

MAY, 1890.

GOOD



FAITH

CONDUCTED

BY

J. H. KELLOGG, M.D.

Price 15 Cents

GENERAL ARTICLES	129-135
International Health Studies: 13.—China (<i>Illustrated</i>), by FELIX L. OSWALD, M. D.; Physical Economy, by KATE LINDSAY, M. D.; A Sure Cure; Short Talks About the Body, and How to Care for It, by a Doctor; Physical Culture for Women, by S. I. M.; Appetites of the Godly; Tobacco a Rude Crow-Bar.	
DRESS	136, 137
Who is to Blame? by S. ISADORE MINER; A Distinctive Dress for Business Women, by E. L. SHAW.	
HAPPY FIRESIDE	138-142
Miss Abington's Cure; Trollhetta Falls (<i>Illustrated</i>), by C. A. VIKMAN; Dervishes, by E. L. S.; Early May (<i>Poetry</i>).	
TEMPERANCE NOTES	143
POPULAR SCIENCE	143
TRUE EDUCATION	144, 145
A Wise Training for Boys, by E. L. SHAW; The New Manual-Labor System in Schools, by S. I. M.	
SOCIAL PURITY	146, 147
Aids in Early Training, by S. ISADORE MINER; The Three P's.	
EDITORIAL	148-154
Medical Frauds: V.—A New Humbug—Electrolibration; Dujardin Beaumetz on Vegetarianism; Poisonous Action of Caffeine; Physiological Objections to Flesh-Eating; A New Mind Cure; Inspection of Meat; Alcohol and Digestion; Fish Poisoning; Foot and Mouth Diseases; Japanese Babies; Cheese Poisoning; Dyspeptic Authors; The Vegetarian Cannibal; Candy Tippling; Vegetable Milk; Wholesale Lead Poisoning; Is Alcohol a Food? The Stimulant Habit; A Hint to Smokers; The Effects of Flesh-Eating on Vegetarian Animals.	
DOMESTIC MEDICINE	155
For Freckles; Meat and Nervousness; Shaken Milk; Danger from Adding Soda to Milk; A New Cure for Boils; Care of Mad-Dog Bites; Thumb-Sucking.	
SCIENCE IN THE HOUSEHOLD	156, 157
Helps for the Inexperienced.—5; Burden-Bearing, by L.; The Disposal of Table Refuse; Caramel Coffee; Browned Rice; The Largest Kitchen in England.	
QUESTION BOX	158
LITERARY NOTICES	159
PUBLISHERS' PAGE	160



A MARVEL OF COMPLETENESS
IS THE
HOME • HAND-BOOK.

A Vast Cyclopedia of Domestic Hygiene and Rational Treatment.

By J. H. KELLOGG, M. D.

The Home Hand-Book tells in plain, every-day language, how to preserve health, and if lost, how to regain it. It is by far, the most important medical work for domestic use that has yet appeared, and is rapidly making its way into the homes of the United States. It is written in the light of the most recent scientific investigation, by a physician of large experience and acknowledged ability, and contains the most approved methods for the treatment of more than 600 diseases. It contains nearly 1700 PAGES, over 500 ENGRAVINGS, about 30 FULL-PAGE COLORED PLATES, and an ELEGANT PAPER MANIKIN.

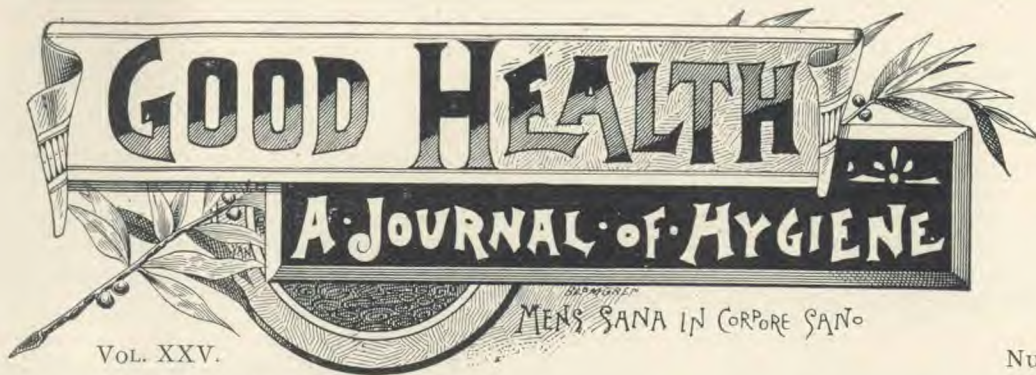
TWENTIETH THOUSAND | RESPONSIBLE CANVASSERS OF EITHER
Just from the Press. | SEX WANTED, to whom a liberal salary will be paid.

Address, Good Health Publishing Company, Battle Creek Mich.



BEGGING DERVISHES.

[SEE HAPPY FIRESIDE.]



VOL. XXV.

NUMBER 5.

BATTLE CREEK MICHIGAN.

MAY, 1890.

INTERNATIONAL HEALTH STUDIES.

BY FELIX L. OSWALD, M. D.

Author of "Physical Education;" "The Bible of Nature," Etc.

13.—China.

If survival is the main problem of existence, the Chinese nation, in its present social and political condition, is unquestionably a triumphant phenomenon. Nowhere else on earth has the task of perpetuating established institutions been more successfully solved. The Chinese chronicles, with their records of one hundred and twenty-two different dynasties, are, of course, mainly fabulous; but there is no doubt that a thousand years before the beginning of our chronological era, many customs, laws, and dogmas of the "Flowery Kingdom" existed much in their present form. The Chinese Empire, in short, represents the results of persistent conservatism.

But persistency of that sort has the disadvantages of its perfections. In the arena of progress, mummies are apt to be distanced by less imperishable bodies; and among the restlessly advancing nations of the nineteenth century, China, with the long-eared stubbornness of its antiquated prejudices, stands like a balking donkey among a troop of mettlesome race-horses.

Like all conservative nations, the Chinese are hampered by an intricate and absurd system of ceremonies. Formalities too meaningless and puerile to be even credible to a Caucasian of common sense, are observed with scrupulous exactitude, and the veneration of ancient usages is carried nowhere else to a more unreasonable length. Everything is done by routine; all functions of public and private life are circumscribed by a code of elaborate by-laws; originality and individualism are suppressed in every pos-

sible way. The traveler Macartney at first admired the efforts at landscape-gardening visible in the neighborhood of every aristocratic residence, from Peking to Canton, till he noticed that the elaborations in question were as much alike as the ornaments of a European army uniform. Trees, bushes, and herbs were everywhere trimmed after the same plan; the very weeds were made to grow in squares or hexagonal plats; the water of the artificial cascades was made to descend so many feet in a prescribed number of terraces, before expanding in a circular lake of a prescribed diameter.

True love of nature is an instinct foreign to the Chinese mind. The working-classes prefer gambling-hells and tingle-tangle operas to public parks; and from an enormous area of the empire the ancient forests have entirely disappeared. The climatic influence of woodlands is a secret that has never yet dawned on the horizon of the conservative Mongol agriculturist, and the penalties of wholesale forest-destruction are paid in the form of inundations, which in the course of the last fifty years have cost at least thirteen million human lives.

The indirect consequence of those floods and of her equally frequent droughts, is the curse of famines, which have forced a large portion of the teeming population to waive all scruples of dietetic fastidiousness, and still the rage of hunger with anything capable of averting actual starvation. Not cats and rats only, not only dogs (which are considered a delicacy in the metropolitan meat market), but diseased cattle

and putrid fish, decayed turnips and rancid salt pork, flung away by the cooks of the foreign trading-ships, are greedily gathered by flocks of human vultures who would not hesitate to dispute the prey of their feathered fellow-scavengers.

Dietetic abominations, however, are by no means confined to the pariahs of the Chinese cities. The holy Inquisition of mediæval Spain professed a horror of blood-shed, and merely roasted its victims; and with a similar refinement of casuistry, the Chinese have conducted their crusade against the vice of



IN THE STOCKS IN CHINA.

drunkenness. Centuries ago the use of *wine* was forbidden by a benevolent emperor who is said to have uprooted countless thousands of grape-vines; and the alcoholic-habit in that special form seems never to have recovered from that blow, though the interdiction of grape-culture has since been revoked. But the dread of wine has not prevented the natives of the Celestial empire from distilling some fourteen different kinds of brandy, and importing whole ship-loads of foreign liquors, besides coffee, tobacco, and opium. The tea-vice has assumed the proportions of a na-

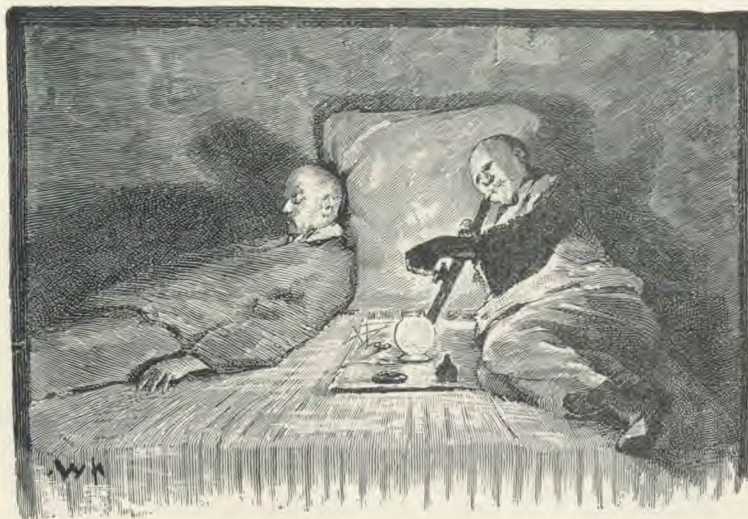
tional epidemic; and in Eastern Asia, there are millions of tea-topers who sip a cup, scalding hot, of their favorite narcotic, about as often as an inveterate tobacco worshiper would light a fresh cigarette. A few months ago, a correspondent of GOOD HEALTH described the loathsome process of tea-gathering and tea-adulteration, in a way that must have cured a good many devotees of the baneful tonic; but a life-long familiarity with those facts does not prevent the native Chinese from devoting every leisure moment to a beverage that has made them the most nerveless, the most petulant, and the most unmanly nation on earth.

Next to tea, the representative pig-tail man loves fat meat and greasy made-dishes. His passion for pork far exceeds that of our Southern darkies, and a most repulsive feature of their national *cuisine* is the association of ham-fat and sugar in the same mess. It takes strong nerves to frequent a native restaurant in the down-town quarters of Canton. "One day," says a French officer who has spent a couple of years in the South-Chinese sea-port towns, "we determined to dine *à la Chinoise* in a Chinese eating-house. Our coolies arranged beforehand that the price was to be two *piastres* a head, a large sum for this country, where provisions are so cheap. As a preparation for dinner, we had to thread our way through a labyrinth of lanes, crowded with dens in which crouched thousands of ragged beggars, poisoning the atmosphere with their exhalations. At the entrance to the open space in front of the eating-house, stood a quantity of heaps of refuse, composed of old vegetable stalks, rotten sausages, and dead cats and dogs, and in every hole and corner a mass of filth as disagreeable to the nose as to the eye. It seemed not quite easy to retain an appetite after running the gauntlet of such a horrible mess. A few tea-drinkers and card-players were seated at the door, and appeared to care very little for the pestilential character of the neighborhood. We tried to be equally courageous, and after admiring two immense lanterns which adorned the entrance, and the sign inscribed in big letters: 'The Three Principle Virtues,' we ventured to hope that honesty would prove one of them, and that the tavern-keeper would give us our money's worth. . . . Tea was served in white metal cups, without spoons, and we were obliged to sip the infusion through a small hole in the lid. When we had got through this ordeal like regular Chinamen, we called for the first course, which consisted of a quantity of wretched little lard cakes, sweetened with syrup, and for *hors d'oeuvre*, a kind of caviare made of the intestines, the roes, and the livers of fish, pickled in

vinegar. Next came some 'land shrimps' cooked in salt-water; these were really nothing but large locusts." Enough! Enough!

Nirvana, the heaven of Buddhism, is a mere negative paradise: deliverance from the troubles of life, and rest, in the sense of absolute inactivity, is in China prized as the highest of all earthly blessings. Rich merchants and wealthy individuals of the so-called educated classes, will sit listless for hours, sipping tea from small cups or languidly handling a light fan, and sneer at the restless activity of foreigners whose fortune would enable them to pass their days in a state of *dolce far niente*. The vaunted industry of the working-classes, is, indeed, merely the fruit of dire necessity; the idea of enterprise (or at least physical exertion), without the spur of immediate want, being something preposterous and eccentric to the mind of the average Chinaman. There are, of course, honorable exceptions; but nine out of ten successful business men value their prosperity chiefly for the sake of the implied privilege of passing the larger part of the day in a state of dreamy indolence.

Opium and Buddhism, "the religion of resignation," exactly suit a nation of that sort, and their love of inactivity is expressed even in their national dress—petticoat-like mantles and clumsy, stiff shoes. Their habit of letting their finger-nails grow to the greatest practicable length, seems to imply the desire of the aristocrats to demonstrate their ability of dispensing with the necessity of manual labor; and the custom of crippling the feet of every well-to-do young lady, might admit of a similar explanation. Lame people have to stay at home, and the voluntary lame thus repudiate the suspicion of being obliged to "hustle for a living," as a Kansas country girl would express it. Poor girls are exempt from the fashionable ordeal, as well as from many other restrictions of their aristocratic sisters; but in the homes of wealth, the process of torture is begun at a very early age of the victim. Girls of six or seven are delivered into the hands of a female specialist, who compresses their feet, from the toes towards the heels, with a mass of oiled bandages. The big toe is bent inward, the other four downward (like the fingers of a clenched fist), further and further down, and at last completely under the sole of the foot. Once at the end of every third or fourth week, the professional tormenter re-



A CHINESE OPIUM-DEN.

peats her visit. The bandages are twisted tighter and ever tighter, and in the course of two years (which to the martyr are equivalent to a two-year's term of cruel imprisonment in the old shackle and foot-lock sense of the word) the feet assume the desired shape—a close resemblance to the hoof of a spavined mule. In that condition, the victim of fashion has to walk, or rather to limp, through life, the only possible method of pedestrian locomotion being an awkward shuffle, or in moments of hurry, a sort of skip, accompanied by a swaying motion of the arms, to preserve the equilibrium.

Veneration of old age is the most amiable character-trait of the native Chinamen, but is almost offset by its converse, the abuse, or neglect, of the young. Children, in China, seem to have few rights which parents or school-teachers are bound to respect. They are cuffed and beaten on the most trivial pretext, and the removal of superfluous babies is still a crime of atrocious frequency. Infanticide, though not directly sanctioned by the laws of the empire, is condoned very much as marital infidelities are condoned in France, and duels in Austria.

