. Well, as an experiment, they were put on plain, simple food, and required to take regular exercise in the gym-Soon they began to develop a sprightly step; their awkward, shambling appearance was overcome; their faces grew brighter; they desired to study; and in a few month's time they came out improved a hundred per cent. It seemed as if the best part of the men had lain folded away in lazy mus-

"Now, boys, you have a great deal before you in order to live lives of usefulness, and and I hope you will take hold of all that we desire you to do with the earnest purpose of making the best kind of men of yourselves."

"I tell you," said John, as they prepared for dinner, "uncle is tip-top. I'm going to be a man just like him."

"A gentleman is always polite to his sis-

ters and his wife," said uncle; "John please let Millie walk with you; and Ethel with you, Ed; just as Aunt Polly and I do." The boys looked annoyed; but uncle continued, "Manners have a great part to play in the heaith of mind and body."

The table sparkled with new silver. "This will be your first regular hygienic dinner," said uncle "and you must have depraved appetites, indeed, if you do not like it."

FAMOUS WOMEN INTERESTED IN HYGIENE AND TEMPERANCE.

LOUISA M. ALCOTT.

MISS LOUISA M. ALCOTT, whose recent death has brought sadness to so many hearts, was born in Germantown, Pa., Nov. 29, 1832. Her mother was a lovely, gifted woman, desended from a long line of distinguished ancestry. Her father, Amos Bronson Alcott, whose death occurred two days prior, has long been renowned as the founder and leader of the Concord School of Philosophy. Louisa was the eldest of four daughters, many of the incidents and scenes of whose happy childhood she has vividly portrayed in her wonderful book, "Little Women." Their early home, though one of comparative poverty, was one of culture and refinement, wherein the rights of childhood were considered sacred, and every effort made to develop and elevate each individual mind. Nurtured in such an atmosphere, it is not strange that Louisa at an early age began to picture, in her imaginary life, the thoughts and principles which were a part of her own home training. At thirteen she wrote that beautiful poem, "My Kingdom," which, after so many years, has recently made its appearance in print. Miss Alcott's road to fame did not lie along flowery paths, but over obstacles and amid difficulties to which a person less determined to make for herself a place in the world, would have succumbed. She began teaching at sixteen, and while thus engaged, wrote her first book, "Flower Fables," which however, was not published until six years later. book, "Moods," was written when eighteen, but her early writings were not well received, and with the exception of such stories as were written for, and published in magazines and papers, yielded her little return.

When the Civil war broke out, Miss Alcott entered a hospital in Washington, and for many long months, with cheerful face and warm heart, she went among the sick and wounded, writing their letters, cheering their lonely waking hours, soothing them to sleep, nursing them back to health, or performing the last sad services for the dead. Her letters home during this experience were afterward published under the title of "Hospital Sketches."

Miss Alcott's devotion to our soldiers nearly cost her life, and for rest and recuperation she went to Europe as companion to an invalid lady, spending a year in London, Paris, Germany, and Switzerland.

Two years later, "Little Women" was written, and Miss Alcott became famous. From that time she devoted herself to literature; and "Little Men," "The Old Fashioned Girl," "Eight Cousins," and other equally interesting volumes which followed, have made her name a household word throughout the land.

Miss Alcott was a most devoted daughter, always sharing with her family the proceeds of her work. By one who knew her, it is said that "her whole life has been the outpouring of a lovely mind and heart in the quiet discharge of home duty and service. Rarely has a writing career, which has commanded the widest popularity, been so full of the sweet sanctities of home."

Miss Alcott was reared a vegetarian, her father having adopted that system when she was but three years old. Her father's cousin, Dr. Alcott, was one of the first to espouse the cause of hygiene and sanitary reform in this country. Throughout her life she was a most earnest advocate of temperance, and her writings abound with the hygienic sentiments and principles, which, in her own life, and in behalf of those under her care, she endeavored to carry into practice.

Writing to mothers respecting the training

of their daughters, Miss Alcott says: "Health should come first, and then an early knowledge of truth, obedience, and self-control; then such necessary lessons as all must learn; and later, such accomplishments as taste and talent lead them to desire—a profession or trade to fall back upon in time of need, that they may not be dependent, or too proud to work for their bread. No late hours, or unwholesome pleasures and dress; no mixing of school and flirtations: but simple amusements, daily duties, and a purpose in life to keep them girls at heart, even while preparing for the work and happiness of woman."

It has been stated that the above plan was the one adopted by herself in rearing her orphan niece, the daughter of her gifted sister May, the Amy of "Little Women," who died in Paris in 1878; and certainly no wiser one could be marked out for the rearing of the daughters of this generation,

Miss Alcott's literary success was no more due to exceptional ability than to the remarkable sincerity and rectitude of her own life. Those who knew her bear testimony that hers was one of the "whitest and purest souls ever enshrined in human form. Notwithstanding her fame as a writer, her own noble life is the best record she has left us.

E. E. K.

EVENINGS AT HOME.

It is well for the women of the household to remember that pleasant evenings at home are strong antidotes to the practice of looking for enjoyment abroad, and seeking for pleasure in by and forbidden places; for relaxation and recreation will be indulged in, somehow, by most men, and happy are they who find in the home circle the diversion they crave. A lively game, an interesting book read aloud, or, in musical families, a new song to be practiced, will furnish pastime that will make an evening pass pleasantly.

A little forethought during the day, a little pulling of wires that need not appear, will make the whole thing easy; and different ways and means may be provided for making the evening hours pass pleasantly, and a time to be looked forward to with pleasant anticipations.

I once visited a large family where it was the duty of each sister, in turn, to provide the evening's occupation, and there was a pleasant privalry between them as to whose evening should be the most enjoyable. The brothers entered fully into the spirit of the simple home entertainments, and were as loth to be obliged to spend an evening away from home as their sisters and parents were sorry to have them absent. Every one spoke of this family as an uncommonly united one; for each and every member showed such a strong attachment for the home to which each one contributed so much pleasure.—Selected.

THE QUESTION OF SELF-SUPPORT FOR WOMEN.

"What is the chief end of woman?" "To get married"—are a question and answer that might have been inserted in the catechism up to a few years ago without raising a doubt in the minds of the orthodox. It was an unwritten belief, to which people held with the greatest tenacity. Only the super-heterodox dared to express the opinion that for women there was any other destiny that would meet with the approval of Heaven. Every woman was a candidate for matrimony, and not to succeed was an evidence of her lack of personal charms, and the unsuccessful became objects of scorn and derision to others.

The world progresses in thought as well as in inventions and resources, and to-day woman is recognized as an individual having talents and gifts that may find a place for action outside of a husband's home,—a place to which she may never be called, and, if called, may know that there are as high claims elsewhere as that one. It is also recognized that to be able to turn gifts of mind to money does not deprive a girl of the graces of heart or person that will make her a fountain of joy in the household, the delight of husband and children.

The women who have met with any degree of success in self-support are brought every week in contact, either in person or by letter, with women approaching or who have passed middle life, who are suddenly thrown on their own resources, with the terrible consciousness that they are utterly unequipped and unfitted to supply their daily wants. "What shall I do? " comes the question from lips and eves that emphasize the inward agony. To those who are thus brought in contact with this phase of the subject, the daily question is, How dare a father and mother let a girl go out into life until she has mastered some one thing by which she could earn money? Many a woman who walks our streets to-day with a bold, brazen face would walk them with the honest, steadfast gaze and tread that comes from honest victory, if, when the crucial time came, there had been one thing which she could have done well, that the world wanted

The same law of success holds good for women, that brings success to men. world is not a respecter of sex. Can you do the work? Can you do it as well as the best? Will you keep to your word? This trinity of questions comes to every worker, independent of sex. The women who fail do not fail because they are women, but for other reasons, the chief of which is, that they will not forget they are women, but workers; and that it is as workers and not as women that they stand before the world. "If I were a man!" they will say. And if they were men, and faced the world as poorly equipped as they face it as women, the world would have none of them, and the end would be the same.

Every girl should be made to feel that in her there is a talent that is a gift from God, and that not to cultivate and develop it, is to sin both for time and eternity; it is the easting aside of God's bounty. The power to work has been the salvation of the world; and this power was given to women as well as to men. The manifestations of it will always differ; but sex, parents, environments, should prove only modifying conditions, not gallows-rope and executioner to put out of life that which leaves the owner the prey and butt of circumstances.—Selected.

Temperance in All Things.—A correspondent of the Woman's Journal, writing upon the "relation of food to liquor-drinking," offers the following suggestive thoughts:—

"Do we realize as we ought that much of the food placed upon our tables tends to the dominion of appetite?"—

"Would that temperance advocates were temperate in all things." We 'draw the line' at wine, beer, and distilled liquor; and inside that line, we lay down the reins on the neck of appetite, and let it carry us whither it will."

"Suppose I were to say, 'I'm not well to-day,—I was out last night, and we got to drinking brandy; and I suppose I took too much, and I am all down to-day.' Wouldn't you be shocked? But suppose I said, 'I have a fearful headache, I ate cake and ice-cream at the "social" last night, and knew at the time I'd pay for it.' Or, I dined with Mrs. A. yesterday, and ate some of her spiced pickles delicious mince pie; they always make me sick, but I am so fond of them I can't let them alone.'

"Did you ever hear temperance men and women say anything like that?

"I have,—and without a tinge of shame at the confession.

"True, such indulgence does not so greatly benumb the higher faculties, and deprave the nature as does indulgence in strong drink. Yet while appetite sways,—in all that is true, and pure, and noble, we live far below our possibilities.

—A man may be well grounded in the laws of health, yet, without exercise, have a feeble body; he may be crowded with knowledge, yet, without mental activity, have a feeble mind; and likewise he may be well versed in theories of right doing, yet, without the habit of practicing them, he may have a feeble moral character, which gives him no power to resist temptation and no courage to do his duty. Teaching and training must go hand in hand; right feeling and right doing must keep pace with right knowing, if we are to have a dutiful child, an upright man, or a righteous nation.

Temperance Notes.

—Government chemists at Washington have been analyzing samples of beer from various parts of the country, and find all containing an alarming amount of dangerous adulterations.

-A writer in a recent number of the Union Signal says: Last year Germany increased the tax upon alcohol to an amount nearly, or quite, the same as that imposed by the United States. During the six months which have elapsed since it became operative, the amount of liquor consumed has decreased 25 per cent-Herr Sanitalsrath Baer, a physician connected with the largest hospital in the city of Berlin, has investigated the facts in this decrease, and finds it confined to that class of drinkers who care very little for their dram, and take it only occasionally, and not habitually. The extra cost of a bottle of schnapps due to the new impost is sufficient to make them abstinent, while the great body of moderate and hard drinkers keep up their steady consumption without any perceptible abatement. Who, then, pays the extra duty on alcohol required by the government? Does it not come out of the families of drunkards and the already poor?

—Just how the use of tobacco was regarded in New England in the early days two laws show. One was made at Harvard soon after the foundation of the institution, and reads: "No scholar shall take tobacco unless permitted by the president, with the consent of his parents or guardians, and on good reason first given by a physician, and then in a sober and private manner." The other is in the old Massachusetts Colony laws, and prescribes the punishment for any one "who shall smoke tobacco within twenty poles of any house, or who shall take tobacco in any inn or common victualing house, except in a private room, so as that neither the innster of said house nor any guest shall take offense thereat."

