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GOOD HEALTH

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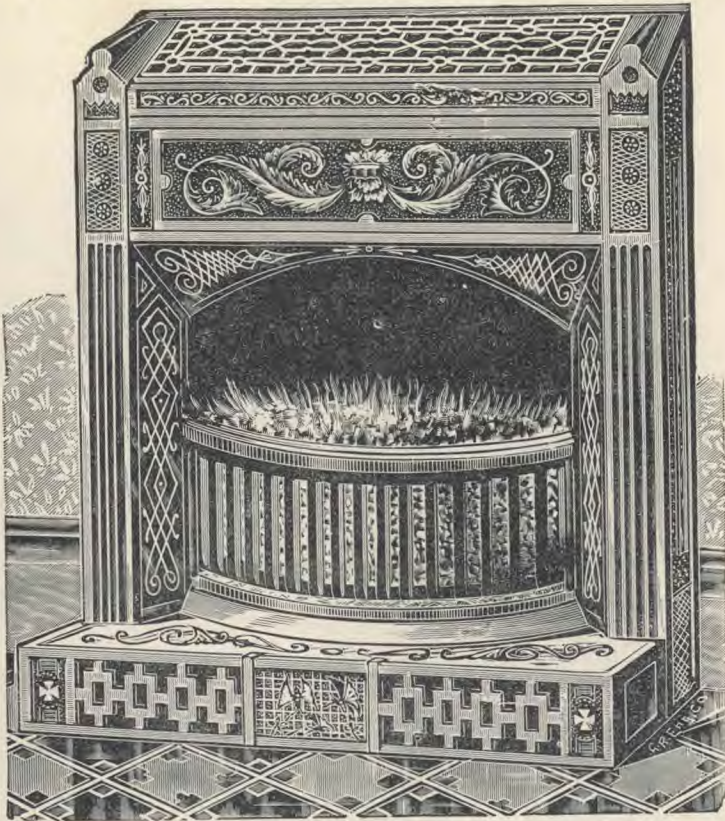
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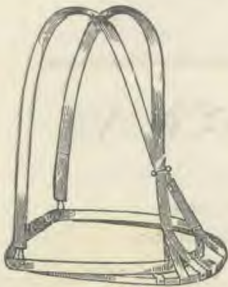
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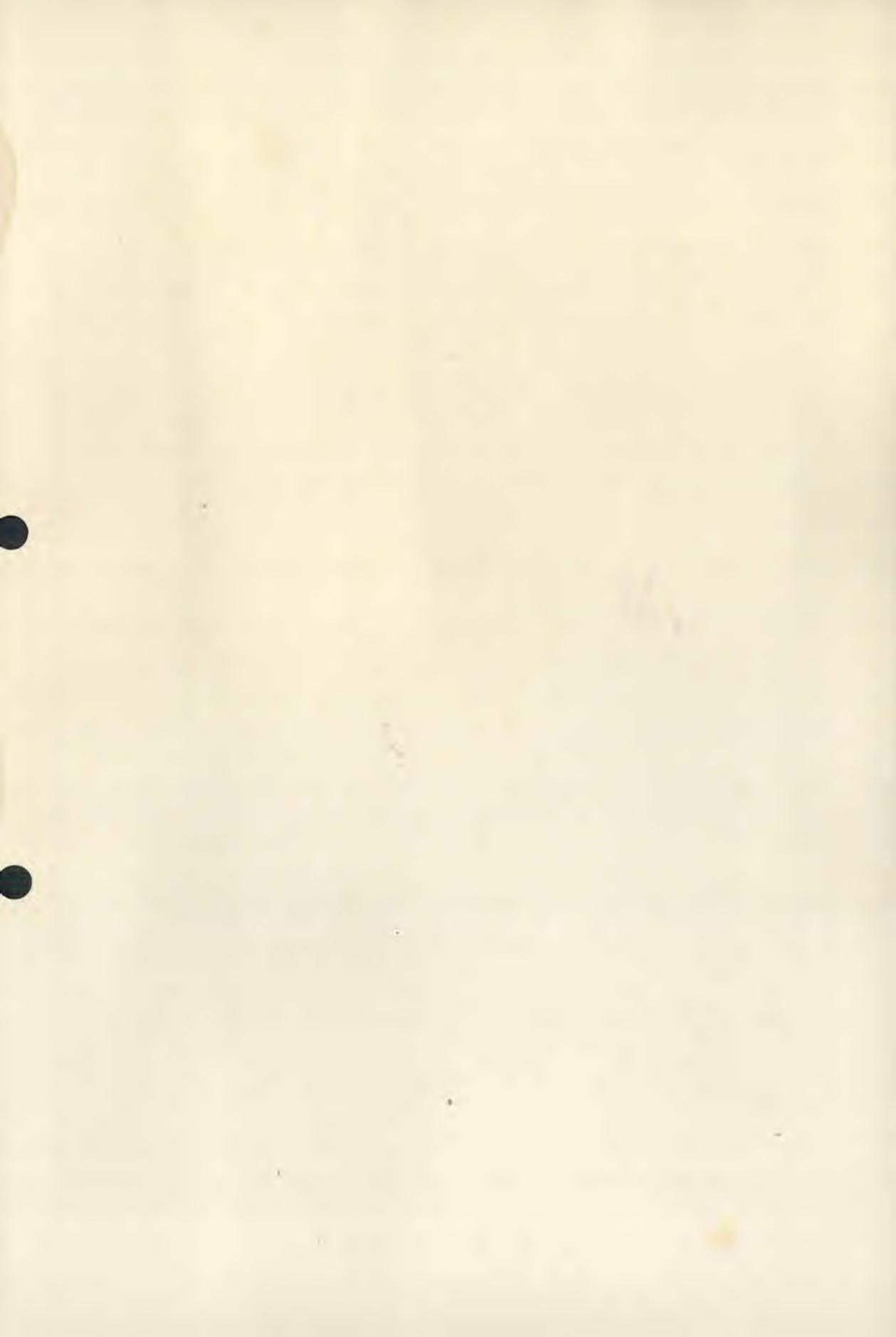
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Volume XXIII.

Number 2.

BATTLE CREEK·MICHIGAN·

FEBRUARY, 1888.

### THE NOSE AND ITS USES.\*

BY THE EDITOR.

LADIES AND GENTLEMEN: In our first lecture I gave you a brief outline of the structure of the nose. To-day, we are to study its uses; and first, let me call your attention to one of its most remarkable functions.

*The Sense of Smell.*—The mucous membrane covering the upper part of the nasal cavity contains a great number of delicate nerve fibers, which pass upward between the cells covering the mucous membrane, until their very ends are even with the surface. This is probably the only place in the body where the nerve fibers are actually uncovered. These are the olfactory nerves, or nerves of smell. Minute particles of odorous substances entering the nose come in contact with these bare nerve ends, and thereby give rise to the sensation which we commonly call odor, or smell. From this we see that the sense of smell is really a delicate sense of touch. That it may be exercised, it is necessary that the nerve fibers should be kept uncovered. If the mucous membrane becomes thickened so that the fibers do not reach to the surface, or if it is covered over with mucus, it is quite as impossible for the nerves of smell to detect odors as for the nerves of touch which are found in the fingers to perceive delicate objects with the hands encased in a thick cov-

ering of leather. It is also evident that in order for the sense of smell to be exercised, the passages of the nose which lead up to the upper part of the nasal cavity, where these nerves are located, should be freely opened, so that the air can pass in without obstruction, as the air is the means by which odors are conveyed to the olfactory nerves. One peculiarity of the nerves of smell is that the impression of an odor which has been received often remains for some time after the odorous substance has been removed,—a fact the analogue of which is observed in each of the other special senses.

This function of the nose is not only a source of pleasure, in that it enables us to enjoy the delightful odors of many flowers, perfumes, etc., but it is intended by nature to be of the most inestimable use to the body as an active signal against danger, by the detection of foul and unpleasant odors, which are almost invariably found to be the accompaniments of dangerous or poisonous substances. The savage uses his nose for the purpose of aiding him in the selection of safe and wholesome food. The sanitarian employs his nose as a delicate means of ferreting out unsanitary conditions. Unfortunately, this function of the nose is greatly neglected among civilized nations. The sense of smell and the odors detected by it are little studied. Sounds, and even flavors, have been analyzed and classified; but who has made a study of odors?

\* A Lecture in the Sanitarium parlor, Battle Creek, Mich.

Some lower members of the animal creation are so dependent upon the olfactory sense, and employ it so constantly, that it has become developed almost immeasurably beyond the stage in which we find it in human beings. For example, the scent of the dog is so keen that he can readily track the footsteps of his master hours after he has passed along; and it is said that the members of some tribes of savages can distinguish in the dark, and at a distance of several feet, those of their own tribe from the members of other tribes. It may be considered doubtful whether the last fact really affords evidence of any extraordinary acuteness of the olfactory sense in savages; but it is the uniform testimony of travelers among barbarous tribes that the sense of smell is with them very much more acute than among civilized nations. The fear has been expressed, and we apprehend it is not wholly groundless, that if the sense of smell continues to deteriorate in civilized nations in the future as rapidly as in the past, a few generations hence races may be found existing in whom this sense has become wholly extinct, as has the sense of sight in the eyeless fish of the Mammoth Cave. Undoubtedly, nasal catarrh is largely responsible for the decay of this important sense.

The sense of smell is closely associated with the sense of taste; that is, many things which we think we taste, we really smell; and perhaps in some instances the reverse may be true. For example, the onion, the potato, and most other vegetables have little or no real taste, but have characteristic odors, which during the chewing of the food find their way from the mouth through the passage behind the soft palate and into the nasal cavity, and thus come in contact with the nerves of smell. One can easily demonstrate this fact by tightly closing the nostrils when eating any of the foods mentioned. In so doing, it will be found that the article seems to be almost devoid of flavor.

The nose is very liberally supplied with blood-vessels, which are closely connected, through their branches, with the blood supply

of the mouth, ears, eyes, and front part of the brain. This membrane is also richly supplied, not only with nerves of ordinary sensation, but with branches from the sympathetic nerve, by which it is very closely related with the upper part of the spinal cord; and through it with every part of the system, particularly with the stomach, liver, lungs, face, scalp, chest, and neck. This connection of the nose with other parts, through the sympathetic system, is a fact which is very important for us to remember, as it is through these intimate nerve relations that the numerous and varied symptoms of this disease in its several stages, arise.

"Rooms to let" is an expression sometimes used respecting a person who is supposed to have a deficiency of intellect, notwithstanding a sufficiently large development of the head. Doubtless those who make use of this expression are quite unaware of the fact that every person has a number of vacant rooms in his head. There are at least eight such chambers in different parts of the skull which communicate with the nasal cavity. Two of the largest of these are found in the skull just above and between the eyes, the so-called frontal sinus. Two others are found in the face-bones, one on either side. Still others are found in the bones which help to form the sides and back of the nasal cavity. Each of these cavities is connected with the nasal cavity by means of a canal, or duct. In addition, the nasal cavity is connected to each eye by a bony canal, as previously mentioned, and the canal also extends from the sides of the back portion of the nasal cavity to each ear.

The purpose of all these cavities is, perhaps, not easy to explain. The use of some of them is very apparent. As already explained, the canals leading from the eyes act as sewers to drain off the tears. Ordinarily, these canals are sufficient to carry away the watery secretions of the eyes; but when the tears are secreted very abundantly, as while weeping, a large portion escapes over the lids, and runs down the cheeks. The canals which connect the nasal cavity with the ear are exceedingly useful to the latter organ. They

not only allow secretion from the inner portion of the ear to escape into the nose, but provide for an interchange of air between the ears and nasal cavity, by which the pressure within the ears is kept uniform with the external pressure. To facilitate this process, which may almost be termed "ear-breathing," the openings at the nasal end of the ducts leading from the ear, which are known as the "Eustachian canals," are placed just opposite the inner extremity of the lowermost passage from the nose, and on a level with it. In ordinary breathing, almost the entire amount of air which passes through the lungs goes through these lower canals, so that the air-current strikes directly upon the mouth of the Eustachian tube, by which the entrance of the air to the ears is greatly aided. It is only when the air is drawn into the nose with a forcible effort, as in snuffing, that the air-current reaches the upper part of the nasal cavity. This is why we involuntarily snuff the air when we wish to sharpen the sense of smell.

*Natural Breathing.*—From what has been already said, it must be apparent that the nose is the only proper channel for breathing, under ordinary circumstances. It will be remembered that in connection with breathing the nose renders valuable service in several particulars. It not only moistens the air, but modifies its temperature, raising or lowering the temperature of the expired air according as the external temperature may be lower or higher than that of the body. It acts as a filter in retaining extraneous matters; is a sanitary detective through its ability to recognize bad odors; it regulates the rate of supply of air by the carefully proportioned size of its channels; and, incidentally, by the direction given the air currents, aids in changing the air in the cavities of the ears. When breathing is performed through the mouth, all of these various useful offices are neglected, and numerous evil consequences arise, not only to the nose and ears; but the throat and lungs and other portions of the body also suffer, as will be pointed out at another time.

Breathing is naturally performed without sound. Audible breathing is always unnatural and unhealthful. It is usually occasioned by partial or complete obstruction of the nose. Snoring is exaggerated audible breathing, in which a peculiar sound is produced by a rythmical vibration of the pendulous portion of the soft palate, the membrane of which hangs loosely at the back of the throat, which is thrown into strong vibrations by the action of two currents of air, one entering through the partially-obstructed nose, the other through the mouth, and meeting at the back part of the throat. Obstruction of one nostril may not be sufficient to produce snoring, provided there is a large opening through the other nostril; but whenever the obstruction of the nose becomes so great as to render nose-breathing difficult, the mouth falls open as soon as the individual becomes unconscious in sleep, and snoring, which often renders night hideous to persons of sensitive ears, at once begins. A full consideration of the causes and cure of snoring and mouth-breathing must be postponed for another occasion.

Sneezing is a modification of breathing, in which the nose is deeply concerned, although it takes no active part. Sneezing is the result of a sudden contraction of the expiratory muscles, forcing the air out at both the nose and the mouth. The act of sneezing is usually excited by an irritation of the mucous lining of the nose. When one sneezes in connection with taking cold, it is due to congestion of the lining membrane of the nose, and is the result of an effort of nature to counteract the injurious effects of the chill by producing a re-action.

A few words more, and I must conclude my remarks for to-day. I wish to call your attention to the relation of the nose to the voice. Every one who has ever had a severe "cold in the head" well remembers having experienced embarrassment in speaking words containing certain sounds, when the nose is obstructed. The sounds of *n* and *m* are either not spoken at all, or are converted into the sounds of *d* and *b*. For instance, the word

*pudding* is spoken as though spelled without an *n*, and *dumb* is pronounced *dub*. We usually say that a person speaking thus has a nasal tone, or that he speaks through his nose; this is quite incorrect, for in fact he is trying to talk without his nose, which is an unnatural and awkward proceeding. The nose seems to be indeed a sort of resonating chamber for the voice; and when the nostrils are obstructed, even to a small extent, the voice is materially and unpleasantly modified. This is a consideration which every person who is suffering from catarrh, even to a limited extent, should seriously bear in mind; and such should also be informed that these harmful modifications of the voice are often so grave in

character and extent that even the highest degree of medical skill can afford only partial relief.

In conclusion, for the present occasion, I wish only to remark that I have given no description of the throat, (1) because our chief business is to study the nose and its diseases; and (2) because by standing before a mirror, and pressing down the tongue with a spoon, each of you, without the aid of a teacher, may become quite familiar with the construction of the throat. I may merely mention that the pendulous membrane at the back of the throat is called the "soft palate," the central and more dependent portion being termed the "uvula," and that the two small lumps on either side, placed between the two loose folds of membrane termed the "fauces," are the "tonsils," of which we shall have occasion to speak more fully at another time.

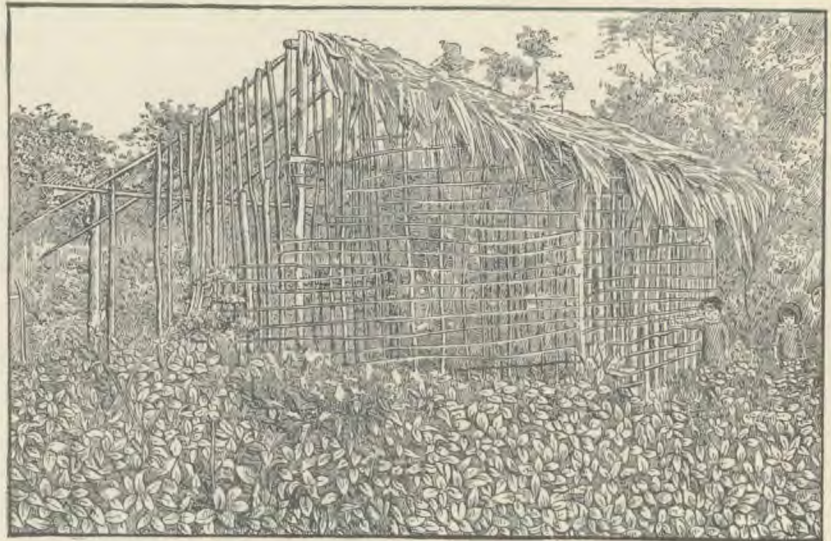
### HYGIENE IN EQUATORIAL AMERICA.

BY EDWARD M. BRIGHAM.

(Continued.)

SOUTH AMERICAN HOMES.

THE traveler on the Amazon becomes familiar with two kinds of houses,—the thatched-roofed and the tile-roofed. The former is the home of the poor man, who is usually either an Indian or a mongrel. The latter is the



result of a union of two or all of the three race elements,—Indian, negro, and Portuguese. The Indian blood, however, greatly predominates.

The thatched-roofed house is an exceedingly primitive structure, as one might expect from the fact that a knife is the only tool used in building it. But this knife is the *facao*, or "great knife," as the natives call it, being from two to three feet long. The *facao* is the constant companion of the native on his excursions into the surrounding forest. It is the sole weapon he lifts against that limitless army of trees upon whose encroachments he must wage an unremitting warfare. With the *facao* he cuts the poles for the wicker walls of his house, the vines to tie the poles together, and the leaves of the palm-tree for thatching the roof.

The first of the accompanying engravings is

from a photograph which I took in the city of Para, and illustrates the construction of the houses of the poorer class. The second engraving represents a thatched house on stilts, such as are found on the low-lying banks of some of the great South American rivers. The thatch forms a perfect watershed, even in a country which has an unequalled rain-fall. When finished, the open spaces of the wicker walls are stopped up with mud, which the native daubs on with his bare hands.

These houses have no chimneys. The cooking is done at a fire-place consisting of three stones so arranged as to support an earthen pot; and the smoke finds its way to the outer



air through cracks in the walls and loose places in the thatch of the roof.

The interior aspect of the thatched house, with its bare earth floor and walls of mud, is unprepossessing at the start, nor does it improve upon further acquaintance. The meshes of thatch, with their countless harbors of gloom, invite legions of vermin,—a list too long to recount. Its proximity to the forest suggests all the repulsive, real and fancied denizens thereof, first among which is, of course, the snake. But snakes are not often troublesome. I have spent months at a time in the very paradise of snakes without seeing more than may be seen in a day's ramble over our meadows. The snakes were there, but they were not visible. Those I saw were usually more anxious than I to avoid an encounter. The only time I was ever bitten by a Bra-

zilian snake was while examining a strange, wiry tree-species, which I had captured with great difficulty. It looked so much like a braided whip-lash, that had it been lying in a dusty road, that is just what it would have passed for. Its head was even narrower than its body, and tapered almost to a point. It could stiffen its wiry body, and slip with the speed of a toboggan from tree-tops to ground. Then, with insinuations too quick to follow, it would glide back through the meshes of leaves, beyond reach and out of sight. Its whole form and movement displayed such marvelous fitness to its home in the tree-tops that my examination was unusually particular. The snake could not well help biting. To bite me was the least it could do in return for the abuse it was receiving at my hands. So I forgave it on the spot, and preserved it in a jar of alcohol.