There is, indeed, a curious analogy between the moral status of the Flowery Kingdom and that of the countries of Southern Europe. Both Japan and China were attacked by the moral marasmus of orthodox Buddhism; but while Japan has shaken off the incubus by a revival of common sense resembling the explosion of the Protestant revolt, China has remained quiescent in the trance of moral lethargy. Her chief hope of progress depends upon the reforming influence of foreign commerce, and, perhaps, of foreign wars.

(To be continued.)

PHYSICAL ECONOMY.

BY KATE LINDSAY, M. D.

DISEASE and bodily suffering are generally but the consequence of violating, through ignorance or otherwise, the principles governing the economy of physical life; and the most common effects, indigestion and dyspepsia, arise from various abuses of the stomach.

The manner in which food is taken has as much to do with the bringing on of the ordinary forms of dyspepsia as has any other one cause. "Twenty minutes for dinner," is not only the rule at railway stations, but a great many business men, manual laborers and brainworkers, put their meals into their stomachs in about the same limited time, and in about the same manner as the coal-heaver shovels in coal. They seem to think that somewhere down in the internal recesses is the mill that will grind all their grist; all they have to do is to throw it into the hopper, as unceremoniously as they please. So, tired and heated, they rush home, into the house, take whatever they can get the quickest, and rush back again to their place of business.

One so hurried is in anything but a condition to take food, and have it digest properly. When a person is tired, heated, and nervous, his stomach is totally unprepared for the work of digestion, and as a result the food, whether suitable or unsuitable, lies a heavy load in the stomach, and undergoes decomposition instead of digestion. The stomach is sour; gas rises, and poisons are absorbed, causing headaches, dullness of mind and heaviness of body, sleeplessness, and a long train of attendant evils.

This represents the condition of a great many men,—and women, too. The men solace themselves with a cigar; the women, with a cup of tea, thus narcotizing their bodies into a state of insensibility to physical discomforts, and making a bad matter worse. A great many housekeepers err in this particular, and bring themselves years of suffering from some form of dyspepsia. They worry themselves into a state of feverish impatience; they fry their ham and their hominy, and at the same time fry themselves, then go to the table heated, and with overwrought nerves, unable to enjoy the food, which if eaten, they are un-

able to digest. Nature craves attention, but the call is misunderstood; and many a time have I been told by a thin, nervous dyspeptic, that she was "keeping up on tea." Tea never keeps anybody up; it keeps people down. It is a stimulant; so is a whip to a tired horse. There may be greater effort for the time being, but it is always at the expense of draft upon vital capital.

My tired friends, next time you are tempted to take a cigar or a cup of tea when you are nervous and exhausted, do n't do it, but, instead, lie down and take an hour's rest, or go out into the open air and sunshine, and forget your work and your worries. You will be the gainer, live longer, work more in the end, and may be escape years of invalidism.

Many will say, "But I cannot afford to take things so leisurely,—to take the time I ought, to sleep, to exercise, to eat, etc. My business would suffer, and my income be diminished." What is a few minutes gained at the expense of one's self each day, to the shortened years of a man's life? Nature will be revenged; it is no strange thing to read of men who, that they might leave to their children princely fortunes, have earned for themselves untimely graves. Not only have they thus lost what might, perhaps, have been the best years of their lives, but too often the children of such parents squander, or put to uses worse than waste, the riches which they were never taught to use, because their father "had n't time."

Mothers, too, there are in plenty, who at a vast outlay of vital capital, keep everything up, in minutest detail, to their ideal of housewifery, and lavish far more time and thought on the elegancies of the family wardrobe than they could possibly devote to the care and culture of their children. What is wealth, and all the possibilities it entails (as well as all the curses), to health and happiness, without which the best gifts prove but honeyed wormwood? Far better would it be for the present generation, as well as for those to come, if men and women would content themselves with moderation, and recognize those claims to which all of a temporary nature is but secondary.

A SURE CURE.—*Lady Visitor* (at office of eminent physician): "I have called, Doctor, to ask if there is any cure for sleep-walking. I have had the habit for years, and lately it has become worse."

Dr. Highprice: "It can be cured, madam. Take this prescription, to be filled at Colde, Steele & Co.'s?"

Lady Visitor: "Colde, Steele & Co.'s? Why, that is not a drug-store; it is a hardware firm."

Dr. Highprice: "Yes, madam. The prescription calls for a paper of tacks. Dose: Two tablespoonfuls scattered about the floor before retiring."—*New York Weekly*.

SHORT TALKS ABOUT THE BODY, AND HOW TO CARE FOR IT.

BY A DOCTOR.

How to Get a New Liver.

SEDENTARY habits tend to produce torpidity of the liver, for the reason that exercise is needed to keep up its normal circulation. With every breath we take, the diaphragm is straightened down upon the liver with greater or less pressure, according to the force with which the inhalation is made. This action is intended to pump the blood out of the liver, and ventilate it, so to speak. Now if a person sits at a desk or lies on a sofa, or idles around, the liver is never cleared of its stagnant blood. It takes vigorous exercise to get up sufficient force to draw the blood out of the liver freely. A person lying down, or in a passive state, breathes one-tenth as much air as one who is actively employed. The force which the chest can exert is really surprising. For instance, a strong man lying horizontally, with a weight of two hundred pounds upon his chest, may raise the weight by simply expanding his chest. The great force which is inherent in the lungs, is, I am sure, all that saves one half the human race from perishing from the abuses they heap upon their bodies. Circumstances of idleness, sedentary habits, the tying up of the handles of the bellows by tight corsets, etc., lessen lung activity, and make it impossible for the liver to act properly.

These abuses are worse among women than among men. Men who do not smoke or drink, have healthier, brighter, clearer complexions than most women. As a rule, women have very bad livers. This is evidenced by their great use of cosmetics, to conceal their sallow complexions. Another proof is the fact that of persons troubled with gall-stones, only twenty per cent are men. The bile becomes thickened and sluggish from constant abuse of the liver and obstruction of the gall-duct, and so gall-stones are produced.

As illustrative of the curious symptoms which diseases of the liver affect, I may speak of a gentleman who came to my office fifteen years ago. He had a very long face, and a very sallow complexion, and panted for breath so that he could hardly utter two consecutive sentences. I examined him carefully, and told him there was nothing the matter with his lungs, but that if he could get a new liver, he would be likely to live many years. He recovered a good degree of health, but a few months ago, he came again to see me, and at first sight I was apprehensive that this time he really had lung trouble. An examination revealed the fact that the symptoms were still those of a diseased liver. In six weeks he was quite

well, and able to resume business. This fact that a diseased liver has the effect of producing marked symptoms of other diseases, should be understood; for it is capable of simulating the appearance of a very great variety of maladies.

To get a new liver, it is necessary, first, to have plenty of fresh air; not simply must the liver be pumped out, but it must have a good supply of oxygen to enable it to do its work as a rendering establishment. The products of wear and tear of the body in the action of the muscles, nerves, brain, glands, and other organs, must all be worked over, and that portion eliminated which cannot be made of service. The blood goes to the liver freighted with waste products; and in order that the organ may be able to convert these substances into those which may be easily eliminated, or which may be made of use, it must be well supplied with oxygen. Oxygen is the great reducing agent in all the processes of nature. Uric acid eliminated from the kidneys for lack of proper oxygenation, can be changed into urea by the action of oxygen, in a chemical laboratory. Uric acid is a very serious poison in the system. Sometimes it is deposited around the joints in the form of urate of soda, and the person will have gout; sometimes its presence in the system occasions disease of the valves of the heart, of the lungs, and sometimes of the brain. Ofttimes the inflammation occurs in the sheaths which cover the muscles, and then the person will have muscular rheumatism. Again, it affects the sheaths of the nerves, and the person will have sciatica. It is capable of producing some of the most painful and dangerous of maladies. If we do not furnish the liver with oxygen enough, it is not able to convert all the uric acid which comes to it, into urea.

One of the best things, then, for a torpid liver is a large amount of exercise. This is one reason why a professional man or a student who has become bilious, has a nasty taste in his mouth, and is gloomy and depressed, returns from a few weeks of hunting or fishing or tramping in the mountains, an altogether different person. His system is renovated. His skin and liver are cleared from the organic dirt which has been accumulating; he is relieved from a dinginess which was more than skin deep,—which was muscle deep and nerve deep,—and oxygen inhaled by increased muscular activity, has been the purifying agent which wrought the change. Many times a

simple change of occupation will cure a torpid liver. That is one reason why there are so many different climates recommended for persons suffering from torpidity of the liver. One man says no place can equal the Adirondacks; another is sure that Florida is the best place, and a third votes for Dakota. The fact is, if a man will be out-of-doors and exercise freely, any climate will help his liver.

Among the things to avoid, tea, coffee, whisky, and tobacco head the list. A taste for all these things has to be acquired, though some begin their use so young they may not realize this. Many people drink tea and coffee because it is the fashion. It has been already explained how the theine of tea and coffee paralyzes the liver, and it may be added that the tannin they contain has an astringent effect, which is also injurious.

A person with a torpid liver would better abandon sugar altogether. Thousands of people say that they cannot eat buckwheat, when it is not the buckwheat which harms them; it is innocent enough if properly prepared. But it is the molasses and sugar and butter and burnt grease that they suffer from. All manner of sweets have a very pernicious influence upon a torpid liver. I have known many people who could not eat sauces made from acid fruits which required considerable sugar to make them palatable, when they could take the fruits without sweetening, easily enough.

It is best to abandon the use of butter; also fat meats, and everything in the shape of free fats. Fats in a natural state, like those contained in cream, nuts, or corn-meal,—there is from eight to ten per cent of fat in corn-meal,—will do no harm. Too much fat always clogs the liver. Another reason for avoiding the use of butter is that it is almost impossible to procure that which is perfectly sweet. If it is tainted in the least, be sure that it is swarming with the worst kinds of germs, and that as soon as they get into the stomach they will begin to form butyric and lactic acids. Butter absorbs gases and undergoes decomposition very readily, and will not keep under the same conditions any longer than will meat. Steam-refined lard, which has been thoroughly cooked, will keep longer than butter, and perhaps might be said to be more wholesome. If there are trichina, or germs of hog cholera, or the tape-worm, they are all killed, and will not do any great harm, although the thought of them is not very appetizing. But in butter, the germs are all alive and lively. Butter taken in the form of sweet cream before it is churned, requires very little digestive work. It mingles with the contents of the stomach, and is readily absorbed; whereas if we take butter into the stomach, it has to be turned

into an emulsion before it can be used at all. This cannot be done in the stomach, as it interferes with stomach digestion; then why not save the dairy-maid the task of churning the cream into butter, and the digestive organs the extra labor of unchurning it?

If a person eats too much, he is overloading his stomach, and also imposing a grievous burden upon his liver. One who desires to have his torpid liver exchanged for a new one, must live abstemiously, taking the smallest quantity of food which is necessary for nutrition. A man once said to me, "Doctor, I eat enough, eat heartily; but I can't seem to gain in flesh." The reason was his liver was torpid, and unable to make use of a large quantity of food. To eat large quantities of food is stomach work worse than wasted, and the labors of the liver are much increased, not only in disposing of the food itself, but because indigestion creates poisons which the liver must dispose of.

A person with a bad liver must avoid pastry, ice cream, cakes, and condiments. He must also avoid an excessive use of flesh foods, because meat imposes extra work upon the liver. In the first place, we have no right to eat these lower relatives of ours, unless we are starving; in the second place, they are not wholesome food for us; and in the third place, they are liable to give us disease, or create conditions which lead to disease. Now a careful investigation as to diet shows that we are unable to assimilate more than three ounces a day of dried albumen; we can replace only what we lose. If we take this in the form of wheat, it is combined with the carbonaceous and other elements necessary to life, and in just the right proportions. Suppose, instead, we use quite an amount of beefsteak,—say a pound and a half each day. In this, the amount of nitrogenous matter would be equal to about five ounces of dried albumen—two ounces more than can be utilized. This surplus must be converted into urea, and carried out of the body, imposing an extra task upon the liver and the kidneys. It was formerly esteemed that wine-drinking was the cause of the prevalence of gout in England; but it puzzled the doctors to understand why Frenchmen, who drank more wine than Englishmen, seldom had gout. It is now believed by most English medical attendants, that gout is due to the excessive use of flesh food; for it occurs among those who never drink wine or alcohol, while it is never known among the English vegetarians, of whom there are now several thousands, some of whom drink wine, as their pledge is only against taking life. So a person with a torpid liver must carefully limit his supply of nitrogenous foods.

The best diet for one with a torpid liver, will be composed of fruits, grains, and milk, avoiding the use of meat entirely. In these articles, the proper food elements will be furnished, with no excess; the supply of albumen will be just sufficient; but if beef be added, there is, of course a large amount to be disposed of as waste. If the liver and the kidneys are thus continually overworked, it will not be surprising if some of the uric acid is not changed into soluble urea, but in-

stead, is left to accumulate around the joints and set up gout. Fruits, grains, and milk make a perfect diet.

A person with a torpid liver must drink plenty of water. It helps to wash out waste matter from all the tissues of the body. The skin can thus be made to do its work more vigorously, and to serve to some extent vicariously for the liver. Water will be an aid to all the mucous surfaces, and it will dilute the bile, and make it more easily secreted.

PHYSICAL CULTURE FOR WOMEN.

THROUGH the influence of several popular and enthusiastic leaders, the subject of physical culture for women is getting a very encouraging hold upon the public mind. In New York City, the interest is such, of late years, that it is said to have modified the age of marriage among the exclusive "four hundred," from twenty-five to thirty years now being considered the proper age for a lady to arrive at before marrying. She is not expected to leave college before the age of twenty, and then five or ten years more must be spent in foreign travel and physical culture and development. In Boston, also, physical culture is becoming almost a "craze," a large society having been organized in its interests, under the leadership of the professor of physical training in Yale College.

In England, one of the favorite modes of out-door exercise among the aristocracy, is horse-back riding. Nor do they make use of the old-fashioned long, full riding-habits, which were always a mistake so far as protection of the person was concerned, and also a great source of danger to life and limb, in case of accident. The English ladies wear jackets and trousers of heavy cloth, the latter strapped down over the boots, and when riding in public, put above the trou-

sers a short, scant riding-skirt, which, when the wearer is seated in the saddle, does not extend below the body of the horse, and thus does not mar the shapely outlines of the beast, nor is entangled by the breeze around the limbs of the rider. In riding-schools they dispense with the skirt altogether, it being considered safer for the equestrian beginner.

In England, too, as in other foreign countries, society leaders are setting the fashion of riding *a la* Duchess de Berri, as ride the men,—a leg on each side. The position is one of greater safety, and more satisfactory to the horse as well as to the rider, perfect equilibrium thus being secured for both. It shows, too, that women are becoming tired of according all the easier methods and manners to men, and are now disposed to become a law unto themselves. Timid women say that when the custom has become established in this country, as is now being attempted, they, too, are going to indulge in this most delightful mode of locomotion. The ladies of our land are certainly paving the way for its introduction, by taking so kindly to divided skirts and safety bicycles, the latter having almost eclipsed the clumsy tricycles in feminine favor.