Temperance in the United States.—The following from an esteemed contemporary should be an encouragement to all earnest workers in the temperance cause to persevere in their efforts:—

"Archdeacon Farrar has returned to England a warm supporter of the Maine prohibitory law. He reports that America is far ahead of England on the temperance question. On that point, figures abundantly support his observation. The consumption per capita of malt liquors in England is thirty-three gallons, against eleven gallons in the United States. Reliable statistics show that the latter country ranks eleventh among the nations of the earth in the per capita consumption of alcoholic liquors, and sixth in the corresponding consumption of malt liquors."

Popular Science.

—There is on exhibition in Paris a remarkable landscape picture made entirely from various European and foreign insects. Every desired shade of color is supplied by forty-five thousand coleoptera in the foreground, and four thousand varieties of the insect tribe for the remainder of the scene.

A New Cave.—A rival of the Mammoth Cave has been discovered in Kentucky. The main avenue has been explored for several miles. The cave contains numerous copper and brass articles.

Mirage of Sound.—The frequent collisions that have occurred recently, under conditions which were supposed to be entirely safe, has led to the discovery that sound is subject to a phenomenon similar to that which sometimes occurs with light, and which is known as mirage.

Luminous Bacteria.—It is found that the luminous decomposition of wood is due to a special form of Bacteria. A German periodical gives an account of a butcher shop in which the body of chops, and other meats, became luminous by coming in contact with a rotten plank in the counter on which the meat was laid.

A New Heat Measure.—An English inventor has recently perfected an instrument which he calls the radio-micrometer, which readily shows the heat cast upon a penny by a candle flame one-fifth of a mile distant. It is claimed that the instrument will indicate one one-hundred-millionth of a degree of heat.

An Electrical Experiment.—Cover a pasteboard box with a piece of glass, the outer surface of which has been thinly coated with collodion. Place on the inside of the box small figures made of paper, cotton, or sponge. By rubbing the outer surface of the glass it will become electrified, causing the figures to hop up and down in a very life-like manner.

Man in Evolution.—One of the great stumblingblocks in the way of the complete triumph of the theory of evolution, has been the difficulty of bridging over the chasm between man and the lower animals. A recent scientific paper read before the Victoria Institute states that Professor Virchow, of Berlin, one of the most noted scientists of the present age, announces that the more he studies this question, the wider does the gulf between man and the highest of the lower animals appear. The view of Prof. Virchow is coincided in by the great majority of eminent scientists. Curious Chemical Names.—The editor of the Popular Science News calls attention to the following curious incongruity in the names of chemical compounds, which, when their inappropriateness is considered, appear extremely ludicrous: thus, oil of vitrol is no oil, neither are oil of turpentine and kerosene. Copperas is an iron compound, and contains no copper. Salts of lemon is the extremely poisonous oxalic acid. Carbolic acid is not an acid, but an alcohol. Cobalt contains none of that metal, but arsenic.

How to Prepare Calcimine.—Some of our readers may wish to prepare their own calcimine; therefore we give these rules: Soak one pound of white glue over night; then dissolve it in boiling water, and add twenty pounds of Paris white, diluting with water until the mixture is of the consistency of rich milk. To this any tint can be given that is desired.

Lilac.—Add to the calcimine two parts of Prussian blue and one of vermilion, stirring thoroughly, and taking care to avoid too high a color.

Gray.—Raw umber, with a trifling amount of lampblack.

Rose.—Three parts of vermilion and one of red lead, added in very small quantities, until a delicate shade is produced.

Lavender.—Mix a light blue, and tint it slightly with vermilion.

Straw.—Chrome yellow, with a touch of Spanish brown.

Buff.—Two parts spruce or Indian yellow, and one part burnt sienna.

Biological Depression.—The Scientific Contemporary is responsible for the following: "There was a time when the ocean bottom was much nearer the surface than at present, and when sunlight pervaded the entire water. Phosphorescence was then in use by a few animals just as it is to-day, for protective powers. Gradually the ocean bed sank and became darker, until the sunlight was no longer of use to the denizens of the deep. The few phosphorescent animals found another use for their light than protection. It became serviceable as a lamp to illuminate their dark home. Other animals saw the use of the light, and, as in the case of pyrosoma, began to adapt themselves to their surroundings by becoming phosphorescent. There is some strange law of evolution that allows this to be done. Animals and plants alike in their struggle for existence, can assume colors and forms best adapted for survival. This is illustrated on every hand, in the sea and on the land. What the power is that allows them to do this is unknown. Be it Providence, instinct, or unconscious change, the result is the same; it is done and is being done every day, nearly always to the advantage of the species.



"Blessed are the Puge in Heart."

MOTHER OR DAUGHTER.

In an able article in "Godey's Lady's Book," under the above title, Helen Campbell, after referring to the periodical outcropping of the dark under-life of our great cities, and deprecating the present state of society in regard to social immorality, asks:—

"On whose shoulders shall it rest? Is it the ignorant, untaught, pleasure-loving girl, who has no armor, save that forged from vague whispered hints of companions in much the same case, or to whom knowledge has come through the secret avenues of vile books or papers; or is it the mother, who, knowing the danger, remains silent? Nothing is more mysterious than this phase of prudery in women, for prudery is the only title it merits, which makes silence on the most vital problem of life a necessity and law of the intercourse between mother and daughter.

"Theology is responsible for that contempt of the body which culminated in the Middle Ages, and which counted God-given mother-hood and fatherhood as a curse, and the body only a thing to be suppressed and resisted at every point. Nothing that was natural, no love of nature or art, or any work of man's hands had a right to existence; and though long ago such theories were swept aside and crumbled into dust with their makers, their ghost still walks, and is felt in the nearest relations of human life. There is abundant jesting allowed. Tiny children may call each other sweet-hearts, with only an encouraging smile from their elders; and unlimited, un-

ending gossip is in order, among rich and poor alike, over every possibility of matrimony for the older ones; but its solemn, most vital meaning has no word of definition.

"Here and there a mother, whose education has given her deeper insight and truer common sense, uses her wisdom in training her children thoroughly in physiology. But for most, as I have had occasion to write before, the old idea born in the ignorance and asceticism of the Dark Ages, that the body is a vile and dishonorable possession, still dominates. No light of this nineteenth century has been strong enough to dispel this shadow of the past. Even where the rights of the body are admitted, and gymnastics indoors and exercise without are expounded as essential, it is only in rarest cases that the facts that underlie all health or progress are made plain.

"Many a girl, laid low in a dishonored grave, has served as a text for sermons on parental government and influence; but how many have even hinted that teaching her the sacredness of her own body might have hindered the tragedy? Ignorance is not innocence; the child whose knowledge of natural phases in the life of the body comes from servants, or is, perchance, acquired through some chance encounter in the streets, has lost something that no after effort can replace. It is the mother's right, it should be the mother's deep desire, to save her child from such catastrophy; and until all mothers accept this as a part of their sacred trust, such cases will still be, wherever unscrupulous, irregulated passion finds ignorance its prey."

THE INFLUENCE OF THE THEATER.

PROBABLY no one is so well prepared to judge of the influence of the theater as those who are most familiar with it. Mr. B. R. Newton, fourteen years a newspaper reporter in New York City, writes as follows to the Presbyterian Observer:—

"During an experience of ten years with some of the largest daily papers in New York, Chicago, and other large cities, I have had an opportunity of seeing theaters and theatrical life on all sides and in all its phases. I have seen the stage from the box, from the orchestra, from the balcony, from the peanut gallery, from behind the scenes, from the fly gallery, and from every other point that would furnish a better view to the critical eye of a dramatic reporter. I have had the acquaintance of a large number of actors and actresses, and have known them on the stage and off the stage; I have known of them what the world knew, and what the world did not know; and were I asked the question that a lawyer sometimes asks a witness, 'What can you say as to the character of the theater; is it good, or bad?'-if I answered in accordance with the dictates of my experience and my conscience, I should say, Bad'!

"A prominent Episcopalian minister of Chicago once said to me: 'I do not attend the theater myself, but I have never been able to see that there was the harm in it that many claim. A person may go to a play with the intention of seeing and hearing evil things, and he may come into my church Sunday evenings with the same purpose.' not my purpose or practice to antagonize the opinions or precepts of ministers of the gospel; but I have often thought that if this reverend gentleman could have known what others more worldly than himself knew, he never would have given utterance to the above sentence, or thought of comparing the theater, in matter of purity, to his own church. The person who goes to the theater for the purpose of seeing and hearing immoral, or at least, improper things, can, in ninety-nine plays out

of a hundred, find what he seeks; but I have been in churches where even the imagination could hardly picture anything evil. If a person's notion of pleasure requires the deleterious antics and immodest postures of the ballet-dancer, the coarse jests of the comedy, or the exciting plot of the tragedy, there are dozens of so-called respectable places in every large city, where his taste can be gratified.

"Perhaps my theological friend in Chicago would say that the only improper features of the variety, the comedy, or the tragedy are those that are seen through the imagination; and possibly it is for this reason that so many people use an opera glass; it may be that they are the ones who are there for the purpose of 'seeing evil things,' and use the opera glass to assist them in their tack; but this can hardly be, for I never use a glass in watching a performance, and still I am constantly forced to see things from which I would turn away in disgust; and I often wonder that highly respectable people are willing to say by their regular attendance that 'this is the sort of amusement we like.'

"Go with me into the dress circle of any of the best theaters in New York. (I speak of the best theaters, because the second and third class will hardly bear description in these columns.) In the 'pit' and in the boxes are seen the kings and queens of wealth and fashion. Money and position in family circles, and not worth or character, are the passport of the theater. You select the most expensive and best seat on the diagram. The curtain has not yet been lifted. You look out over the audience of richly attired people, and if you are not accustomed to the theater, the scene almost dazzles you. Everything is gayety and brilliancy. On your right sits a a lady as beautiful as an artist's dream. She is dressed in the costliest manner, and the brilliancy of her jewels makes her like a being of fancy. Who is she? On your left sits a gentleman, faultlessly attired, and with that air of self-possession and dignity that leads you to believe that he is certainly a gentleman of no ordinary rank. Who is he? Perhaps he is a wealthy pawnbroker. Perhaps he is the prince of gamblers and sharpers; it makes no difference. He has as good right there as you have, and possibly better. The orchestra ceases, the curtain rolls up; and for three hour syou watch the ravings and antics of a number of jaded hirelings, in mimicry of human passion and weakness. It is a panorama of the most sensual love story intensified.

"At last, the final act is finished, and you leave the perfumed and wine-scented atmosphere and are jostled into the world of prosy reality. You feel a sense of uneasiness and dissatisfaction. You have been following the fascinating fortunes of gilded characters through an enchanted realm of fiction, and the more sober details of every-day life seem tame and irksome.

"To say nothing about the absolutely immoral features of the stage, I believe that the excitement, the stimulant of the average modern drama, is a positive injury to a young person, and particularly to those of a highly intellectual and imaginative mind,"

THE KIND OF BOOKS THAT CHILDREN SHOULD NOT READ.

There is no question about this one thing—that there is a vast amount of literature (so-called) in the form of books, and floating matter in magazines and newspapers, that children ought to have nothing to do with.

Is there any subject upon which parents are more blind than about the books and papers their children read? Take a bright little girl, say of eleven or twelve years, with the new passion for reading which often develops about that age; and the number of books she will devour is simply incredible. Usually the taste is for fiction, and it grows at an astonishing speed; and, unfortunately, it is often fiction of a vitiating kind.