But there is another order of reptiles which literally swarm about the houses. These are lizards. As long as the sun shines, the day-lizards, gorgeous in their coats-of-mail of vivid blues and greens, are seen creeping and darting upon the insects about the houses. No more attention is given to them than to the insects they prey upon. At dusk these bright lizards are succeeded by spectre-like night-species, which during the day are hidden in the walls and roof.

Bats also infest the thatch. They are quiet during the day, but at night the sleepers are often disturbed by falling litter, with which may be mingled centipedes, scorpions, or a nest of white ants, which the nightly rovings of the bats shake from the thatch. Among these bats are the vampires, whose direful attacks on man are more real in books than in the land where the animals abide. But the great and perpetual pests are ants. They are to be found everywhere, in countless numbers and uncounted kinds. Some of their pathways leading into the forests are as broad as those made by the hands and feet of man. Day and night they are active, and nothing is exempt from their marauding attacks. Often in my rambles in the deep forest, I have retreated from the mingled rushing-

and clicking sounds caused by their multitudes marching over the dry leaves and twigs. One attempt to pass such an army, unless both borders of the column may be seen, is enough to satisfy the most aggressive disposition that the ants are the proprietors, for the time being, of that particular part of the forest. There is one kind, the Sauba, which will cut the leaves from an entire orange-tree, and carry them into their subterranean dwellings in a single night. Nothing is safe from their depredations. All food must be suspended in baskets from the rafters, and the cord covered with pitch to prevent the passage of the ants from above.

There is one kind of ant, however, which does a service that partly compensates for the continual ravages of its relatives. It is the carnivorous, house-cleaning ant; and I think it may safely be affirmed that a Brazilian house is never so thoroughly clean as immediately after these ants have done their work. When an army of ants enters a quarter, the people grab their provisions, and depart for the woods or a neighbor's house. The bats fly away; and the night-lizards which are lucky enough to escape the ants' rapacious jaws, take a scamper in the sunlight; while the centipedes, scorpions, wasps, termites, cockroaches, and countless lesser vermin are soon represented only by their skeletons and other indigestible parts picked most scrupulously clean.

The necessary furniture of the house consists of hammocks, which always do duty as beds, and usually are the only seats except the bare earth; a large jar for water and a smaller one for cooking purposes; and an iron or tin coffee-pot. With any of these lacking, a house would not be considered properly furnished, and the matter would doubtless be subject to gossip in the neighborhood.

*Tender-hearted Young Lady.* "Oh, you cruel, heartless little wretch! to rob those poor birds of their eggs."

*Wicked Little Boy.* "Ho! That's the old mother bird that you've got on yer bonnet. Guess she won't care."

### QUACK STUFF IN PIOUS PRINT.

JAMES CLEMENT AMBROSE.

IT was my pleasure recently to present the "Sham Family" before the three hundred residents and many invited guests of the Sanitarium. Straightway the editor was pleased to solicit a branch from my "Family" tree for engraftment upon GOOD HEALTH. So here I am, with samples of the potent twigs that thrive on pages accounted pious, and thus help the organ of the church, like the organ of the politician, to make the almighty dollar the cart-wheel of its hope.

And he is a blind reader, or at least not an orthodox one, who fails to meet in his religious harbinger the duplicates, or kindred, of my samples. And if this little free notice of some nostrums shall make one person so sick of them, as to cure him, thus giving life the chance to become worth living, my efforts will not have been lost.

These specimens of religion for profit are clipped at random from such journals of clean prospectus as of late have come into my home. That is my only warrant for distinguishing them above many other pill-hawkers in the church, and must be my apology unto them that feel wounded by omission here.

The advice of the New York *Independent*—at a dollar a line, say—is this: "Use Champ-*lin's* Liquid Pearl, which imparts an honest blush, and removes all imperfections." As the *Independent* is too good to lie, you may, of course, have "all your imperfections" rubbed out, and the sore spots kissed with "an honest blush," at only one dollar a bottle—cheap for blushes. Evidently that paper has not applied what it puffs.

The New York *Christian Advocate* finds "benefit" in this dose: "No matter what your ailment is, Brown's Iron Bitters will surely benefit you." If, then, you get down with the mumps, hard times, or a bad conscience, you have only to send your wheelbarrow after "Iron Bitters;" for the *Advocate's* editor is notoriously hard on "humbugs"—that don't pay his salary. It is, you know, well to be of a discriminating mind.

It walks the *Christian Union* to feather its

nest with this guaranty against a naked crown: "Everybody may have luxuriant hair by using Ayer's Hair Vigor." Alas, how I wish that were true!

The *Golden Rule*—Boston's *G. R.*—says: "It is impossible to disguise the fact that the Vegetable Compound prepared under the personal direction of Mrs. Lydia E. Pinkham"—etc. Yet the "vegetable" Pinkham years ago was tucked under the sod, to give "personal attention" to her patients.

It takes a great advance—*The Advance*—to guaranty that "Mrs. Winslow's Soothing Sirup has been used for forty years by millions of mothers, with never-failing success." "Forty years, by millions, yet never failed"—to transform babies into orthodox angels, did it? Anything to make the paper pay!

Some of the church papers that are edited in the counting-room, set up a column of the stuff they swap some conscience for, in layers of alternate joke and soft soap, thus: "Ayer's Cherry Pectoral is the best of all preparations for the cure of pulmonary complaints." That is the *Interior* soap, resting upon this *Interior* joke in the next line: "Oysters are not allowed to open on Sunday in New York."

The *Standard* warms a cold spot thus: "No safer remedy can be had for coughs than Brown's Troches." And to keep this soap in everybody's eye, it is neatly laid in between a pair of squibs about the ladies, the top one being this: "A woman's idea of sacking a town is to present every lady with a seal-skin," while below is this wicked question: "Will the love for the antique ever become popular enough to embrace old maids?"

Being lately the guest of a Methodist minister in Michigan, he tossed me the *Michigan Christian Advocate*, with attention called to a single column containing the following stock of sandwiched matter: First, advice to go on a certain railway excursion, very aptly followed by three lines from "Walton on the Resurrection;" then "Peck's Patent Ear-drums" are tied onto "Divine Love, by Hervey;" with "honey of tar" mussing up the next line; while "sulphur soap," "corn-killer," "hair dye," and "tooth-ache puller," ride to market

on top of Bishop Hall's assurance that "faith bends her eyes only to the end." So the nostrums itinerate on faith, their *Advocate* bending her eyes only to the end with a silver tip. Then a dozen words on "infinite pity" lead pitifully in the "Golden Medical Discovery;" while "Balsam for the Lungs" comes wheezing in between "Luther on Works," and "The Old Age a Good Name Lives To." Hugging the knees of this sentiment is a romance of ten lines—how "Sulphur Bitters" cheated a woman with six husbands under the sod, out of the luxury of making grass grow over the seventh, the next line being her apology for the six: "It is easier to preach many sermons than to conquer one bad passion." Spooning this is a spoonful of "Liver Balm," in proof that whether life be worth living depends upon the liver; and the bottle is left standing on Vincent's "No Rainbow without a Storm." Close under the chin of this rainbow, a case of croup breaks out, while great Emerson is harnessed in to peddle "salve for old sores," and hawk the "catarrh remedy" onto some old sneezer.

The details of all that in a single column professing piety, and the foot of the column greased with this excuse: "Kind words cost no more than unkind ones"! And of course they pay the printer better. And if any lady reader so loves one husband as to wish him multiplied by three, hark to the *Christian at Work*: "That husband of mine is just three times the man he was before he began using Wells' Health Renewer." Of course, its multiplying effect makes it dangerous to leave in the way of the drinking, brutal husband.

Certainly you all have read that very pious narrative—or another from the same mill—"The Stage Driver's Story—How Gen. Scotts' Life was Saved," etc., a double-headed yarn a column long, the prelude enticing, and a grand dramatic catastrophe stopped only by a bottle of Warner's Kidney Cure.

Well, these are samples of patent doubtfuls copiously puffed in pages reputed pious, and not one of the endorsements marked as advertising matter. Does the man on the tripod think he is n't lying? The presump-

tion is against him, and lots of people on both sides of the grave sympathize with the presumption. True, the experts can detect at sight what is paid for in print; but many good folks are not experts; they lift their eyes toward heaven, swallow the substitute for an editor's soul, and think it balm in Gilead, not balm in the bank account.

Of course, if the editors would only try all the pill-shams they commend as good for the blood, that, indeed, would cure the world of much head trouble, for they would soon try their last box,—a sleeping portion six feet long.

Many secular journals, you say, sandwich the news between even falsehood and filth. Yes; but the Lord does n't take them as a model for his press. So, when your church journal tells you that the safest road to Heaven is by way of Smith's physic, write its editor a line of old advice, "Throw physic to the dogs," and give Christians a chance to make the narrow way very long by paving it with wheaten grits.

Yes; the editors, the good fellows always giving advice, often need to get a little. Let them have it, and they'll weed out the sour-grass, whose only virtue lies in getting puffed by the religious press.

*Evanston, Illinois.*

### FOOD AND CHARACTER.

[THE *Chicago Commercial Bulletin* recently published an excellent article on the above subject, from which we condense a few paragraphs.—ED.]

"How much does food influence character?—Far more than people think. Ancient classical writers give us very minute accounts of the barbaric magnificence of the banquets of ancient Greece and Rome. Incongruous ingredients of their 'plats' are strangely typical of eccentric atrocities perpetrated by the partakers of such dishes. Thousands of nightingale's tongues entered into the composition of an especially favorite dish of that Roman emperor who caused the streets of his capital to be illuminated by the burning bodies of Christian slaves.

"Looking at matters from a food standpoint, the diet of monarchs in the days of des-

potic power must have been a matter of no small importance. What hasty decisions, what bewildering political complications, may not have been caused by a fit of indigestion on the part of the powers that were! It is a well-established fact that a leg of mutton caused a revolution in the affairs of Europe. Just before the battle of Leipsic, Napoleon the Great insisted on dining on boiled mutton, although his physician warned him that it would disagree with him. The emperor's brain resented the liberty taken with its colleague—the stomach; the monarch's equilibrium was overturned, the battle lost, and a new page opened in history. Who drinks beer, thinks beer, is a time-honored proverb; and its truth is well exemplified in the literature of the Tudo period, when beer was the customary drink. It was the ordinary beverage drunk by the virgin queen herself. The literature of the era is like the strong fluids and solids which nourished the brains of the writers. It is coarse, pungent, and vigorous, full of the sensuality of thought and expression which a gross manner of living tends to foster. . . .

"With the introduction of tea commenced the age of ephemeral literature. The 'Tattler' and 'Spectator' were the offsprings of coffee-house chat. They are remembered and quoted now because they are almost the chief records of the every-day life of the period at which they were written. With the mixture of food comes a mixture of literature most curious to note. Dean Swift was fond of tea, but he was also a lover of stronger fluids and solids; and here we may find a key to that strangely constituted mind which could pen such grossness. . . .

"Dr. Johnson, we are told, was much addicted to the pleasures of the table. He was a huge eater and drinker; he liked port, and did it justice, but tea was his favorite beverage. His literary productions form a curious and remarkable corroboration of the fact that food has a material influence upon character. He labored incessantly at literary work, yet of all his productions not one, save his dictionary, is left to sustain his reputation."



*Height of Great Men.*—Some one wishes to know if there is any truth in the general belief that the leaders of any particular age are large men, or if it is merely superstition. There is a modicum of truth in it. While there are numerous exceptions, it seems to be a fact that great poets, essayists, scholars, and philosophical thinkers are, as a rule, small; while great generals, orators, and politicians, those who are engrossed in doing, rather than thinking, are, as a rule, above the average size of man. There is a reason for it; those who possess the most vitality are apt to make the biggest noise in the world. Washington was a large man; so were Cortez, Charlemagne, and Wellington; so were Webster, Clay, Tom Corwin, Tom Marshall, Lincoln, Chase, Sumner; so are Gladstone, Bismark, Ferry, Cleveland, Blaine, and Gen. Sherman. When men who have won distinction are not tall, they generally make it up in breadth; like Bonaparte, Stephen A. Douglas, and Gen. Sheridan.

The thinkers of the world have generally been small; as Cicero, Aristotle, Bacon, Alexander Pope, Alexander Hamilton, and Oliver Wendell Holmes. The members of the Senate, ever since that body was established, have been, it is alleged, about an inch taller than the average American men. Successful American editors have generally been tall men, averaging six feet high, and weighing over two hundred pounds. James Gordon Bennett, Thurlow Weed, James Watson Webb, Horace Greeley, Wilbur F. Story, Murat Halstead, Joseph Medill, Joseph Pulitzer, Charles A. Dana, and Whitelaw Reid are all fine specimens of full-grown men.

Great orators are almost always large men; and such specimens as Joseph Cook, Henry Ward Beecher, Col. Robert Ingersoll, Mr. Moody, Roscoe Conkling, and T. De Witt Talmage are familiar to the eye of the present generation of Americans. These orators are not only alike in weighing two hundred and twenty-five pounds apiece; but they further resemble one another in possessing a keen sense of both humor and pathos, and also in being coarse-grained,—of the earth, earthy.

If they had not been of coarse texture, they would have died young; and if they were not large, they would have lacked the physical strength to surpass in the sharp competitions of their time. At the present day, it is proverbial in New York, that successful merchants far outweigh their clerks.—*Selected.*

*Health and Work.*—There are many persons in the world whose only capital is health. They are engaged in work of various kinds; and so long as health lasts, they earn a good living. They must learn how to avoid illness by living in the right way. There are others who have lived wrongly in youth, but have found out their errors in time to have a fairly good constitution left. These may live to a ripe old age healthfully, if they only take care. There are still others with everything that riches can give; these must learn to live rightly, too, if they want to be well. Plain food, exercise, etc., will enable these to live long, as they are not troubled by the necessity of work so that they may live. Wealth comes not from our income, but from the amount we save of it; so health comes not from the amount we have to go on with, but from the amount we save, by not spending it on trifles which waste our strength, and give us no return.—*Dr. Allison.*

LET'S oftener talk of nobler deeds,  
And rarer of the bad ones,  
And sing about our happy days,  
And not about the sad ones.  
We were not made to fret and sigh,  
And when grief sleeps, to wake it;  
Bright Happiness is standing by—  
This life is what we make it.

—Mr. Talmage believes in the civilizing influence of good health and good bread. He says that he thinks the time will come when every large church in cities will have a hospital on one side and a bakery on the other. At the present time, some of our large churches are so badly ventilated and often so overcrowded that they ought to have a hospital attached to the back end, ready for immediate use.



### OUR BONDAGE.

BY FRANCES E. WILLARD.

I WONDER how many women go back in thought, as I do at this weary hour, to the time when they first lost their liberty? I ought to be thankful, doubtless; for mine lasted longer than that of most of them. During sixteen blessed years I had feet uncramped, limbs unfettered, trunk unbandaged, hair untwisted, and largely as a consequence, spirit as blithe as a singing skylark. Living in the country, and in much isolation, my dear mother permitted to her daughters the almost unexampled bliss of freedom, in both body and mind. There was no hill too high to climb, and no tree, for that matter; no valley too deep to explore, no brook too wet to wade. Out-door air, simple food, eight hours' sleep in every twenty-four,—all these beatitudes were ours.

But there came a day—alas! the dark day of my youth—on which I was as literally caught out of the fields and pastures as was ever a young colt; confronted by a long dress that had been made for me, corsets and high-heeled shoes that had been bought, hair-pins and ribbons for my straying locks; and I was told that it simply “would n't answer” to “run wild” another day. Company from the city was expected; I must be made presentable; I “had *got* to look like other folks.”

That was a long time ago, but I have never known a single physically reasonable day since that sweet May morning, when I cried in vain for longer lease of liberty. Those “adornments”—the inquisition of fashion—changed my outlook in the world. A caged bird be-

came my fitting emblem. Of a shy, sensitive nature, I yielded at once to the inevitable. But my high heels threw me out of poise, and I would n't try to walk more than was necessary in the clinging folds of that long, tight-fitting gown. Hence, I ceased to be a denizen of God's beautiful out-doors; was a rambler and a climber no more, but gave myself to books, and have remained in my cage—the house—right on through the years. After my long day's work with the pen, I say to myself so often, “If I could put on a hat, button a coat around me, and step off freely, how delightful a walk would be!” But no; there are intricate preliminaries before a woman can do anything so simple as to take a constitutional walk. In my own case, the easy wrapper that I wear at my work, with its long heavy skirt, must be changed for a street-dress; the slippers, for shoes to be buttoned up; a bonnet, affording no protection from light, wind, or observation, must be “tastefully” put on; tight-fitting gloves drawn to their places; and then only, with skirts to be lifted at every step, until one's knees grow weary, the airing may begin. A man would have two things to do,—put on his coat and crowd a hat over his eyes; a woman has three articles to take off (wrapper and slippers), dress to draw on, collar and cuffs to adjust and pin, shoes to button, wrap to fasten, bonnet to tie, and then all of their burdens and constrictions to endure.

So, for the thousandth time, I return to my room, actually too tired to “get ready” and then “get over the ground,” though Lake Michigan's splendid expanse stretches away

to the east, and there are lovely groves, cool, shady nooks, and tempting by-ways all about me. Much I muse why these things are, and clearer grows the conviction that woman will never be a rational citizen of the world while these things are. I recognize joyfully the progress we have made since I was a student at Milwaukee, in 1857, when no girl was really "stylish" who wore less than eight white skirts trailing on the ground after her; but how slowly we move, when women of refinement will wear bustles, lace themselves as of old, pinch hands and feet, bare their heads to the blast, that their tufts of bonnets may be "like the rest," and simper their criticisms on "dress reform." Near me, on the walls of my study, hang Annie Jenness Miller's picture and engravings of her new costumes. I look up at them with a prayerful heart, saying, "How long, O Lord, how long?"

Instead of the walk I would like to take, had I the old-time conditions,—the modest, simple, short dress, loose jacket, and broad-rimmed hat of auld lang-syne,—I pen this jeremiad, and bid God-speed to the earnest-hearted woman who, in roaring Gotham, plans for us women a costume that hints at better days.

#### **THE FEMALE TYPE OF RESPIRATION.**

PHYSIOLOGISTS are agreed that there are two types of respiration,—the male type and the female type. It is found by observation that in men, respiration is chiefly carried on by means of the diaphragm and the abdominal muscles; so that in breathing, the greatest amount of expansion takes place about at the waist line. Observation also shows that in women there is very little movement at the point of the greatest degree of chest movement in men, but that there is a very marked movement of the upper part of the chest. So it has been claimed that women breathe chiefly with the upper part of the lungs; and men with the lower part. For many years the writer has combated this idea as being unphilosophical and inconsistent with other physiological facts, and with what we know of the function of respiration in lower animals.