S. I. M.

APPETITES OF THE GODLY.—A friend of mine who was giving a large dinner once, called on old T., the caterer, to arrange the dinner and take the trouble off her hands. "Yes, ma'am," said old T., "I'll look out for it all; but fust I want to know who de company is. Is there any clergymen and them kind a-comin'?" "Certainly," said my friend; "but why do you ask such a question?" "Oh," says old T., "if they's clergymen and that sort comin', yo' must get more to eat and drink. Them pious eats tremendous!"—*Blackwood's Magazine.*

TOBACCO A RUDE CROW-BAR.—Did you ever think about the logic of stimulus? Nature supplies her

own. It is astonishing what she will do if you give her a chance. In how short a time will she revive the over-tired brain! A breath under the apple-tree, a siesta on the grass, a whiff of wind, an interval of retirement, and the balance and serenity are restored. A clean creature needs so little, and responds so readily! There is something as miraculous as the Gospels in it. A mind invents its own tonics, by which, without permanent injury, it makes rapid rallies, and enjoys good moods. Conversation is an excitant, and the series of intoxications it creates is healthful. But tobacco, tobacco,—what rude crow-bar is that with which to pry into the delicate tissues of the brain!—*Emerson.*



WHO IS TO BLAME?

BY S. ISADORE MINER.

THE effects of bad dressing are self-evident, but the causes lie farther beneath the surface, and are not so easily recognized. We wonder how many have gone to the root of the matter, and found where rests the blame for the education of a taste that requires the sacrifice of all that is natural in the female figure?

The desire to please is the predominating motive that governs style in dress. Reasoning from these premises, it is plain that woman is largely influenced in matters of dress by man's opinions. It is equally plain, then, that since taste in regard to what is the proper female attire has become perverted, upon man's conversion to the true, the natural standard, depends much of the emancipation we trust the future holds in store for woman.

But how came we by this preference for the anti-natural? It is a statement shamefully true, since it has been asserted openly many times, and has yet to be refuted, that the fashions so innocently followed by even the best women of our land, are not so innocent in their origin. Chiefly they emanate from that class of women who pervert the natural desire of pleasing to serve most unholy ends. The tapering waist, tightly girt in a gown that robs the womanly form of all delicacy, the foot crowded into a disproportionately small shoe, and elevated by the high French heel, the artificial fairness and bloom of complexion, are but mediums of trade devised to attract followers. From such sources came the *decollete* waists of our fashionable ball-rooms, and other toilet accessories deemed indispensable; and by such means have men been brought to admire and demand the distortion of the female figure and the immodesties of the evening dress. True, the men immediately influenced are not the best men, but they are generally from the ranks of wealth and position,—from those to whom it is accorded to “set the fashion,”—and they have so molded popular opinion, that even good pure men, totally ignorant of where these vulgar modes originated, see nothing to object in their wives' and daughters' adopting the habiliments of the *demi monde*.

This evil has not been confined to fashionable centers or classes, however. Through the malevolent medium of the fashion-plates, it has been foisted even upon every backwoods settlement, and women of every rank and station have been quick to ape the leaders of fashion to the letter. It is said that in Paris, where every *ultra* fashionable is supposed to originate, mode designers consult the tastes of unprincipled women, sure that if the fancy of some favorite is delighted, their success is attained. These designs straightway are the rage, and are scattered broadcast in every civilized land. They are always out of all proportion, as far as meeting the requirements of nature is concerned; but stay-makers have sought out many inventions, and it is only a question of time when nature is made to conform to the model presented. Women suppose that the form as represented in these fashion-plates must be the correct thing, and they proceed to make their own as near like it as possible; and it is a fact that some are so ignorant of the first principles of anatomy or the laws which govern their being, that they honestly look upon the form that is guiltless of having been remodeled, as a sort of monstrosity. Many of the fashion-plates represent the size of the waist as one third that of the chest, and hardly more than the circumference of the throat. No wonder so many women have died in the attempt to reduce their own proportions to a *fac simile*!

We are therefore of the opinion that some labor at the root of this evil might not be illy expended. Good men and women might thus be enlightened to adjure countenancing devices so meretricious in origin and result, and to accept as correct taste only that which conforms to nature's standard. Many champions of temperance and social ethics very properly appeal to our young ladies to aid them by discountenancing the young men addicted to evil habits, and very truthfully assert that therein lies a potent remedy for much of the corruption of the times. With equal propriety might we call upon our young men to aid us in this much-needed dress-reform, by evincing a preference

for the purely natural in the female figure and the purely modest in attire; for so long as wasp-waists find admirers among the opposite sex, so long will wasp-waists be affected. And, we are also heartily in sympathy with the petition so nobly prepared and circulated, a few years ago, by one of the champions

of her sex, which, while it invited the attention of pattern designers, and fashion-plate publishers to their false delineations, and appealed for their reform, did a better work by thus gaining the attention of thousands of earnest but unenlightened women, and securing their interest and co-operation.

A DISTINCTIVE DRESS FOR BUSINESS WOMEN.

BY E. L. SHAW.

ELLEN BATTELLE DIETRICK, in a late article, gives a history of men's dress from the earlier ages, showing that any fashion of dress for man, particularly distinctive from that of woman, is of comparatively recent origin. Until a little over 200 years ago, men wore gowns from the cradle to the grave, fashion deciding that they should sometimes reach only to the knee, and sometimes trail in the dust; but whether under the title of tunic or toga, gowns they were, and as such held their own. They were considered the proper thing for manly wear, and even Alexander the Great, "who conquered the Median race, and was then himself conquered by Median garb," failed in his early efforts to introduce the "captive trousers." The arguments of Tertullian to the Romans, in favor of the gown, sound queerly in our modern ears: "Nowhere is there a compulsory waste of time in dressing yourself in it, seeing that its whole art consists in loosely covering. That can be affected by a single circumjuction; thus it wholly covers every part of the man at once. It has no surrounding tie; it has no anxiety as to the fidelity with which its folds keep their place; easily it manages, easily it adjusts itself."

Even in our day the long gown is worn boldly by men in churches, courts, and colleges, without a thought that it is the distinguishing dress of woman, and its appropriation by the opposite sex an infringement upon her rights. And, not only was the sole difference between man's and woman's garb, for thousands of years, some trifling matter of "a few inches in length or width, or cut of sleeve," but the men of Athens wore their hair so long that it was sometimes held up by golden pins; and even in Cromwell's time English gentlemen deeply resented the innovation of cropped hair, brought in by the Round-heads.

Since history shows that men have, all through the centuries, been both gowned and long-haired whenever they chose, without a protest from anybody, and only drifted into their present style of dress as a pure matter of convenience, there seems to be little consistency in condemning the modern business women to trailing skirts, or to the uncomfortable absurdities of long and abundant hair, when the practical needs

of her daily life set in the same direction as do man's, and clamor as loudly as did his only a little way back, to be relieved of every superfluity and inconvenience.

Long gowns will, undeniably, be the dress of the women of elegant leisure, to all time; but it is not with that favored class that we have chiefly to do. Every honest heart must be in touch with the thousands of women bread-winners all over the land, whose necessities oblige them to be on the street, rain or shine, whose comfort, health, and, therefore as a natural sequence, business success turns upon their wearing a garb affording fullest protection from the weather, and which, at the same time, shall leave their movements free and unimpeded. They must be out-of-doors though the wind blows a perfect gale,—give them a street-dress that cannot twist into fetters around their limbs; they must go on their way though the rain pours in torrents,—give them a style of dress which will be unable to flap miserably wet about its wearer's ankles, soaking boots and stockings through and through; they, like their snugly dressed brothers, are due at the office or workshop at a certain hour, though the streets may be well-nigh impassible,—give them a skirt short enough that it cannot collect the mud and filth of the curbstone, in its onward progress.

No matter in what direction our better judgment may point, we are all more or less fast in the bonds of fashion. But our eyes turn toward the future, from out which an emancipator must shortly come. In the nature of things, that emancipator must be a woman, and one, very likely, who will not realize her mission at all, but will accomplish the work whereunto she is set, notwithstanding. She must be young, rich, beautiful, powerful, and while she may not care a fig for her working sisters, nor even once think of them in the doing, yet a whim, or prospective notoriety, will furnish inducement for her appearance in public in a radically reformed costume, whose most desirable points will be at once greedily seized upon and appropriated by business women. Once the imperial stamp of "the fashion" is set upon the coming business dress, it will speedily commend itself to popular favor.

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.

MISS ABINGTON'S CURE.

"I THINK you said the Doctor was coming this morning, Eleanor, didn't you?" Miss Martine said, incidentally.

She was busily arranging in a cut-glass bowl a mass of perfect roses, heavy with dewy fragrance, whose heads would droop over on the pliant, pensile stems.

"It is Dr. Langdon's day," the fair invalid replied, discontentedly.

"You don't like him as well as you do Dr. Solis?"

"Oh, I have n't any objection to him personally. But he is young and inexperienced, and of course there is no one who knows how to treat nervous diseases like Dr. Solis."

"He is Dr. Solis's assistant, is n't he?" Miss Martine inquired.

"Yes. The Doctor thinks he is a wonderful young man, and has left all his practice in his charge while he goes to Europe to attend a medical convention. I don't see how he dared do it."

"Oh, I suppose he knew what he was about," said her friend, bustling about the room. "Where shall I put this bowl, Eleanor, dear? On your Davenport?"

"No, please! Not there! I can't stand their perfume so near me. Really," she added plaintively, "I feel half the time as if I were smothered with flowers."

"That is a poetic death, at all events," said Helen, laughingly. "I should think it would suit you. There, there, dear! Don't work yourself into a nervous fit. If you don't like the flowers, pitch them out of the window. I don't care. Shall I bring your egg and sherry now?"

Eleanor assented. The times when she took things were to her episodes of the day. While Helen went after the stimulant, she lay back in her easy chair, with a pretty, fretful face turned toward the window-pane, which was splashed with rain drops.

"I never saw such wretched weather!" she complained. "They tell me I ought not to mind when it rains, as I hardly ever go out; but I do mind. I like

the sunlight shining in my room. Wet weather gives me the blues."

But, as a matter of fact, the blues were what she had whether it rained or shone. You could see that in the peevish expression of her mouth, which drooped unnaturally at the corners. It was a pity, too, for Eleanor Abington had been a remarkably pretty girl. She was that even now, though they said she was fast losing her beauty. As she lay there, pale and interesting, with her blonde hair drifting down over her blue cashmere wrapper and mingling with frills of soft white lace, she reminded one of a Bisque figure, put there to look pretty; and so far as that mission was concerned, she fulfilled it.

Dr. Langdon thought so when he came in, and yet that did not soften his heart towards his fair patient, with whom the fashionable disease, "nervous prostration," had become a mania.

"How are you, Miss Abington?" he said in his breezy way. "I am glad to see you so much better."

"Better, Doctor!" she said resentfully; "Why I spent a wretched night. I hardly closed my eyes."

"What did you have for supper?" asked he, looking at her with his keen eyes.

"Nothing, actually, but a muffin and a cup of coffee."

"Humph! Warm dough and nerve poison. I said you were not to drink coffee. If you want a beverage, try hot milk. There is nothing better. No wonder you can't sleep!"

"You are very disagreeable!" flashed out Miss Abington. "Dr. Solis never talked to me in that way."

"In my opinion, it would have been better if he had."

"Then you think I'm putting on my illness?"

"I think that the greater part of it is imaginary," said the young doctor deliberately. "Come now, Miss Abington, don't get angry. I am plain-spoken,

but I prefer to offend you by speaking the truth than to preserve your good-will by following a purely politic course. What you want is to forget about yourself, and you can't do that unless you find some occupation. You must get out of this room! Fah! It is perfectly sickening in here with flowers and sachet-powder and one thing and another. If you don't look out, you'll nurse yourself sick, and then your strength will have been so entirely evaporated that you can't get well again."

"I wish you would go away!" Eleanor exclaimed resentfully, bursting into tears.

"Well, I'm going soon. But I'll tell you what. If to-morrow is a nice day, I'll take you out to ride."

"I won't go!"

"Oh yes, you will! I have charge of a children's hospital out in the suburbs. I will take you out there with me."

"I would n't be paid to go near it!" Eleanor said energetically.

"I would not take you where there was any danger," Dr. Langdon went on quietly. "I think you would like to go there. It is very sweet and clean, and there are a great many ladies who visit the children. I have one little patient, a French girl, who has spine disease, contracted from a fall in the circus. She is an orphan, and they had her riding bareback before she was six years old."

"What a shame!" said Eleanor, forgetting her tears. "Will she never get well?"

"I am afraid not, though there might be a chance for her if she could afford to have special treatment. But she can't get that in a charity hospital. What she needs now is an individual nurse."

"Can't one be employed?" Eleanor inquired.

"Who is to pay for one? Besides, what she wants is the personal care of a gentle and refined woman, who will wait upon her from sympathy and affection, not for a consideration. There is a great difference."

"Yes, I know," Eleanor said quickly. "I never could bear to have a hired nurse near me."

"Well," said Dr. Langdon, rising, "I must be off now. But if it is fair to-morrow, I will call for you."

The demurrer that, from force of habit, rose to Eleanor's lips, died away.

"He is a perfect bear," she confided to her friend Helen, who was secretly pleased with the Doctor's course; "but I shall go with him — yes, I shall go if I die for it, and then he will see how much I was putting on!"

The next morning proved to be fair and lovely, so Dr. Langdon brought his landau in place of his phaeton. He was really surprised when he found Eleanor

dressed to go out, and his handsome eyes beamed with pleasure, when he saw in her hand a magnificent bouquet of roses.

"Yes; I am going," she said vindictively. "It is the first time I've been out for weeks, and if I die, you will be accountable."

"They may hang me for your murder," said the Doctor, laughing, as he helped her into the carriage.

Eleanor had never been inside of a hospital, and she had pictured them as odious, repulsive places, unclean and unsightly. Perhaps there are some which are so, but this one was Dr. Langdon's charge, and he saw to it that it was as fresh and inviting as such a place can be made. He taxed all his rich patients for contributions, and as a consequence, the clean white walls were beautified with pretty pictures, the windows were filled with birds and growing plants, the beautifully polished floor was patched with bright rugs, the counterpanes and table-scarfs were white as snow, and pretty wicker chairs were scattered about all along the ward.

"I had n't any idea it was like this," said Eleanor, as she laid her bouquet shyly down on the table.

"You are just in time," said the Doctor, taking up the roses. "You meant these for the children, I suppose?"

As the Doctor started down the ward, a number of little heads, light and dark, straight and curly, bobbed up, and he was saluted with a chorus of "How d'ye do, Doctor," uttered in voices that rang all the changes from a feeble, half-audible whisper to the sprightly tones of convalescence. From some beds there came no sound; only pale, pinched faces were turned on the pillows, and thin lips smiled wanly, or glazed and feverish eyes gave forth no glance of recognition.