You will find by inquiring at the public libraries what is the character of books that some of these young readers call for. Not long ago a librarian who tries to restrain this tendency, tore in pieces the card which two girls (almost children in years) had presented to him, because he was so disgusted with the list they had made out. On handing them another, on which he had penciled the titles of a few tempting biographies for the young, he heard one whisper, "I don't want any Lifes," with a scowl which meant that she would not read them.

Poor children! They had been steeped in Miss Braddon and Mrs. Wood, even in "Ouida," and had actually read French novels at will, till their hearts were full of murders, suicides, and elopements. They were brilliant, susceptible girls, alert, responsive, highly imaginative; and here their minds were being stimulated and hurt by heated, passionate, or baneful kinds of reading. It was next to impossible to get them thoroughly interested in anything but an exciting story. They were fast becoming creatures of moods and sentimentality, inclined to be irritable; their ideas of life, as well as their tempers, were being affected, and their dispositions were undergoing a change. Their whole future was in peril from this one cause.

It is to any child, especially to a girl, a most deplorable, a most disastrous, thing to grow up without control over the feelings,—emotional, sensitive, but without balance; with no source of strength in time of need, no regulating principle, no power to meet calamity or disappointment, no inward steadfastness or ability to calm herself, or to bear the inevitable. What a tempest-tossed spirit, what turbulence and what rebellion, what anguish, awaits the woman whose childhood has come under this curse! And the tendency of a lamentably large amount of modern fictitious literature is positively and potentially in this direction.

It would be an amazing revelation to many parents to be actually brought face to face with the ugly fact that their children are absorbing literature which is weakening both their moral and intellectual natures; that, instead of being made strong to meet life, they are growing limp and nerveless, and without fiber or stamina; they are ready to be turned this way or that, or to go down when the pressure comes.

What is needed in many a household is a discourager of so much reading. What is more needed is the exercise of a discriminating oversight. Never should a book which an older person has not first read be allowed to go into a child's hands. A single sentence sometimes determines the influence of a book, and sometimes—of a life. A single sentence sometimes stays by one's memory forever; and it is strange how the very things that ought not to be remembered do stay and hold fast.

Not infrequently it happens that an author—even one who has the interest of the young at heart—spoils what might otherwise have been a book to be commended, by introducing some pernicious idea, by glossing over a wrong, or tampering with a principle. Not long ago a prettily-written story for girls appeared from the pen of an approved author,—a story not positively harmful until toward the close, where the abhorrence which ought to have been felt for the "hero" was wholly neutralized by the appeal to the reader's sympathies on account of the sad circumstances attending his death. And that is but a single instance.

The whole subject of reading for the young can be summed up negatively in a few sentences. We cannot afford to have our boys and girls take their tone from the heroes and heroines of sensational novels; we are not willing that even in books they should come under the influence of adventures, profligates, and unprincipled women, with whom we should shudder to have them brought into contact, though endowed with all the talents and graces which bewilder the moral sense in fiction; we protest against their acquaintance with the contents of books where religion, truth, honor, and purity are made a mockery of; we condemn that class of books where the lines between good and evil are so indefinite that it cannot be plainly seen where one ceases and the other begins.

All books of highly-colored views of life, of passion, of sentimentality, of questionable moral tone, of a quality and treatment whose effect is to confuse one's sense of right and

wrong, should be let severely alone. Let the children always have the full benefit of the doubt. It is their right. And the responsibility is on us.—Christian Union.

Social Purity Work in California.—We are pleased to know that effective work in the social purity cause is being done in California, by the Rev. Geo. W. James. We are informed that a good interest has been aroused at Oakland and Fresno. It is certainly well that this State, which has so long tolerated the infamous traffic in Chinese girls, should be taking hold of social purity work in good earnest.

A Good Law.—The State of Mississippi has recently passed a law which is a proper complement to the law respecting the "age of consent." It makes seduction a crime punishable by ten years imprisonment in cases in which the victim is over sixteen years of age.

—The friends of reformed legislation in the interest of women will rejoice in the good results already manifest. A man who was found guilty of seduction, his victim being but thirteen years of age, was sentenced to imprisonment for life. A year ago this wretch would have gone free, without even a fine. But the law is still defective. The age should be raised to eighteen years. Indeed this infamous crime ought to be recognized and punished as a crime at any age. Let all lovers of purity endeavor to secure from their law-makers, the reforms needed for the better legal protection of women and girls.

—Those engaged in efforts to suppress immorality may be aided by knowing that according to a recent decision of Judge Allison, of Philadelphia, a property owner, as well as the tenant, may be held responsible, for the use to which the property is put.

[—]It is asserted that there are 7,000 white slave girls in the pinery dens of Northern Michigan and Wisconsin. Who will be the John Brown of their emancipation?



—Dr. Cutler says that dyspepsia is a physiological sin.

—The lower creatures, which we call brutes, by intuition observe those laws of health which man, with his intelligence, disobeys.

—Some idea of the amount of patent medicine used, may be obtained from the fact that the manufacturer of a single medicine gave an order to a glass manufacturer for more than three and one-half million bottles, to be delivered within the next six months.

—Bill Nye objects to chewing gum, not because it is unhealthy, but because it is "unnice." The hygienist can find something to say respecting the unhealthfulness of this disagreeable habit, at least when industriously pursued.

—Doctor H. B. Baker, Secretary of the Michigan State Board of Health, has recently called attention to the fact that quarantine does not deal with the most serious diseases. Cholera and small-pox kill very few people in this country, while diphtheria and scarlatina carry off thousands every year. No quarantine law is thorough-going which does not exclude all contagious diseases, as well as small-pox, cholera, and yellow fever.

—Getting sick is like sliding down hill, easy and often fascinating. Getting well is like climbing back again. Often, too, the health climber has to drag after him a heavy sled load of sanitary sins.

—An outbreak of tyrotoxicon poisoning from cheese, recently occurred at Huntington, Ind. A number of persons were seriously ill. One case proved fatal. Cheese is an unsafe article of food, besides being hard to digest, and a promoter of dyspepsia.

Good for Dyspepsia.—"Really, don't you think cheese is good for dyspepsia?" said an advocate of the use of this dietetic abomination, "Why, my uncle had dyspepsia all his life, and he took a bit of cheese at the close of every meal."

Teetotal Medicine.—The National Temperance Hospital in Chicago has undertaken to demonstrate that diseases can be successfully treated without the use of alcohol in any form. The English Temperance Hospital has been demonstrating this for many years, as have several large health institutions in this country and England. We are glad to know that this new enterprise is meeting with a good degree of success.

STATISTICS OF SICKNESS AND DEATH.

Some years ago the Statistical Congress at London, England, deduced from the tables of Drs. Farr and Edmunds, the following interesting facts respecting sickness and death, which preach important sanitary sermons without the aid of comment:—

"Of one thousand persons at the age of thirty, it is probable that ten will die in the current year; that there will be ten permanent invalids, and an average of twenty sick for the year.

"Of one thousand persons at the age of seventy, it is probable that a hundred will die during the year, and three hundred will be sick or become chronic invalids.

"It is estimated that of every thousand of population there will be fifty-seven sick, on an average, for the year, in England and Scotland; fifty-three in Ireland; sixty-seven in France; seventy-six in Germany; ninety-four in Austria; eighty-nine in Italy and Spain; seventy-one in Holland; fifty-seven in Denmark; and fifty-five in the United States.

The most salubrious of these countries is Ireland.

"The average number of days of sickness per adult inhabitant in the principal civilized countries of the globe, is fourteen and twotenths. In the United States it is ten and fivetenths.

"The average loss per cent of income from sickness in the United States is two and ninetenths; in England, three; in France, three and five-tenths; in Germany, three and ninetenths; and in Russia, five and five-tenths."

TYPHOID FEVER FROM SEWER GAS.

An outbreak of typhoid fever recently occurred at the Industrial School located at Adrian, Mich., in which twenty-one girls and one teacher suffered from the disease, which was of a very severe type. In five cases, the disease was fatal. An investigation showed that through improper construction of the sewerage system, sewer gas was allowed to escape into the basements, a portion of which is in each building used as a laundry. Each of several

buildings was found to be contaminated with sewer gas. The effect of the sewer gas was intensified by imperfect construction and improper management of the ventilating system. Instead of taking air from outdoors, the steam coils were supplied with air from the basements, which was contaminated with gases from the sewer and from other sources.

The sewers were disinfected by a strong solution of corrosive sublimate, and ventilating ducts opened. As a result, the epidemic, which was rapidly increasing in virulence, was stayed almost at once. In less than a week new cases ceased to appear. Typhoid fever usually results from the use of contaminated water. This case, however, seems to confirm the teachings of an eminent German authority, that the disease may be communicated through the medium of the air.

MILK AND MEAT.

A PRECEPT of the Mosaic law prohibited the use of milk and meat at the same meal. At least this seems to have been the idea held by the Talmudists, and now taught and practiced by orthodox Jews and Jewish rabbis. There has lately been quite a little discussion of the question in New York, by rabbis, chemists, doctors, and journalists, without getting at the root of the matter. There is, doubtless, a physiological reason for the prohibition. Meat does not generate germs in milk, as one chemist asserted, but a mixture of meat and milk undergoes decay with great readiness; and when placed in a stomach not prompt in its digestive processes, is pretty certain to undergo septic changes. This is chiefly because milk is digested but slightly in the stomach, being more readily and perfeetly digested by the pancreatic juice. Meat is chiefly digested in the stomach. The milk is retained in the stomach during the three to five hours required for the digestion of the

When taken by itself, milk leaves the stomach in about two hours, as shown by Dr. Beaumont's experiments upon St. Martin. The unnatural delay in the stomach causes the

milk to ferment, and the meat itself is led to undergo decomposition also. This is doubtless the true explanation of the experience which leads many persons to suppose that they cannot use milk. They say it makes them "bilious," which means simply that they have indigestion when they use milk.

Milk agrees perfectly with fruits and grains, less satisfactorily with vegetables. We have met hundreds of persons who thought they could not use milk, but who were able to use it with impunity as soon as they learned and avoided the use of milk and meat at the same meal. Milk is a natural food for man. Flesh is an unnatural diet, for which an artificial appetite has been created by indulgence.

HOUSE-FLIES AND CONSUMPTION.

ALTHOUGH in this part of the world, houseflies are still taking their winter nap, the circulation of this journal embraces so many different latitudes that with many of our readers the house-fly will still be found making himself at home; hence, it may be useful, even at this season of the year, to call attention to the fact that recent discoveries fasten upon the house-fly the most conclusive evidence of being the means of propagating consumption. Numerous other criminal indictments have been brought against the fly, such as being the conveyer of yellow fever, erysipelas, and all other germ diseases; but this last one is the most appalling of all, and all sanitarians will agree that the house-fly must go. Consequently, after the reader has perused the facts presented in the following paragraph, we doubt not that he will immediately prepare to wage a vigorous warfare against this household enemy wherever he is found at the present time, or as soon as he re-appears in the spring :-

"While dogs and cats and the higher animals appeal to our feelings of mercy, the insects, as a class, generally find but little sympathy. Who has any love for the house-fly, for instance? It is conceded by all to be a plague and a nuisance. But scientists have more serious accusations to bring against it, for the house-fly is known often to be the means of

spreading some contagious diseases. now another charge is added to the list. Spillmann and Haushalter are of the opinion that flies spread the bacillus tuberculosis. In a memoir read before the Academy of Sciences. they have described experiments made with some of the flies that hover so pertinaciously around the spittoons of tuberculose patients. They have found living Koch's bacilli both in the abdomens of flies and in their excrements; and they have no doubt, considering the persistent vitality of the bacillus, that such flies may become active vehicles of the contagion, near and far. As a prevention, they recommend that the spittoons be provided with close covers, and be cleaned with boiling water or a five-per-cent solution of carbolic acid."