Recently the writer has had an opportunity to demonstrate the erroneous views of physiologists upon this subject, by observations made upon some twenty Chinese women and fifteen Indian women of different tribes, ten of whom were still in a thoroughly aboriginal state, having never been impaired by the tight dresses and heavy skirts of civilized life.

We found in the case of every woman who had not worn the civilized dress that the type of respiration was precisely the same as in civilized man, which establishes beyond controversy that the peculiar mode of respiration observed in civilized women, is due to their barbarous modes of dress, by which the movement of the lower portion of the chest is effectually prevented. Our observations were made by means of a pneumograph. The full particulars, together with diagrams, will be published at an early date. J. H. K.

#### **ORIGIN OF BUSTLES.**

It is a curious fact, and one which should give rise to serious reflection, that nearly all the monstrosities in female dress are simply imitations of the absurd and monstrous practices of women in a state of savagery. It is well known that the wearing of finger-rings, ear-rings, bracelets, and in fact, all forms of jewelry is simply a vestige of barbarism. Bangs, tight shoes, and the use of cosmetics are also imitations of savage practices. Only in the wearing of corsets does the civilized woman exceed her savage sister in the barbarity of the treatment of her body. One of the latest decided innovations in female dress is the bustle, which, by fashionable people is doubtless supposed to be the creation of some Parisian aristocrat; whereas, the truth is, the bustle is one of the most antique of old-fashioned articles of dress.

Recently the writer made a visit to the Yuma Indians of Arizona and New Mexico. His object was to make a study of physical development among these most primitive of the present inhabitants of this country. In the course of his studies a series of measurements

was taken, including the measures of the shoulders, chest, waist, and hips. When the last measurement was to be determined, it was found that no idea of the natural form could be obtained on account of an enormous rear protuberance. The Catholic sister who was kindly assisting in taking the measurements at once recognized the difficulty, and asked the Indian woman "to step aside and remove her bustle," which proved to be an enormous mass of bark, sufficient to two-thirds fill a half-bushel measure. This kind of dress has been worn by the Indian women of New Mexico for numberless generations. In attempting to adopt a civilized dress, the Indian woman does not have to throw away her bark garment, but simply throws a calico wrapper over it. So here is the origin of the bustle; and we have traced back another fashion to its ignoble origin.

J. H. K.

**Union Garments.**—An ideally perfect undergarment is made in one piece, reaching from neck to ankles, and closely fitting the body, like the garment shown in the accompanying cut. A garment made in this fashion is warmer than one which is loose-fitting, and the weight is as light as possible, as there is no surplus material. When made of elastic material, so as to adapt itself perfectly to the form, a union garment leaves nothing to be desired as regards health, convenience, and comfort to the wearer.



Jersey-Fitting Under-Garments.

The interest taken in reforming the dress of women in recent years has secured at least this one thing which has not yet been attempted in men's garments. "Union flannels" for women and girls are now manufactured in various styles, and are rapidly gaining popularity. The only objection which has ever been raised is their high price, as they are manufactured under patents. It is not necessary, however, to purchase the patented

article in order to enjoy the chief advantages of the "union flannels." The vest and drawers of elastic material may be purchased separately, and joined together by a small amount of labor, at an expense of about one third less than that of the patented article.

**The Reason Why.**—In her book entitled, "The Art of Beauty," Mrs. Haweis says:—

"The reason why a small waist is considered a beauty is because, when it is natural, the person has the peculiar litheness and activity of a slenderly-built figure. All the bones are small, the shoulders and arms *petite*, and the general look is dainty and youthful.

"The reason why tight-lacing is ugly is because it distorts the natural lines of the figure, and gives an appearance of uncertainty and unsafeness. I put aside the fact that a woman so laced *must* be unhealthy; for if it comes to a choice between beauty and health, health would most likely be sacrificed by the majority. . . . I am chiefly concerned with appearance.

"In architecture, a pillar or support of any kind is called debased and bad in art, if what is supported be too heavy for the thing supporting, or if a base be abnormally heavy and large for what it upholds. The laws of proportion and balance must be understood. In a waist of fifteen inches both are destroyed, and the corresponding effect is unpleasant to the eye. The curve of the waist is coarse and immoderate, utterly opposed to what Ruskin has shown to be beauty in a curve. Real or artificial, such a waist is always ugly; if real, it is a deformity that should be disguised; if artificial, it is culpable and ugly besides."

**A New Garment.**—It must have occurred to many busy women what great economy of time might be secured if woman's dress could be constructed in such a manner as to dispense with so many separate articles of apparel, each requiring separate adjustment. With this thought in mind, some sensible women have conceived the idea of joining garments together in such a manner as to secure, when adjusted, the putting in place of several

articles usually requiring separate attachment. As the result of this effort, the combined waist and skirt has been evolved. This combination seems to be the most natural possible. Indeed, it is singular that the skirt and waist were ever separated. Mothers have long dressed their little daughters in this fashion, but it does not seem to have occurred to most of them what an advantage might be gained by dressing themselves in the same way. A sensible lady, who long ago adopted this style of combination, remarked in the hearing of the writer the other day that she rarely required more than three minutes to put on all of her garments on rising in the morning, which she considered a saving of at least fifteen minutes from the time formerly occupied in getting all the different articles of dress in place and fastened together. This idea of combination is one to which women may profitably give a little thought.

*A Good Physique.*—The eminent Mark Hopkins once remarked: "When God would secure to man the highest, best balanced, most long-continued action of mental and moral power, he does it by giving him a sound physique."

The sentiment of the above paragraph is equally true respecting women. Indeed, it must be that a good physique is even more important for woman, if possible, than for man, as it is impossible for her to bequeath to her children what she does not herself possess. But little attention now-a-days is given to the matter of physique. In fact, the idea that a robust, healthy body is necessarily coarse, and that a spare figure and rather pale countenance is necessary for true refinement in appearance, seems to have been prevalent among young women for some years back. The sooner this false notion is dissipated, the better it will be for the race. The great aim seems to be to squeeze and distort the form to fit a false and artificial model of beauty, rather than to develop it in the beautiful and symmetrical manner designed by the Creator.

Mothers cannot do their daughters greater

service than by securing to them such conditions as regards dress, exercise, etc., as will enable them to develop strong and vigorous bodies. A good physique attained by proper dress and proper exercise in girlhood and early womanhood, is the best means of securing immunity from the long list of distressing ailments which hamper the usefulness and mar the lives of so many of the women of the present day.

*Foot-Warmer.*—The accompanying cut shows a new kind of foot-gear, which is certainly one of the most comfortable modes of dressing the feet in cold weather that we have ever seen. The shoe is woven by hand, and lined with soft wool, and cannot fail to keep warm any foot which has blood enough in it to keep it alive. It certainly is just the thing for invalids in cold weather. Many persons suffer much harm by allowing their feet to remain cold a great portion of the time



FOOT-WARMER.

during the cold months. When the feet and limbs are chilled, the liver, lungs, and other internal organs, as well as the head, contain more than their due proportion of blood. In consequence, these parts are likely to become diseased. Headaches, stomach and liver disorders, catarrhs, various forms of nervous diseases, and other chronic complaints have all had their origin in cold feet.

The foot-warmer, shown above, is far superior to the use of artificial heat in any form, as it retains the natural heat, thus increasing the vital activities of the foot, and enabling it to keep itself warm; while artificial heat, when depended upon, has the effect to debilitate the tissues, and to increase their susceptibility to the cold.

This useful article can be obtained of the Sanitary Supply Company, Battle Creek, Michigan.

# THE HAPPY FIRESIDE

DEVOTED TO TEMPERANCE MENTAL AND MORAL CULTURE  
 HOME CULTURE, NATURAL HISTORY AND  
 OTHER INTERESTING TOPICS  
 CONDUCTED BY MRS. E. E. KELLOGG A.M.

## HOW TO LIVE.

He liveth long who liveth well !  
 All other life is short and vain ;  
 He liveth longest who can tell  
 Of living most for heavenly gain.

He liveth long who liveth well !  
 All else is being flung away ;  
 He liveth longest who can tell  
 Of true things truly done each day.

Waste not thy being ; back to Him  
 Who freely gave it, freely give ;  
 Else is that being but a dream ;  
 'T is but to be, and not to live.

Fill up each hour with what will last ;  
 Buy up the moments as they go ;  
 The life above, when this is past,  
 Is the ripe fruit of life below.

Sow truth, if thou the truth wouldst reap ;  
 Who sows the false shall reap the vain ;  
 Erect and sound thy conscience keep ;  
 From hollow words and deeds refrain.

Sow love, and taste its fruitage pure ;  
 Sow peace, and reap its harvests bright ;  
 Sow sunbeams on the rock and moor,  
 And find a harvest-home of light.

—Horatius Bonar.

## SOPHY—BAKER'S SECOND-COUSIN.

BY PRISCILLA ANN BAKER.

(Concluded.)

WELL, I got supper that night while Sophy was tendin' on Baker. How I done it is more'n I can tell ; for my head swum so it seemed like the cook stove an' cupboard an' table was a-swingin' back an' forth like penjulum. When Sophy come out an' see me, she looked scared, an' made me go right to bed in the front bedroom agin. What happened

after that I do n't know much about, only every time I spoke, an' lots when I did n't, Sophy was right there in a minute ; an' sometimes I know she bathed me awful careful, an' kep' coolin' my head, an' puttin' somethin' warm to one of my limbs that felt so cold an' little. Agin, I'd ben raised right straight up, an' come down jest as easy onto a nice, cool bed. She said when I asked her about it afterward, that one of them stood on each side of the bed, an' lifted me, an' another one rolled away that bed, an' put a fresh one in its place, an' then they laid me down agin.

They give me *some* medicine, an' milk, an' her kind of egg-nog, an' sich coolin' nourishin' things till after the fever was gone. That went on till one day I got to know what was goin' on ; an' a little at a time Sophy an' her mother (who she'd sent fur as soon as I was took, an' I had n't knowed frum her), an' Baker an' Ben told me all about it. Baker's fever had broke two or three days after I got down, an' he was purty well, though weak, when I come to. It had ben four weeks sence I'd got supper that night, with the things a-swingin' so ; an' Hannah had ben there all the time a-workin', her an' Sophy an' Ben.

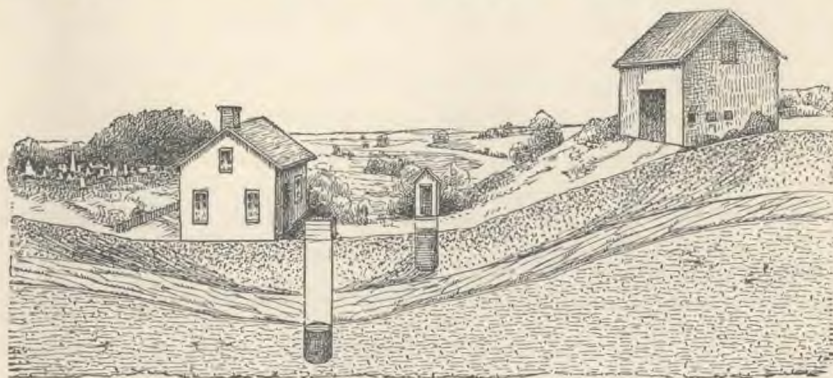
Hannah's ben a wider ten year, an's jest got Sophy an' another one, Belle, who was goin' to school. She jest put her to a neighbor's to board, an' come. I'll never forgit it of her an' Sophy till I'm laid where I would ben, if they had n't done for me

While I was sick, Sophy found out how it all happened ; an' I thank the Lord he sent her to us, for if we'd got up agin without

her—which I'm mighty doubtful of—we'd a-kep' gettin' sick, time an' agin, like the other folks that lived here. We'd never thought nothin' of havin' garden stuff an' meat in the cellar right under where "we lived an' moved an' had our bein's," as it were; only to the old place 't was under the part we did n't use much, so 't wa'n't quite so bad as the old one here. Why, there was great cracks in that kitchen floor here, an' I'd kep' at Baker about 'em off an' on a long time, they looked so starey, an' let the water through so when I was scrubbin'. But land! we never knowed that poison was a-risin' off them things down there up through, an' makin' us sick, till So-

he was a-bringin' her water frum. As soon as she got breath agin, she asked, kind of pleadin'-like, if there wa'n't any to be got where 't would n't be pereylated full of poison frum the barnyard. Her color come back a little when he told her of the good spring of soft water on the fur side of the house hill, but she hardly took a good breath till she'd follered him away out there, clean across the stump-patch to it, an' was sure nothin' could poison it; an' he'd promised as solemn as an owl to tote it all frum there till we got some other way fixed.

Well, the upshot of the hull thing was that Sophy stayed all summer, an' helped us build



THE HOUSE WHERE BAKER LIVED.

phy told us. They had n't kep' overly well neither, bein' shet up so tight. As soon as Sophy found out about 'em, she had Ben open the outside door an' tote every last thing outen there; an' they scraped an' swep' an' burnt dsinfectin' stuff down there. There was no walls or they'd a-whitewashed 'em, she said. Me a-stayin' in the house all the time over them things, was why I was sicker'n Baker.

Then agin the place the well wus, was bad. The house is on a hill that slopes to the east towards the road, an' to the north towards the barn, which is on another knoll that slopes right over towards the house. Well, right between them hills is a holler, an' the fence between the two yards runs along in it, an' right by the fence wus the well, so as to water man an' beast, as it were. Ben says Sophy come mighty nigh a-faintin' when she learnt where

an' fix so as to keep well. Baker would n't hear to her goin' away, nor me neither, fur we didn't want to run no resks; an' we knowed she could tend to havin' things fixed right. She wrote to a big doctor, where she'd ben—Sammy Terryum, I guess—an' got a picture an' printin' of how to make a cistern with a filter into it, so we'd have good, pure water; an' another paper that read about cellars. If we had one under the house, to have a powerful tight floor over it, an' ventilate it right up the kitchen chimbley; but 't was safest not to have one in under the house at all.

After all we'd ben through, Baker an' me, we thought we'd fix as safe as we could. So Ben dug a cellar northwest of the house a ways, an' we had it walled an' floored an' petitioned with brick an' cement, an' moved the old kitchen part onto it. I have what was

the kitchen for a wood-shed an' milk-house too in the summer, when there's nothin' in the cellar, an' Baker has what was our bedroom for a bin.

Sophy took the carpet up in the front room, an' we lived in there while we was buildin' an' fixin'. After they got the wall built fur the new house, they took an' filled the old cellar up with rocks, dry dirt, an' sand, as tight as if they'd growed there; an' made a mighty nice cistern jest like that picture, with a filter of sand an' gravel an' charcoal into it. It's on the back porch, an' s' fixed so it kin easy be cleaned onst or twict a year. An' then they dug a good clean well fur the stock.

We built a nice big kitchen, an' a bedroom fur Baker an' me, an' a pantry that's big enough to have the stove in in the summer, an' let us have a cool kitchen to eat in, an' set. The bedroom an' pantry's north of the kitchen, which jins the front-room; an' we put a long porch on the west, an' was a-goin' to on the east too, but Sophy said Baker an' me'd look like purtaters growin' in a cellar, if we did n't let the sunshine in; so we jest put a portico over the east door. There was to be a east winder to the kitchen too, an' Sophy took a powerful notion fur it to be a bay-winder. "Good land!" says I, "a bay-winder onto a kitchen! You must be takin' the fever; you talk so wild."

"But," says she, "you'll jest have one the sun shines in at, an' a bay-winder would let in so much more, an' make it so cheerful an' pleasant for you. I think kitchens where housekeepers spend nearly all their lives, ought to be made as bright as any room in the house." Well, I did n't see but what she was right, so bay-winder it was; fur we'd sold some woods over by Uncle Dan'l'ses along the crick, an' had a plenty to build an' fix as we wanted to, an' pay Sophy mighty handsome too, as fur as money *kin* pay sich as her.

It made a heap of difference on Baker an' me, her bein' here that summer. He give up smokin', an' we both quit tea an' coffee, because she made it so plain they was hurtin' us; an' pork, an' most kinds of pie an' pickles we do n't eat neither no more. I was a mighty

good cook, if I do say it, though I'm fur from bein' the first one as has. I'd got the premiums on spice-cake, an' rusks, an' compone, an' jam, an' pickles, time an' agin at the Brush County fair; but I never paid no attention to whether they was healthy or not. But that summer I buckled to, an' learned how to cook wholesome, healthy vituals without so much sweetin' an' shortenin' an' stuff into 'em, outen a mighty nice cook-book Sophy'd brung with her. She says she's "proud of her pupil," but I never let on I was.

Baker goes round with his lip a-hangin' fur mince-pie an' doughnuts yit sometimes, but I look at him powerful cold, an' say, "Whenever I find a thing's a-hurtin' me or any body else, I do n't have nothin' to do with it." An' then he gives a sigh clean frum down where he wants the pie, an' goes to readin' the *Bean Blossom Globe*. I feel mighty sorry fur him though, an' alwus cook somethin' else that he's extra fond of, an' does n't hurt him none. I do want coffee powerful bad when I think of it, but I never let on to Baker nor Priscilla Ann neither, no more'n I kin help; an' when I fall to eatin' things outen that book, I forgit all about it.

Baker's bile don't never take spells no more, an' my rheumatiz do n't bother me much neither like it used to; an' Sophy says it won't as long as I eat what I ought to, an' wear them soft flannels cut by her pattern (only lots bigger), clean down to my heels.

We take a heap of comfort with that good cellar, an' pure soft water, an' the bay-winder. It's a mighty nice big one, an' I keep Goldie, the bird, hangin' up in it, an' he jest sings like he'd split his little yaller throat. I have some flower-pots, too, in it, on each side. Sophy said not to keep too many, an' cheat ourselves of the sunshine. I set there right smart, an' knit, an' cut apples fur dryin'; an' I've never ben sorry we had it made, nor neither has Baker, fur he sets there a heap too, readin' an' nodin'. Well, that's about all of it; any way, I've got to take after that old hen turkey, fur I'll warrant she's got them young ones of hers trailed plum over to the rye-field by this time.



**UNDER THE SOUTHERN CROSS.**

BY ELD. D. A. ROBINSON.  
(Continued from last number.)

As we were walking through Dartmouth, the town-crier broke the stillness of its quiet streets. Taking his stand on almost every corner, he rang a massive hand-bell; then, after pausing a moment, he would solemnly read the following announcement: "All persons are hereby warned against using the town water for any other than absolutely necessary purposes. Any one found disregarding this ordinance will be dealt with according as the law directs. By order of the town Council of Dartmouth." The occasion for this was that quite a severe drought was prevailing at the time.

Friday, July 8th, we steamed out of the Dart River, crossing the British Channel and the Bay of Biscay, for the Port of Lisbon, where we arrived on the following Monday morning. Lisbon still contains a few marks of the great earthquake of 1755. In the distance, the city looks neither like an American nor an English city, but has an appearance peculiarly its own; but as one goes along the streets, the shops do not look very unlike those on "Cheapside" or "London Strand." July 17, we got our first glimpse of the African coast, off Cape Verde. At Lisbon we purchased a linen suit, which cost 4,560 reis. This was for our comfort in passing through the tropics; but as yet we have had no occasion for its use, and are still clad in our winter apparel, except that an overcoat is unnecessary.

At daylight on July 28, Table Mountain could be clearly seen in the distance, and at 9 A. M. of the same day, in midwinter, we were safely moored at the dock in the city of Cape Town. The only reminder of winter is the short days and the long nights which belong to that season of the year. The grass was in its best green, flowers in bloom out-of-doors as well as in the houses. Cape Town, with its suburbs has a population of about sixty thousand; and it is really a much better city than we had expected to find. The Colonial Government buildings are lo-

cated here. The House of Parliament is quite an elaborate affair, and is said to have cost \$1,250,000.