"I will leave you with Adèle while I go my rounds," said the Doctor, as he passed along the wards shaking one little hand after another, saying cheerfully, "Why, how are you Tommy?" "Hello, Sam! you're getting on famously," or "Dick, my little man, aren't you feeling so well to-day?"

"This is Adèle," said the Doctor, stopping beside a little cot; but the nurse's silent gestures warned him the child was asleep.

Eleanor took the seat which the nurse resigned to her, and the Doctor left her fanning the little girl whose pale, lovely face and golden hair excited her wonder. Adèle lying there looked like an angel who had been fretted and worried by a forced sojourn on earth. She was a beautiful child, and when she opened her big blue eyes to look at Eleanor, Eleanor's heart was taken by storm.

"Where is the nurse?" the child asked in a voice

that rang sweetly on the foreign accent. "Are you the new one?"

"No," said Eleanor gently. "The nurse is going around with the Doctor. I came with him to-day."

"You have never been here before?"

"No, never before."

"I have been here a long time."

"Have you? Poor child!"

"They are very good to me;" Adèle said hastily, "especially the Doctor. I don't want to go away, but I'd like to get well, and grow up and be a nurse like her;" and she pointed to a quiet, sweet-faced woman who was tenderly ministering to the wants of a poor crippled boy.

"May be you will, some day," said Eleanor, smoothing the silky hair softly.

"That is what the Doctor says," she answered; "but I do n't think so."

The "I do n't think so" was uttered with such an air of conviction that Eleanor searched the pale face, and found in it that strange foreknowledge of death that sometimes comes to the young.

"Why do n't you come often?" Adèle said, her eyes wandering over Eleanor's fair face and tasteful apparel. "I like to look at you. Your dress is very pretty. I like pretty clothes. I used to have pretty clothes, too,—pink and blue silk and spangles all over. I get tired looking at the nurses' dresses. They are all gray, and I hate gray. It makes me feel so sorry."

"I will come often," said Eleanor. "I would have come before, but you see I did not know anything about the hospital, and I had never heard of you."

"Well, you'll soon get to know us. There's my 'arrivals' hanging on the wall. Will you get it, please?"

Eleanor reached for a paper scroll that hung by a cord on a hook at the head of the bed. Adèle bade her read it, and turning over the pages she saw the names of the little sufferers who had been brought into the ward since Adèle came, set down in a queer, cramped childish hand, while below many was written something in clear, bold script.

"The Doctor writes down what's the matter with them, when I can't remember," Adèle explained. "I like to look them over. It kind of makes me forget about my back when I think about them. You see, my back do n't hurt *all* the time, and some of them have got hurts that never stop hurting, not even at

night. That's a good deal worse than a back, is n't it?"

"I suppose it is," said Eleanor, "but most of us are so taken up with our own ailments that our sympathies are quite deadened."

"I did n't quite understand that," said Adèle timidly. "What do you mean?"

"I mean that you are an angel," said Eleanor quickly, and two tears crept from under her eyelids; but she brushed them away, for the Doctor was coming.

"Good-bye, Adèle!" she said huskily, and she stooped to kiss the child.

"Are you going away?" asked Adèle, regretfully, clinging to Eleanor's hand.

"Yes; but I'll come again," she promised; and she did.

When Dr. Langdon lifted her out of the carriage at her own door, he said with a grave kind of humor: "You do n't feel any the worse for your ride?"

"In one way—yes," Eleanor confessed. "I feel that I am very wicked and selfish. But, Doctor—" "Well?"

"I am going to take your prescription. I am going to the hospital to nurse Adèle."

"Miss Abington," said the Doctor, seizing her hand and shaking it heartily. "It will be the making of you both. I always thought you were made of the right stuff, and now—God bless you."

The honest young Doctor did not stop to talk it over. He jumped into his carriage, and drove away. But the following week, Eleanor was installed in the hospital.

After that visitors used to wonder who that beautiful lady was who sat in the cripples' ward, dressed so exquisitely in gowns that were always fresh and dainty, soft, pliable silks, and cashmeres of delicate pink, blue, or creamy white. The Doctor began by ridiculing these elaborate gowns, but when he saw how the children's eyes followed Eleanor with pleasure and admiration, he no longer found her costumes extreme and out of place.

She nursed Adèle faithfully, and, more than that, her money procured the child that "special treatment" which was to have cured her,—but failed, alas! Two months later, Adèle died.

"She worked my cure," Eleanor said, when her friends asked why a special bed in the hospital was so richly endowed.—*Godey's Lady's Book*.

Too much of joy is sorrowful,
So cares must needs abound;

The vine that bears too many flowers,
Will trail upon the ground.

TROLLHETTA FALLS.

BY C. A. VIKMAN.

THIS gem of Swedish scenery has always been much admired by northern tourists, but its popularity has been greatly increased since it has become a prominent point on the wonderful water-way which the Gotha Canal has opened up through the southern part of Sweden, from one lake to another, and which unites Guttenburg on the west with Stockholm on the east. From Guttenburg, we steam up the Gotha River, which gives but little resistance as it flows through verdant meadows and between flowery banks,

The falls are surrounded by the most wild, yet picturesque scenery; and dull indeed must be the perceptibilities of him who can view, unmoved, such exhibitions of the power and omnipotence of the Father of All, who has created for us an earth so full of wonderful and enjoyable sights.

A noted traveler, in describing Trollhetta, says: "It is not a fall, but a torrent, or rather a mighty river, chafing in a broad, bright ridge of foam for more than three-fourths of a mile, with deafening noise as



A PORTION OF THE TOPPÖ FALL OF TROLLHETTA.

to seek a final resting-place in the broad bosom of the ocean. Thus leaving behind us the spires and smoke of the old city, and the long line of sea-coast hills, now blue in the distance, we glide on over the placid surface of the river, until we hear the thundering roar of the fall, and see the hills and mountains rising abruptly from the plain.

And now we come in sight of one of the most beautiful and fascinating cascades in the Old World, although surpassed in volume by some others. Here the water collected from the extensive mountain districts surrounding Lake Vener, comes dashing and rushing down into the valley, never ceasing to lift towards the clear blue heavens its sparkling columns of mist and spray.

down the side of a mountain, now gushing in one body over a perpendicular edge, then breaking for a short space through fragments of rock, till it reaches another brink; and so on from fall to fall, till it sinks into the valley, where it is in one moment as smooth as if it had never been ruffled."

This description can scarcely give an idea of the awe which fills one as he feels the very rocks shaking beneath him, nor of the wonder and admiration with which he beholds the enormous masses of water pouring over the ledge above him, to be dashed into white foam and mist at his feet.

Not far below the falls we leave the steamer, and while it makes its way around the falls by a tedious passage through the locks, we have an excellent op-

portunity of viewing Trollhetta, now from the rocks, where the cataract roars menacingly above us, and now from the brink of a towering crag or the top of a wooded terrace. After gazing for some time at the three Helvete cascades, which follow each other with terrific speed, we take a small path through the woods and over the rocks, past the wild rapids of Stampeström, to the foot of the Toppö fall. Here the river takes a plunge of between forty and fifty feet, on each side of an island, which stands as if poised on the verge of the precipice. At this spot a grotto forms an interesting feature, and inside we find the walls engraved with the names of some of the most illustrious sovereigns of Sweden; owing to this fact, it is called the "Kings' Grotto." Having climbed the height, we cross a little iron bridge, leading to the islet we had just

seen above us. Here we have an excellent view. On one side we see the steamers winding through the Gotha canal, and hear the busy hum of the manufactories driven by the ample water-power; on the other hand rise the wood-covered heights, far above us, while the river roars and hisses over its rocky bed, and on either side of us leaps into the boiling, seething caldron below.

A little further up the stream is the Gullö fall, which also embraces a small island; but by this time the steamer has made its trip through the locks, and again enters the river. So we must hasten from this scene of grandeur, to resume our journey, reluctant, however, at not being able to spend more time in admiring this exquisite piece of Scandinavian scenery.

DERVISHES.

FROM the earliest history of Islam, dervishes have represented the spiritual and mystical side of its religion. With few exceptions, these fanatics live lives of poverty and abstinence, in the midst of filth and squalor, and under vows of strict celibacy. The word itself—*dervish*—is a Persian word, signifying "the sill of the door," having reference to those who beg from door to door.

The regular dervishes live in convents, endowed by the government with lands and funds. Among these the Mevlevies are the most wealthy and powerful. These wear a distinctive dress,—a tall cap of gray felt, with jacket and skirt of the same color. This is the most numerous and respectable order, having constant accessions to its ranks from the wealthy and educated classes. A disciple undergoes a long and tedious novitiate before being pronounced worthy to girdle his gaunt waist with the *tayband*, or woolen belt wherein rests the "stone of contentment," or hang from his worn and mutilated neck the sacred rosary containing the *ismi jelah*, or the "ninety-nine beautiful names of God." Some are permitted to continue their business, or even to marry and move about, while others are condemned to total seclusion. But even the more fortunate abate in very slight degree,

the rigors and austerities of their self-devoted life. With all alike the end and aim is, by long continued fasts, vigils, self-torture, and the practice of mystic rites, to attain to the "final ecstasy," where the "attraction of God" gives them power over the visible and the invisible.

There are immense numbers of nomadic dervishes throughout Turkey, Persia, Egypt, Hindostan, and Central Asia, who belong to no order, but are simply beggars, professional jugglers, snake charmers, etc. Some of these, particularly in India and Central Asia, are not even Mohammedans, but are followers of Buddha. They make the most impudent beggars, and the most successful, as, being accounted holy, the people are afraid to deny them, or offer them violence. Their supposed holy character often cloaks the vilest crimes.

Their religious rites, the howling and the swaying of some orders, the whirling of others, and their reckless self-mutilation, are infinitely grotesque and horrible. They are supposed to heal all manner of diseases, and after one of their hideous exhibitions, the sick are brought and laid on the ground before them, and these dreadful beings actually *walk upon them*,—men, women and even little children,—to force out the evil spirit which caused the sickness! E. L. S.

EARLY MAY.

In the aisles of the orchard fair blossoms are drifting,
The white petals drop one by one,
And the tulip's pale stalk from the garden is lifting
A goblet of gems to the sun!

Come ramble awhile through this exquisite weather
Of days that are fleet to pass,

When the stem of the willow shoots out a green feather,
And buttercups burn in the grass.

When, pushing the soil from her bonny pink shoulders,
The clover glides forth to the world,
And the fresh mosses gleam on the gray, rugged boulders,
With delicate May-dew impearled! — *Edgar Fawcett*.

TEMPERANCE NOTES.

THERE are now twenty-one miles of saloons in Chicago,—one to every thirty-four voters.

IN South Dakota, the W. C. T. U. are laboring to influence legislation to the extent of securing scientific temperance instruction for the schools of that State.

ACCORDING to Mr. Michael Davitt, one half the yearly Irish drink bill would set every woolen mill in Ireland running, thus giving employment to all their young people, at home.

LADY HENRY SOMERSET, of England, proves a notable exception to those capitalists who never use the power in their hands to strike a blow at any of the existing wrongs of the time. Much of her property is let on leases, including quite a number of public houses, and the leases being about to expire, she has announced that she will not let them again to be used as public houses. The tenants will be obliged to change their business.

So peaceful an atmosphere does prohibition create, that it is said a marshal, a deputy marshal, and two policemen are all the police force needed to do duty in the city of Hutchinson, Kans., which contains a population of 18,000 inhabitants.

DRINKING MEN NOT WANTED ON RAILROADS.—President Corbin, of the Reading Railroad, has issued the following order: "All superintendents will be held strictly responsible for the enforcement of the rule relating to the use of intoxicating liquors by employees. Men who violate it must be promptly discharged, and proof that a man goes inside a drinking place while on duty, will be ample evidence to warrant his immediate dismissal. Men known to drink to excess or frequent drinking places while off duty, must be discharged. When employing new men, strict inquiry should be made as to their habits, and preference always given to those who do not use intoxicating liquors. Heads of departments must keep informed as to the habits of the men under them, and make sure that these rules are strictly observed."

POPULAR SCIENCE.

IN Burmah and Siam, in the place of slates, there is used a peculiar kind of black paper, made from the bark of certain trees, the writing being erased by means of betel leaves.

A NEW kind of paint is made from boiled potatoes. After mashing and sifting, the potatoes are diluted with water, and a certain quantity of Spanish white, or other ocher or mineral, is added, to form the desired color.

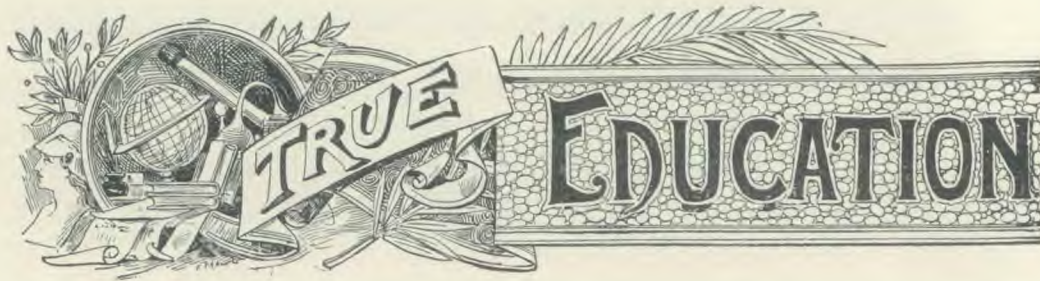
AN immense hotel, complete in all its parts, has lately been constructed entirely of paper, in Hamburg, Germany. It is claimed that paper, as building material, possesses great advantages over all others, as it is capable of being made absolutely fire-proof, and also impervious to the action of water.

LIEUTENANT JOHN P. FINLEY, U. S. Signal Service, states that electric storms are sometimes witnessed during the ascent of Pike's Peak, where "each snowflake, charged with electricity, discharges a spark as it touches a mule's back in its fall. Electric sparks also stream from the finger-tips of upraised hands."

THE Chinese manufacture a kind of paper of particular lightness and delicacy, from spider's webs.

THE British Museum has received information that a tomb, believed by archæologists to be that of Cleopatra, has just been found on the site of a recent excavation in Egypt. The sarcophagus was covered with exquisite carving, and was found in a chamber ten feet long, by two and one half feet wide, and of corresponding height, and at a depth of twenty-five feet.

AN ingenious contrivance for obtaining a light without matches, is in use by the watchmen of Paris, in all magazines where explosive or inflammable materials are stored. They put a piece of phosphorus the size of a pea, into an oblong vial of clear glass, and pour some pure olive-oil, heated to the boiling point, upon it, leaving the bottle about one third full; it is then corked tightly. To obtain the light, they remove the cork, let the air enter, and then recork. The entire empty space in the bottle then becomes luminous, giving a strong, clear light. To increase the light, if it grows dim, one has but to uncork the bottle for a moment, and admit a fresh supply of air.



A WISE TRAINING FOR BOYS.

BY E. L. SHAW.