Hog-Cholera Hams .- Several years ago we noticed by comparing the news columns of the Chicago dailies with the daily reports of the arrivals of stock, that whenever an epidemic of hog cholera broke out in any section, shipments of hogs from that section was at once increased in a very remarkable manner. This meant, to our mind, that large numbers of diseased hogs were hurried off to market so that the butcher might get the start of nature by a day or two. The following testimony of an ex-pork packer of St. Louis, recently given before the Agricultural Committee of the United States House of Representatives, confirms this suspicion in a most thorough manner :-

"W. G. Bartle, an ex-pork packer of St. Louis, was on the stand, and stated that he had been in the pork-packing business for forty years, and knew that cholera-infected hogs were cut up and put upon the market as good meat; that it was done in his business, and that it was the custom among other packers to slaughter hogs from herds where they were dying by the hundreds from cholera, and to sell the infected meat in the market. The custom, he claimed, was quite general, and that packers could not deny it. He said he had gone out of the business because he considered it dishonest and criminal.

COFFEEISM.

For years physicians have recognized a distinct disease resulting from the use of tea, which has been termed teaism or tea-drinkers disorder. A French medical journal recently published a contribution from M. Guelliot, an eminent physician of Reims, in which a distinct form of disease is attributed to the use of coffee, and receives the name of coffeeism. There is now left no room for doubt on the part of any one, that coffee as well as tea is a harmful and pernicious beverage. The use of either of these substances is as unnecessary as the use of alcoholic drinks or tobacco.

Chemists have known for a generation, at least, that both coffee and tea contain poisons, which are deadly even in small doses. Their effects upon the human system are only less harmful than those of alcohol and tobacco because they are used in a very diluted form. We do not hesitate to venture the assertion that the health would suffer less from the use of half a pint of light wine daily than from the use of tea and coffee as ordinarily used. A cup of strong tea contains more poison, and does more mischief to the vital economy, than an equal quantity of beer.

Science speaks just as positively respecting the harmful character of tea and coffee as in relation to alcohol and tobacco. Consistency requires, for a thorough-going temperance reform, the abandonment of all these narcotic and stimulant poisons.

Brewery Stomachs.—A man who habitually suffers from "sour stomach," a form of dyspepsia, may be a temperate man by profession, and a total abstainer from alcoholic drinks; but he is nevertheless imbibing alcohol. The writer has many times noticed in this class of dyspeptics the flushed faced, bloodshot eyes, quickened pulse, and many other symptoms which accompany mild intoxication. The breath also often has a taint of alcohol upon it.

That alcohol is formed during fermentation in the stomach, as well as elsewhere, there can be no doubt. As is well known, it is the function of the saliva to convert starch into The starch constitutes about half the weight of farinaceous foods. Besides, more or less sugar is taken with the food. An ounce of sugar, when fermented, produces nearly two thirds of an ounce of pure alcohol, or the equivalent of more than an ounce of whisky. Probably not less than four ounces of starch and sugar are taken at an ordinary meal. Suppose, then, that in a case of dyspepsia the food remains in the alimentary canal long enough for one-half the starch and sugar taken at one meal to be converted into alcohol, we have as a result, the equivalent of not less than two ounces of whisky. Is it any wonder then that the dyspeptic is flushed and giddy or excited, and sometimes complains of a feeling of partial intoxication a few hours after eating!

It may be a new idea that a man may get drunk on a bad dinner, but the fact remains that a sour stomach is actively engaged in the production of alcohol, becoming a sort of brewery, in fact. Such a stomach needs a good disinfection, and its possessor can hardly be called a total abstainer until he has so reformed his diet that he has put a stop to the manufacture of alcohol in his own alimentary canal.

Poison from Nutmeg.—An Australian medical journal gives an account of a case in which a woman was seriously poisoned by eating half a nutmeg. Her life was saved only by the most vigorous efforts on the part of her physician. Numerous other cases have occurred in which eating a single nutmeg has produced most distressing symptoms of poisoning. The symptoms in the case referred to were coldness, palor, dilated pupils, sighing of respiration, pulse almost imperceptible and so rapid that it could not be counted. Nutmeg, in common with all other condiments, is a poisonous and unwholesome substance.

A \$300 Fine.—Some time ago a man was fined \$300 in New York for giving tobacco to a giraffe. About the same time a Chicago man was fined \$5 for selling whisky to children.

Effects of Intemperance in France.—According to an article in Figaro, of Paris, lunatics are rapidly increasing in France, and alcohol is to blame for it. In this article it is shown that "at the beginning of the present century the French were a very temperate people, drinking but little, and that little, a pure wine of but trifling alcoholic strength. It was in 1800 that the practice began of distilling brandy from wines, corn, and potatoes; and since then, spirit-drinking and its deplorable effects have speedily increased, insanity being one of the most marked, as well as the most deplorable, of these effects. To such an extent has this been the case, that while the population of the Department of the Seine has increased but two-fold, the number of the insane has been increased ten-fold. In the years 1870-87 inclusive, the lunatics of that Department have increased from 6,000 in the earlier year to 10,000 in the latter. In 1804 the amount of liquor drank per head was only about a quarter of a pint. In 1830, the amount had risen to more than a quart, in 1880, to more than three quarts; and by 1887, to nearly five quarts. The suicides in France, also, have kept step with the growing alcoholism. In the four years from 1826 to 1830, there were 1,739 cases of self-destruction, while from 1876 to 1880 there were 6,259. In view of these facts, a leading physician has said: 'If the evil continues to grow, you may infinitely multiply charitable societies, hospitals, mutual aid societies, benevolent associations, all the charitable efforts you can make, all the miracles of private kindness, all the foresight of economists, and all the wisdom of statesmen; -but all will be fatally swallowed up in the flood of alcoholism."

Roman Fever.—A Roman physician says there is no such thing as "Roman fever." The disease which has been called such by foreign physicians, he regards as simply an aggravation of ordinary typhoid or malarial fever, from the irregularities and dietetic errors to which travelers are addicted. The disease is unknown among Italians or Italian physicians.

Wise Words.—The eminent New York physician, Dr. Andrew H. Smith, recently read before the Academy of Medicine, an interesting and very profitable paper, entitled, "The Family Physician of the Future," from which we quote the following paragraphs:—

"The social custom according to which, night after night, the young of both sexes give up a large portion of the night to revelry, is responsible for an enormous sacrifice of health and life. That this custom continues in this enlightened age is sufficient proof that, though the school-master is abroad, the doctor is not. If the medical profession exercised the influence which the nature of its calling implies, rational beings would adopt more rational methods of enjoyment.

"The same argument applies to the subject of dress, and particularly to the dress of women. The future student of history, when reading of the social customs and dress of the nineteenth century, will surely exclaim, 'Were there no doctors in those days?' And the more advanced student will reply, 'Yes, there were plenty of them, but they had very little influence in the community.'"

"Jews' Meat."—In some of the meat shops of every large city in which many Jews reside, may be found a place set apart for meat intended only for the use of the Jews.

This meat has all been carefully examined by a Jew appointed for the purpose, whose duty it is to examine the animal before it is slaughtered to see that it is properly killed and dressed, and then to inspect with great care all parts of the carcass of the animal, especially its internal organs.

The Jews are so impressed with the importance of eating only healthful meat that they will eat no other flesh, unless compelled to do so by necessity. An eminent Jewish rabbi in New York was recently interviewed upon the subject of diet by a newspaper reporter, to whom he remarked as follows:—

"Orthodox Jews in this city are just as careful about their diet as their ancestors were. They buy their meat from butchers who get it killed by regularly-licensed slaughterers.

These slaughterers, known as schochets, must have diplomas, certifying that they can distinguish between sound and diseased meat, The meat which they kill is known as kocher meat, and is stamped with a regular seal, which purchasers can examine. some portions of a carcass which Hebrews will not eat under any consideration. will not eat the hind-quarter, on account of the veins in it; and though they eat the liver and the heart, they will not touch the kidneys. In like manner they abstain from oysters, lobsters, and all fish on which scales are not vis-All such fish are ible to the naked eye. rightly regarded as scavengers, and it is pretty generally admitted that their flesh is exceedingly indigestible."

Danger in Natural Gas.—Dwellers in natural-gas regions seem to be enjoying the luxury of this cheap and convenient fuel and
illuminant to such an extent that some have
quite lost their balance, and have come to
regard the gas wholly as a benefactor and
friend.

We have no sympathy with the man who claims to believe that the whole Ohio valley will, one of these days, be torn up and turned over on one side; but it is an unquestioned fact that natural gas is a dangerous substance. It is explosive when mixed with air, as is common coal gas; more than this, the products of compustion are poisonous. When coal, gas, or any other fuel is burned, carbonic acid, an irrespirable gas is formed. Every cubic foot of gas burned makes a cubic foot of carbonic acid gas. The Frenchman commits suicide by means of this gas, producing it by burning charcoal in a furnace without a pipe for conveying away the products of combustion. We are informed that in natural gas regions many persons are in the habit of burning the gas in stoves disconnected from any chimney, so that the carbonic acid gas and other poisonous products find their way at once into the living rooms. This practice will speedily produce a crop of casualities in which whole families will fail to awaken in the morning, and at the funeral, the minister will make the customary reference to "this strange dispensation of Providence."

The American Physique. - Mr. Edward Atkinson has been studying the American physique by means of data obtained from tailors and clothiers. He finds that the Southern man has legs longer than the Western man, whose waist has a circumference greater than the length of his legs, while the Southern man's waist is less. On the whole, he thinks the American chest and waist are increasing in size; whether this is due to the increased interest in athletics or the large number of sturdy foreigners added to our population yearly, he does not seem to have ascertained, This is an interesting study, which we hope may be continued. We would suggest that some one make a similar study of the feminine physique in America, by means of inquiries made of dress-makers and modistes. How large is the feminine waist of to-day, compared with the waists of the past generation? This is a question that is of much greater importance than the length of a Southern man's legs or the comparative size of his stomach. Who will give us the facts?

Danger in Soaps.—Everybody does not know that soaps, especially in hotels, become, not infrequently, a source of disease. About every man in fifty has some sort of contagious skin disease. Soaps and towels in hotels and public institutions are often a means of communicating maladies not by any means easy to eradicate. Better go with dirty hands and face than to run the risk of contracting a distressing or offensive malady.

Rain-Water.—The popular notion that rainwater is always pure, is by no means correct. As a sanitarian sententiously remarked sometime since, rain-water is nature's dish-water. It washes the atmosphere of dust and germs. Besides, rain-water often swarms with impurities, as the result of contamination from cesspools or vaults; indeed, no water is safe without intelligent care.