The city lies nestled at the foot of the mountains, stretching from their base to the water's edge. It is laid out with most of the streets running at right angles. Street-cars, or trams, as they are called, constructed after the London pattern, run through the city and out to the suburban towns. Unlike the American plan of a single five-cent fare, whether you ride three blocks or two or three miles, here you pay according to the distance you ride.

To one from the Northern States of America, the winter and spring seasons here are certainly delightful. It is rarely, if ever, cold enough to freeze at Cape Town. From one to six hundred miles north of here, snow is not uncommon; and still farther north, nearer the equator, in the Transvaal, the cold is quite severe.

The greatest curse of the country is the drink traffic, with its associate evils. The farmers in the wine districts reap their greatest profit from converting their grapes into intoxicating drink. We have seen more drunkenness here in the city of Cape Town, in the last three months, than we have in the State of Massachusetts in as many years. It is true that the great majority of these cases are among the colored population. Moderation in the use of wine is a more popular idea than is total abstinence; and yet there are many strong advocates of the latter, and evidently prohibitory sentiments are gaining ground in the colony.

We have spoken several times on the temperance question, and have tried to show the physical evils that are wrought by the use of alcohol. Nearly a hundred thousand pages of temperance literature have been circulated. This matter has been well received, and read with interest. Noble souls here in the city have aided in this work, and we expect they will see fruit of their efforts in this direction. GOOD HEALTH is a welcome visitor, and is read with interest in quite a large number of homes in this city.

There is ample room for improvement in some of the Colonial laws relating to social questions, and decided steps are being taken with that end in view. The next Parliament will undoubtedly be asked to move in the matter, and it is to be hoped that these efforts will prove successful.

Cape Town is connected with Kimberley, six hundred and fifty miles north, and with Port Elizabeth, about eight hundred miles distant on the southeastern coast. In the line of fruit, the Colony produces oranges, lemons, guavas, nartjes, figs, grapes, bananas, plums, peaches, pears, loquats, pomegranates, quinces, strawberries, and Cape gooseberries. Many of these are, to a more or less extent, converted into jams; but there is no attention paid to the canning of fresh fruit, as is done so extensively in America, and with such excellent results. If we are to judge from what we have seen, apples here are a failure, and are not worth the eating.

When our friends in Massachusetts, Michigan, and the Northern States are encountering deep snows and zero weather, we shall be panting in the sultry heat of Christmas-time under the "Southern Cross."

### BEAR RIVER, MAINE.

(See *Frontispiece*.)

THE mention of this northernmost corner of the United States suggests a stony soil, arctic winters, and prohibition; but no one would think of making a pilgrimage to Maine in search of beautiful landscapes. If, however, we may rely upon the truthfulness of the artistic engraving which we publish this month as a frontispiece, Maine scenery has not been justly appreciated. Certainly those of our readers who reside in this section of the country will, at this season of the year, welcome this eloquent reminder that "summer days will come again."

This scene located upon Bear River is certainly a charming one, and the artist seems to have so entirely caught the spirit of it that we can almost hear the rushing of the waters along the river's rocky bed, a deep-toned accompaniment to the music of a thousand merry

songsters overhead; and can almost imagine ourselves comfortably lounging on a mid-summer's day within the shade of one of those overhanging rocks, drawing in health at every breath, and gathering inspiration from the sweet, subduing influences around, which must chase away from the chambers of our mind the hobgoblins of disease and the imps of sordid thoughts, and make us purer and better men and women.

### CARRYING HIS ILLUSTRATION TOO FAR.

WRITING of the late Hon. H. B. Stanton, his wife, Mrs. Elizabeth Cady Stanton, gives the following incident:—

"When speaking before an audience, he was very quick to turn to account any unexpected occurrence. On one occasion he was delivering a temperance lecture on a platform covered by a thick oil-cloth, which protruded two or three inches over the edge of the boards in front. In the midst of one of his most eloquent passages, he was comparing the inebriate's downward course to the Falls of Niagara, and the struggle with drink to the hopeless efforts of a man in the rapids. Just as he reached, in his description, the fatal plunge over the precipice, he advanced to the edge of the platform, the oil-cloth gave way under his feet, and in an instant he went down headlong into the audience, carrying with him desk, glass, pitcher and water. Being light and agile, he was quickly on the platform again, and immediately remarked with great coolness: 'I carried my illustration farther than I intended to. Yet even so it is that the drunkard falls, glass in hand, carrying destruction with him. But not so readily does he rise again from the terrible depths into which he has precipitated himself.' The whole house cheered again and again, and even Gough never struck a more powerful blow for temperance."

*Mistress* (arranging for dinner): "Did n't the macaroni come from the grocer's, Bridget?"

*Bridget*: "Yis, mum, but oi sint it back. Every wan av thim stims was impty."

**Secret of Happiness.**—An Italian bishop who had struggled through many difficulties without repining, and had been much opposed, yet had manifested no impatience, on being asked by a friend to communicate the secret of his being always happy, replied: "It consists in a single thing, and that is, making right use of my eyes." His friend, in surprise, begged him to explain his meaning. "Most willingly," he replied. "In whatsoever state I am, I first of all look up to heaven, and remember that my great business is to get there; I look down upon the earth, and call to mind how small a space I shall soon find in it. I then look abroad in the world, and I see what multitudes are in all respects less happy than myself; and then I learn where all my cares must end, and how little reason I have to murmur or to be otherwise than thankful,—and to live in this spirit is to be always happy."—*Selected.*

**How to Be Miserable.**—The best recipe we know, if you want to be miserable, is to think about yourself,—how much you have lost, how much you have not made, and the poor prospects for the future. A brave man with a soul in him gets out of such pitiful ruts and laughs at discouragements, rolls up his sleeves, whistles and sings, and makes the best of life. This earth never was intended for a paradise, and a man who rises above his discouragements and keeps his manhood will be only the stronger and better for his adversities. Many a noble ship has been saved by throwing overboard its most valuable cargo, and many a man is better and more humane after he has lost his gold.—*Selected.*

**Melican Heathen.**—The much-criticised Chinaman has many faults, some of the most serious of which, however, are those which he copies from his critics; nevertheless, he now and then improves his opportunity to teach our American heathen very wholesome lessons.

"The story is told in the West of a Chinaman who applied to a wealthy family for work. He was asked: 'Do you drink whisky?'

'No; I Clistian man.' 'Do you gamble?'—'No; I Clistian man.' He was employed, and proved to be an excellent servant. In course of time the mistress of the mansion gave an elaborate 'progressive euchre' party, at which wines were served. John waited at the table with exceeding deftness and acceptability, but the next morning asked for his wages, saying that he wanted to quit work. The mistress was astonished, and asked, 'What is the matter?' The Chinaman told her. 'I Clistian man,' he said; 'I told you so befo'; no heathen. No workee fo' Melican heathen.'

**The Snow.**—Surely, of all things that are, snow is the most beautiful and the most feeble. Born of air-drops less than the fallen dew, disorganised by a puff of warmth, driven everywhere by the least motion of the winds; each particle light and soft, falls to the earth with such noiseless gentleness that the wings of ten million times ten million make no sound in the air, and the footfall of thrice as many makes no noise upon the ground,—what can be more helpless, powerless, harmless?

But not the thunder itself speaks God's power more than this very snow. . . . While it is in the air, it is lord of the ocean and the prairies. Ships are blinded by it. All harbors are silent under this plushy embargo. . . . The prairies are given up to its behests; and woe to him that dares to venture against the omnipotence of soft falling snow upon those trackless wastes! In one night it hides the engineering of a hundred years. Towns and villages yield up the earth, and obey this white, diffusive despot!

When flake is joined to flake, and the frosts within the soil join their forces to the frosts descended from the clouds, who shall unlock their clasped hands? Gathered in the mountains, banked and piled till they again touch the very clouds in which they were once born and rocked—how terrible is their cold, and more terrible their stroke, when some avalanche comes slipping, down the mountain-side.

But, behold again! That august might that buried the fields, that wound the very wilderness with a burial sheet, and sat watch-

ful over its work from the tops of mountains, defying men, and storms even; which, when once enthroned, could not move or change its mighty power—that very might, when God pleases, shall go as quick and as silent as it came. When God remembers the earth from the south, and his breath returns again, warm and life-giving, in an instant the snow goes back to its former state. Its flakes die to drops of dew, and the field drinks up the depths and banks that hid its fate; and the ice and snow that sat silent on the hills now sing down the brooks and rills, prophets of the coming flowers.—*H. W. Beecher.*

**Novel-Reading.**—It cannot but be injurious to the human mind never to be called into effort; the habit of receiving pleasure without any exertion of thought, by the mere excitement of curiosity and sensibility, may justly be ranked among the worst effects of habitual novel-reading. Like idle morning visitors, the brisk and breathless periods hurry in and out in quick and profitless succession; each, indeed, for the moment of its stay prevents the pain of vacancy, while it indulges the love of sloth; but, altogether, they leave the mistress of the house—the mind, I mean—flat and exhausted, incapable of attending to her own concerns, and unfitted for the conversation of more rational guests.—*Cole-ridge.*

—Sometimes I compare the troubles we have to undergo in the course of a year, to a great bundle of sticks, far too large for us to lift. But God does not require us to carry the whole at once. He mercifully unties the bundle, and gives us first one stick, which we are to carry to-day, and then another stick, which we are to carry to-morrow, and so on. This we might easily manage, if we would take only the burden appointed for each day; but we choose to increase our trouble by carrying yesterday's stick over again to-day, by brooding over past troubles, and, by anticipation, adding to-morrow's burden to our load before we are actually required to bear it.—*John Newton.*

## Temperance Notes.

—One hundred and two thousand pages of temperance literature were printed during the past year by the Woman's Temperance Publishing Association.

—The young ladies of White Cloud, Kansas, have signed a pledge that they will abstain from the use of gum and slang, and not keep company with young men who use tobacco, strong drink, or profane language.

—Mr. Philip Armour, of Chicago, has in his office the following sign placed over his head cashier's desk: 'No Cigarette-Smoking Here.' The effect of this is said to be most salutary, as out of more than two hundred clerks not one has continued the habit.

—One hundred and twenty of the one hundred and seventy members of the House of Representatives have expressed themselves favorable to the repeal of the tax on tobacco. Nothing is said about reducing the tax on sugar and such household necessities.

—It is authoritatively stated that during the past year the Liquor Dealer's Association of this country has expended eight hundred thousand dollars in their efforts to defeat prohibition in Michigan, Texas, Tennessee, and Oregon, and in fighting temperance legislation in other States.

—Prohibition has lost Atlanta, but it has gained a victory where least expected,—in the vast territory contiguous to the North Sea. The six powers included in this territory; namely, Great Britain, France, Belgium, Holland, Germany, and Denmark, have come to an international agreement that no intoxicants shall be sold to fishermen and men on board fishing-vessels; that no exchange of goods for liquor shall be allowed; and that vessels peddling supplies to fishing-vessels shall be prohibited from selling intoxicants.

**The Lord's Prayer and License.**—An exchange says: "Think of praying, 'Hallowed be thy name,' and then voting to license the liquor traffic, which causes God's name to be continually blasphemed; . . . 'Thy will be done,' and then voting that it shall not be done; 'Lead us not into temptation,' and then voting to place temptation in every one's path; 'Deliver us from evil,' and then voting for the greatest of evils, if so be that a little money may come to the city or town treasury; 'Give us this day our daily bread,' and voting to license that which takes bread from thousands of almost starving children."

## Popular Science.

—The Patent Office records show that 1955 inventions have been granted to women.

—Arrangements are being made to introduce street-cars into Damascus, the ancient city founded by Abraham, 1900 years before the Christian era.

—A wooden case containing a complete set of surgical instruments, many of which are similar to those used at the present day, was a recent discovery at Pompeii.

—Some Indian arrow heads were lately shown at the Societe d'Anthropologie, which were poisoned with *curare* over a century ago, but still retain their deadly power. Small animals scratched with them died in half an hour.

—It is a curious fact that wasps' nests sometimes take fire, as is supposed, by the chemical action of the wax upon the material of which the nest is composed. Undoubtedly many fires of unknown origin in hay stacks and farm buildings may thus be accounted for.

—There has recently been discovered in the high Alps near the summit of the great St. Bernard, five large granite altars and numerous other relics of the stone age, used in pagan epochs for sacrifices. Swiss scientists consider this discovery a proof that Mount St. Bernard was a place of sacrifice in pagan times, and that the Canton of Valais must have been inhabited by human beings as far back as the stone age.

—The petrified remains of a huge animal have been discovered lying beneath the earth's surface, on the bank of the Des Moines River, near Percy, Iowa. The length of the monster, without the head, which was detached from the body, measures over forty feet. The remains were in a bed of dark blue stone, surrounded by petrified insects and remains of other animals. It is supposed that the animal belonged to the carboniferous age.

—There is a large factory in Bridgeport, near Chicago, employing one hundred workers, in which waste animal blood is converted into buttons. From 8,000 to 10,000 gallons of fresh beef blood are used daily for this purpose. It is prepared in thin sheets by evaporation and chemical processes, and afterwards worked up into various useful articles. Not only buttons, but tons of ear-rings, combs, belt clasps, and trinkets are annually made in this manner from blood.

—The ruins of a prehistoric city have recently been unearthed in the Salt River Valley, in Arizona, about eighty miles northwest of Tucson. The city was quite an extensive one. Over two hundred burial vaults have been exhumed, also a fortified temple built of sun-dried clay, which no doubt was originally several stories high. Pottery, axes, mortars, pestles, and bone needles have been found in large quantities. Remains of wheat, barley, and other grains were found in a charred condition. There are evidences of there having been a canal running through the city, and it is believed the whole valley was under cultivation. The discoverer of the city is of the opinion that it must have contained a population of at least 25,000. It is believed that, like Pompeii, the city suffered some great calamity, probably an earthquake.

**Artificial Silk.**—A Frenchman has devised a means of making silk from nitro-cellulose, a substance closely allied to collodion. The threads can be made as fine as the finest silk, and will take any color.

**Telephoning at Sea.**—A new method of telephonic communication at sea has been devised by a naval officer, by means of which ships can easily communicate with one another at a distance of one and one-half miles.

**The New Phonograph.**—The old phonograph was a failure. You could understand it very well if you knew what it was going to say, but otherwise its remarks were open to many different interpretations. It is claimed that the new phonograph is free from this objection. It is proposed to manufacture the phonograph upon a large scale, and put it upon the market for practical use.

**Electric Rock.**—A very peculiar property has recently been discovered in the rock of a mountain seven miles from the town of Santa Cruz. This rock is heavily charged with electricity, and when applied to a battery was found to produce strong electric currents. The rock has very much the appearance of ordinary soapstone, and exists in enormous quantities, constituting the principal mass of the mountain. Its strange property was accidentally discovered by a man who was experimenting with mineral water on the mountain, and having occasion to use some of the rock, placed it in contact with the battery. The man who made this wonderful discovery kept it a profound secret from the world until he and one or two of his confidential friends had obtained a title to the portion of land, paying fifteen thousand dollars therefor. The present owners are experimenting with the rock, with the intention of thoroughly testing its properties. The result of such investigation we can only surmise, but shall be glad to learn.—*Tulare Free Press.*



"Blessed are the Pure in Heart."

#### **THE SAN FRANCISCO SLAVE-TRADE.**

PROBABLY there are comparatively few persons aware that a traffic in human beings, more odious than that carried on in the South before the war, still exists in this country. This fact is, however, well known to the reading public of California, and the authorities have for many years had a full knowledge of the matter. An intelligent Chinaman recently testified in court that ten or eleven different parties are regularly engaged in the importation of Chinese girls for infamous purposes. Agents are sent over to China to purchase girls from their parents, at prices ranging from one hundred and fifty to five or six hundred dollars, according to their age and personal appearance. They are brought over to this country to San Francisco, where they are sworn in by hired persons as the wives or children of resident Chinamen, and are then taken to a regular market-place, where thirty or forty of them may often be found herded all together, and are here offered for sale to the highest bidders, as fresh recruits for brothels. The prices usually received range from eight hundred to two thousand dollars.

There is no difficulty in obtaining girls in China, as it is a common thing for poor parents to dispose of one or more girls to obtain means to aid in caring for the remainder of their children. Chinese fathers often sell their daughters to the keepers of brothels for a term of years; a life of shame not being considered, among the lower classes in China, as any particular degradation. Not infrequently

girls are mortgaged, just as horses, cattle, or other chattels are mortgaged in this country. If the parent does not pay the money promptly when due, the lender seizes the daughter, and she becomes his slave. He may sell her to whom he chooses, just as a man in this country may dispose of a cow or a horse.

Inhuman and inexcusable as this practice carried on in China may appear to us, some allowance can be made for the benighted Chinese parent, on the ground of ignorance and prevailing custom. The fact should also be borne in mind that the custom of selling daughters as wives has prevailed not only in China, but in the greater share of barbarous and semi-civilized countries from time immemorial, so that women are looked upon rather in the light of chattels, or property, in all of those countries. But what excuse can be offered for the indifference manifested by the civil authorities of California toward this infamous and barbarous traffic, carried on under their very eyes, in the midst of our so-called Christian civilization?

This trade in Chinese girls has not been carried on in a secret manner, but has been so open that the authorities must have been fully cognizant of it for at least a generation; yet there has been apparently no effort made on their part to suppress it. Even the United States law against the importation of Chinese has been evaded in a manner which could hardly have succeeded, unless winked at by the authorities. The present law forbids the entrance of Chinese into this country, unless they have been former residents,

and are simply returning from a visit to their native land. The importers of Chinese girls have found no difficulty in meeting the requirements of the law. They simply ascertain the dates upon which women have returned to China by various steam-boat lines; and while bringing the girls over to this country, give them a regular course of instruction in the geography of San Francisco and other cities in California, drilling them until they are able to give the names of streets as well as a foreign resident would be expected to do, and are given a story to tell respecting their personal history while here. On their arrival, they readily find some Chinaman who, for a consideration of twenty-five to fifty dollars, will swear that the woman in question is his wife, and will corroborate her story.

This fraud has undoubtedly been carried on ever since the law regulating the importation of Chinese came in force; and from the fact that the number of Chinese women who return to this country is at least three or four times as great as the number who have returned to their native land, the authorities must be fully aware that the law is being evaded; and the fact that nearly all of those returning are young girls, varying in age from fifteen to twenty years, while the dates of their departure has generally been stated as five to seven years ago, makes the fraud so apparently transparent that it seems that no honest official can be really deceived; and yet the Chinese slave-traders are allowed to recruit the vile and infamous "hook-shops" of San Francisco with young girls from China, on the claim that they lived in this country six or eight years ago as old married women, going back to their native land on a visit. Ocean travel is reputed to have done people all sorts of good, but such a transformation is rather too much even for an ocean trip to accomplish.

Fortunately there are those who are more interested in the execution of the law than are its "special guardians." Through the efforts of Rev. Masters, in charge of the M. E. Chinese Mission of San Francisco, and Miss Culbertson, the efficient superintendent of the

Presbyterian Chinese Mission, something is being done to check this horrible trade. We are glad to state also that the efforts which the excellent persons referred to are making, are well seconded by Colonel Bee, the able Chinese Consul-General in charge of the Consulate located at San Francisco. Many have been rescued from the clutches of the wretches who hold them in durance vile.