WISELY as parents often plan in regard to the education of their boys, there is yet a department of knowledge most important in its effects upon a boy's life and character, whose advantages they ignore, and from whose varied benefits they usually shut him out. If it is the outgrowth of our silly notions concerning "spheres" in the past which has fixed such a great gulf between the boy and housework, then the sooner we get rid of these notions the better it will be for the coming man, the coming woman, and the home which they will sometime build together. Perhaps this fact alone — that they will build the home together — is the strongest reason that need be adduced why the boy, equally with the girl, should be trained in all the work that goes toward the making of that home habitable and comfortable.

Boys, if as early trained to domestic work, take to it quite as kindly, and are quite as capable as are girls, having full as much pride in doing it in the best manner. "My boy is such a comfort to me," is the verdict of every mother who has been wise enough to take her young son into partnership, and so slide off a portion of her burdens upon his sturdy young shoulders. And, certainly, it goes without saying, that those wives whose husbands, in all the exigencies of sickness, moving, or house-cleaning, could not for their lives wash a dish, clear up a room, or even "spread up" a bed, will be a unit in the desire that husbands of the future be educated out of their helplessness and one-sidedness.

At present we are at the mercy of the servant girl. In the interval before the Bellamy theory becomes a rule of daily practice, when the message per telephone to the Housekeepers' Agency, evokes a noiseless, dispatchful being to enter our kitchens and "do up" our housework, just as a like message to the hardware firm now brings up somebody to clean and set up our stoves, or one to the plumber, a man to see to our drain-pipes, let us train up the children, boys and all, to be able to do Bridget's work, if for no other

reason than that we may, if we wish, dispense with Bridget's presence in the household. Even though she paid them Bridget's wages, the change from a stupid, careless servant to her own, merry, interested boys and girls, would seem a grateful one to almost any mother; while the young things themselves, growing in character as they developed ability to do things, would revel in the sense of individual responsibility, and its accompanying power to earn money.

Beyond any other possible advantage is the incalculable good accruing to boys from the gentle and humanizing influences within which they are won, by household occupations, to spend many an hour which otherwise might be given up to bad company, or to the general mischief always ready to drop into idle hands. "Mother's boy," if you notice, is, without exception, gentle, obedient, well-disciplined, and an important aid in the governing of the other children. A good many "mother's boys" have come under the writer's observation, from time to time, and they were invariably fine, manly young fellows, quite "the pick of the family" in the estimation of their friends and neighbors. "Tied to mother's apron string" seems somehow a most natural and favorable condition for the development of noble qualities in in both boys and girls.

Two successful men we have now in mind, whose pride it is to-day that they were brought up within this charmed circle. We have known them since early youth. There were six sons in the family, but only one daughter—the youngest of all. The mother wisely trained two of the older boys to housework. When the elder of the two was about twelve years old, the father beguiled him out to work upon the farm, but the other staid on in the house with his mother and sister. He was lithe and strong, and so came to perform easily a larger share of the housework than either of them could possibly do. In this way, with everything carefully systematized, no one was overtaxed, but each found a certain amount of time for

relaxation or recreation. The mother read the new books and magazines, Robert and Annie took music and various other studies. Even after he went to town to school, Robert worked at home nights and mornings, riding on horseback to school in the morning and back at night. Little of all this would have been possible, had the work not been arranged with careful regard to order and system. Besides, there were few idle hours in the Winter household. Indeed, it was a fine commentary upon this particular fact, that seven young lives grew up to manhood and womanhood under that roof-tree, without a single unworthy habit to hinder their future usefulness in the world. But then, you see, the Winter children had no time to be bad!

The first real break in the pleasant daily life, came when Robert, having thoroughly prepared himself, went off to Yale Divinity School. Then, no help being to the mother like that of her own strong and willing boys, a man was hired upon the farm in Edwin's place, and he came into the house again. When

he finally decided to go to business college, a servant-girl was hired in the house for the first time.

During vacations, the young men used to knit their own socks, do their own sewing, darning, and mending, laundering their own white shirts, vests, and trousers equal to any "heathen Chinee" the sun ever shone upon, besides often putting their broad, young shoulders to the wheel on washing, ironing, baking, and churning days. Edwin went from school into a successful business, and Robert, lingering but a few weeks at the old home before beginning his life work, accepted a call from a prosperous Eastern church where he had occasionally preached in vacation time.

The other sons are all "good men and true," but with a certain roughness of manner, as well as many a social lack not apparent in the Rev. Robert Winter, of C—, nor in his brother Edwin. *They*, however, took their first lessons in the fine courtesy which makes so admirable a setting for all virtues and attainments, in doing things, when boys, "to save mother."

THE NEW MANUAL-LABOR SYSTEM IN SCHOOLS.

SOME twenty years ago, a teacher in the little country of Finland, that poor, despised, out-of-the-way corner of the earth, originated a method for supplementing the education of his pupils, which was destined to revolutionize the systems in use by the best instructors the world over. A few years later, his method, still in merely rude outline, came to the knowledge of some far-seeing Swedish teachers, who were at once alive to the possibilities it presented, and who were not only in a position to perfect the plan, adapting it to practical use in schools, but to secure its adoption into some of the best institutions in Sweden.

The system, consisting of a series of healthful exercises, illustrated by models made from wood by the pupils, has taken a name from its adopted country,—*slöjd*, meaning dextrous, and from the same root as our word *sleight*. (*Slöjd* is pronounced nearly as if spelled *slade*, except that the vowel, like the German *ö*, is divided in sound between long *a* and long *o*.) The claims made for *Slöjd* are similar to those for other kinds of manual labor in connection with mental work, except that it does not profess to teach a trade. It is adapted to the benefit of all, whatever their future occupation or business may be. Primarily, its object is to secure the physical development so often painfully lacking in students; but it also cultivates "general dexterity, found useful in every vocation, develops the perceptive faculties, in-

genuity of construction, concentrated attention, love of exactness, and artistic taste." The exercises are "pleasing, so as to interest the pupil; varied, so as to exercise the various faculties; and graded, so that the pupil may, with the mere guidance of the teacher, pass from the first and simplest to the last and most difficult."

The system, being confined to work in wood, requires less conveniences in the shape of work-rooms and tools than other manual-training systems. It is therefore less expensive, and better adapted to practical school work. The objects must all be of use,—ladders, skimmers, bread-knives, etc., even down to boot-jacks,—and must combine curved lines, and be finished without paint, thus requiring not only a perfect *fac simile* of the model, but fine work in every detail. The tools are those in common use in carpentry.

The success of this original departure in child-training has become phenomenal. Thousand of earnest minds from educational centers all over the globe, have given it their hearty support, and secured for it test-schools in their own country. At the present time, the school employing all the *Slöjd* methods most successfully in our own land, giving instruction both to teachers and pupils, is in Boston; but educators by the hundred are flocking to the Swedish school (at Nääs), and the time will come when all our public schools will be fully equipped for, and thrown open to, this rapidly popularizing system. S. I. M.

SOCIAL PURITY.

AIDS IN EARLY TRAINING.

BY S. ISADORE MINER.

EVERY mother recognizes the fact that the time will come, and all too quickly, when the little child at her knee cannot always be kept there. The social nature in humanity develops early, and there soon comes a day when the child flings away its inanimate toys, and wants "something live to play with." It craves the association of those of its own age, and such associations it ought to have. There is something pitiful, despite their quaint, demure speeches, in the "little old man" and "little old woman," brought up apart from other children, and careful copyists of the mannerisms of their elders, which appeals strongly to all who have lived long enough to know that childhood holds the happiest of life. Let the children have their plays and their playmates. It develops in them affection, unselfishness, self-control, and teaches respect for the rights of others,—an education we cannot afford them to lose.

But we would not have parents ignorant or disregarding of the dangers that lurk in childish companionship, when it can be obtained only outside the home circle; yet much of this results from their own carelessness or want of forethought.

A mother would not think of leaving delicate, fragile treasures within reach of a child who had never been restricted, or trained to obedience. God did not wait till our first parents had sinned before making known his requirements. How, then, can mothers expect that little children who have been reared without instructions what to do and what not to do, when suddenly thrown into temptation, will always shun the evil and choose the good?

A great deal of this yielding to temptation on the part of children, comes from the mother's failure to secure the confidence of her child. This can best be done when the child is most dependent on the mother. Never let slip the tender years of susceptibility. Something will leave its impress; let it be the right thing. Somebody will gain the child's confidence; let it be the mother. Priority of possession holds the secret.

Children often commit wrong because they do not know it to be wrong. The child who naturally and freely confides in its mother, who has no secrets which "mamma must not know," will never go far astray. At the first suggestion of anything in which she is forbidden to be the sharer, it will take alarm, and instinctively recognize evil. But mothers cannot win confidence by force, or by occasional spasms of maternal solicitude. It must begin at the beginning, and grow a natural growth.

When mothers are assured of this confidence, they are to a great extent assured of the innocence of their children. But there are yet many safe-guards that can be thrown around them. The street is not the proper play-ground for children, nor are the chance acquaintances they may pick up there, the proper playmates. It is difficult in cities, where the greatest dangers to children are to be met, to confine the little one to the limited area of the home-surroundings as a playground; but it ought to be done, at least till the child has reached an age when it is less susceptible to influence. Much of the coarse, vulgar language, loose slang, and even oaths, that are bandied from mouth to mouth of even very small boys, are picked up on the street. But children love to be where there is something "going on," and they will not willingly be kept in unless home is made attractive, and interesting home plays furnished. This all takes thought and time on the part of the mother; but it pays. Ask your children which of all their little friends they love to visit, and you will find that it is the one who has the most attractive home, where children's needs are remembered with books and toys and out-door games, and where the parents are willing to put up with a little racket and hearty laughter, for the sake of what they hope their sons and daughters will become.

But even the neighbor's little ones are not always just what you would wish as companions for yours; it is so much easier to see faults in others' than in our own. Did you ever try to see what one earnest, thoughtful mother could do to revolutionize a whole

neighborhood? There are ways and ways, of course, not the best of which is to complain of the children. No mother likes to be told that you do not consider her child a fit associate for yours. But a word dropped here and there, a judiciously selected leaflet, given with the air of one who takes it for granted that *all* mothers are interested in such subjects, may awaken the lethargic mind to dangers never dreamed of. Then mothers' meetings may be introduced, and here we may say that in this sort of missionary work, as in all others, the sower reaps the richest returns from the seed scattered near her own door. Sow the germs of purity wherever you can, but remember your own children are benefited when you have helped rescue those of your next-door acquaintance. Mothers'

meetings right around home, of which your humblest neighbor is a welcome member, will work a weightier influence in your own family than can the more formal organizations, where the chief ladies of the town meet to read and discuss papers on social purity, while some timid mother, longing for personal advice, hesitates to call attention to herself by expressing her mind freely. Go, by all means; treasure the wise and helpful suggestions, but give them a broader field of usefulness by sharing them with those around you, and interesting those whom the larger association would fail to reach. In this way you can make of your neighbor's children safe companions for your own, thereby lifting a great burden from your own heart, leaving in its place the sweet reward of well-doing.

By the provisions of our new extradition treaty with Great Britain, now pending in the Senate, the crimes of abduction, child-stealing, and kidnapping, including others of personal violence to defenceless women and children, are made extraditable.

THE THREE P'S.—A new social purity organization for girls, originated a few months ago in the Thirty-Eighth Street Working-Girl's Society, of New York City, which has for its motto, Purity, Perseverance, Pleasantness. It is called the Three P Circle, and is designed especially to emphasize purity of life and sunniness of temper. A certain class of members are styled Co-operating Members, whose duty it is to interest others, and bring them into the circle. Its influence is spreading, and it proves a power for good in developing earnestness of character among these girls.

THE influences that to-day push young people down, are intensified beyond those that our fathers and mothers confronted, in a proportion corresponding to the increased speed of locomotion and communication, and to the vastly greater use of the press. The equipment that served the Puritanic maiden in the days of the canal packet and stage coach, when she "sang by her wheel by the low cottage door," will not answer now in these rushing days of telephone and typewriter, when all the virtues and vices of every shade of civilization and barbarism, of the old world and the new, are concentrated in our great cities, and radiate thence to secluded villages and country homes. Indeed, we have no secluded places. Everywhere through these nerves of steel we feel the feverish pulse of the age. O, foolish mothers, slow of heart to believe, trying to persuade yourselves that ignorance and innocence are synonymous terms—that the di-

vine laws of purity, that must prevail if we would keep these bodies temples fit for the presence of God, are not fit for your children to learn! And so in your mistaken love and pitiful blind shrinking, you leave your dear ones with this very holy of holies in their nature, empty, "swept and garnished," an inviting dwelling-place for the watchful demons of our modern life!—*Señ.*

THE W. C. T. U. propose to work in the direction of influencing legislation in the different States toward the establishment of industrial homes for the benefit of that class of girls and boys for which the State has so far done but little. This will include, in Miss Willard's words, "young people who can never get on except as they are taught a trade, and fairly well educated; boarded and clothed, meanwhile, and started out in life with a few ideas in their heads, and a bread-winning weapon in their hands;" also "girls who if not criminal in their conduct, are at least on the verge of a departure from the white line of a true life; girls who have been arrested for vagrancy or other crimes, and other girls who are in their company, or who from a wild and headstrong nature, are likely soon to be." They will be for those children "whose destruction is their poverty." Here they will secure a fair English education, as well as learn an occupation. The "children born kleptomaniacs, born drunkards, born gamblers, born to abominations generally," will be taken in, and "the physical and mental imbeciles" will be cared for all their lives long, at the expense of the State. The W. C. T. U. believe that in these cases, the early "ounce of prevention" will be more easily administered, and with much better results, than the tardy and rarely effectual "pound of cure" usually relied on in the past.

GOOD HEALTH

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

BATTLE CREEK, MICHIGAN.

MEDICAL FRAUDS.—V.

A New Humbug—Electrolibration.

OUR attention was first called to this new development of quackery some months ago, by a gentleman from the West, a former patient, who had been employing it for a nervous affection from which he had been suffering for some years. From this gentleman, and from the circular which he handed us, we learned that the "electropoise," the instrument by which the so-called "electrolibration" is supposed to be applied, is professed to be a sort of electrical appliance in which a current is generated by burying a portion of the instrument in the earth, from which the current is conducted to the room of the patient, connecting there with a kind of switchboard, by the use of which it is claimed the current can be adjusted to the treatment of various diseases and conditions of the patient.

But not content with curing the patient, the electropoise proposed to accomplish more. It even undertook to do the work of the health officer in disinfecting the sick-room during the patient's illness or after his recovery, it being claimed that by adjusting the switchboard in a particular manner, the electric current could be so regulated as to produce in the air of the room great quantities of ozone, capable of destroying all germs. This instrument, according to the representations of the circular, was manufactured at Birmingham, Alabama, and was claimed to be the invention of a certain Dr. Sanche. It was not offered for sale, but was loaned or rented to patients at \$100 per year.