For Catarrh.—Here are a few excellent prescriptions for nasal catarrh, which, by extensive experience, we have found to be the most satisfactory, in ordinary cases, of any remedies which we have ever employed.

- 1. To a pint of water add 2 drams of baking soda and one of borax. Apply to the nose with an atomizer giving a coarse spray. The spray should have sufficient force to carry the fluid through to the back of the throat. If there is much dripping in the throat, the spray should also be applied by means of a tube to the post nasal region at the back of the throat, by throwing the spray up behind the soft palate. This solution is for the purpose of cleansing the mucous membrane, and should be used thoroughly in all cases where there is a discharge from the nose, either a fluid discharge or masses of dried mucus.
- 2. To a pint of water add two or three ounces of listerine, which can be obtained at any drug store. Use this with an atomizer same as directed with No. 1.
- 3. When there is a very profuse discharge from the nose, use the following in the place of No. 2; alum, 2 drams; listerine, 3 oz.; water, 1 pint.
- 4. In all cases of catarrh in which there is less discharge, but much thickening of the mucous membrane, as indicated by the obstruction of the nostrils, breathing, and snoring during sleep, use the following solution to follow No. 1: Iodide of zinc, 2 drams; iodine, 5 grains; listerine, 3 oz.; water sufficient to make 1 pint.

The Grape Cure. The grape cure, as practiced at Meran, has been much talked about; but according to the experience of a patient who has tried this method of cure, it is not so pleasant as it sounds. "All the doctors agree that no effect will be produced unless two pounds of the grapes are eaten daily. The maximum dose is nine pounds. I managed to eat about five pounds, and I thought that I had done enough for an experiment. I was quite satisfied in one respect. I should imagine breaking stones at the roadside to be a somewhat monotonous as well as exhausting employment, yet I can well suppose that the moment arrives to a patient under the grape cure, when such form of toil seems preferable to that of eating grapes all day. But the patient is not always relieved from toil when the day ends. He is haunted with grapes in his sleep, and dreams of having to eat a double dose or die.

For Ivy Poison.—The season of the year is approaching in which cases of ivy-poisoning are frequent, rendering it important that an efficient remedy should be known and at hand for use. It has long been understood that the fluid extract of Grindelia Robusta is the most efficient remedy for poisoning by this plant.

The extract should be mixed with an equal quantity of water, and applied as a lotion to the parts affected. It may be used very freely without harm, and relieves the itching, burning, and swelling characteristic of this disease, and hastens the recovery.

Dry Air.—G. A. Keyworth a few years ago read before the British Pharmaceutical Conference an account of experiments in the use of a jet of air entirely deprived of water by drying with chloride of calcium heated to 100° F. He claimed that he found it useful in relieving the pain of cancer, causing a shriveled appearance of the growth. He recommended it for treatment of old ulcers, wounds, tumors, and cancerous growths, and even gout, rheumatism and dropsical swellings. The remedy is worth a trial.

Constipation in Infants. — Constipation in children is often due to an excess of caseine in their food. Cow's milk contains a much larger amount of caseine than mother's milk, and should always be diluted with water, or better, with barley or oatmeal water. Mother's milk is often conducive to constipation for the same reason, because containing an excess of caseine. In cases of this sort, the child should be fed a quantity of thin oatmeal gruel, well boiled and strained, before each nursing. Constipated children should always be allowed to drink freely of water.

Feeding in Sickness.—The following simple principles of feeding in illness will be found of service:—

In ordinary fevers the food should be liquid, and should be given rather cool. Milk, gruels, and fruit juices are to be preferred to meat, teas, or any form of animal food.

In case of a tendency to vomiting, the food should be given cold. Sips of iced milk, or even frozen milk, are often of great service in cases of constant vomiting.

In acute diseases of the lungs, such as pneumonia, pleurisy, bronchitis and croup, food should be given warm. Liquid food is to be preferred to solid.

In cases of collapse, foods should be liquid, and should be taken as hot as the patient can bear. If the patient is unable to swallow the fluid, food should be given by enema. In this case, chicken broth or beef tea given in considerable quantity by enema are often of great service.

A Use for Vinegar.—We do not recommend vinegar for food, but it may be useful as a medicine. A writer in the Canada Lancet calls attention to the value of vinegar as a lotion in diphtheria, claiming that it is a good antiseptic. The vinegar may be applied as a spray or with a brush. If used as a gargle, an equal quantity of water should be added.

For Habitual Constipation. — Constipation due to lack of sensibility of the rectum may usually be relieved by the use of glycerine—one tablespoonful with three or four of water. Inject and retain for a few minutes at the usual hour for the bowels to move—half an hour or so after breakfast. In some cases it is best to take the preparation in the evening before retiring, and retain it over night. The action of this remedy is usually prompt and certain.

For Spongy Gums.—When the gums are spongy or congested, and bleed easily; or if they have a tendency to recede from the teeth, try the following: Tannic acid, ½ oz.; glycerine, a small quantity, barely sufficient to moisten the powder. Let it stand half an hour until thoroughly mixed, then apply to the gums by means of a little cotton bound around the end of a tooth-pick.

Diet in Disease of the Kidneys.—In all forms of kidney diseases, alcoholic liquids, spices, coffee, tea, and salt should be avoided. This statement is made on the authority of the largest and most eminent medical experience. Eggs and meat should be avoided, especially in cases where there is a tendency to dropsy.

—Persons whose feet tire easily will often be relieved by changing the shoes two or three times a day. No two pair of shoes press the feet exactly in the same manner; hence, the feet are rested by a change.

—An advertisement of patent medicine begins, "Dyspeptics may now take heart." It is not heart which dyspeptics need, but stomach.



MY FIRST PIPE.

BY F. M. SCOTT, A. B.

(Adapted from the French of Andre Theurist.)

A GOOD many years ago, when I was a small lad in roundabout and knickerbockers, the desire for smoking raged like an epidemic among boys of a tender age. Fortunately that is all done away with nowadays—No? Is it not? Then perhaps you will be interested in the story of my first pipe, which was the occasion, both of my first crime and of my earliest aspiration toward nobility of character.

It was while I was in the second class at school that the incident which I am about to relate occurred.



My First Pipe.

The height of our young ambition at this particular time was to go through the streets of our little village with the stem of a pipe between our lips. To smoke! Ah, what a divine foretaste that would be of the enjoyments and prerogatives of manhood! We made believe smoking, of course, as all boys do. We pulled away at the dried stems of the clematis, and even tried the pungent leaves of the peppermint, which we gravely smoked in little clay pipes that cost us a

penny apiece. But this did not answer. We aspired to real tobacco in real pipes—such pipes as we noted with envy between the lips of smokers of note in our neighborhood.

One of these famous smokers especially excited my admiration. He was a dealer in cutlery, Peterson by name, whose shop faced ours on the principal street of the village. In the evening, when the streets were swarming with men and girls returning home from the factories, I used to see old Peterson, lean and yellow, sitting in an old arm-chair just inside his door, and watching the stream of passers-by, while blowing copious whiffs of curling blue smoke from his pipe. And such a marvel of a pipe it was, with its long cherry stem, its egg-like meerschaum bowl, which had taken years in coloring, and its rich silver mounting. I could not gaze enough at it, and at night it came floating about my head in dreams, borne on clouds of thin blue smoke.

"Oh, that Peterson! what an idle fellow!" my father would exclaim a dozen times a day. "Always a pipe in his mouth. He thinks more of his smoking than of his business."

My father, rotund, cheerful, and active, was the very opposite of old Peterson. Busying himself all day about his drug store, he lived a very laborious life, between his sister, my Aunt Elizabeth, who had remained an old maid, and my grandfather, who, having retired from business, spent his leisure time in cultivating a small garden situated behind our house. Old Peterson, with his everlasting clouds of tobacco smoke and his interminable loafing, was a constant thorn-in-the-flesh to my father. Whenever, between the colored flasks in our shop window, he caught sight of our opposite neighbor, sitting idle in a halo of smoke, he would shrug his shoulders and mutter to himself, "That man will come to a bad end yet."

And to a bad end he came, sure enough. One morning I awoke to behold a big red flag hung out in front of the closed shutters of the opposite store. Old Peterson's goods had been seized by his creditors, and there was to be a sale of his merchandise.

"I told you so," exclaimed my father, not without satisfaction: "There, you see what smoking leads to; and tea, and coffee, and all bad habits go with them. [My father had peculiar ideas on the subject of tea and coffee drinking, as you see.] Let this be a warning to you, Harry. Old Peterson is ruined, and he has his pipe to thank for it."

For my own part, I must confess that what caused me most concern was the fate of old Peterson's pipe. Had it been seized with his other effects? I would gladly have attended the sale, but fortunately it took place during school hours, and my father would listen to no nonsense on that subject; and so for a week I lost sight of old Peterson's pipe.

But one evening, as I was returning home from school, I happened to glance at the show-window of a second-hand store, when I suddenly experienced a violent mental shock. Behind the window-pane, between a rusty flint-lock pistol and a stringless violin, lay the object of all my longings, old Peterson's beautiful pipe!

Without the power to resist, my legs carried me straight into the shop, where the second-hand dealer was sitting in the wreck of an easy chair, engaged in polishing a tarnished silver coffee-pot.

"That pipe there," I stammered, "how much will you take for it?"

"Too much for your pocket, youngster," replied the dealer, eying me suspiciously. "It's worth two dollars and a half, if it's worth ten cents. Genuine meerschaum, and so mild to smoke,—a perfect honey of a pipe,"—and he took it from the window and fondled it tenderly.

My heart went out toward it, but two dollars and a half! With my slender allowance of pocket-money it would take months of the most scrupulous economy to save so much.

"I will think it over," I said, with a reddening face. "I will call again."

"Oh, yes—when two Sundays come in a week," said the dealer ironically. "A child like you to think of smoking. Well-a-day, there are no children nowadays."

(TO BE CONTINUED.)

A LESSON IN NEATNESS.

Habits of thorough cleanliness are not only required by good taste and good breeding, but are essential to health. Those enemies to life and health called "germs," are always found in connection with dirt. Most animals instinctively avoid filth. The bird takes its morning dip in the lake or stream; the elephant treats himself to a shower bath as often as he likes; dogs love to bathe and swim in the water, as do many other animals. Even so humble a creature as the crab, which does not receive credit for much intelli-

gence, has a great antipathy to dirt. These curious creatures have a singular habit of tearing off their legs on sundry occasions. For instance, if a crab gets badly scared at a thunder-storm or a loud noise in the water, it straightway tears off a leg or two. A crab often loses one or more legs in combat with other crabs. A still more curious thing is that when the crab's legs are lost in this way, they grow on again in a few weeks' time, or, rather, new ones grow out in place of the old ones. Perhaps this is why the crab values a leg so little; he can get a new one just as good as the old one by simply waiting for it to grow.

But we said that crabs are extraordinarily neat in their habits. These creatures have such a dislike for dirt that if, by chance, one of them happens to get one of his legs soiled in any way, he immediately pulls it off. A missionary in the Samoan Islands tells a story of a crab that was going out one morning in search of food, when it accidentally soiled one of his legs. It immediately wrenched off the leg, and hobbled back to its hole to remain in solitary confinement until it should grow again. It is claimed that crabs have been known to pull off all their legs in the same manner, and then laboriously drag themselves home by their nippers to wait for new legs to grow.