Many of these girls came to this country with the expectation that they were to become the wives of wealthy merchants, and were not aware of their real destiny until they found themselves imprisoned in the heart of Chinatown, from which escape for them is almost impossible. Occasionally, however, girls make their escape, and in such cases find a safe refuge in the Presbyterian and Methodist Mission houses, where more than fifty of these unfortunates are now living. Many have been sent back to their native land by the Chinese Consul. We should say in addition, to the credit of the Chinese government, that the expenses of such persons who wish to return to their parents, are promptly paid.

It seems inconceivable that the facts above stated can be true in a country which, for the purpose of purging itself of negro slavery, less than a generation ago underwent one of the most remarkable revolutions the world has ever seen. Yet the facts given are abundantly attested. Should not every Christian man and woman in the land enter a protest against the further tolerance of this iniquity? Why do not the newspapers of the Pacific Coast and elsewhere properly set before the public not only these facts, but also proper representation of the iniquitous conduct of public officials who will allow such a business to be carried on without raising a finger to prevent it?

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—Last June, the New York Legislature passed a bill amending the law relating to rape, which raised the age of consent from ten to sixteen years. Why should not the legislature of Michigan and other States do as well? England raised the age of consent from thirteen to sixteen years, more than two years ago.

**Gospel Purity Association.**—An association has been formed in England, which is known as the Gospel Purity Association, the purpose of which is the advocacy of social purity upon a Christian basis. Article II. of its Constitution reads as follows :—

“This association shall uphold an equal standard of purity for men and women; and its public advocacy shall be in harmony with the following truths of holy Scripture:—

“(1) That impurity is in the thought as well as in the deed. Matt. 5 : 28.

“(2) That the moral and physical laws of our humanity are in unison; and that the impure, in sinning against God, sin also against their physical nature. 1 Cor. 6 : 18.

“(3) That the Lord Jesus Christ is able to save to the uttermost all who come unto God by him. Heb. 7 : 25.

“(4) That to the pure in heart, God will grant a special manifestation of himself Matt. 5 : 8.

“(5) That it is God’s will that the human body should be the temple of the Holy Spirit; and that it is the privilege of every reconciled child of God to attain to ‘righteousness, peace, and joy in the Holy Ghost.’ 1 Cor. 3 : 16, 17.”

#### **First Lessons in Fashionable Dissipation.**—

Parents who have endeavored to rear their children in the way of sobriety and piety, yet are disappointed in the realization of their fond hopes for their sons and daughters, through the influence of evil companions, by whom they are allured to gayety and reckless ways, are deserving of sympathy. Pitiful indeed is the lot of pious and intelligent parents, who see the results of long years of careful training in their children brought to naught through the malign influence of fascinating, but gay and impious companions.

Upon the other hand, what can be said for those parents who deliberately train their children from the most tender years in ways which lead straight to destruction? The newspapers recently contained an account of a *soiree dansante d’enfants*, or a children’s dance, in which between one and two hundred

children participated, including all sorts of character dances, in addition to the “German” and other fashionable dances. Meanwhile the misguided parents looked on approvingly. Those same parents, who are helping to lay the foundation of the moral ruin of their children, a few years hence will be wondering why their sons and daughters have turned out bad.

**Early Training of Children.**—A point which is usually neglected in the early training of children is teaching them to be capable of self-entertainment in wholesome and profitable ways. The boy or girl who is wholly dependent upon some one else for amusement or entertainment, who constantly depends upon some one else for happiness, who does not know how to spend a leisure hour pleasantly or profitably, is in great danger. Such ones are easily led away by associates whose influence may be pernicious. They soon come to feel that to be alone, or to be without some one to entertain them, is a hardship, and will seek questionable means and places of entertainment.

Children should be early taught to entertain themselves; to find in the reading of wholesome books, in study, in congenial and improving occupation, the most satisfying pleasures. The want of this training leaves many a promising boy or girl to drift away from the parental influence, and meet with early shipwreck of character, who by more careful training might have been saved. This thought is worthy the attention of parents.

—An exchange well says: “Social purity means immense moral and social reform. It means purifying the laws, and raising the same standard for men as for women. It means preventive, reformatory, and legislative work; and in this difficult, delicate work, Christians have no right to say, ‘I can’t,’ when God says, ‘You must.’”

—There is a White Cross Society in Minneapolis, numbering over two thousand members.



*The Age of Protection.*—From the last report of the department of Social Purity of the National W. C. T. U., we quote the following summary respecting the age of protection, existing at present in the various States and Territories:—

The States printed in italics are those in which the age of protection has been raised during the present year.

Seven years: Delaware.

Ten years: Alabama, California, Florida, Georgia, North Carolina, South Carolina, Tennessee, District of Columbia, Maryland, Minnesota, Wyoming, Arkansas, Utah, Montana, Arizona, Rhode Island.

Eleven years: Vermont.

Twelve years: Missouri, Indiana, Nevada, Virginia, West Virginia, Idaho.

Thirteen years: Massachusetts, Iowa, *Maine*.

Fourteen years: *Illinois, Dakota, Connecticut, New Hampshire, Oregon, Ohio, Wisconsin, Michigan, New Mexico.*

Fifteen years: Nebraska.

Sixteen years: *Pennsylvania, Kentucky, New York, New Jersey, Washington Territory.*

Eighteen years: Mississippi, Colorado, *Kansas.*

*The Tung Wah.*—From an English periodical we learn that the slave-trade in Chinese girls is carried on most extensively between Hong Kong and Australia, Borneo, Java, Manilla, and many other English and Chinese colonies. The writer seems not to be aware of the traffic between China and this country, *via*. San Francisco, to which we have called attention in another article. We are happy to learn that a Chinese philanthropic society, called the "Tung Wah," has undertaken to break up this horrible traffic at the Chinese end of the business, and that the efforts of the society are seconded by the government.

—The increasing prevalence of the worst crimes against women is so noticeable as to receive frequent newspaper comment; and what is equally noticeable is the frequency with which the perpetrators of these outrages escape punishment, through the want of ener-

getic efforts to bring them to justice, or through the efforts of shrewd lawyers, who take advantage of some technicality in the law or slight flaws in forms of proceedings, to save their inhuman clients from punishment. Is there not need of legislation upon this subject, that brutes in human form may be made to feel a wholesome terror of the law, by which these dastardly outrages may be lessened in frequency?

—Just at present Canada enjoys the reputation of being the resort of all sorts of villains whose crimes are not enumerated in the extradition treaty between that country and the United States. Embezzlers and bribers have long made themselves greatly at home in Montreal and other cities across the line. Recently the Canadian Convict Colony has been increased by one, in the person of Mike Leahy, a Wisconsin slave-trader and brothel-keeper, who has been the owner of numerous dens in which young girls who have been inveigled from Chicago and elsewhere were enslaved, and subjected to horrible and inhuman treatment. It is to be hoped that the respective governments of Canada and the United States will recognize the importance of speedily modifying the existing treaty laws so as to secure the return of these infamous scoundrels for proper punishment.

—Abstain from all those books which, while they have some good things about them, have also an admixture of evil. You have read books that had two elements in them; the good and the bad. Which stuck to you?—The bad! The minds of most people are like sieves, which let the small particles of gold fall through, but keep the great cinders. Once in a while we find a mind like a loadstone, which, plunged amid steel and brass filings, gathers up the steel and repels the brass. But it is generally just the opposite. If you attempt to plunge through a hedge of burrs to get one blackberry, you will get more burrs than blackberries. You cannot afford to read a bad book, however good you are.—*Talmage.*

# GOOD HEALTH

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## TOBACCO IN POLITICS.

THIS journal has never taken any active part in politics, except in encouraging the recent effort to establish the prohibition of the liquor traffic; nevertheless, there are a few features of the present political situation which we deem appropriate to notice in these columns. What to do with the surplus revenue which, to the extent of many millions, is accumulating in the national treasury, is at the present time an important question with the national authorities. Mr. Cleveland, in his recent message, recommends that the duties on raw materials for the manufacture of necessary articles be lessened or abolished, and the duties on manufactured articles be diminished as much as possible without injury to home industries. Mr. Blaine, in criticising the President's message, protests against the lessening of duties either on raw material or manufactured articles, and proposes to abolish the revenue tax on tobacco. Mr. Cleveland's reason for retaining the tax on tobacco is that it is a luxury, and not a necessity of life. Mr. Blaine insists that to those who have become accustomed to its use it is a necessity, and that to compel the users of the weed to pay so high a price for it, is a hardship from which they should be relieved.

A boy can now purchase for two cents tobacco enough to kill him, if he will use it in the

most economical manner; yet Mr. Blaine would have it cheaper. Probably he would prefer that the daily dose of nicotine should cost but one-half a cent or a penny. Very inconsistently, Mr. Blaine maintains that the tax on whisky should be retained, utterly ignoring the fact that whisky, for those who are accustomed to its use, is as much a necessity as tobacco is to those addicted to it. Why not also abolish the tax on opium? Many a poor Chinaman in California, on account of the high price of opium, is obliged to spend all of his earnings to supply himself with this seductive drug, which for him is a necessity even greater than the use of tobacco or liquor can be to any one. Mr. Blaine is anxious that the tobacco tax should be repealed, but that the tax on cotton and wool, either raw or manufactured, should be maintained for the protection of home industries. The protection of home lives is an item that seems not to have entered into his calculations. It seems to be to his mind not worth considering.

Mr. Blaine's policy seems to be one which is well calculated to win votes. It will secure to him the influence of wool manufacturers and other employers; and if carried out, will enable them to maintain high prices, selling their goods at fifty to one hundred per cent more than the same articles can be obtained for in other countries. It is also calculated to win the votes of the lower classes of both

the native and the foreign population, as it will give them cheap tobacco, which to many of this class is more than food and raiment. Mr. Cleveland's policy may be less popular, but to our mind it will prove vastly more conducive to the best interests of the people. Mr. Blaine says if he could have his way, he would repeal the tax upon tobacco before another New Year. We sincerely hope that no man with these sentiments will find a seat in the presidential chair. The next step of such a politician would be to cheapen whisky,—to cheapen anything or everything calculated to win votes or create political capital. Much more to be respected is that half-civilized potentate who has prohibited, under a heavy penalty, the use of both tobacco and whisky among his subjects.

#### SANITARY LEGISLATION NEEDED.

THOSE who are in the habit of visiting the markets of our large cities, or the butcher shops of smaller ones, are familiar with the sight of numbers of dead fowls exposed for sale, which have been stripped of their feathers, but have not been "drawn." A close inspection of such fowls is not needed for the recognition of the dark coloration of those portions the most closely connected with the abdominal cavity. If the purchaser of fowls in this condition will take the pains to be present during their preparation for cooking, he will observe that the contents of the crop and abdominal cavity, when removed, are in a highly putrescent condition. The dark coloration of some portions of the flesh of undrawn fowls is due to the poisonous gases and other products of decomposition which are formed in the decaying contents of the intestines. Such flesh is itself advanced some degrees beyond the first stage of decomposition, and is quite unfit for food. Indeed, it would seem that ordinary respect for cleanliness and decency as regards diet would indicate with sufficient clearness the impropriety of this very common practice, to say nothing of its unhealthfulness.

Fowls, as well as other animals intended for use as food, should be dressed as quickly

as possible after killing. The liver and other viscera advance rapidly in the decomposition, which is set up very quickly after death. This is due in part to their soft texture, and also to the quantity of venous blood which they contain. In the killing of the animal, even when the large blood-vessels are cut, a very large quantity of blood remains in the vessels connected with the intestines, called the portal system. This is due to the fact that only through the capillaries of the liver, can the blood in this part of the circulatory system find its way into the large veins which convey blood to the heart, and at death is cut off from the general circulation at both ends by a capillary system; so that while other portions of the circulation may be almost completely emptied by cutting the large vessels at the throat, the portal circulation remains distended with venous blood, which, as is well known, putrefies with great rapidity, forming a virulent poison. The Indians of South America are said to render the wounds of their arrows very deadly by dipping them in decayed blood.

The contents of the intestines of all animals are always in a condition of putrescence more or less advanced, and are certainly ready to undergo rapid decomposition after death, when the preservative action of the digestive fluids ceases. That food substances in the alimentary canal are very prone to fermentation and other processes of decay is well proved by the distressing symptoms suffered by certain classes of dyspeptics. After the death of an animal the decaying intestinal contents, which would naturally have been expelled in the course of a few hours, are retained; in the case of a fowl exposed without being "drawn," they are retained until a purchaser is found, and the fowl reaches the hands of the cook. During all this time, putrefaction is going on, and the flesh of the fowl is being permeated by the products of putrefaction. It is indeed this process which gives to game that peculiar flavor which the French term *haut gout*, which, properly interpreted into plain Anglo-Saxon, means rotten.

Pasteur has shown that the alimentary ca-

nal of human beings contains not less than twenty-seven different kinds of germs, notwithstanding the care which is usually exercised respecting the diet, as regards cleanliness (a notable exception to which is the subject of our present complaint). Most of the food of human beings is cooked before being eaten, whereby the entrance of myriads of live germs into the alimentary canal is prevented. Fowls usually take their food raw, and the barn-yard fowl certainly cannot be accused of being at all dainty or fastidious respecting its diet. If man has twenty-seven varieties of germs in his stomach and intestines, a barn-yard fowl must have at least a thousand, and each particular class of germs very enormously represented and actively engaged in setting up its particular kind of putrefactive fermentation.

As a result of these putrefactive processes, certain poisonous substances known as ptomaines are formed; some of which are extremely deadly in character, as shown by the poisonous effects frequently produced by the use of canned salmon or other meats that have undergone putrefactive changes. In fowls which have been for some time exposed for sale without being drawn, there must be a great abundance of ptomaines, not only in the alimentary canal, but also in the flesh of the fowl; and not only ptomaines but germs must be present in great abundance. We intend to undertake some experiments for the purpose of getting correct and definite information upon this subject. The frequent occurrence of severe illness from the use of game may be fairly attributable to this cause. Certainly, the above reasons are sufficient for condemning as food, fowls,—chickens, geese, ducks, turkeys, and such small birds as quails, snipes, etc.,—which have been killed and exposed for sale without having been “drawn.” This is a matter to which our State and Health authorities may well give attention. We are glad to be able to record that the State Legislature of Massachusetts has enacted a law relating to this subject, of which the following is the essential portion:—

AN ACT REGULATING THE SALE OF DRESSED POULTRY.

“Be it enacted . . . as follows:—

“*Section I.* No poultry, except it be alive, shall be sold or exposed for sale until it has been properly dressed, by the removal of the crop and entrails, when containing food.

“*Section II.* Whoever knowingly sells or exposes for sale poultry contrary to the provisions of Section I. of this act, shall be punished by a fine of not less than five, nor more than fifty dollars for each offense. The Boards of Health in the several cities and towns shall cause the provisions of this act to be enforced in their respective cities.”

The only criticism we have to offer is that the words “when containing food” should be omitted. The alimentary canal of fowls will always contain food or something worse, and a vast number of germs ready to set up increased putrefactive processes in the intestinal contents, and in the surrounding flesh. We shall have occasion to speak further upon this subject at another time.

**FREE RUM ON THE CONGO.**

ONE of the greatest crimes of modern times is the wholesale poisoning of the natives of the Congo Free State by so-called Christian nations. The Berlin Conference effected a commercial treaty, by which free trade was granted to all nations participating in the Conference. Free trade in these countries means free plunder. The ignorant Africans have already become so addicted to the use of rum that they value it above every other commodity. Traders on the Congo declare that in trade a bottle of gin is worth ten times its value in cloth. Gin, indeed, is the principal currency of the country. No government has taken any steps whatever for the protection of these ignorant savages; and the consequence is that rapacious and mercenary traders have poured into this newly-developed portion of the world a perfect deluge of the most poisonous intoxicants, as the result of which the efforts of all the missionaries who have been sent to this region of the earth,

have been a hundred fold neutralized and outstripped, in a bad direction.

Mr. W. T. Hornaday, of the Smithsonian Institute, Washington, District of Columbia, has taken up his pen in defense of the poor savage, and has written a very instructive, interesting, and eloquent appeal to the American people upon the subject, in a work entitled, "Free Rum on the Congo and What It is Doing There." The title page bears the following quotation from an editorial of the *New York Tribune*: "What is being done out there in the name of commerce is a world crime of a character so colossal, of an immorality so shameless and profound, that if it could be regarded as a type and illustration of nineteenth-century civilization, it would be necessary to denounce civilization as a horrible sham, and a conspicuous failure."

We wish every one of our readers would obtain a copy of this book, which is published by the Woman's Temperance Publication Association, Chicago, Illinois; and let all humane men and women join in raising a cry of indignation against this stupendous crime.

#### THE SMEAD DRY-CLOSET SYSTEM.

THE committee of the State Board of Health, consisting of Dr. John Avery, President of the Board, and the editor of this journal, submitted the following preliminary report of their investigations:—

Pursuant to the instructions of this Board, the committee visited Toledo, as requested by Mr. Isaac D. Smead of that place; the committee being accompanied by the Secretary of this Board. In company with Mr. Smead, we visited several school-buildings in that city, and carefully examined the system of dry closets in use in them. In all but one building the working of the system appeared to be very satisfactory, the outside temperature being such as to insure a good draught in any heated building provided with an efficient system of ventilation. In one building, the odors present in the basement were, when it was first entered, exceedingly foul, the odors coming chiefly from the urinal.

It was necessary to open the basement windows to clear the room, even in part, of the odors present. The fecal matter in the vaults of two of the buildings visited was nearly dry; but in this building it was in a soft and highly putrescent condition.

The committee also visited a school-building in Detroit into which this system had recently been introduced. The system had not been long enough in use in this building to judge of its efficiency. The conclusion thus far reached by your committee may be briefly stated as follows:—

1. The Dry-Closet System, as introduced in connection with the Smead system of ventilation, with a sufficiently strong and constant draught, presents features of economy and conveniences which render it worthy of investigation.

2. The apparent success of the system is wholly due to the efficiency of the system of ventilation in connection with which it is introduced.

3. The system presents several features which do not commend it to sanitarians, and which certainly suggest further study and observation before it can receive scientific endorsement.

- a. There is always a possibility, and under some circumstances, as during the prevalence of adverse winds and in hot weather, a *probability* of an interference with the ventilating system, by which fecal odors may be carried by a back draught in the foul-air ducts, into the school-rooms.

- b. The system does not provide a satisfactory method of caring for the boys' urinal.

- c. In the light of the most recent researches, the drying of fecal matters, which is supposed to occur in the dry vault, does not destroy the germs of disease which may be contained in them; and the scattering of these germs, through their discharge into the open air, may be conducive to the wide dispersion of the infectious elements of diphtheria, typhoid fever, and, possibly, other grave maladies. This danger would, of course, be greatly aggravated in times of epidemics of any of these diseases.

4. On the whole, we are obliged to express the opinion that the Dry-Closet System is not in the line of the best sanitary progress.

Your committee wish especially to call attention to the fact that their inquiries thus far have been prosecuted at a season of the year when this system would necessarily appear at its best, and when its dangers and disadvantages are least likely to appear; and on this account they desire to withhold their final and complete report upon the Dry-Closet System until they shall have had opportunity to observe its working during the warm season of the year.