The gentleman above referred to had obtained one of the instruments through the recommendation of a friend in Detroit, Michigan, and at considerable expense had had it properly placed in his residence by electricians; but after a number of weeks, he failed to see any effects, and by invitation of his friend, was on his way to Detroit to consult the "Doctor,"

who, it seems, had changed his base of operation from Birmingham to Detroit. We authorized the gentleman to extend to the "Doctor" an invitation to visit us, bringing along one of his wonderful instruments, for the purpose of testing its merits, agreeing to purchase at once a thousand sets of his apparatus, providing it would accomplish what it was claimed to do; but proposed in the course of the investigation of its merits, to shut the "Doctor" up for a week with a mad dog or a small-pox patient, allowing him no other protection than the ozone-producing qualities of his electropoise.

We heard nothing further from this new discovery, claimed by its inventor to be the greatest of all discoveries from ancient to modern times, until a few weeks ago a gentleman of our acquaintance, on a visit to Detroit, was induced to invest in the apparatus, through the representations of business men in that city, in whom he had confidence.

In the meantime, the cumbersome apparatus of the Birmingham pattern had been modified to a small nickle-plated cylinder, about three inches in length and an inch in diameter, attached to one end of a cord about six feet in length, connected at its other end with a small metal disk. In the use of the electropoise of the new pattern, the cylinder, or "polarizer," as it is termed, is not buried in the ground, but simply put in a cold place, as in a pail of water or upon a block of ice, or even hung out of the window, or laid upon the floor of a cold room. It is only necessary, according to the "Doctor," that the polarizer should be 30° or 40° F. below the temperature of the body, it being claimed that the colder the polarizer is made, the greater the force of the electropoise. A caution is given, "Never place the polarizer in a place as warm or warmer than the human body," as

he asserts that if this error is made, the current is reversed, and most disastrous effects might follow, since the electropoise would in this way produce disease instead of curing it. The polarizer being properly placed, the disk at the other end of the cord is fastened to the ankle, or some other convenient part of the body, with a moist sponge between it and the skin.

How does this wonderful instrument act in producing the remarkable effects claimed for it? The inventor of the electropoise claims to have discovered that disease is commonly due to the excess of hydrogen in the system. The natural enemy of hydrogen is oxygen, consequently the best means of curing disease is to saturate the system with oxygen. This certainly is a very easy solution of one of the great problems of the age, and if the theory had an atom of truth in it, it would indeed be a very beneficent discovery.

But, besides this, the "Doctor" claims also to have discovered that ordinary respiration is not the best means of introducing oxygen into the system; indeed, that the lungs, with their two thousand square feet of absorbing surface, are not capable of taking in oxygen with sufficient rapidity to saturate the system, and that this can only be accomplished through the skin and the mucous membrane of the alimentary canal, under the influence of his magical "electropoise." Certainly the electropoise must be a most potent instrument to be able to so stimulate vital activity as to make a few square feet of skin—a thick, tough membrane—accomplish more in the direction of introducing gases into the system than can be done by the two thousand square feet of delicate mucous lining of the air passages, which is exactly adapted to this purpose!

Next month we will notice a few of the modest claims made for the "electropoise."

DUJARDIN BEAUMETZ ON VEGETARIANISM.

THE number of eminent medical men who favor a vegetarian diet, at least in the treatment of a large number of diseased conditions, is constantly increasing. The following from Prof. Dujardin Beaumetz, of Paris, presents arguments in favor of the vegetarian regimen, which, while intended by the author to apply especially to conditions of disease, tell with almost equal weight in favor of a vegetarian diet for those who are suffering with no specific ailments:—

"The affections of the digestive tube or of the stomach, to which the vegetarian regimen is applicable, are numerous. This regimen, in fact, reduces to a minimum the toxins which enter the economy by the food.

"Remember, in fact, what I told you last year, *a propos* of the ptomaines and leucomaines. As soon as death smites the living being, and at the very instant when death appears, the ptomaines manifest their presence. At first non-toxic, they become toxic from the fourth or fifth day which follows death, and these substances are sufficiently deleterious to promptly cause the death of animals to which they are administered. Among these toxic alkaloids I will mention, particularly, *neurine*, *mydaleine*, putrefactive *muscarine*, *methylganine*, etc. Moreover, according to the animal species, these ptomaines are more or less active; thus putrefied fish furnish a great number, such as *ganidine*, *parvoline*, and especially *ethylene-diamine*. Mussels give *mylotoxine*, which is the cause of poisoning by these mollusks. We find also certain

of these ptomaines in ripe cheeses. As man consumes a great quantity of animal substances whose time of killing often goes back to eight or ten days, it is easy to understand what a fruitful source of poisoning may be here found; this danger is avoided by those who adopt the vegetarian regimen.

"If vegetable substances may undergo putrescent alterations, these are much less likely to take place with respect to vegetable than to animal food. Hence this diet system becomes obligatory whenever, by the bad functioning of the kidneys or digestive tube, the toxins may accumulate in the economy.

"In the first rank we will place all those cases where there exists renal insufficiency. Whether this insufficiency results from interstitial nephritis, from catarrhal nephritis, from fatty degeneration of the kidneys, we should enjoin a vegetable diet. I shall return to this subject when I come to speak of the treatment of renal insufficiency. In the dilation of the stomach by gastric neurasthenics, this same regimen also gives good results. Lastly, in the putrid diarrheas, the vegetarian regimen is also indicated.

"But there is another point of view in connection with which this regimen gives good results. I refer to the irritations of the gastric mucous membrane,—acute or chronic gastritis. In fact, this regimen demands little of the stomach; the labor of digestion is imposed principally on the intestines, and the stomach is thereby given an opportunity to rest. Next, in the dyspeptic troubles, properly so called, which

result mostly from modifications in the gastric juice. Whether it be an exaggeration or an increase in the acidity of this fluid, this dietetic system enables us to cure these affections without imposing any work on the pepsin glands. Lastly, in the general diseases characterized by hyperacidity, such as the uric diathesis, we can still derive benefit from the vegetarian regimen.

"To sum up, then, and as the conclusion of this lecture, I would say, if from an anthropological and physiological point of view, man is omnivorous, and may, according to climates and according to his necessities, live on a flesh diet, or on a mixed diet, or on a vegetable diet, from a therapeutic point of view the latter regimen, as applied to our climates, constitutes a very important method of treatment, which is demanded in a great many gastric and renal (kidney), as well as general affections."

It must be apparent to the most superficial thinker

that a substance which is likely to contain such an array of poisonous substances as is above presented by the eminent professor named, can hardly be considered as entirely wholesome as an article of food under circumstances except those involving scarcity of other more wholesome articles. Certainly it would seem that the knowledge that flesh food becomes actually toxic, or poisonous, after the fourth or fifth day following death, and that such flesh may contain, according to Prof. Dujardin Beaumetz, neurine, mydaine muscarine, methalganine, ganidine, parvoline, ethylene-diamine, mylotoxine, etc., is not well calculated to stimulate an appetite for flesh in one who respects his body, and considers it a duty to maintain, to the highest degree possible, purity of blood and tissue. And what must be said of the "Christmas beef," so much enjoyed by Chicago epicures, in which the changes by which these poisons are formed, has been in progress for several months?

POISONOUS ACTION OF CAFFEINE.

It is probable that few of the many persons accustomed to the daily use of coffee as a beverage, are aware of the fact that the coffee-bean contains a poison which is capable of producing most marked effects; and very likely the majority of the habitual users of caffeine will be greatly surprised if told that the exhilarating effects for which both coffee and tea are commonly employed, are largely, if not wholly, due to the action of this poison upon the system. The identity of this poison, commonly known as theine when obtained from tea, and caffeine when obtained from coffee, was long ago fully established, and the poisonous properties of caffeine were also fully understood so long as fifty years ago. We have in our library a scientific work devoted to physiological chemistry, written in 1841 by Prof. Lehmann, the eminent professor of physiological chemistry at Liepzig, in which the poisonous effects of caffeine are thus described:—

"A quantity from two to ten grains will produce the most violent excitement of the vascular and nervous systems—palpitation of the heart, extraordinary frequency, irregularity, and often intermission of the pulse, oppression of the chest, pains in the head, confusion of the senses, singing in the ears, scintillations before the eyes, sleeplessness, and delirium."

After detailing the above symptoms, Prof. Lehmann states as follows:—

"The above-named results were yielded by experiments instituted on myself and several of my pupils

with pure caffeine. Five persons, after taking from five to ten grains of this substance, were unfit for any business during the next day."

The reader will please note that the poisonous symptoms above described were produced in some instances by so small a quantity as from two to five grains, and that the effects were so serious as to render a person unfit for business for at least twenty-four hours. According to good authorities, roasted coffee contains about one per cent of this poison, which would amount to five grains for each ounce of coffee. It is evident, then, that a person in taking an infusion from an ounce of coffee, is taking into his system a sufficient quantity of this poisonous substance, caffeine, to produce serious effects, if unaccustomed to the use of this drug. Tea ordinarily contains from two to six times as much theine as coffee, consequently it is apparent that thousands of people are in the habit of using these substances in really poisonous doses, and the only reason why the deleterious effects are not more conspicuous, is simply that the system has the power to become accustomed to the use of almost any poison, so that the toxic effects may not ordinarily appear. It is for this reason that tobacco-users become able by long use of the poisonous weed, to take into the system, every twenty-four hours, nicotine in quantity sufficient to kill several persons unaccustomed to its use, just as the arsenic-eater of Styria will swallow at a single dose, sufficient to kill three or four men, and yet without any immediately poisonous effects.

PHYSIOLOGICAL OBJECTIONS TO FLESH-EATING.

THERE are a great number of objections to the use of flesh as an article of ordinary diet. We do not propose to attempt to consider all of these in this article, but would invite the reader's attention to one or two points of significance:—

1. Flesh food contains about three per cent of extractive matter, which consists of excretory substances, and which would have been eliminated from the animal through its organs of excretion if its life had not been taken. Within the last twenty years, extensive studies have been made of the nature of these excretory substances, and of their effects upon animals and human beings when separated, and studied each one by itself. As the result of these investigations, which have been carried on in the most exact and scientific manner, it has been proved that a large share of them are poisonous in character, some of them intensely so. Taking into consideration the fact that the system of most human beings, especially those living in civilized countries, and more particularly persons of sedentary

habits, are all burdened with considerable quantities of these poisonous substances which are on the way out of the body, and that life and health depend upon the rapid oxidation and excretion of these poisons, it is evident that nothing is to be gained by additions of this character from an outside source, even though the quantity be small.

2. The experiments of Brieger and others have shown that in the digestion of animal fibrine, an extremely poisonous substance is developed, which has been termed pepto-toxine. This substance is found to be so poisonous that a few drops of it in water, injected underneath the skin of a frog, produced death in a few minutes. It has been well known for a long time that in the digestion of animal food, certain bitter substances are formed. That these substances are of a poisonous nature seems now to be very thoroughly established. It is certainly of interest to note that the bitter principle referred to is not formed in the digestion of vegetable albumens.

A NEW MIND CURE.—A Maine dentist tells of a man who came into his office the other day, with the request that a sound tooth should be pulled. On investigation, the dentist learned that the gentleman was acting under the advice of a "faith healer," who had ordered him to have a sound tooth pulled for the benefit of his general health. A faith that will send a man to the dentist on such an errand, is certainly worthy of respect; but the doctor capable of making such a prescription, ought to be confined in a limbo especially prepared for "mind curists," "Christian scientists," and "faith healers."

INSPECTION OF MEAT.—An eminent sanitary authority of England, some years ago remarked that the stomachs of Englishmen served as catacombs in which were buried the carcasses of more than 20,000 diseased animals every year, and this notwithstanding the careful system of inspection which prevails in England. At a recent meeting of the Sanitary Association of Scotland, Prof. Walley read a paper in which he gave the following rules respecting the inspection of the flesh of animals, which we give for the purpose of calling attention to the fact that in this country, at least, a very large proportion of the flesh sold would be rejected as wholly unfit for food, if subjected to criticism according to the rules given: "(a.) An excessively dark color of the muscles—indicating interference with oxidation. (b.) An exces-

sively dark color, coupled with a deep yellow—indicating interference with oxidation, and absorption and retention of biliary matters. (c.) Iridescence of the surface of a cut section—indicating material interference with nutrition of the flesh, and probably some form of degeneration of the muscular elements. (d.) A universal magenta or pink color of the flesh—indicating material changes in the blood itself, and especially the coloring matter of the red cells. (e.) A green color of the flesh—indicating putrefaction. (f.) Extravasation of blood into the deeper tissues, or universal superficial extravasation, as indicating also important blood changes. (g.) Effusion of serum into the cellular tissue, especially if this effusion is general and deep seated, and still more particularly if this effusion is tinged with blood, and is thrown out in close proximity to the bones—all indicating some form of degradation or depravation of the blood, as the result of fever, organic disease, the action of poisons, and improper dieting. (h.) A flabby or flaccid condition of the flesh, particularly if that condition is associated with a soapy feel to the fingers, and if the flesh pits on pressure. (i.) Any odor indicating the commencement of putrefaction, particularly if found in close proximity to the bones."

That diseased flesh is often sold in the markets in this country is a fact too well known to be a matter of serious comment, and is a natural result of the absence of any general system of inspection.

ALCOHOL AND DIGESTION.—Dr. G. Stricker has shown by actual experiment, that ptyoline, the active principal of the saliva, is paralyzed by alcohol.

FISH POISONING.—The frequent occurrence of poisoning by the use of fish, has led the Russian authorities to offer a prize of 5000 rubles for the best essay on the nature of the poison, which so frequently develops in raw salt fish.

It is probably generally supposed that the oyster is a particularly nutritious article of food. On the contrary, chemical analysis shows that the nutritive value of a quart of oysters, solid meats, is only equal to that of two thirds of a pound of bread.

FOOT AND MOUTH DISEASES.—It is not generally known that foot and mouth diseases in cattle may be communicated to man. The milk of cows suffering from these diseases may give rise to fatal pneumonia in adults, and distressing skin eruptions in infants. The sterilizing of milk, by boiling, is getting to be more and more of a necessity, as a safeguard against infection by disease.

JAPANESE BABIES.—Dr. Small recently stated before the Royal Asiatic Association of Japan, that the mortality of Japanese babies is very small as compared with that of American babies. He attributes this fact to the good ventilation secured by the loose construction of Japanese dwellings. These structures are generally made so light and airy, and with so many openings for the air, that although carbon fires are often used, the ventilation is very much better than that usually found in the air-tight brick or stone houses of foreigners. Certainly, this is a good testimony to the value of fresh air for babies.

CHEESE POISONING.—Every eater of cheese ought to be informed of the fact that ripe cheese always contains poisonous substances. These are not ordinarily present in sufficient quantity to render their presence apparent by seriously toxic symptoms, but the fact that the cheese eater may at any time swallow unawares a fatal dose of cheese poison, or a dose of sufficient size to imperil his life and entail great suffering, is evidenced by the frequency with which cases of cheese poisoning are reported. Some months ago over two hundred cases were reported to the State Board of Health, of Ohio, within a few days. The symptoms were vomiting and great pain in the stomach, violent purging, lasting from twelve to forty-eight hours, great prostration, and in some cases, syncope.