This is certainly very extraordinary neatness, is it not? It is not necessary to cut off a hand or a finger because it is soiled, for it can be easily cleansed by the use of soap and water. With the poor crab, however, legs are cheaper than soap, and so he instinctively mutilates himself rather than remain in close company with dirt.

A PUZZLE FOR LITTLE READERS.

I HAVE a trunk with-

- 1. Two lids.
- 2. Two caps.
- 3. Two musical instruments.
- 4. Two established measures.
- A great number of things a carpenter cannot dispense with.
 - 6. I have always about me two good fish.
 - 7. A great number of smaller ones.
 - 8. Two lofty trees.
 - 9. Fine flowers.
 - 10. Two playful animals.
 - 11. A number of smaller and less tame breed.
 - 12. A great number of whips without handles.
 - 13. Some weapons of warfare.
 - 14. A wooden box.
 - 15. Two fine buildings.
 - 16. A piece of money.
 - 17. A fine pair of blades without handles.
 - 18. Part of a carpenter's implement.
 - 19. A letter finished off with bows,
 - 20. Secure fastenings for the whole.
 - All these are in the human body.—Bishop of Oxford.

 THE ANSWER WILL BE GIVEN NEXT MONTH.

Question Mour.

NINE o'clock, Monday morning, at the Sanitarium, is question hour, and the questionee is Dr. Kellogg. There the man who feels lost, away from business, tries to find himself in the animated parlor, while some answer finds his weak spot and his bad habit. The woman who would feel lost without her "tatting," brings it along instead of note-book and pencil; for she is most impressed with the need of doing things by hand the moment there's a good thing for the head to do. A lot more, perhaps a hundred, of the inmates, of this "penal institution," as the Doctor calls it, drop in. Most of them look, and act (to the layman), and are, just as innocent and wholesome as half the crowd they left behind; yet they are here, serving out the sentence of Nature for the sins of overeating and under-sleeping, some for overwork, and some for the sin of no work, and yet othersa large group of old young men and women-for the sin of getting tight at the waist or loose in unnatural

This morning I sit here; and the rest of the creatures having come into this ark of safety, by 9:15, we wonder whether our Noah—the captain of the ark—has got left out in the wet. No; it is one of his patients that is trying our patience. But here he comes, quick and springy in movement, of a merry-keen look, and ready on facts for the unexpected—even for the insanities of a sanitary question-box.

"Good Morning, Ladies and Gentlemen," is his greeting, as he tips the box empty and picks up a query or two; and after a glance at the slip, he begins to go off from head to feet, industriously wearing out the carpet on a quarter-circle to his right, about the marble stand. "What does he say!" That depends on what we listeners have inspired the box with. Eve just room to sample the bread-crumbs dropped from the medically-rich man's table at this Monday meal:—

We don't really inherit any disease, only a good chance to get it, if we try; the old smoker's boy is not born with a pipe in his mouth, only with the natural instinct to break it so blunted that, if the father, or other sinner, puts it there, the boy is apt to let it stay. So, the child of a consumptive need not die of it; he has simply inherited a weak spot in his bellows, and must avoid clogging and straining it with the colds and excesses some of sounder parentage live in spite of. And if your mother died in the madhouse, and some other lunatic keeps you in mind of that gloomy background by the frequent remark in long meter, "Oh, my dear girl, how much you do look and act like your mother! I'm dreadful 'fraid you'll go like her!" just think her a fraud, stay out of her sour apple tree, and go away off to the sweetest, jolliest set you can make friends with.

"Milk Diet?" Yes, the cow is a health resort-a healthy cow is; but don't drink the milk full of animal heat; in fact, don't drink it at all. Cool it as quick as possible, skipping milk toted two hours in the cart, then eat it, chew it with solid food, or use the cream with bread and grains instead of butter, because the fat in the cream is in thin globules, just ready for absorption by the stomach; they are easy to digest, forming a happy family in the stomach. But butter when eaten, has first to be unchurned by the stomach; then digested, if it does n't block rather than oil the alimentary wheels- a double task, you see. Moreover, it is almost impossible to get pure butter; and if at all rank, it is fit only for wagon-grease-will not make hard muscles and tender dispositions; it contains living germs. We [the Sanitarium] get all our butter of one creamery, paying 26 cents per pound the year round. It is shipped to us on ice twice a week, yet now and then a plate of it standing off the ice 24 hours, turns up the nose of the taster. We encourage you to eat cream. Skimmed milk makes good bones, flesh, nerves, etc., but not fat.

The doctor did n't stop here, but I must.

JAMES CLEMENT AMBROSE.

Literary Notices.

The Atlantic Monthly for March opens with "Miss Tempy's Watchers" by Sarah Orne Jewett; "The Aspern Papers," in three parts, by Henry James; "The Dawes Bill and the Indians" by James B. Thayer; "Over the Teacups," by Oliver Wendell Holmes; "The Dying House," by T. W. Higginson; "The Law of Fashion," by N. S. Shaler; "Beginnings of the American Revolution," by John Fiske; "The Marriage Celebration in the Colonies," by Frank Gayford Cook, are additional subjects of interest treated in this number.

Terms, \$4.00 per annum. Houghton, Mifflin, Co., Boston.

DIPHTHERIA is now such a common disease that it is of the utmost importance for every mother to have some idea of its symptoms and character. An article in the March number of Babyhood supplies much information concerning that scourge of the nursery. The article is by Dr. Chapin, Professor of "Diseases of Children" at the Woman's Medical College, of New York, and is thoroughly practical. It gives plain directions for the examination of the throat, which it is insisted should be made in every case of illness in children. A number of illustrations help to make clear the difference between simple tonsilitis and diphtheria, and the changes in the appearance of the tonsils in both diseases. The March number is for sale by newsdealers everywhere at 15 cents.

Morals Versus Art is the title of a little book by Anthony Comstock, in which he gives facts and figures which all should examine with care.

The recent arrest in New York, for a violation of the law, has created an intense excitement. The book should have a wide circulation, and it will be mailed to any address for ten cents, or a special price per hundred, by J. S. Ogilvie & Co., Publishers, 57 Rose Street, New York.

Mr. Kennan's Siberian papers, illustrated by Mr. G. A. Frost, who accompanied Mr. Kennan on his trip through Asiatic Russia, will begin in the May CENTURY. Their appearance has been deferred, on account of the author's desire to group in preliminary papers-the last of which will be in the April Century-an account of the conditions and events in Russia directly related to the exile system. This system is now to be minutely described and elaborately pictured; and by way of preface to the first illustrated paper, Mr. Kennan will, in a brief statement, answer the question as to how he came to enter upon his arduous and somewhat perilous investigations, and why he and his companion were accorded such extraordinary facilities by the Russian Government itself. In the April Century Mr. Kennan will write of "The Russian Penal Code."

THE frontispiece of the St. NICHOLAS for March is an exquisite engraving of "Baby Stuart," by T. Johnson, from Van Dycks well-known painting. Ernest E. Thompson has contributed a novel and attractive paper, showing what a naturalist may read from "Tracks in the Snow;" and the tracks are reproduced so that the readers may draw conclusions for themselves. Helen Campbell tells an amusing story of "The Hobart Treasure," and shows how treasures may be hidden where least expected. Frank R. Stockton, in the "Personally Conducted" series, gives his impressions of "The People We Meet" abroad; Mr. John Preston True gives the second installment of "Drill." "Edward Athoy," the plain and touching story of the life of a young Pennsylvania miner, is begun in this number. Edgar Mayhew Bacon's essay upon "Accidental High Art" will be welcomed by amateurs, professionalists, and Philistines with equal pleasure, and will certainly create the want which it supplies. Louise Stockton, however, offers a substitute sure to satisfy those still seeking artistic expression, and her "Some Work for Lent" is seasonable and pleasing. "The Bronzed Kid Shoes," a charming poem by Marion Douglas; "Two Surprises," a poem by R. W. Mc Alpine, with illustrations by Brennan; and "A Regular Boy," by George Cooper, an amusing jingle with equally amusing pictures by Birch; and the usual Pictures and Departments, complete this attractive number.

ILLUSTRATIONS in color is a striking feature of the Cosmopolitan for March. This is the only American magazine that has had the daring to embark upon this original venture. The contents are upon the live topics of the day, as well as sketches of travel, science, biography, etc. Reviewing the table of contents for March, the articles particularly noticable are, "Horses and Hunting in Persia;" "Superstitions of the Negro;" "First Steps toward a Millenium," and the first chapter of "Miss Lou," a story of Southern life after the war, by E. P. Roe.

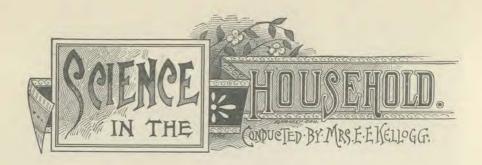
Though less than two years old, its distinct individuality is no less marked than its great popularity. And its increased facilities for development bespeak for it an unprecedented career in the history of successful magazines.

Published at 29 Park Row, New York City. Subscription price, \$2.00.

THE numbers of The Living Age for February 25th and March 3d contain Darwin's Life and Letters, and Cabot's Life of Emerson, Quarterly; Personal Experiences of Bulgaria, and the Evolution of Humor, National; Home Rule of Norway, Nineteenth Century; A Jacobean Courtier, Fortnightly; Mary Stuart in Scotland, Blackwood; A Night in the Jungle, Macmillan; Some Wiccamical Reminiscences, and The Romace of History—Bayard, Temple Bar; Unser Fritz, Time; 'Thackeray's Brighton, All the Year Round; with "A Tumbler of Milk," "The Five Horseshoes," and poetry.

For fifty-two numbers, of sixty-four large pages each, (or more than 3,300 pages a year) the subscription price (\$8) is low; while for \$10.50 the publishers offer to send any one of the American \$4.00 monthlies or weeklies with *The Living Age* for a year, both post-paid. LITTELL & Co., Publishers, Boston.

THE CHAUTAUQUAN for April presents the following table of contents: "Bones and Muscles," by C. Fred Pollock, M. D., F. R. S. E., F. R., S. E.; "Recent French Literature, by William Price, B. A.; Sunday Readings; "Literature of the Far East," by Justin A. Smith, D. D.; "Amercian Shipping," by Henry Hall; "The Money We Use," by Henry C. Adams, Ph. D.; "Plant Life at Work," by Byron D. Halsted, Sc. D.; "Life and Manners," by the Rev. Abbott, D. D.; "Explorations in Unknown Territories," by General A. W. Greely, Chief of the United States Signal Office; "The Art Year," by Clarence Cook; "Apothegm; from Victor Hugo's Les Miserables;" "On the Mighty Yang-tze-Kiang," by Bishop H. W. Warren, LL. D.; "Madame Boucicaut and the Bon Marché," by Caroline M. Baker; "The Decay of Public Morals," by Bishop A. Cleveland Coxe; "More Work for Women," by Susan Hayes Ward. The usual departments receive full space.



SEASONABLE BILLS OF FARE.

DINNER NO. 1.

Velvet Soup,

Mashed Peas,

Baked Potato,

Mashed Parsnips,

Fluted Wheat with Cream,

99.5

Whole-Wheat Bread,

Rolls,

Corn Starch Meringue.

Cream Pea Soup,

Molded Potato,

Stewed Lima Beans, Mashed Turnip,

Whole Wheat with Cream,

Buns,

Whole-Wheat Puffs, California Grapes and Raisins.