**Medicine Gods.**—The Chinaman, if a Taoist, consults, when sick, the "god of medicine," which is found among other gods in Taoist temples. He makes his complaint to the god, and the priest tells him precisely what medicines to take for the cure of his malady. His faith is unbounded. He expects a cure, and undoubtedly in many cases his expectations are fulfilled. This is the Chinese mode of mind-cure. There are, in this enlightened land even, those who have medicine gods. One worships homeopathy; another, allopathy; another, electricism; another, hydropathy; another, animal magnetism; and there are some who even bow down to so gross a fetish as clairvoyance, or mind-cure. There is gradually growing among people, however, an abiding faith in rational medicine, a system sufficiently comprehensive to include every remedy of value afforded by the whole range of medical science, but which has no fellowship with charlatans of any sort, material or meta-physical.

—President Porter, who has charge of the revision of Webster's Dictionary, is going to put the word "dude" into the next edition. He says this word conveys a "specific idea," although he thinks it would be hard to give its exact meaning. The *New York World* suggests that from this standpoint the word "dude" is more energetic than the thing itself, since "no one ever heard a dude convey a specific idea. It would make him tired."

**Tea-Drinkers' Disorder.**—A writer in the *Practitioner* calls attention to the frequent occurrence of dyspepsia in tea-drinkers, in particular, as the result of the astringent properties of tea. We have met scores of cases in which dyspepsia was readily cured by abstinence from tea or coffee.

**A Remarkable Tree.**—One of the most remarkable and useful trees growing in this country is the mesquite. This tree flourishes on the poorest and driest soil, raising a good crop of beans on the desert wastes of New Mexico and Arizona, where there is sometimes no rain for a year at a time. Were it not for the nutritious pods, of which this tree produces from two to five bushels, the cattle and prairie-dogs, as well as the aboriginal Indians, would often perish with hunger. The following brief description of this tree accords with the writer's observations. We found the pods really very toothsome, tasting very much like the fruit known as St. John's Bread:—

"The tree belongs to the leguminous, or bean, family, nearly allied to acacia. It makes a straggling growth of about ten to twenty feet, sometimes reaching a height of forty feet,—a grove, when seen at a distance, resembling an old dilapidated peach orchard, except in leaf and fruit. The trees bear heavy crops of beans, the pods of which are generally eaten by stock; for the sweet nutriment lies in the beans, not in the seeds, which are so small and hard that animals cannot chew them.

"The wood is very hard, heavy, and durable; the roots are enormous for the size of the tops. Both root and trunk make excellent fuel, even for forging in the smithy, when green. Such wood is procured at some expense, as the digging is laborious. It is sold in the towns of that region at about five dollars a cord of one ton weight. Wherever seeds have been scattered by stock or otherwise, these trees, in a few years, cover over vacant lands with a growth averaging from ten to fifteen feet in height. The millions of bushels of pods annually grown in Texas

play no small part in the economy of stock-raising. No land is so dry, poor, or rich that it will not produce the trees. The mesquite grows from near the head of Red River, south into Mexico. Where the bark is broken, a fine gum resembling gum-arabic oozes out in considerable quantities."

**Disadvantage of Warm Climates.**—A physician who has spent many years in tropical climates, recently remarked: "To find a warm *dry* climate, where civilized people can live and enjoy themselves . . . is a problem not admitting of easy solution. Equability of temperature is not consistent with low humidity (dryness). One cannot have everything; and if dryness is essential, steady warmth must be abandoned." Thousands of persons imagine that in seeking Florida and other warm climates during the cold months, they are making a great gain; whereas, the dampness of these southern latitudes often produces pernicious results, which more than counterbalance any possible good which may be gained from the higher temperature.

**Compound Oxygen.**—Professor Prescott, the eminent chemist of Ann Arbor, recently analyzed a sample of Compound Oxygen, and found it to contain a solution of three or four per cent of nitrate ammonia in water.

This substance is not volatile when the Compound Oxygen is used in the manner directed, and the necessary conclusion is that this much-advertised medicine is a sort of mind-cure.

**More Evidence against Coffee.**—The active principle of coffee, that which renders it attractive to those using it, is a poisonous substance known as caffeine. Numerous experiments have shown this substance to be a deadly poison. Seven and one-half grains will kill a cat. Recent experiments by an eminent London physician, Dr. Philips, show that even in small doses, the effect of caffeine is to decrease the action of the kidneys, and sometimes to arrest their action altogether. The large use of tea and coffee (the two substances being es-

entially the same in their effect upon the kidneys) may be one of the causes of the great increase in disease of the kidneys, recognized in modern times.

—David Dudley Field, one of the most eminent lawyers of New York City, now eighty years of age, and active as ever, attributes his excellent health to the habit of daily exercise. When a young man, he was greatly troubled with headache. More than forty years ago, he adopted the habit of taking a cool sponge-bath immediately upon rising, then riding an hour before breakfast, and regularly walking four miles to his office, and back, making eight miles in all, every day. He says he has not had a headache for more than forty years, and has enjoyed most excellent and uninterrupted health during that time.

—Beef tea is so often employed as almost the sole form of nutriment for invalids, particularly for fever patients, that it is important that warnings against its use in this manner should be frequently uttered. All scientific authorities now agree that beef tea is practically useless as a nutriment. In cases in which beef tea has been customarily employed, milk, hot or cold, should generally be used.

—Careful examinations made at sea, show that at a great distance from land, sea-air is almost absolutely pure, contact of air with water being one of nature's means of purification. From this fact it is apparent that an island in the ocean, or a body of land nearly surrounded by great bodies of water, like the peninsulas of Michigan and Florida, has an atmosphere of a greater degree of purity than that found elsewhere.

—Recent scientific observations show that when a person has taken sufficient liquor to amount to one two-hundredth part of the blood, or rather, when the quantity of alcohol in the system reaches the proportion named, the individual becomes dead drunk. If the proportion of alcohol reaches one part to one hundred parts of blood, the individual dies.

# DOMESTIC MEDICINE



## HOT WATER IN EYE DISEASES.

THERE is no single remedy capable of such wide usefulness in the treatment of diseases of the eye as hot water. Nearly all inflammatory and painful affections of the eye are benefited by the proper use of hot water, which should be of such a temperature as may be borne by the end of the finger held in it. The following are a few of the most useful methods of applying hot water to the eye:—

(1) Simply bathing the eye with hot water, holding the head forward and lifting the water with the hand. This is not the best method; first, because the head must be held forward, a position which tends to increase the congestion; and second, because water of a sufficiently high temperature cannot be readily applied in this manner. The eye can easily bear a temperature of 130° to 135°; if not at first, after water of a slightly lower temperature has been applied for a few minutes. This method is very serviceable, however, in treating chronic affections of the eye, such as granulated lids, etc.

(2) Let the patient lie upon the side corresponding with the affected eye. Place a little absorbent cotton wet with hot water upon the eye, so as to cover it about one-fourth of an inch deep. Now allow water as hot as can be borne to run slowly upon the cotton, the head being held in such a position that the water may be received into some convenient vessel. An ordinary fountain or siphon syringe may be used. This method is especially applicable in cases in which but one eye is affected, but may be used in cases requir-

ing treatment of both eyes; and the application of the hot water through the absorbent cotton will be found much more agreeable than when it is allowed to fall directly upon the eye. Two or three thicknesses of sheet lint or several folds of some soft cotton fabric may be used instead of absorbent cotton.

(3) A hot spray to the eye, in which several fine streams of hot water are allowed to fall upon the eye with gentle force, seems to produce better results in some cases, especially chronic cases in which there is little or no tenderness of the lids or eyeball. The spray may be directed in an upward direction, the patient leaning forward until the eye is brought into a proper position.

(4) Fomentations may be applied to the eye as well as to other parts. Very soft cloths should be employed. Pieces of sheet lint two inches wide and three inches long, folded to two thicknesses, are best for this purpose. The fomentation should be covered with a dry flannel cloth, and should be changed every two minutes.

(5) Fill a small tumbler with hot water. Hold the tumbler in the hand, and lean forward until the rim can be adjusted to the side of the nose, the eyebrow, and the cheek, without spilling the water. By slight pressure against the face, the mouth of the glass may be so completely closed that the patient may assume a horizontal or any other comfortable position without spilling a drop of the water. This is an excellent means of applying hot water to the eye, as the eye may be opened, and thus the hot water find its way between the lids, and reach the entire diseased



surface. A cupping-glass, the rim of which is protected by rubber, is more convenient for this purpose than an ordinary tumbler.

(6) Some eye diseases are probably due to the presence of disease germs. Water at 130° F., a temperature which may be borne by the eye, will destroy these germs; and consequently hot water is not only an excellent means of reducing inflammation, but is a germicide at the same time, and hence helps to remove the cause as well as the effects of the disease.

#### SIMPLE METHOD FOR REVIVING PERSONS APPARENTLY DEAD.

At a meeting of the last congress of German scientists, this subject was discussed, and Dr. H. Frank mentioned that there are but two ways to stimulate the heart,—electricity and mechanical concussion of the heart. The first is considered dangerous by him, as it may easily destroy the last power of contraction remaining in the organ. But what is termed "pectoral concussion" is decidedly preferable. Dr. Frank's method is as follows:—

He flexes the hands on the wrist to an obtuse angle, places them near each other in the ileo-cæcal region, and makes vigorous strokes in the direction of the heart and of the diaphragm. These strokes are repeated from fifteen to twenty times, and are succeeded by a pause, during which he strikes the chest over the heart repeatedly, with the palm of his hand. In favorable cases this method is early successful, and sometimes a twitching of the eyelids or the angles of the mouth appears with surprising rapidity as the first sign of returning life. As soon as these symptoms are noted, the simple manipulations above described must be earnestly continued and persevered in from a half to one hour, for with their cessation, the phenomena indicating return of life also cease. Generally, the face assumes a slight reddish tinge, and at the same time a faint pulsation may be felt in the carotids. By this method Dr. F. has seen life return in fourteen cases, among whom were such as had hung themselves, drowned, and suffocated by carbonic oxide, and in one case of

seeming death by croup. In three cases of asphyxia by coal gas and in one case of apparent death by chloroform, the method described alone succeeded.—*Med. and Surg. Reporter.*

**A Lime Sweat.**—Dr. J. O. Harris has invented a new method of taking a sweat. His procedure is as follows: Have a tinner make a tin box eight inches in diameter, four inches deep, with a perforated cover. Fill the box half full of lime, and turn on a pint of water. Close down the cover. Put the patient in bed between woolen blankets, and place the box between his legs, protecting the sides so they will not come in direct contact with the skin. Cover the patient warm, and in ten minutes he will be in a profuse perspiration from the heat and steam generated by the slacking lime.

**Tonsilitis.**—A noted French physician recommends as a cure for acute inflammation of the throat, or tonsilitis, an application of powdered bicarbonate of soda. At the beginning the tonsil should be rubbed with the end of the finger dipped in powdered bicarbonate of soda every five minutes for half an hour, then once an hour for several hours. Afterwards, three times a day, until the inflammation is relieved.

**A New Method of Detecting Alum in Bread.**—Mix the bread with water to a pulp, and place in this a piece of gelatine. At the end of twenty-four hours, wash the gelatine with water containing a little tincture of logwood and solution of ammonium carbonate. If alum be present, the gelatine will turn blue.

**For Freckles.**—Make a strong decoction of tamarind flavors. Bathe the face with this lotion twice a day. This is recommended by Dr. Howell as an excellent preparation for the removal of freckles and pimples.

—An excellent remedy for a cold is one or two glasses of hot lemonade drunk just before going to bed at night.

# HYGIENE FOR YOUNG FOLKS



## AN INDIAN'S FIRST TASTE OF PICKLE.

How many of our little readers ever saw an Indian? Perhaps not many of them, for most of the Indians in the United States are now confined to a single

Nevertheless, we may learn some very wholesome lessons from the Indians. For example, they are, when in a natural state, very simple in their habits. They are much more healthful in their dress, in many respects, than are most white people; and when not



THE INDIAN AND THE PICKLE.

Territory, known as the Indian Territory, to which they were removed many years ago by the government. We are apt to think of an Indian as a very savage creature, little better than an animal, and perhaps more cruel. It is true that the Indian has many faults, and has often been guilty of very great crimes, especially when excited to revenge by real or fancied wrongs done to him by white men or members of other tribes.

led by white people into unhealthful ways, they are contented with the most simple diet imaginable.

If you should receive an invitation to take dinner with an Indian, you would not find a table spread with many different kinds of foods,—cakes, pies, and other dainties, with pickles, mustard, pepper, pepper-sauce, various spices, and hot sauces, which many people think they cannot do without. Indeed, you would not even find a table. The In-

dian is content to spread his meager meal upon the ground; and as the family gathers around the frugal meal prepared, it is usually found to be but a single article, and that of the simplest kind. Perhaps it may be a kettle of boiled corn, seasoned with a handful of hickory-nut meats, which the Indian calls "tom-fulla." The little Indian boy does not call for butter, cream and sugar, sirup, or even milk for his "tom-fulla," but is quite content with the simple food which his parents and his big brothers and sisters eat. This is because the Indian has a natural taste, just as a horse, a cow, or a sheep has. If you cannot eat simple food, at least such food as nice bread and milk, or oatmeal mush with milk or cream, it is because your taste has become perverted. You must try to learn to like simple things.

But you are wondering what about the pickle? The artist has made a picture for us which represents an incident that occurred far out West in the Indian country a few years ago. Some hungry Indians entered a camp of soldiers after a long hunt. They were very tired and hungry, and looked very wistfully at the remains of the meal which the soldiers had been eating. A kind-hearted officer gave them some food, and, thinking to show him special attention, gave to the old chief a pickle. The hungry savage took a big mouthful of the pickle, supposing it to be wholesome food. He quickly discovered his mistake, however, and spit it out with great indignation. He thought it was a cruel joke, and seizing his scalping knife, came near taking the life of the poor officer, being only prevented by another officer, who caught hold of him from behind.

So you see what an Indian thinks of pickles. He has the same opinion of mustard, pepper, pepper-sauce, and similar things. He thinks them all poisons, and so they really are. If you wish to grow up strong and well, you will be sure to avoid all such harmful things.

—A little Buffalo girl was not feeling well, and her parents suggested that she might be about to have the chicken-pox, then prevalent. She went to bed laughing at the idea, but early the next morning she went into her parents' room, looking very serious, and said: "Yes; it is chicken-pox, papa; I found a feddar in the bed."—*New York Sun*.

*Susie.* O mamma, I'll never disobey you again.

*Mamma.* Why, Susie, what have you done?

*Susie.* Well, I drank my milk at lunch, and then I ate a pickle; and the milk said to the pickle, "Get out;" and the pickle said, "I won't;" and they are having an awful time!—*Life*.

—A noted wit has described a cigar as a roll of leaves with a fire at one end and a fool at the other.

### THAT IS ENOUGH, LITTLE MASTER.

A GENTLEMAN sat one day in his library, after dinner, reading the evening paper. His little boy sat in front of the fire, toying with two rosy-cheeked apples, and finally eating one of them. The father read on in silence, which was at last broken by a voice, saying softly, "That is enough, little master!" He glanced round his paper, but seeing no one except his little son, who was silently patting his remaining apple, concluded that he must have been mistaken, and continued his reading.

A few more minutes of silence, and again he heard the voice saying, "Thank you, little master." This time he laid down his paper, and said to his little son Charlie: "To whom are you talking, my boy?"

Charlie blushed till his cheeks were as rosy as the apple he held in his hand, hung down his head bashfully, and did not answer. The wise father saw there was something behind this blushing hesitation, and taking Charlie upon his knee, coaxed this pretty story from the child's lips:—

"Our teacher tells us that the stomach is our faithful servant, working for us every day, to change the food we eat into blood, to make us grow. When we give it good food, at the right time, and not too much of it, its work is easy; it is glad and thanks us. But if we eat too much, we make the stomach work hard; and then it complains and aches.

"Now I had eaten a nice dinner, enough good food to make me grow; and then I brought these two apples here to eat before the fire. I ate one, and then my stomach said, 'That is enough, little master.' I pretended not to hear, for this other apple did look so nice I wanted to eat it; but I thought of a verse about it, which teacher gave us out of the Bible, so I said to myself, 'I won't eat it;' and then my stomach said, or I said for it, for you know it cannot talk, 'Thank you, little master,' and that was what you heard."

"You have a wise teacher," said his father, taking the apple his little boy handed him, and laying it on the table. "You said, Charlie, that your teacher gave you a Bible verse which helped you make up your mind not to eat the apple; can you tell me what it is?"

"I can't tell the very words," answered the little fellow, "but it means, 'Keep your soul on top.'"

The grave father looked astonished for a minute, then turned away his head to hide a smile as he recognized Charlie's "free rendering" of Scripture. Then he asked, "Are these the 'very words' you cannot remember, Charlie, 'I keep my body under?'"

"Yes, sir," said Charlie, brightening, "Those are the very words teacher told us. You see they mean just the same thing; if we keep the body under, of course the soul is on top."

And little Charlie was right, both in his reasoning and his conclusion.—*Mary Allen West, in Childhood: Its Care and Culture.*

## Question Box.

All questions must be accompanied by the full name and address of the writer, as it is often necessary to address by letter, the person asking the question.

**Sundry Questions.**—W. H., Massachusetts, wishes information on the following subjects:—

1. Substitutes for tea and coffee.
2. How to cook cracked cocoa.  
How to treat convulsions.
4. A remedy for congestion of the chest.
5. Best patent food in the market, for making blood.
6. How to relieve burning sensation of the skin.

*Ans.* 1. Hot milk is the best substitute for tea and coffee. A drink somewhat resembling coffee in flavor may be made from roasted barley, wheat, peas, acorns, toasted bread, etc. We do not, however, recommend the last-named articles. Substitutes are, as a rule, injurious only in a less degree than the articles for which they are substituted.

2. We have no recommendation to make respecting the cooking of cocoa.

3. If a person feels a convulsion (epileptic) coming on, he should immediately lie down. Habitual epileptics should carry in their pockets a piece of cork; and if sufficient warning of the attack is given, the cork should be placed between the teeth to prevent biting the tongue. A person having charge of an epileptic should assist him to do the two things mentioned, and in addition should simply keep the patient quiet, or prevent his doing himself injury, until consciousness returns. There is usually little or no danger that death will result from a convulsion of this sort. Convulsions of children are sometimes due to too much blood in the head; sometimes the opposite condition. Often they are due to indigestion. If a child having a convulsion is pale, it should be held with the head downward, or hot fomentations should be applied to the head. If the head is full of blood, put the child immediately into a warm bath. Always call a physician.

4. For congestion of the chest, fomentations to the spine, a cold compress to the chest, a warm leg-bath or a hot pack for the lower half of the body, are excellent measures. The patient should be bolstered up in bed to nearly an upright position.

5. We know of no patent food for making blood, which we can recommend. There is nothing superior to wholesome food well cooked.

6. If a sensation of burning is experienced when the skin is not hot, it may generally be relieved by sponging the part with hot water. If the surface is hot, cool or tepid water should be used.

**Cider, Etc.**—E. K. E., of Illinois, inquires: "1. Is the bruised part of an apple wholesome?"

"2. Does the juice of an apple ever ferment before the skin is broken?"

"3. How much alcohol to the pint in cider one week old?"

"4. How much intoxicating liquor was sold in the United States in 1886?"

"5. Is cider harmful five minutes after making, if made from good apples, and not taken too freely?"