DYSPEPTIC AUTHORS.—Carlyle, whose literary productions have long been regarded as one of the symptoms of his chronic indigestion, described the sensations produced by his disease as being "like a rat gnawing at the pit of his stomach." He evidently agreed with the wag who stated that the outside of a horse was the best remedy for the inside of a man, since he declared his best physician was his horse. Calvin was a terrible dyspeptic, and according to his diary, was suffering from a severe attack when he condemned Helvetius to the stake. Emerson was a dyspeptic, which was, perhaps, the reason he condemned laughter.

DR. D. LAUDER BRUNTON, an eminent London physician, has recently been making a series of scientific experiments in India, for the purpose of determining the effects of chloroform upon lower animals, with special reference to its use as an anesthetic. Dr. Brunton improved the opportunity afforded him while making a large number of experiments upon lower animals, to investigate to some extent the effect of corset-wearing, selecting female monkeys as subjects, as being more nearly like human beings of the same sex than dogs. He applied plaster-of-paris jackets to imitate stays, and a tight bandage to produce the effect of the tight skirt-bands worn by most women. The effects, as stated by Dr. Brunton, were "very marked, indeed." The monkeys thus treated died. In view of such experiments as have been made by Dr. Brunton and other scientific investigators, the wonder is not that women are inferior to men physically, but rather that they are able to exist at all.

THE VEGETARIAN CANNIBAL.—The kinship between flesh-eating and cannibalism was recognized by the elder Booth, who was for a time a strict vegetarian. While traveling at one time in a steamboat, on one of our Western rivers, as related by *Tid-Bits*, he "happened to be placed at a table opposite a solemn Quaker, who had been attracted by the eloquent conversation of the great actor. The benevolent old Quaker, observing the lack of viands on Booth's plate, kindly said, 'Friend, shall I not help thee to the breast of this chicken?' 'No, I thank you, friend,' replied the actor. 'Then shall I not cut thee a slice of ham?' 'No, friend, not any.' 'Then thee must take a piece of the mutton; thy plate is empty,' persisted the old Quaker. 'Friend,' said Booth, in those deep stentorian tones whose volume and power had so often electrified crowded audiences, 'I never eat any flesh but human flesh, and I prefer that raw.' The old Quaker was speechless, and his seat was changed to another table at the next meal."

CANDY TIPPLING.—The *Pharmaceutical Era* calls attention to the fact that the authorities of Lynn, Mass., high school have been obliged to enter complaint against confectioners in that city for the sale of brandy drops, which were found to contain between seven and eight per cent of brandy. Fortunately for the city of Lynn, a license is required for the sale of any substance containing more than one per cent of alcohol, so the trade in this intoxicating candy may be stopped; but it is important for parents to know that even in the popular candy drops and apparently innocent chocolate-covered sweets of various sorts, there may be hidden that which "stingeth like an adder."

VEGETABLE MILK.—An English periodical contains the following interesting description of the cow-tree of South America: "There are several trees which produce milk, the best known being the *Palo de Vaco*, or 'cow-tree,' of the Cordilleras of the coast of Caracas, in South America. Humboldt says of this tree, 'Among the many curious phenomena that I beheld during my journey, there was hardly any that struck my imagination so forcibly as did the "cow-tree." It grows on the rocky side of a mountain, scarcely insinuating its roots in the stone. For many months not a shower of rain falls on its dry leaves; the branches seem dry and dead; but pierce the trunk, and a sweet and nourishing milk flows. At sunrise this vegetable source is most abundant; then the blacks and native people hurry from all parts, provided with jugs to catch the milk, which turns thick and yellow on the surface.' M. Bousingalt has analysed this vegetable milk, and declared before the Academy of France that it most certainly approaches in its composition to the milk of a cow, and contains not only fatty matter, but also sugar, caseine, and phosphates. The relative proportions of these substances are greatly in favor of the vegetable milk, and brings it up to the value and richness of cream. The 'cow-trees' grow in Demerara, Ceylon, and the Canary Islands."

WHOLESALE LEAD POISONING.—Dr. J. J. Putnam, of Boston, has recently published, in the *Medical and Surgical Journal*, a report of an investigation as regards poisoning by lead, from which it appears that paralysis and bowel ailments are by no means the most common symptoms of lead poisoning. He finds that tremors, resembling those of paralysis agitans, and a great variety of nervous symptoms, are frequently caused by lead poisoning, not sufficient in degree to produce bowel troubles or paralysis. The

investigations were carried on in the city of Boston. He found lead in the urine of fifty per cent of all the cases examined. This fact exposed the fallacy of the popular notion that many waters, especially those that are a little hard, protect the pipes so perfectly that there is no danger of poisoning, even though lead pipe may be used. An investigation of the matter shows that in fifty per cent of all the cases in which lead was found, the water was obtained through lead pipes. The error has been in supposing that bowel troubles and paralysis were the chief symptoms present in cases of poisoning by lead. It is important that all persons living in large cities where lead pipes are much used for conveying water, should be acquainted with these facts. Water which has stood for any length of time in a lead pipe, cannot be safely used.

IS ALCOHOL A FOOD?—The latest apology offered for the use of alcohol, by those scientific gentlemen who seem to consider it to be a part of the duty of science to find some excuse or natural necessity, however unsubstantial, for every vice to which men are addicted, is the assertion that it has a food value. If this were true, the facts would still remain that alcohol is in no way superior to a vast number of simple, safe, and wholesome foods; that it is decidedly inferior to a number of the best foods; that its detrimental effects are not to be equaled by the use of any other food, and that it is the most expensive of foods, if a food at all. But the assertion that it is a food, has never been satisfactorily proved, and the present indication is that no such proof will ever be forth-coming. The same arguments which are relied on to prove alcohol to be a food, would also prove the same thing for ether, opium, arsenic, and a great number of other poisonous drugs. So good an authority as the *British Medical Journal* has recently spoken upon this question, as follows:—

"The clinical facts which some writers have produced as demonstrative of the food-nature of alcohol, are, as such, worth absolutely nothing. We have no hesitation in saying that *to call alcohol food, in the present state of our knowledge of its effects, is an abuse of language.* We possess no particle of satisfactory and scientific evidence to show that it is such. Those who affirm that it is, should give us something beyond the mere vague surmises of their own opinions. But to say that an emaciated creature who rises from his bed, and has swallowed during his sickness large quantities of water and alcohol, is a living proof that alcohol is food, is manifestly an unfounded assumption."

THE STIMULANT HABIT.—Our war against alcohol and other stimulants is not based upon the specific influence of alcohol, tobacco, tea, coffee, or opium, but upon the fact that these substances are all artificial stimulants,—that is, by their use the body is harmed, and the vital power is weakened by the consumption of energy which is not in any way reinforced by the substance employed. There are many other substances besides those named above which possess this same property, such as hashish, Siberian fungus, strychnia, and arsenic. Dr. Norman Kerr, in a recent article, records cases which have come under his own observations, in which persons have taken from ten to fifteen grains of arsenic, and claimed to have been improved by it. According to Dr. Kerr, "ladies swallow arsenic to improve their personal appearance, and also use it externally for the complexion. Gentlemen are also addicted to this practice, and both sexes take doses of arsenic as a fillip and general tonic. Nor is the habit confined to the wealthy. On one occasion, while crossing a ferry, Dr. Kerr saw a boatman rest on his oars and take a drink out of a pocket-flask. The beverage was a preparation of arsenic, and the dose was enough to kill any four average Englishmen."

A HINT TO SMOKERS.—A celebrated European specialist has recently called attention to the fact that consumption is becoming exceedingly prevalent among cigar-smokers. The reason for this is evident. The fact that persons of feeble or diseased constitution are frequently employed in the manufacture of cigars, coupled with the enforced confinement in a close and foul atmosphere, renders this class of laborers especially liable to consumption. It is not an uncommon thing to see two or three loud consumptives in a single cigar-factory. Of course, the mouth and lips are constantly soiled with the expectorated matter, and when the cigar-maker puts on the finishing touch to the cigar, by moistening it with his lips, he infects it, and the man who smokes the cigar, thereby becomes vaccinated with the disease. It might, perhaps, not be a matter to be so greatly regretted that the race of cigar-smokers should be killed off, although it must be admitted that, through ignorance, many excellent men are addicted to the practice; but the non-users of cigars are interested in this matter almost as much as those who smoke, for the reason that the person suffering from consumption will be a source of infection to others. We have, in more than one instance, been able to trace consumption in a wife to the care of a consumptive husband, and so the smoking husband might easily

infect an innocent and unoffending wife, from whom the disease might in turn be communicated to innocent children. Cigar-smoking must be regarded as one of the most dangerous, as well as one of the most loathsome, practices tolerated among civilized people.

THE EFFECTS OF FLESH-EATING ON VEGETARIAN ANIMALS.—A strong argument against the use of flesh as an article of diet is to be found in the dietary change induced in the flesh of herbivorous animals by feeding them upon the flesh of other animals instead of their natural diet. This fact has been long known to observing sanitarians, but for the benefit of those of our readers who have not given the subject much thought, we give the following, on the authority of the *British Medical Journal*, November 2, 1888, the purpose of the article being the instruction of meat inspectors: "In the normal state the flesh of every animal has its own characteristic odor. Beef has a specific insipid kind of smell, modified by the different modes in which the animals have been fed. Thus it is stated that the flesh and milk of cattle in the polar regions have a fishy odor, because the absence of pasturage obliges the inhabitants to feed their oxen and cows on fish. Veal smells of milk, mutton of wool and sometimes of grease. The normal odor of pork is insipid and inoffensive, but when the pigs are fed on offal, the flesh has a pale, cachectic hue, and an offensive smell and taste. The odor of poultry fed on corn differs from that of poultry artificially fattened. In a diseased state, meat emits a typical odor resembling the breath of feverish patients. This odor is particularly noticeable beneath the shoulder, and in the muscles of the inner side of the leg. The odor should be carefully noted immediately after the incision is made. This should be done by the inspector himself. When diseased meat is roasted, it emits a strong and offensive smell. The fever odor is particularly marked in the case of animals which have suffered from peritonitis, charbon, morbid symptoms following parturition, or with ordinary acute disease. In such cases the smell is recognizable at once, and it is unnecessary to make any incision." We hardly need to add that if the use of flesh by lower animals has the effect to give an offensive flavor and odor to the tissues, the use of flesh by human beings must have a similar effect; and who can enjoy the thought of eating food which actually gives to his tissues an offensive flavor and odor? Can a food which imparts to the tissues such properties be the best calculated to promote the highest degree of health, and the best kind of moral and intellectual activity?

DOMESTIC MEDICINE



It should always be remembered that in fumigating a room by means of burning sulphur, water should be kept boiling in the room at the same time, as sulphur vapor is less effective as a disinfectant in a dry atmosphere than in a moist one.

FOR FRECKLES.—Probably one of the most frequent requests physicians receive from fashionable ladies, is for something which will “remove moth and freckles.” A wash which is highly recommended for this purpose, consists of equal parts of lactic acid and kerosene. It should be applied carefully, and if used in this way, may be considered harmless.

MEAT AND NERVOUSNESS.—Dr. Mc. Laine Hamilton asserts that one of the usual causes of nervousness among adults, is the taking of too much beer, and the eating of too many sweets. The Doctor thinks that meat-eating causes *essera* among girls, and is likely to cause consumption among boys. Hot bread and hot cakes, in the Doctor’s opinion, occasion sleeplessness, and other nervous diseases.

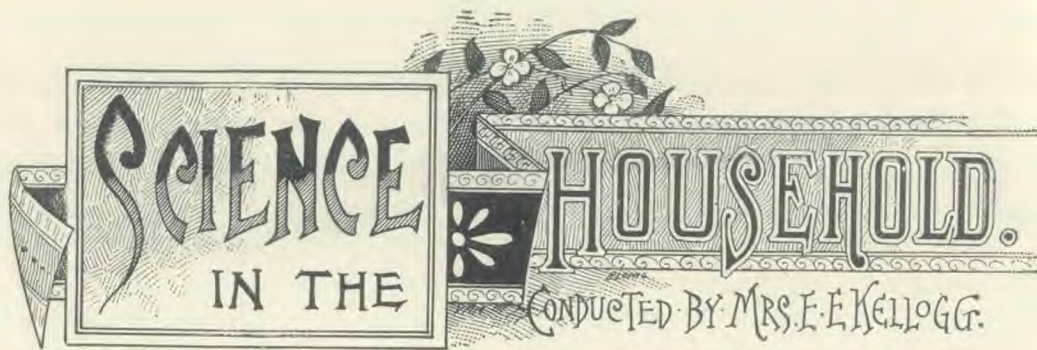
SHAKEN MILK.—A writer in the *Medical Reporter* claims to have demonstrated by experiment that milk may be made more digestible by shaking, as accomplished by means of a tin cap placed over a tumbler, similar to that used by bar-tenders in preparing mixed drinks. It is quite possible that the increased digestibility of milk thus shaken is due to the admixture of air. The suggestion is worthy of investigation.

DANGER FROM ADDING SODA TO MILK.—The Council of Hygiene of the Seine, in France, has condemned the practice of adding bi-carbonate of soda to milk, to increase its keeping qualities, as one of danger, it having been found that the soda produces chemical changes in the milk which render it purgative in action, and hence dangerous for use, especially by infants. The best means of increasing the keeping qualities of milk, is by heating the milk to the boiling point for about five minutes.

A NEW CURE FOR BOILS.—A German medical journal asserts that incipient boils may be readily cured by injection with a three per cent solution of carbolic acid. In order to effect a radical cure and prevent suppuration, injection must be made early. If a boil has already begun to discharge, the injection will only have the effect to hasten the cure, and prevent formation of deep scars.

CARE OF MAD-DOG BITES.—A German forest-keeper recommends a cure for the bite of a rabid animal, which is being very widely circulated in the newspapers. It consists of bathing the wound with vinegar, and pouring upon it a few drops of muriatic acid. We are sure that any one who tries this remedy, will find it nearly as bad as the bite. Muriatic acid is a powerful corrosive.

THUMB-SUCKING.—The popular idea that thumb-sucking is injurious to an infant’s health, is combatted by Dr. Eads, in the *British Medical Journal*, who insists that thumb-sucking is not only not injurious, but actually beneficial. The following are his arguments in favor of this infantile practice, which certainly seems to us to be harmless enough: “Sucking the thumb causes the salivary glands to pour out their secretion, thus moistening the mouth, and aiding digestion. The pressure of the thumb eases, while the teeth are ‘breeding,’ the irritation and pain of the gums, and helps, when the teeth are sufficiently advanced, to bring them through. Sucking of the thumb, moreover, makes a cross infant contented and happy, and frequently induces a restless babe to fall into a sweet, refreshing sleep. After dentition is completed, it is likely to become a habit with a child; in that case, it may be readily cured by smearing the thumb with a paste of aloes and water. One or two applications will suffice, as after tasting the bitter, it will eschew its former enjoyment. I may add that thumb-sucking, in my opinion, is far preferable to the ivory or India rubber rings, nipples, etc., we see so frequently given to these poor mortals by their loving mothers.”