Mashed Peas.—Cook dried peas until tender, using as small a quantity of water as possible, so that when they are done they will be quite dry. Rub through a colander, season with cream and a little salt if desired and serve hot. If too moist after rubbing through the colander, place in a moderate oven until most of the moisture is evaporated, before seasoning.

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 As soon as the water boils, 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.

Mashed Parsnips.—Scrape the parsnips, and put at once into cold water to prevent discoloration. Slice them into quite thin pieces, and steam in a steamer over a kettle of boiling water until very tender. When done, mash very thoroughly, add salt to taste, and a few spoonfuls of thick, sweet cream, and serve.

Velvet Soup.—Pour three pints of hot potato soup seasoned to taste, slowly over the well-beaten yolk of an egg, stirring briskly to mix the egg perfectly with the whole. This soup must not be reheated after adding the egg. Plain rice or barley soup may be used in place of the potato soup, if preferred.

Molded Potato.—Cook, mash, and season the potatoes. Oil a handsome mold, (a scalloped cake tin does very well), sprinkle brown bread raspings over the inside, then press the potato lightly into it. Turn the molded potato out, and brown it equally all over in the oven.

Corn Starch Meringue.—Heat one and one-half pints of milk to boiling, and then stir in gradually two tablespoonfuls of corn-starch which have been previously rubbed smooth in a little cold milk. When the starch has thickened, allow it to cool a little, and then add, stirring continuously meanwhile, the yolks of two eggs, which have been previously well beaten up with three tablespoonfuls of sugar, and a little salt, if desired. Let the whole simmer for a minute or two longer, turn into a dish, meringue with the whites of the eggs; and when cold, dot with lumps of strawberry jelly.

Whole Wheat. — When properly cooked, whole wheat is not only a most nutritious but likewise palatable article of diet. A writer in the *Popular Science News* gives the following directions for preparing the wheat for the table. "Take one pint of whole wheat from the granary, wash clean, and let it soak in cold water over night. The next day boil until it is thoroughly soft, or steam in a double boiler, as you would other grains, until tender."

MEXICAN COOKERY.

From the earliest period of which we have any knowledge Indian corn has been the chief reliance as a food staple among the Mexicans, as a class. Their manner of preparing it for the table, though very laborious, is exceedingly simple. A traveler writing of Mexican customs says:—

"The economy of the cuisine is something wonderful in its simplicity, even in the houses of the rich.



Grinding Corn on a Metate,

Starting upon first principles, the Indian and Mestiza women who rule the kitchen prepare the farinaceous food in the same manner they did a thousand years ago. For hundreds of years, they have ground the corn for their daily bread, as at the present day, between two stones. They know no other way. One of them, on being told that the women of the States had no such employment, exclaimed in surprise, "Why! what do they find to do with themselves?"

The stone roller and slab upon which this tedious

task is performed is called a metate. Its appearance is well shown in the accompanying engraving. Upon this metate the corn, which has been previously softened by being soaked in lime water, is ground to a fine paste. It is then patted and and pulled into thin, wafer-like cakes, and baked over a quick fire, on a thin iron plate or a flat stone. These corn cakes are known as tortillas; pronounced tor-tee-yas.

Housecleaning Time.—Char. Woman. "Madam, cud I get the job of cleaning out your pantry?"

Madam. "No, my good woman, the saloon-keeper attends to that matter."

Fire-Proof Material.—Dr. Doremus says that even the lightest fabrics can be rendered uninflammable, by dipping them in a solution of phosphate of ammonia in water. It will be found impossible to set on fire fabric so treated.

The Table as an Educator. - As a certain famous cook has well said, there is no silent educator in the household that has higher rank than the table. Surrounded each day by the family, who are eager for refreshment of body and spirit, its impressions sink deep; and its influences for good or ill form no mean part of the warp and woof of our lives. Its fresh damask. bright silver, glass, and china, give beautiful lessons in neatness, order, and taste; its damask soiled, rumpled, and torn, its silver dingy, its glass cloudy, and china nicked, annoy and vex us at first, and then instill their lessons of carelessness and disorder. An attractive, well-ordered table is an incentive to good manners; and being a place where one is incited to linger, it tends to control the bad habit of fast eating; while, on the contrary, an uninviting, disorderly table gives license to bad manners, and encourages the baste which is proverbial among Americans. The woman, then, who looks after her table in these particulars, is not doing trivial work, for it rests with her to give, silently, these good or bad lessons in manners and morals to her household as they surround the daily board.-Boston Post.

—The greatest care should be taken in washing milk cans and all dishes in which milk is set, as milk spoils very readily when put into an unclean dish. Wash first in cold water; second, in a strong solution of soda and water, and then in clean tepid water. Wipe dry, and, if possible, set out of doors to sun and air.—Good Housekeeping.

[—]To clean men's clothing, mix two parts alcohol and one part ammonia; rub vigorously with a sponge or woolen cloth. This is also excellent for other woolen goods, and for carpets.

Publisher's Page.

All intelligent readers of this journal will be interested in the study of the colored frontispiece, and the explanatory article, which appear in this number. This illustration alone is worth more than the price of the journal a year, to those who have not made a thorough study of this subject.

The publishers have had made for their special use an excellent engraving of the renowned Hindoo scholar, Pundita Ramabai, who is now lecturing in this country in behalf of a school which she has undertaken to found for Hindoo widows. A sketch of this remarkable woman will accompany the portrait, which will appear as the frontispiece of the next number of this journal.

The editor having been unusually pressed with work during the past month, the Question Box is omitted from the present number; and in its place we have substituted the "Question Hour," a partial report by Mr. Ambrose, of Dr. Kellogg's Monday morning lecture, which consists of answers to the questions of patients, which are written on pieces of paper and deposited in a box provided for this purpose.

The Special Course of Instruction now in progress at Battle Creek College is very largely attended, not only by the regular students, but by scores of persons who have come from various parts of this and adjoining States. One of the features of the course is a lecture upon health and temperance principles each afternoon at five o'clock. The audience usually numbers about three hundred.

We have just issued a new edition, including the fortieth thousand, of "Social Purity," which contains an important chapter by Mrs. Kellogg, Associate Superintendent of the Social Purity Department of the N. W. C. T. U., entitled "A Talk to Girls," by which the value of this useful pamphlet is greatly increased. The new chapter is an abstract of a series of addresses recently delivered by Mrs. Kellogg before the young lady students of Battle Creek College.

New subscriptions and standing orders from news companies for this journal during the last month have averaged more than one hundred and fifty a day. The managers are ambitious to increase the regular circulation of the journal to at least fifty thousand. When this is accomplished, they will very likely consider one hundred thousand as not beyond their reach. For this prosperity, we have to thank the friends of temperance and sanitary reform, who take the pains to place the journal before those who become interested in it.

An opportunity is offered at the Sanitarium for half a dozen young women and as many young men, of good character and first-class ability, to engage in the study of medicine. The Sanitarium is not a medical college, but affords rare opportunities for laying the foundation for a first-class medical education. A large number of young men and women who have availed themselves of these advantages, have become successful practitioners. The editor of this journal and the managers of the Sanitarium are constantly receiving appeals from all parts of this country, and from other countries, for well-educated physicians who have been trained in the methods of the Sanitarium. The field of usefulness open for women physicians in this direction is particularly excellent. Any who may be interested in this matter should address the managers of the Sanitarium, Battle Creek, Michigan.

A new edition of the "Ladies' Guide," one of the most popular of Dr. Kellogg's works, has been recently printed by the Review and Herald, of this city. The work is still having a rapid sale. Few works sell better in the hands of lady canvassers. The publishers give a liberal commission. A more extended notice of the work will be found in the advertising columns.

The Pacific Health Journal has changed from a bimonthly to a monthly, and has put on a cover. Every number of the journal is brim full of good things in a sanitary line, and is the best journal we know of except —, well, we are too modest to speak our minds freely on this subject. If the reader thinks us blased, let him take both journals for a year, and find out for himself. Very likely, at the end of the year, he will say they are so much alike that he hardly knows which is best, and yet so different that he cannot get along without either one of them.

The Sanitarium Food Company have just issued a new catalogue of their new food products, which is a unique thing in its way. The catalogue is a covered pamphlet of 24 pages and contains, not only descriptions of the various foods manufactured by the company, price list, etc., but a description of ancient and modern methods of flour-making, with cuts which show the microscopical structure of a grain of wheat, and the curious modes of making flour employed by ancient nations, and some of the uncivilized tribes of modern times. A copy of the pamphlet may be obtained by any one desiring it, by addressing the Sanitarium Food Company, Buttle Creek, Mich.

President, W. C. White, and others, of the increasing prosperity of the Rural Health Retreat, of St. Helena, California. When in California last fall, we were surprised that so many invalid tourists should be content to lounge about the crowded hotels of the cities, struggling to subsist on a dyspepsia-producing hotel diet, when there is offered to them such a delightful, retired, and home-like place for recuperation as is found at this thriving institution. Numerous improvements have been made during the past year, and we understand that others are in contemplation. Those of our readers who may visit the Goiden State in search of health or pleasure might spend a few weeks at this institution with very great profit.

The first session of the Sanitarium School of Domestic Economy was organized March 15th, according to announcement. There were more than thirty intelligent-looking young women present at the opening of the school, and a number have arrived since. The enterprise is starting out with most flattering promise of success, and the managers have determined to keep the school in continuous session the year round. This will enable them to admit pupils at any time. The regular course will begin twice a year, so that there will be some advantages in entering the school in the spring or fall; but those who do not find it convenient to join the school at the commencement of the course, will have opportunity to obtain the whole course of instruction by listening to those lectures in the succeeding course which they have missed in their first course.

So excellent an opportunity for a young woman to obtain a practical knowledge of scientific house-keeping has probably never been offered in this country or any other. Daily instructions in the form of lectures and drill is given without charge, to those who are willing to work. This is to enable girls of the most moderate means to secure the benefits of the educational training which most mothers neglect to undertake, if, indeed, they have themselves the qualifications to give the instruction required. Students receive board free the first month, and after that time, if their proficiency is such as to warrant, they receive compensation according to their ability and proficiency.

In the effort to meet the necessities of a large Sanitarium with its great variety of patients, we have produced a number of food preparations adapted to different diseased conditions, the merits of which are such as to secure for them a very large and increasing sale, not only to persons belonging to the invalid class, but those who wish by "good living" to avoid disease. The following are the leading preparations :-

No. 1 Graham Crackers, 10	Whole-Wheat Wafers,	Avenola,
No. 2 Graham Crackers,	Fruit Crackers,	Infant's Food,40

Sample packages containing specimens of each of our foods sent postpaid for 50 cents. Selected samples, 25 cents.

All grain preparations can be supplied in large or small lots, as we keep a fresh supply constantly on hand of goods which are largely made expressly for us, of a superior quality of grain. Address,

SANITARIUM FOOD COMPANY.

Battle Creek, Mich.

KELLOGG, M.

AFTER a careful study for several years of the Physical Effects of Alcohol and Tobacco upon the human body, with unusually favorable opportunities for observation through post-mortem examinations, chemical analyses, and microscopical investigations, the author has prepared, by the aid of the best artists to be secured, a series of TEN COL-ORLED PLATES, which depict in the most graphic manner possible, the ravages of alcohol among the delicate structures of the human body. The following is a list of what is exhibited by the several Charte:—

PLATE 1. The Alcohol Family.