*Ans.* 1. There is probably little nourishment in the bruised part of an apple; but unless fermented, it is not likely to be more injurious than the skin of the apple, or any other unnutritious substance.

2. Probably not, but the break in the skin may be too small to be detected by the unaided eye. Fermentation is caused by germs, which find access from the air.

3. We know of no means of answering this question, as the amount of alcohol will depend upon the degree of fermentation which has taken place; and the degree of fermentation depends upon numerous conditions, as the amount of sugar in the apple juice, the temperature to which the apple juice is exposed, etc.; but it is safe to say that cider one week old contains enough alcohol so that its use should be discarded by total abstainers.

4. We have not the statistics at hand, but will endeavor to obtain the desired information, and publish the same in an early number of *GOOD HEALTH*.

5. It is probable that no injury to health would result from a moderate use of such cider.

**Unleavened Bread—Bills of Fare.**—H. W., Dakota, asks:—

"1. Will you please give directions for making bread without raising ingredients."

"2. Does the 'Cooking School' publish bills of fare for different meals?"

*Ans.* 1. We have not space in this department for the replies called for. The first will be found in the "Cooking School."

2. No; bills of fare are to be found in the Household Science Department of this journal, both in the present and in back volumes.

**Eczema.**—W. L. G., Pennsylvania, wishes to know what to do for a little boy who was poisoned with ivy several years ago. The eruption has frequently re-appeared, and continues to do so.

*Ans.* The eruption which re-appears is probably eczema, which frequently follows poisoning by ivy, and other poisonous plants. A solution of common soda, a tea-spoonful to the pint of soft water, should be applied, by frequent bathing, or wetting a cloth in the solution and laying upon the part. Zinc ointment also is usually of great service. The ointment can be obtained at any drug store.

**Fistula.**—R. W., Indian Territory, asks: "How should a fistula be treated? Should it be cut out?"

*Ans.* There are several successful methods of treating fistula. The most common and a very satisfactory method is to pass a knife through the fistula into the bowel, and then draw it through in such a manner as to cut its way to the surface, dividing the tissue between the fistula and the bowel. The pus-forming membrane lining the fistula, and the pus cavity which is usually found adjacent to it, should be carefully scraped off. Fistulae are also sometimes treated by means of ligature. This is much more painful, however, and no more successful than the method described. The most modern method is to carefully dissect off the membrane lining the fistula, after dividing it, then close the parts together with silver sutures, and thus secure immediate union. The operation requires much skill, and it is not applicable to all cases.

**Diet for Invalids.**—J. F. A., of Arkansas, inquires for the best work on diet for invalids, especially a person suffering with "lupus cancer."

*Ans.* "Digestion and Dyspepsia," published by the Health Publishing Company, Battle Creek, Michigan. There is no specific diet for lupus, except that the diet should be as wholesome as possible, and should consist chiefly of fruits, grains, and milk.

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## Literary Notices.

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THE issue of the LIBRARY MAGAZINE for the 7th of January, 1888, contains the following interesting articles:—

"The First Chapter of Genesis," by Prof. W. Gray Elmslie; "Captured Brides in Far Cathay," from *Blackwood's Magazine*; "The Time it Takes to Think," by J. McK. Cattell; "Kinglake's Invasion of the Crimea," from the *Pall Mall Gazette*; "Mr. Donnelly and Shakespeare," from *The Athenaeum*; and others.

John B. Alden, Publisher, 393 Pearl St., New York, and 216 Clark St., Chicago. \$1.00 a year; single copies, three cents. Order direct. Not sold by dealers.

**VICK'S FLORAL GUIDE.**—As a catalogue, Vick's is unequalled in artistic appearance. New and beautiful engravings, and three colored plates of flowers, vegetables, and grain, are features of the issue for 1888. It is in itself a treatise on horticulture, and is adapted to the wants of all who are interested in garden or house plants. It describes the rarest flowers and the choicest vegetables. If you want to know anything about the garden, see *Vick's Floral Guide*.

Published by James Vick, Seedsman, Rochester, New York. Price, only ten cents, including a certificate good for ten cents' worth of seeds.

ST. NICHOLAS for January offers the children a most delightful bill of fare. It opens with a beautifully-illustrated poem by J. G. Whittier. "The Amusements of Arab Children," "London Christmas Pantomimes," "A Girl's Military Company," with numerous stories and poems, make up a most interesting number.

Published by the Century Co., Union Square, New York. Subscription price, \$3.00.

THE CENTURY for the first month of 1888 is a most pleasing number, both from a literary and an artistic point of view. Its table of contents is varied and interesting, and in every way fully up to its usual standard of merit.

Published by the Century Co., New York.

THE ATLANTIC MONTHLY for January fully sustains its reputation as a first-class literary journal. Among its attractive features we find, "After One Hundred Days," by Oliver Wendell Holmes; "Unpublished Letters of Franklin to Strahan;" "The Golden Hesperides," by Charles Dudley Warner; "Constantinople," by Theodore Child; "A Liberal Education," by E. J. Lowell; a story by Charles Egbert Raddock; and numerous other articles by writers of note.

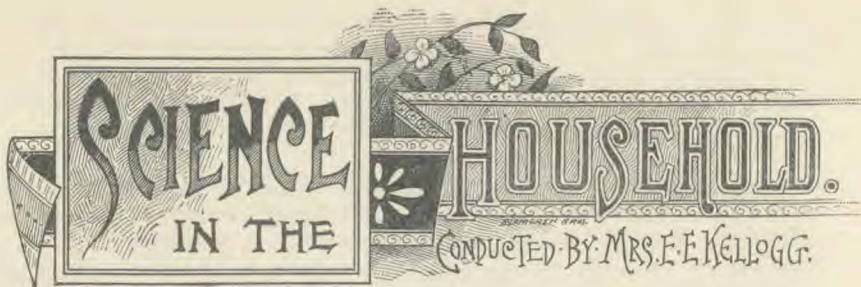
Published by Houghton, Mifflin, & Co., Boston. Subscription price, \$4.00 per annum.

**Demorest's Monthly Magazine** for February has just come to our table, and as usual is filled full of interesting and seasonable matter. The Temperance Department contains a fine portrait and sketch of Mrs. Mary T. Lathrop, President of the Michigan W. C. T. U.

Published at 15, E. 14th St., New York. Subscription price, \$2.00 per year.

THE following are some of the good things to be found in the table of contents of *The Chautauquan* for February:—

"The Skin and Baths," by C. Fred Pollock; "Winter Sports and Pastimes," by Maurice Thompson; "Our Oil Fields," by Charles Albert Ashburner; "Seeds and How They Travel," by Byron D. Halsted, Sc. D.; "Our Public School System," by Prof. W. T. Harris; "Harriet Beecher Stowe at Home," by Frances E. Willard; "Defects in the Education of American Girls," by Julia Ward Howe; "A Ride across the Balkan Mountains," by Bishop John F. Hurst, LL. D.; "Economic Effects of the Saloon," by Hamilton W. Mabie, Senator J. J. Ingalls, Bishop S. M. Merrill, President J. H. Seelye, Dr. William Hayes Ward, Bishop E. R. Hendrix, Lewis Miller, Esq., Joseph Cook, and Prof. Edward J. James.



### SEASONABLE BILLS OF FARE.

We present our readers this month with two bills of fare, which, like those of last month, are largely made up from the same material prepared in different ways. Recipes for the dishes named, not given in this number, will be found in the March and July issues of last year.

#### NUMBER ONE.

Vegetable Soup,	Succotash,
Potato with Celery Sauce,	Scalloped Turnip,
Whole-Wheat Bread,	Plain Buns,
Pearl Barley,	Bananas.
Orange Custard,	

#### NUMBER TWO.

Bean Soup,	Stewed Celery,
Creamed Potato,	Stewed Dried or Canned Corn,
Cerealine Flakes,	Raisin Bread,
Whole-Wheat Rolls,	Apple Tart.

**Scalloped Turnip.**—Prepare and steam whole white turnips until nearly tender. Cut into thin slices, and lay in an earthen pudding-dish. Pour over them a white sauce made by cooking a table-spoonful of flour in a pint of new milk, part cream if preferred, until thickened. Have sufficient sauce to just cover the turnip, season with salt if desired, sprinkle the top lightly with grated bread crumbs, and bake in a quick oven until the top is a rich brown.

**Stewed Celery.**—Cut the tender inner parts of the celery heads into pieces about a finger in length. (The outer and more fibrous stalks may be saved to season soups.) Put in a stew-pan, and add sufficient water to cover the celery. Cover the pan closely, and set it where it will just simmer for an hour, or until the celery is perfectly tender. When cooked, add a pint of rich milk, part cream if you have it. Salt

to taste, and, when boiling, stir in a table-spoonful of flour rubbed smooth in a little milk. Boil up once, and serve.

**Vegetable Soup.**—Prepare and slice a pint of vegetable oysters and a pint and a half of potatoes. Put the oysters to cook first, in sufficient water to cook both the oysters and potatoes. When the oysters are nearly done, add the potatoes, and cook all till tender. Rub all through a colander; or if preferred, remove the pieces of oysters, and rub the potato through the colander together with the water in which the oysters were cooked, as that will contain all the flavor. Return to the fire, and add a pint of steamed stewed tomatoes; when boiling, add a cup of cream and a cup of milk, both previously heated; salt, if desired, and serve at once.

**Apple Tart.**—Pare and slice enough tart apples to half fill a small earthen pudding-dish. Cover with a crust which has been prepared in the following manner: Into a cup of thin cream stir a gill of yeast and two cups of flour; let this become very light, and then add sufficient flour to mix soft. Knead for fifteen or twenty minutes very thoroughly, roll out evenly, and cover the fruit. Put it in a warm place until the crust has become very light, then bake in a quick oven. Cut and dish so that the fruit will be uppermost, and serve with cream sauce.

**Orange Custard.**—Peel from four to six sweet oranges, and halve them, taking out the white part in the center; cut into very thin slices, taking care that no seeds are retained; place in a glass dish in layers, sprinkling each layer lightly with sugar. Over the whole pour a plain, cold, boiled custard, and set in a cold place until ready for use.

**Boiled Custard.**—Heat a pint of milk to the boiling-point, and have ready two eggs very thoroughly beat n. When the milk boils, add it to the egg very slowly, not more than a spoonful at a time, stirring constantly. Add two table-spoonfuls of sugar, and turn the whole into a granite-ware double boiler, or into a pitcher which can be placed in a basin of boil-

ing water. Stir the custard constantly until it begins to thicken; then for a few seconds lift the inner cup out of the water, stirring the custard continuously, then return it; remove it thus two or three times when it gets just to the boiling-point. This will allow the egg to cook thoroughly without causing it to curdle. An egg cooks just below the boiling-point, but if it boils, it curdles. When thick as cream, remove from the fire and cool.

**Potatoes with Celery Sauce.**—Take six large potatoes, pared, and steamed until tender, then mashed fine and rubbed through a colander. Heap the mashed potato loosely in a dish, making little hollows over its surface. Pour over it a celery sauce made by boiling together one pint of sweet milk, part cream if it can be had, one table spoonful of flour, and two stalks of celery chopped fine.

### HOUSEHOLD CONVENIENCES.

#### THE PEERLESS STEAM-COOKER.

IN these days of invention and progress, much thought and ingenuity is expended in making and perfecting labor-saving utensils, which will serve to make housework less of a burden and more of a delight to the women of the household.



The Peerless Steam-Cooker.

One of the most unique of these conveniences is the steam-cooker illustrated by the accompanying cuts, the first of which shows the cooker in use upon the stove; the second illustrates its construction and the various uses to which it can be put.

Steaming is, for many foods, a much more economical and satisfactory method of cooking than any other; especially is this true respecting fruits, grains, and vegetables, the latter of which often have the larger proportion of their best nutritive elements dissolved and thrown away in the water in which they are boiled. In the majority of households it is, however, the method least depended upon, because the ordinary steamer, over a pot of boiling water, requires too much attention, takes up too much stove

room, and creates too much steam in the kitchen, to prove a general favorite. The steam-cooker obviates all these difficulties. It is a *multum in parvo*; and in its different compartments may contain and cook an entire dinner, if need be, over one stove hole or one burner of an oil or gasoline stove.



Steam-Cooker Showing Compartments.

Strong odors and an excess of steam are avoided when using the cooker, which has (as is shown in the first cut at letter A) an escape steam tube, through which odors and steam pass out under the cooker and into the fire. There is no mingling of the flavors of the various foods cooked at the same time, because each of the compartments are entirely separate and complete in themselves. The cooker is provided with a self-regulating safety-valve, a boiling water indicator, and best of all, a steam whistle (indicated by the letter B in the large cut) which signals when the water is nearly out, and which can be heard in almost every part of the house, thus preventing the danger of burning, which so often occurs through forgetfulness. The water can be easily replenished through the tube, without removing the cover.

—Keep large squares of pasteboard in a convenient place, to slip under pots, kettles, stew-dishes, and spiders, whenever you set them down.

## Publisher's Page.

Our next number will contain, in continuation of the sketches of "Famous Women Interested in Hygiene and Sanitary Reform," a sketch and portrait of Mrs. Mary A. Livermore, which are published by special permission of Mrs. Livermore.

THE SANITARY SUPPLY COMPANY have issued a neat illustrated circular, in which will be found described a fine assortment of healthful articles of dress. Circulars will be sent to any address by request.

Bound volumes of GOOD HEALTH for 1887 are now ready. This volume of GOOD HEALTH is undoubtedly the most valuable ever published, and is almost an encyclopedia of hygienic facts. It will be sent post-paid, on receipt of \$1.50.

Our new book, "SUNBEAMS OF HEALTH AND TEMPERANCE," is already delighting the eyes and minds of several thousand readers. It is a work which cannot fail to interest any intelligent reader. It contains volumes of hygienic information compressed into small parcels, and well seasoned with hygienic spice, in the shape of artistic engravings, entertaining stories, bits of wholesome humor, etc. Agents are wanted in every town of the United States, to push the sale of this work, which is not intended as a holiday book, but will sell equally well at any season of the year.

We would call the special attention of our readers to the series of articles appearing in the department devoted to Household Science, giving seasonable bills of fare for each month, with recipes. These bills of fare and recipes for the preparation of food are prepared with very great care, and with reference to the nutritive values of the various articles of food combined. A large share of the recipes are original, and all of them have been thoroughly tried. Mrs. Kellogg, who conducts this department, has for years conducted an experimental kitchen, and has probably given more attention to the subject of hygienic cookery than any other person in this country.

The impression seems to be abroad that hard times are prevailing. The source of this idea may probably be traced to the fact that in two or three States, or portions of States, a drought was somewhat prevalent during the last season, so that certain staple crops failed to come to maturity. Undoubtedly, in some small sections of the country, money at the present time is quite scarce; but this certainly is not true of any large portion of this great country. The United States is a large territory, and it never happens that drought or any other general calamity falls upon all parts of this vast territory at the same time. As a matter of fact, drought in one part of the country usually results in producing increased prosperity in some other locality, though the enhanced value of particular productions may have been cut off in less fortunate sections. The commercial reports show that the country is in a state of prosperity, and there is really no considerable portion of the United States in which there is not sufficient money in circulation to provide for all necessary wants.

But if it is true that times are a little stringent in some places, this is certainly an added reason why greater attention should be given to health. Persons in limited circumstances cannot afford to be sick. If times are hard, and money is scarce, it is certainly a wise economy to save doctor's bills by avoiding sickness, and still more to save the loss of time and interference with productive business, which result from sickness. Hence, even "hard times" should be no barrier to the

introduction of health literature, and we trust our agents will not be discouraged in their efforts. If times are hard, ordinary luxuries may be disposed with; but anything which will conduce to the preservation of health is one of the necessities of life, which will become more necessary when "hard times" prevail than at any other time. We hope to see the circulation of GOOD HEALTH increased within the next six months at a more lively rate than ever before.

We are happy to announce that Mrs. E. G. White has in preparation a volume on health and temperance, which will embody her experience and views upon this subject, and a history of the rise and progress of one of the most important movements in hygienic reform in this country. This work will be of great value, and for a long time has been earnestly wished for by the friends of health and temperance reform. Notwithstanding her numerous other heavy burdens, Mrs. White has kindly consented to give the preparation of this volume immediate attention, and is now engaged in the work. We hope to be able to announce it in press in a short time; and predict for it, when ready, a rapid sale. The work will be published by the GOOD HEALTH PUBLISHING COMPANY.

We are glad to announce to our readers that Mr. James Clement Ambrose, of Evanston, Illinois, whose caustic arraignment of the newspaper press for its shameless endorsement of patent-medicine frauds appears in this number, has promised a serial story for GOOD HEALTH, during the year 1888, entitled, "Mr. and Mrs. Shampain."

Any one who has ever listened to the inimitable Sham Family, as portrayed by Mr. Ambrose, will be prepared for a rich treat in his description of the experience of Mr. and Mrs. Shampain.

This is a very numerous family, and we are glad Mr. Ambrose has made their acquaintance. If there are any members of this family among our readers, we give them fair warning that they had better stop the journal at once; for the perusal of Mr. Ambrose's story will be pretty certain to make them very uncomfortable.

Our old subscribers, many thousands of whose subscriptions expire with the early numbers of the year, are renewing at a rate which ought to delight the heart of the most exacting publisher, and bring fresh courage to the editor of any journal.

We are glad to see that our friends appreciate the efforts of editors and publishers to place this journal in the foremost rank of popular health magazines.

GOOD HEALTH has for years enjoyed the largest circulation of any health journal in this country, and at the present time undoubtedly surpasses the combined circulation of all others. Neither editors nor publishers flatter themselves that this is wholly due to their efforts, as without co-operation of friends, no publisher or editor would succeed in getting his publication before the public. The publishers are glad to acknowledge their obligations to the numerous friends of the journal, who, during the past year, have taken so much pains to place its merits before their friends and others; and having received so many favors in the past, we make bold to urge that our friends will still continue their efforts in this direction, and suggest that each subscriber, in sending in his subscription for 1888, take the trouble to call the attention of some friend to GOOD HEALTH and its mission, and solicit his subscription.

**Erratum.**—In our November number of last year we made a complimentary reference to the excellent portable steel ovens manufactured by Mr. Reid, whose advertisement has appeared in our journal for several months back. The stenographer substituted the word "steam" for "steel." Mr. Reid does not claim to be able to bake with steam heat.



## INVALID FOODS.

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 to those who wish by "good living" to avoid disease. The following are the leading preparations:—

cts. per lb.	cts. per lb.	cts. per lb.
Oatmeal Biscuit..... 12	White Crackers..... 10	Wheatena..... 12
Medium Oatmeal Crackers..... 10	Whole-Wheat Wafers..... 12	Avenola..... 13
Plain Oatmeal Crackers..... 10	Gluten Wafers..... 30	Granola..... 12
No. 1 Graham Crackers..... 10	Rye Wafers..... 12	Gluten Food..... 40
No 2. Graham Crackers..... 10	Fruit Crackers..... 20	Infant's Food..... 40
Plain Graham Crackers [Dyspeptic] 10	Carbon Crackers..... [net] 15	White Gluten Food..... 25

Sample packages containing specimens of each of our foods sent post-paid for 50c. Selected Samples, 25c.