2. A Healthy Stomach.

3. Stomach of a Moderate

Drinker.
PLATE 4. Stomach of a Hard

Drinker. PLATE 5. Stomach in Delirium

Tremens.
PLATE 6. Cancer of the Stomach.

PLATE 6. Cancer of the Stomach.

** 7. A. Health y Nerve Cells. B. Fatty Degeneration of Nerve Cells. B. Fatty Degeneration of Nerve Cells. C. Healthy Blood. D. Blood of an Habitual Smoker. E. Blood of a Drunkard. F. Blood Destroyed by Alcohol. G. The Drunkard's Ring. H. Healthy Nerve Fibres. L. Fatty Degeneration of Nerve Fibres. L. Fatty Degeneration of Nerve Fibres. L. Fatty Degeneration of Muscle Fibres. E. Fatty Degeneration of Muscle Fibres. E. Fatty Degeneration of Muscle Fibres. Sphygmographic Tracings of the Pulse, showing a list of various poisons used in adulterating the various liquors. Sphygmographic Tracings of the Pulse, showing the effects of Alcohol and Tobacco upon the pulse. A. Pulse of a Healthy Person. B. Pulse of a Moderate Drinker. C. Pulse of a Drunkard. D. Pulse of an Old Tobacco User. E. Pulse of a Young Smoker.

Statistics of Stimulants and Narcotics. A diagram exhibiting in a graphic way the fact that the annual cost of Alcoholic Drinks, Tobacco, Rum, Tea and Coffee, exceeds the cost of Bread, Meat, Clothing, Education and Missions.

Nothing so Complete in this line has ever been attempted before. These ten charts constitute a most

PLATE S. Smoker's Cancer. A
Rum Blossom. A Healthy Brain.
A Drunkard's Brain. A Healthy
Heart. A Drunkard's Heart.
PLATE 9. A. A Healthy Lung.
B. Drunkard's Consumption. D.
A Healthy Kidney. E. Enlarged
Fatty Kidney of Beer Drinker. F.
Atrophied Kidney of Gin Drinker.
G. Healthy Liver. H. Liver of
Drunkard, showing Nutmeg Degeneration. L. Magnified Section
of Fatty Liver of Drunkard. J.
View of an Eye Diseased from the
Use of Tobacco and Whisky. K.
View of the Interior of a Healthy
Eye.

Nothing so Complete in this line has ever been attempted before. These ten charts constitute a most powerful temperance lecture, the impressions of which will not be easily forgotten.

The accompanying cut illustrates a novel arrangement for exhibiting charts, which is now furnished with this series of charts when desired. It works to a charm, and it is just the thing for lecturers. It is only necessary to set it on a stand or table, and in two minutes it can be made ready for operation. It can be operated in either direction equally well. Each set of charts is accompanied by a Key and a stenographic report of a lecture from the charts delivered by Dr. Kellogg at the Lake Bluff Temperance Convocation.

Price of Charts on common rollers, \$12.00; Case extra, \$1.25; Charts with Exhibitor, \$15.00.

GOOD HEALTH PUBLISHING CO., Battle Creek, Mich.

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Varieties, FREE I

An Unparalleled offer by an Old-Established and House! The Ladies! Wonth Is a mammoth Is-page, 64 column illustrated paper for ladies and the family circle. It is devoted to stories, poems, ladies! family work, artistic needle-work, home decoration, housekeeping, fashions, hyglene, juvenile reading, etiquete, etc. We want in the color of the paper a trial, because we know that a very large proportion of them will series of which is a very large proportion of them will series of work and some and the stories will also some permanent substantially and the stories will also some permanent and selection of the color of the stories of the stories will also some, Free and post-paid, a large and magnificent Collection of Choice Plower Seeds, two hundred verieties, including Pansles, Verbenas, Chrysanthemums, Asters, Phlox Drummondil, Balsam, Cypross Vine, Distablis, etc., etc. Remember, len cents pays for the paper three months and this entire magnificent collection of Choice Plower Seeds, but up by a first-class Seed House and warranted fresh and reliable. No lady can afford to miss this wonderful opportunity. We guarante every subscriber many limes file value of inomey sent, and will refund your money and make you a present of both seeds and paper if you are not entirely satisfied, Ours is an old established and reliable publishing house, endowed by leading in sewspapers throughout the U.S. Do not comboning. Write to-day—don't put it off! Six subscriber was considered and six seed collections sent for 80 cents. Address, S. H. MOONE & CO., 27 Park Place, New York.

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STRONG WORDS FROM STRONG MEN.

Dr. C. M. Richmond, of New York, writes of the Felt Tooth Brush :-

'As a cleanser and absorbent of the oils and particles which collect on the teeth, it has no equal and never can have a rival."

Dr. W. Geo. Peers, L. D. S., of Montreal, writes of the Felt Tooth Brush:—

"It ought to be a luxury as well as a stimulant to use the Felt Brush constructed as it is, and I believe that with that and the floss silk between the teeth, nothing better can be relied upon."

The well-known actor, Mr. Stuart Robson,

says:—
"The Felt Tooth Brush is a great success. It appears to possess qualities above all others in my experience."

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18 Felt Brush "Heads" boxed 25c, each good for 10 days' use. Handsome Imperishable Holder 35c. Bristle "Head" (40c quality) 15c. Mailed to any address on receipt of price.

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Acknowledged Best Protection Against the Ravages of Fire.

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A PICTORIAL

ENCYCLOPEDIA OF HYGIENE TEMPERANCE

By J. H. KELLOGG, M. D.

Chromo-Lithographic Plates, a Series of Ten, Each 32x48 inches In Size.

All competent teachers of physiology and hygiene have for years felt the need of some more efficient means of illustrating these subjects than have heretofore been afforded, especially as regards the subject of hygiene.

The author of these charts has for years been engaged in teaching physiology and hygiene in the class room and by popular lectures, and has endeavored to fill the gap in means of pictorial illustration by blackboard sketches and charts specially prepared for his own use. In response to the repeated suggestions and requests of teachers and others interested in this line of educational work, he has selected from among the designs which have thus grown out of his practical experience in teaching these subjects, such as have proved the most effective and serviceable, and now presents them in this form, believing they will be recognized as a very helpful addition to the facilities which teachers have hereofore possessed for making these subjects interesting and attractive. A number of skilled artists were employed for several months in perfecting the designs and coloring, and no expense has been spared to make the charts both

SCIENTIFICALLY ACCURATE AND THOROUGHLY ARTISTIC

in every detail of design and coloring, in which particulars they are quite unequaled. These Charts are specially designed for the school room, but they are equally serviceable for lectures. The whole subject of Anatomy, Physiology, Hygiene, and Temperance are illustrated in these Charts in a manner never before attempted. The following is a bare list of the Charts:—

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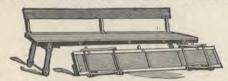
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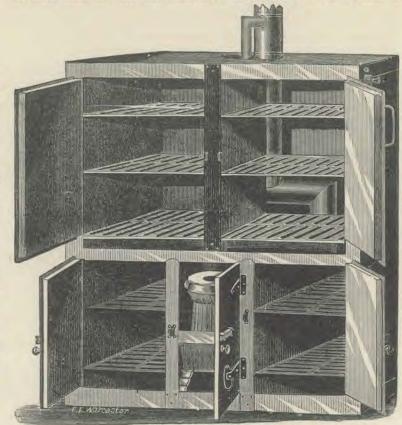
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Adam Reid. Esq.,—
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(LETTER No. 1.)—It is nearly a year since I first used your Bake Oven (No. 60), and I can say now what I have repeatedly said, that in all my experience I have never seen better work than that which your oven turns out. The one in use here works just as well as the one I first used at Chantanqua, N. Y., last year.

Yours respectfully,
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(LETTER No. 2.)-The oven in use here is still in "good shape," and continues to give satisfaction EMMA P. EWING.

I have recently sent them to the New Osborne House, and the new Powers House, Rochester, N. Y.; the Central House, Reading, Pa.; the Forest City House, Cleveland, O.; H. C. Austin, Binghamton, N. Y.; James Dick, Dansville, N. Y.; A. Alvord, Elmira, N. Y.; W. W. Whittaker, Lockport, N. Y.; W. W. Clemmons, Geneva, O.; Mansion House, Buffalo, N. Y.; Monteagle House and Deveaux College, Niagara Falls, N. Y.; Geo. Davis, Mohawk, N. Y.; B. F. Simmons, Castle, N. Y.; A. E. Potter, Mansfield, N. Y.; S. K. Kimbali, Alexandria, N. Y.; I. G. Corbett, Austin, Pa.; E. E. Proud, Saggerstown; Geo. Truscott, Mackinac, Mich.; Louis Bath, Wellsburgh, N. Y.; Joseph Mecklinberger, Suspension Bridge, N. Y.; Avery & Miller, Kalamazoo, Mich.; H. T. Williamson, Waterford, Pa. Here is a copy of an order for three after the fullest inquiry had been made:—

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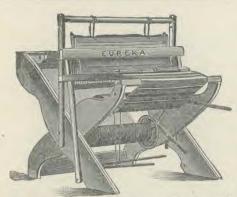
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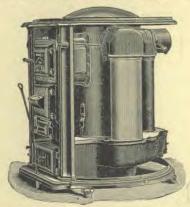
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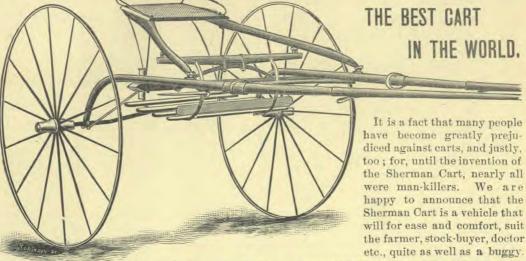
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Battle Creek Buggy Co.,

Manufacturers of the

SHERMAN ROAD CART.

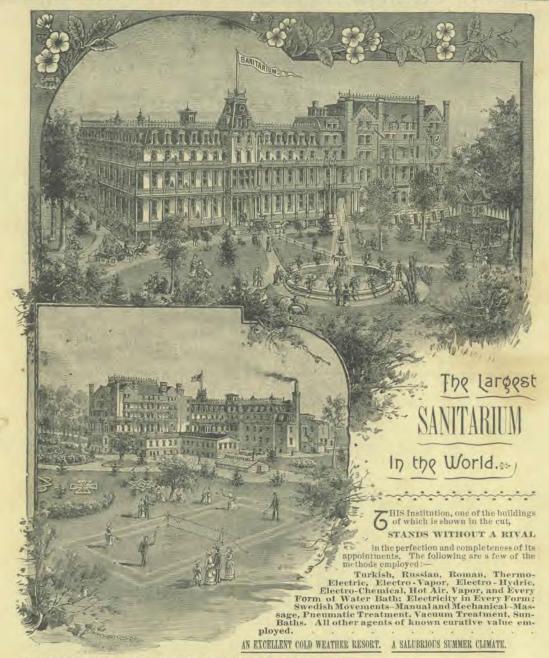


It is the only cart that has the foot rest attached to the spring-bar, thereby obtaining a **VERTICAL MOTION**, all other carts having a circular motion. The feet and limbs of the rider have the same motion as his body. Warranted to ride as easy as a buggy. For further particulars, address

AGENTS WANTED.

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