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 CO., Battle Creek, Mich.**



### WOODMAN, SPARE THAT TREE.

In recommending the folding saw machine represented above, we have but one compunction—the too rapid destruction of our already fast disappearing forests. The implement is truly a triumph of mechanical genius, and for rapid and satisfactory work, easy adjustment and ready portability, its equal appears never to have been invented. A man can carry it to the woods under his arm in the

morning, saw down and trim trees, cut up the logs and cut seven or more cords of wood before night. The firm, Folding Sawing Machine Co., 303 to 311 South Canal Street, Chicago, Ill., offer them at reasonable rates, and any lumberman or farmer with a few acres of timber can make one save its first cost in a short time. Send for their circular and form your own opinion on the subject. If you buy one lots of time, muscle and chips will be economized.



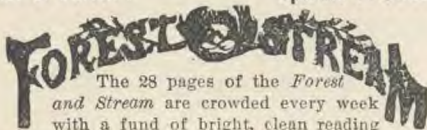
### LADIES

Enamel your Ranges twice a year, tops once a week and you have the finest-polished stove in the world. For sale by all Grocers and Stove Dealers.

FOSTER STEPHENS & CO., General Agents,  
Grand Rapids, Mich.

**Odor of Forest!**

**Sparkle of Stream!**



The 28 pages of the *Forest and Stream* are crowded every week with a fund of bright, clean reading about Angling, Shooting, Travel, Natural History, Canoeing, Yachting and the Kennel. These are the sports of the field that bring men into close communion with Nature, and have about them nothing that is debasing. If you care for the topics discussed by the *Forest and Stream*, send 10 cents for specimen copy. Forest and Stream Publishing Co., 40 Park Row, N. Y.

**Catalogue of Books Free on Application.**

TO  
Young House-Keepers!

FREE TO ALL BRIDES.

NOTICE IS HEREBY GIVEN TO ALL THE readers of this paper and all their friends and acquaintances throughout the United States and Canada, that

## THE HOUSEHOLD

Will be sent one year as

### A Wedding Present

To every newly married couple whose address—and 10 cents to pay postage—is sent to the publisher *within one year from the date of their marriage.*

Persons sending for this present are requested to send a copy of a paper containing a notice of their marriage, or some other evidence that will amount to a reasonable proof that they are entitled to the magazine under the above offer. Address,

**THE HOUSEHOLD,**  
BRATTLEBORO, VT.

### SEEDS GIVEN AWAY!

A package Mixed Flower Seeds (500 kinds), with PARK'S FLORAL GUIDE, all for 2 stamps. Every flower lover delighted. Tell all your friends. G. W. PARK, Fannettsburg, Pa.

Be prompt. This offer appears but once more.



The Eureka Hand Loom is especially designed for weaving *rag carpets, silk curtains, rugs, mats and table covers*. This loom has many advantages over others. We mention a few: It requires no warping-bars, lease rods, lease strings nor the taking of a lease. The warp is put on the warp beam direct from the spools. The loom can be folded up in a few moments (with or without the carpet in it, and without taking it apart) small enough to pass through a common door. Steel reeds, wire harness, quill wheels, spools and other weavers' supplies furnished. Send for descriptive circular. Address

EUREKA LOOM CO., Battle Creek, Mich.

### THE ONLY POLISHER OF THE TEETH IS



Professionally named "The Hygeian Brush." "The best cleanser and polisher of the teeth known."—*N. Y. Tribune*. "Unequaled for benefit, excellence and economy." Bristle "Head," best "Florence" make, fitting above holder, 15c. Set 75c, or sold separately.

### 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."

### ECONOMICAL.

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



7/8 Cords of Beech have been sawed by one man in 9 hours. Hundreds have sawed 3 and 6 cords daily. "Exactly" what every Farmer and Wood Chopper wants. First order from your vicinity secures the Agency. Illustrated Catalogue FREE. Address FOLDING SAWING MACHINE CO., 303 S. Canal Street, Chicago, Ill.

## Knowlton's Bathing Apparatus!



BEST BATH EVER KNOWN.



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THE PEOPLE'S

PAPER.

8 PAGES, 56 COLUMNS

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## THE DICK SEAMLESS FOOT WARMERS.

The popular Fire-side Comfort Shoes. Worn everywhere. Woven by hand and lined with wool. The only shoe combining warmth, pliability, durability, and noiselessness. If your dealers have none, order of us.

Ladies' sizes, \$1.35; Men's, \$1.60. We also make Infant and Children's sizes, in fact any size desired. Mailed to your address, postage paid by us. Descriptive circular and prices sent upon application. Write plainly, and give size of shoe. W. H. DICK, Man'r, Danville, N. Y.



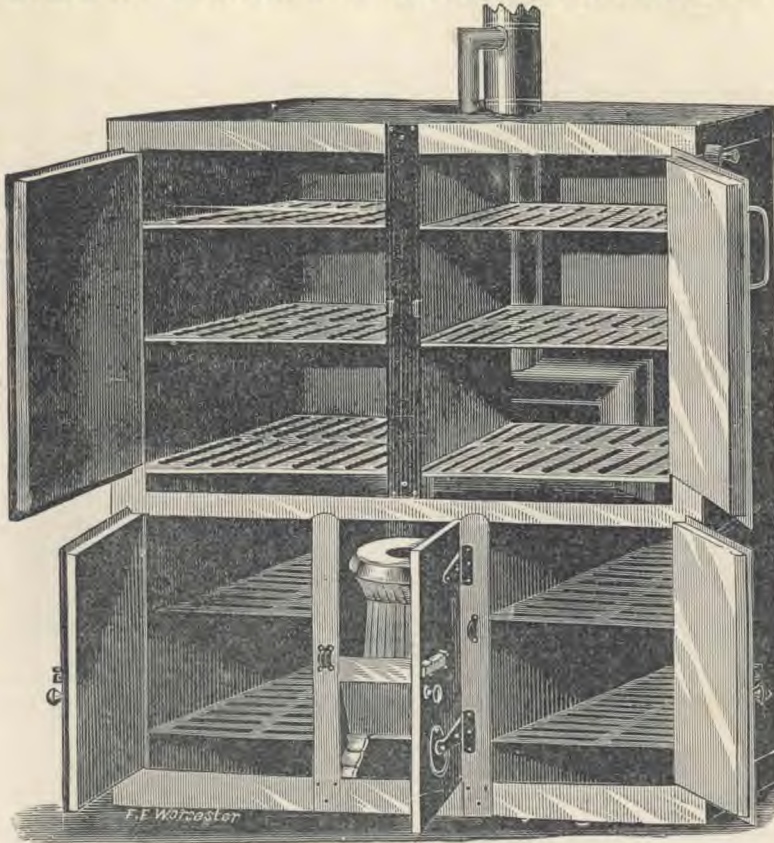
FIVE CENTS' WORTH OF FUEL WILL BAKE A BARREL OF FLOUR INTO BREAD.

—TO ALL INTERESTED IN—

# STEEL PORTABLE OVENS!

Send for 12-page Pamphlet and Circulars.

They cost 70 per cent less than brick. Do not get out of order. Do the work better and at one-fifth the cost of fuel.



Five cents' worth of fuel will bake a barrel of flour into bread, and roast meat in proportion.

This from a Practical Baker.

LeRoy, N. Y., May 20, 1887.

To Whom it May Concern:— I bought a No. 70 Oven from Mr. Reid about a year ago. About six weeks ago I bought another No. 70. I am using them in preference to brick. I like them. I have seen all the kinds. This "takes the cake." J. W. BROWNELL.

Adam Reid, Esq.— School of Domestic Economy, Iowa Agricultural College, Ames, Iowa, April 3, 1885.

(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 Chautauqua, N. Y., last year. Yours respectfully,

EMMA P. EWING.

May 2, 1887.

(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. A. Alvord, Elmira, N. Y.; W. W. Whittaker, Lockport, N. Y.; W. W. Clemmons, Geneva, O.; Mansion House, Buffalo, N. Y.; Montegle 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. Kimball, Alexandria, N. Y.; I. G. Corbett, Austin, Pa.; E. E. Proud, Saegers-town; 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:—

Mr. Adam Reid,—

St. Teresa's Academy, Kansas City, Mo., June 3, 1886.

DEAR SIR,—Yours received in due time. You may send three ovens as soon as you possibly can. Address one to "Mother Clemence, St. Mary's Orphan Asylum, St. Joseph, Mo.," address the second to "Mother Liquori, St. Joseph's Hospital, Seventh and Penn Streets, Kansas City, Mo.," and the third you may send to the Academy, as also the bill for the three, and I will forward amount. Yours respectfully,

SISTER MARY FIDELIA.

This from the Proprietor of the Whitcomb House, Rochester, N. Y.

Mr. Adam Reid,—

Rochester, N. Y., December 7, 1886.

DEAR SIR,—Your oven is such a success, both as a baker and roaster, that you can write out something good and strong—you cannot make it strong enough—and put my name to it. I will honor your draft at any time. [Signed,] RUSSELL COATS, Prop. Whitcomb House.

THREE SIZES, NOS. 50, 60, 70. Baking from 50 to 150 loaves. The readers of this magazine will please communicate with the undersigned. Shipping them in all directions; ride as easy as a packing trunk. OVER 2,600 IN USE.

ADAM REID, Patentee and Manfr, 119 Main St., BUFFALO, N. Y.

# SHARP & SMITH,

MANUFACTURERS & IMPORTERS OF

## Surgical \* Instruments

**APPARATUS**  
For Weak Ankles,  
Bow Legs, Knock Knees  
Spinal Curvature,  
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**ELASTIC STOCKINGS**  
For Enlarged Veins  
& Weak Joints.  
Batteries, Inhalers,  
Etc.

### ARTIFICIAL LIMBS.

**Abdominal Supporters. Artificial Eyes.**

SEND FOR DIRECTIONS FOR MEASUREMENT.

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#### LUCRATIVE EMPLOYMENT

Send for the Economy Roaster and Baker if you want to make money, have a tender roast or good bread. Sample by mail, \$1.00.

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So. Vineland, N. J.

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A 16-Page Educational Journal,

For **TEACHERS, STUDENTS, PARENTS,**  
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THE TRUE EDUCATOR, South Lancaster, Mass.

### THE SYPHON SYRINGE

Is the Best Syringe Made.

It is automatic in action, and CANNOT get out of repair. For circular, address,

SANITARY SUPPLY CO., - Battle Creek, Mich.

Holds Ink enough to write  
50 sheets paper at one  
filling.

Pen, Penholder  
and Inkstand  
all in one.

AGENTS



WANTED

#### FOUNTAIN PEN.

Uses any kind of ink; filled by an automatic action of India Rubber reservoirs; feeds itself by the pressure of writing; carries in the pocket safely; will not leak; finely made and finished in hard rubber; prices reduced to 50 cts., or 3 for One Dollar, including Pen, Holder, Case and Filler. In use and highly praised in the N. Y. Post Office.

Our Stylographic Pen is the marvel of Perfection, never gets out of order. Pen point will never wear out, and require no changing. A pen of similar construction has always retailed for \$2.00; our price, 65 cts., or 2 for \$1.10, gives universal satisfaction. Each pen is guaranteed as represented, or money refunded. 10 dozen in use in one dept in the N. Y. Post Office. Samples post-paid.

SAFE FOUNTAIN PEN CO.,  
37 Frankfort St., N. Y.

### YOU ARE WANTED, TO ACT AS SALESMAN.

Reader, we offer you a good business in your own locality. We also wish to employ a number of active men to travel as appointing agents. Compensation liberal.

Address, A. K. ATTEBERRY,  
Keenville, Ill.



# AMERICAN HOUSEKEEPING

- A LADIES' HOME JOURNAL -

ON TRIAL **4 MONTHS** FOR **ONLY 10c.** SILVER OR STAMPS

It is one of the most charming illustrated ladies' magazines published. Every number is filled with entertaining stories, sketches and all manner of useful knowledge for the household. Its departments are:

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Timely articles, telling how to economize in the kitchen and how to give dinners. New and selected receipts.

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**OUR LETTER BOX** In this department we print letters from our subscribers relating to cooking, children's interests, home adornments—in fact, everything for the well-being and happiness of the home.

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Miss ALCOTT.—"YES, MAMA AND I THINK IT IS THE BEST AND HANDSOMEST LADIES' MAGAZINE PUBLISHED; WE WOULD NOT BE WITHOUT IT FOR THREE TIMES ITS COST."

Do not miss this rare chance, but send in 10 cents for four months' trial subscription at once, or send us a club of five at 10 cents each and we will send the paper to you four months FREE.

Remember, this offer is good for a short time only and is made simply to introduce AMERICAN HOUSEKEEPING into new homes, where it is sure to receive a hearty welcome when once known.  
**\$2.00 FOR \$1.00** To any one who will send us two yearly subscribers to AMERICAN HOUSEKEEPING, with \$1.00, we will send one copy of THE EVERY-DAY COOK BOOK, containing 320 pages, with over 600 receipts for cooking (regular price \$1.00), FREE. Am. Housekeeping, 143 LaSalle St. Chicago, Ill.

## MICHIGAN CENTRAL RAILROAD.

GOING EAST.						GOING WEST.					
Mail.	Day Exp.	N. Y.	Atl'n	Exp.	Nig't	STATIONS	Pa'ic	Ev'g	Day	Ch'P	Mail.
p. m.	p. m.	p. m.	a. m.	a. m.	a. m.	Ar.	Dep.	p. m.	p. m.	a. m.	p. m.
6.00	6.45	10.45	6.00	7.30	6.08	Detroit,	9.15	8.00	9.10	1.30	7.00
4.38	5.30	9.45	4.35	6.08	6.08	Ann Arbor,	10.28	9.12	10.25	2.32	8.16
3.15	4.20	8.49	3.15	4.50	6.08	Jackson,	12.03	10.52	11.35	3.32	9.35
2.00	3.10	7.54	1.58	3.43	6.08	Marshall,	1.04	11.47	12.50	4.22	10.28
1.12	2.27	7.33	1.30	3.20	6.08	Battle Creek,	1.35	12.12	1.12	4.40	11.03
12.17	1.50	6.58	12.33	2.35	6.08	Kalamazoo,	2.35	1.20	1.50	5.15	11.52
10.38	12.15	5.49	11.13	1.55	6.08	Niles,	4.18	3.03	3.22	6.27	1.40
9.18	11.11	4.55	10.18	11.27	6.08	Mich. City,	5.4	4.32	4.35	7.32	2.58
6.50	9.00	3.10	8.15	9.10	6.08	Chicago,	8.05	7.00	6.40	9.3	5.15
a. m.	a. m.	p. m.	p. m.	p. m.	p. m.	Dep.	Ar.	a. m.	a. m.	p. m.	p. m.

Gr. Rap & Kal. Ex. lvs. Kal'm'zoo 6.45 a. m., Bat. Creek 7.31, Marshall 7.57, Jackson 9.15, Ann Arbor 10.30, ar. Detroit 11.50 a. m. Returning, leaves Detroit 4.00 p. m., Ann Arbor 5.30, Jackson 7.10, Marshall 8.20, Battle Creek 8.52, ar. Kalamazoo 9.45.

All trains run by Ninetieth Meridian, or Central Standard Time. Day Express, Grand Rapids and Detroit Express, and Grand Rapids and Kalamazoo Express daily except Sunday. Pacific, Evening, and Chicago Expresses west, and Atlantic, New York, and Night Expresses east, daily.

June 5, 1887.

O. W. RUGGLES, Gen. Pass. Agt., Chicago.

## CHICAGO & GRAND TRUNK R. R.

Time Table, in effect May 15, 1887.

GOING WEST.					GOING EAST.					
Chgo Pass.	Mail.	Day Exp.	Pacific Exp.	R.R. Pass.	STATIONS.	Mail.	Limit Exp.	Atle Exp.	Soo. Pass.	Pitt'n Pass.
.....	am	am	am	pm	Dep.	Arr.	pm	am	am	am
.....	5.55	7.15	8.15	4.10	.....	Port Huron	10.20	1.15	7.35	.....
.....	7.28	8.31	9.34	5.40	.....	Lapeer	8.42	11.57	6.17	.....
.....	8.05	9.10	10.15	6.40	.....	Flint	7.55	11.27	5.49	.....
.....	8.45	9.35	10.18	7.20	.....	Durand	7.05	10.58	5.03	.....
.....	10.03	10.30	11.53	8.20	.....	Lansing	5.20	10.07	4.05	.....
.....	10.37	11.00	12.25	9.03	.....	Charlotte	4.42	9.37	3.25	.....
a. m.	11.30	11.45	1.15	10.03	A	BATTLE CREEK	3.45	8.55	2.35	.....
6.30	am	12.05	1.20	pm	D	Vicksburg	3.40	8.50	2.30	.....
7.18	.....	12.45	2.21	.....	.....	Schoolcraft	2.41	8.11	1.43	.....
7.30	.....	12.55	2.32	.....	.....	Flint	2.31	.....	1.27	.....
8.17	SUN.	1.45	3.19	Acc.	.....	Cassopolis	1.45	7.25	12.43	.....
9.00	Pass.	2.28	4.07	.....	.....	South Bend	1.05	6.50	12.01	.....
10.15	am	3.43	.....	am	.....	Haskell's	11.47	.....	.....	.....
10.30	7.35	4.05	5.02	6.05	.....	Valparaiso	11.35	5.30	10.29	3.40
12.40	10.00	6.25	9.10	8.45	.....	Chicago	9.05	3.25	8.15	1.15
pm	am	pm	am	am	Arr.	Dep.	am	pm	pm	pm

†Stops only on signal. Where no time is given, train does not stop. Trains run by Central Standard Time.

Valparaiso Accommodation, Battle Creek Passenger, Chicago Passenger, Pt. Huron Passenger, and Mail trains, daily except Sunday. Pacific, Limited, Day, and Atlantic Expresses, daily. Sunday Passenger, Sunday only.

GEO. B. REVE, Traffic Manager.

W. J. SPICER, General Manager.

Wonder increases to astonishment that there is any intelligent man, not decrepit or indigent, who does not own and ride a bicycle.—A Writer in the Century Magazine.

## COLUMBIA BICYCLES AND TRICYCLES.



Now good Digestion  
wait on appetite  
And health on both.

CATALOGUE SENT FREE.

## THE POPE MFG. CO.,

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12 Warren St., } Branch Houses } 115 Wabash Ave.,  
New York. } } Chicago.

"I am of the opinion that no exercise for women has been discovered that is to them so really useful."—B. W. Richardson, M. D., F. R. S., on the Tricycle.

## \*DIGESTION AND DYSPEPSIA\*

A work of the greatest importance to all who may be afflicted with poor digestion. 176 pp., in muslin, 75 cts. post-paid. Address, **GOOD HEALTH,** Battle Creek, Mich.



## THE LARGEST SANITARIUM IN THE WORLD!

THIS Institution, one of the buildings of which is shown in the cut, stands without a Rival in the perfection and completeness of its appointments. The following are a few of the methods employed:—

Turkish, Russian, Roman, Thermo-Electric, Electro-Vapor, Electro-Hydric, Electro-Chemical, Hot Air, Vapor, and Every Form of Water-Bath; Electricity in Every Form;

Swedish Movements—Manual and Mechanical—Massage, Pneumatic Treatment, Vacuum Treatment, Sun Baths. All other agents of known curative value employed.

### An Artificial Climate

Secured for those needing special care during the cold months.

**Special Departments for the Treatment of Diseases of the EYE, EAR, NOSE, THROAT, LUNGS, and DISEASES OF WOMEN.**—SPECIAL ADVANTAGES AFFORDED SURGICAL CASES.

**GOOD WATER, PERFECT VENTILATION, STEAM HEATING, PERFECT SEWERAGE.**

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