HELPS FOR THE INEXPERIENCED.— 5.

THE cook who desires unfailing success for all her dishes, must needs bear in mind many of the simple principles of physics. Much of the soddenness of improperly boiled foods might be avoided, if the problem of *latent heat* were not forgotten.

When vegetables, or any other article of food of ordinary temperature, are put into boiling liquid, the temperature of the liquid is lowered in proportion to the quantity and the temperature of the food thus introduced, and will not again boil until the mass of food shall have absorbed more heat from the fire. The result of this is that the food is apt to become more or less water-soaked before the process of cooking begins. This difficulty may be avoided by introducing but small quantities of the food at one time, so as not to greatly lower the temperature of the liquid, and then allowing the latter to boil between the introduction of each fresh supply, or by heating the food before adding it to the liquid.

Evaporation is another principle often overlooked in the preparation of food, and many a sauce or gravy is spoiled because the liquid, heated in a shallow pan, from which evaporation is rapid, loses so much in bulk that the amount of thickening requisite for the given quantity of fluid, and which, had less evaporation occurred, would have made it of the proper consistency, makes the sauce thick and unpalatable.

Many a cook fails and knows not why because she does not understand the influence of *temperature* on materials and foods. Flour and liquids for unfermented breads cannot be too cold, while for yeast bread they should both be warm,—not hot,—to favor the growth of the yeast plant. The temperature of yeast bread during the entire process of making, is the point upon which success or failure very greatly depends. Many foods, especially those containing a large proportion of albumen, are best cooked at a low temperature.

BURDEN-BEARING.

THERE are a great many over-particular housekeepers, who wear and fret themselves out in doing things which could just as well be left undone. Matters pertaining to health and cleanliness may be counted as necessary work, always; but there are a great many little touches, extra efforts at order and nicety, which may be omitted, and the housekeeper be the gainer, if she will spend the time thus saved in out-of-door exercise, or in self-culture.

A great many women who could amply afford to keep one or two girls to help, do their own work, simply because they can find no one to do the work as they themselves would do it. Do not expect too much;

if your meals are well cooked and served, and the house kept in fairly good order, do not worry if some of the dainty touches you delight in are not added. It will pay you to be philosophical, and not look too sharply for defects. Save yourself, that you may be more to husband and children than a mere household drudge, and save yourself from the miseries of invalidism.

Good housekeeping is desirable; over-nicety is not. There are a great many Marthas in the world, who are "troubled about much serving," and it would be well to divide up their virtues with the quiet, patient, blessed Marys. L.

THE *Sanitary News* warns the sewing guild who bite off the ends of their silk thread, of the danger

of lead poisoning, as the silk is soaked in an acetate of lead, to increase the weight.

THE DISPOSAL OF TABLE REFUSE.

WHAT to do with the waste accumulating from the preparation of foods, is a question of no small importance. The too frequent disposition of such material is to dump it into a waste barrel or garbage box near the back door, to await the rounds of the scavenger. Unless more than ordinary precautions in regard to cleanliness are observed, such a proceeding is fraught with great danger. The bits of moist food, scraps of meat, vegetables, and other refuse, very quickly set up a fermentive process, which under the sun's rays, soon breed miasma and germs. Especially is this true if the receptacle into which the garbage is thrown is not carefully cleansed after each emptying.

A foul-smelling waste barrel ought never to be permitted under any circumstances. The best plan is to burn all leavings and table refuse as fast as made, which may be done without smell or smoke, by opening all the back drafts of the kitchen range, and placing them on the hot coals to dry and burn. Some

It should be remembered, in flavoring soups, that all delicate flavors must be added just before serving, as, if they are allowed to boil, they are apt to be lost by evaporation.

CARAMEL COFFEE.—Take one cupful each of white flour, corn meal, unsifted graham flour, and molasses. Mix well together, and form into small cakes a little larger around than a silver dollar. If the molasses is not sufficiently thin to take up all the dry material, one fourth or one half a cup of cold water may be added to the mixture for that purpose. Bake the cakes in an oven until very dark brown, allowing

CREAM of tartar is said to be excellent to clean white kid gloves.

THE Professor Winchell paste, or cement, is said to be very strong and excellent, and can be used upon glazed surfaces, and will firmly hold wood, crockery, and even geological specimens. It is made as follows: Use two ounces of gum arabic, one and one half ounce of starch, and one half ounce of white sugar. The gum should be pulverized and dissolved, the sugar and starch being then added to the solution, using the same quantity of water the laundress would use for that amount of starch. Then the mixture must be cooked, until the starch is clear. When done, it should be thick like tar. A bit of gum camphor added, will keep it from spoiling.

housekeepers keep in one end of the sink a wire dish-drainer, into which all fruit and vegetable parings are put. If wet, the water quickly drains from them, and they are ready to put into the stove, where a very little fire soon reduces them to ashes. All waste products which can not well be burned, may be buried at a distance from the house, but not too much in one spot, and the earth should be carefully covered over afterwards. Under no circumstances should it be scattered about on the surface of the ground near the back door, as heedless people are apt to do.

If the table refuse must be saved and fed to animals, it should be carefully sorted, kept free from all dish-water, sour milk, etc., and used as promptly as possible. Any receptacle used for waste should be entirely emptied, and thoroughly disinfected each day with boiling suds and an old broom. This is especially imperative if the refuse is to be used as food for cows, since the character of the milk is more or less affected by the quality of the food.

them to become slightly scorched. When desired for use, take one cake for each cup of coffee required, pour cold water on them, and steep twenty minutes.

BROWNED RICE.—Wash well a cupful of rice, and dry thoroughly; then brown in the oven the same as coffee, stirring frequently to prevent scorching, and to preserve a uniform color. Put the rice thus browned in an earthenware or china dish, add one and a half cups of water, and steam until tender in a steamer over a kettle of boiling water. One hour will generally be a sufficient length of time for cooking. Serve hot, with cream and sugar.

THE LARGEST KITCHEN IN ENGLAND.—Probably the most spacious kitchen in England is that of Raby Castle, the seat of the Duke of Cleveland. It is thirty feet square, having three chimneys, one for the grate, a second for stoves, and the third for the great caldron. The roof is arched, with a small cupola in the center. It has five windows, from each of which steps descend, but only in one instance to the floor, and a gallery runs round the whole interior of the building. The ancient oven had a diameter of fifteen feet, and would allow a tall man to stand upright in it. Vast as this kitchen was, it must have been sometimes taxed by the hospitality of former ages; for in one of the apartments of the castle, seven hundred knights were upon one occasion entertained at the same time.

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.]

ABNORMAL SENSATION OF COLD.—E. S., Iowa, states that for some years he has been troubled with a cold sensation in his right knee, and that it frequently aches as if ice were applied to it, and causes him much trouble. He wishes advice.

Ans.—The difficulty complained of is a nervous affection, and should be brought to the attention of some thoroughly competent physician.

CARBOLIC ACID AS A REMEDY.—A subscriber wants to know if carbolic acid is of any value and safe in treating cancer, either taken internally or applied to the eruption.

Ans.—No. Carbolic acid is a poison, and is not suitable for internal use. It is not sufficiently powerful as a caustic to be of any considerable value in cases of cancer, although it is probable that small cancerous growths might be killed by injections of pure carbolic acid, or strong solutions of the acid. There are, however, so many better remedies for this purpose that this remedy is not to be recommended.

BOILED MILK AND CONSTIPATION.—E. H. C., Ill., would like to know if boiled milk for infants, as recommended in **GOOD HEALTH**, would not cause constipation, if used constantly.

Ans.—Milk should not be boiled, but be brought merely to the scalding point. The popular opinion that milk thus treated has a constipating effect on the bowels, has little foundation. Scalded milk is more easy to digest than raw milk, and does not form indigestible curds so easily. The germs which it contains are killed, so that it does not sour; consequently it is less irritating to the bowels, does not provoke looseness, but has no positive effect as a constipating agent.

HOT BISCUITS.—N. A., Tex., wishes to know why hot biscuits are so indigestible.

Ans.—There are two principal reasons why hot biscuits are indigestible: First, the soft dough of the interior of the biscuits is rolled into bullet-shaped nodules, which are dissolved in the gastric juice only after a long time. Second, hot biscuits are usually thickly spread with butter, which, being melted by the heat, completely saturates the farinaceous mass, and renders its digestion by the stomach absolutely impossible. As the gastric juice cannot act upon fats, the butter-soaked portion cannot be digested until the food mass reaches the small intestines, and comes in contact with the bile and pancreatic juice.

COMMUNICATION OF DIPHTHERIA.—Mrs. L. S., Iowa, inquires: "How is diphtheria communicated from one person to another? or is it contagious?"

Ans.—Diphtheria is one of the most contagious of maladies. It may be conveyed from one person to another through the breath, through the sputum, through the excreta, or by means of soiled clothing. The greatest pains should be taken to prevent extension of this disease, by carefully following out the rules for isolation, disinfection, etc., laid down by the Michigan State Board of Health. A circular giving full information upon this subject, may be obtained by addressing the secretary, Dr. H. B. Baker, Lansing, Mich.

THIN HAIR.—T. W. R., Ill., inquires: "1. Is shaving the head beneficial when the hair is becoming thin and weak prematurely? and if so, how often should it be done, and how long continued? 2. Can you recommend anything to improve the hair?"

Ans.—Shaving the scalp, or cutting the hair very short, is a common means of stimulating the development of the hair in some cases. Cases which are benefited by this means, are those in which there is found among the thin but properly developed hairs, many short, downy ones, which need stimulation to attain full development. A weekly shaving of the scalp, or close clipping of the hair usually meets this requirement. In addition, the scalp should be shampooed with cold water every morning, being rubbed with the ends of the fingers until well reddened.

DIET FOR A SEDENTARY LIFE.—A. S. D., Bradford, Eng., wishes advice as to diet. Is a clerk, and after meals generally has a very acute headache, and experiences a heaviness in the body, which unfits him for his work. Otherwise, enjoys quite good health, except that he often passes sleepless nights.

Ans.—A person of sedentary habits should eat sparingly, and the diet should consist of fruit and grains, with a moderate allowance of milk. The food should be dry in character, so as to require very thorough mastication. Sugar and other sweets should be sparingly used. If the questioner will adopt the practice of taking one or two glasses of hot water half an hour or an hour before each meal, he will probably be relieved of his after-dinner headache. It is also important that the bowels should be thoroughly evacuated daily. If a spontaneous evacuation is not secured, a warm water enema should be employed.

LITERARY NOTICES.

Our Little Ones and the Nursery is a carefully regulated magazine for young readers, filled each month with little stories, pictures, and interesting talks about interesting things, and is thus deservedly popular with the wee folks. Russell Pub. Co., Boston.

Scribner for April contains the beginning of a notable series, "The Rights of the Citizen;" the latest of the Electric Series on Railway Travel of To-day; an article of travel describing a journey across the Syrian Desert; the second and concluding paper on Charles Lamb's homes and haunts; an essay on Wagnerianism and its relation to Italian opera, besides much other interesting matter,—stories, poems, essays, etc. Charles Scribner's Sons, New York.

THE *Jenness-Miller Magazine* for April devotes eleven pages to discussion and presentation of most artistic styles in gowns, wraps, etc. The continued papers on Physical Culture are highly instructive, and the articles on Social Etiquette are replete with practical suggestions. There is another installment of Mrs. Jenness-Miller's serial story, some charming Easter matter, and a valuable paper on Fine Lace. The Jenness-Miller Pub. Co., New York City.

THE *Home Magazine* (conducted by Mrs. John A. Logan) for April, contains a picture of the World's Fair Committee. There is a paper on the Empress Augusta, by Mrs. Logan; "A Trip to Hebron," by Mrs. Lane; "Janet: A Story," by Mrs. Oliphant; "King's Daughters," by Mary Lowe Dickinson; and a pleasant article with fine views of the interior of Vice-President Morton's home. There are innumerable good things, besides. This magazine is sent three months for 10 cts. Brodix Pub. Co., Washington, D. C.

THE *Century* for April is remarkable for the variety of its contents. In the series on "Italian Old Masters," W. J. Stillman has a paper on Giovanni Bellini, artistically illustrated, one of its engravings forming the frontispiece. Three timely articles are "The Latest Siberian Tragedy," by George Kennan, in which is given a new account of the outrage at Yakutsk; "Suggestions for the Next World's Fair," a practical and helpful paper, by Georges Berger, Director of the French Exposition; and "The Slave-Trade in the Congo Basin," by E. J. Glave, one of Stanley's pioneer officers, with text and pictures from life during Mr. Glave's residence of twenty months among the natives. The Century Publishing Co., New York.

WITH the present number, *Good Housekeeping* completes its tenth volume and fifth year of publication. This number has a great variety of seasonable and interesting matter, many Easter articles and poems, and a pleasing sketch of Sorosis, the model woman's club of New York, with a fine likeness of its president, Mrs. Ella Dietz Clymer. We would call particular attention to Helen Campbell's department, "Woman's Work and Wages." Clark W. Bryan & Co., Springfield, Mass.

THE illustrations in *Demorest's Family Magazine* for April, are works of art, and some of the articles which they illustrate are "Orchids," "The Manhattan Working-Girls' Society," "The Easter Lily," "The Forbidden Place, or The Harâm Esch Scherif in Jerusalem," "In the Grasp of the Grip," "Easter Eggs," "Easter Novelties," "Kindergarten Work and Play for the Home," etc., besides numerous other articles and stories, including "A Woman's Kitchen-Garden," "Our Cooking Class," "Preserving Garments from Moths," "The Art of Letter-Writing," "Madge Bonfield's Easter Ghost," etc., etc. Published by W. Jennings Demorest, 15 East 14th St., New York.

"REGULATION FALLACIES," by Dr. Emily Blackwell, of the New York Woman's College, an eight-page leaflet, has just been issued as No. 22 of the *Philanthropist* series. It answers conclusively the assumed necessity of vice, as urged by the advocates of license and regulation in Europe, and by the apologists for the tolerated vice of our own country. It is a most valuable leaflet for general use, to neutralize and dispel the evil influence of the vicious teaching of a double standard of morality for men and women. Price, twenty cents a dozen; one dollar a hundred. Address, *The Philanthropist*, P. O. Box 2554, N. Y.

"GLIMPSES OF FIFTY YEARS," by Frances E. Willard. Woman's Temperance Publication Association, Chicago, Ill. The story of one strong, pure life, simply told, is always an inspiration to weaker lives; and so, as this book is essentially a woman's book, sympathetic and warmly human, it will not fail to furnish an object lesson in womanly living and womanly struggles and development. From the sentiment on its title-page, "Nothing makes life dreary but lack of motive," to the pathetic "*Vale*" at its close, where the broken pen drops from tired fingers, it sings its "hymn of lofty cheer" to listening hearts, everywhere.

PUBLISHERS' PAGE.

Do not forget to send in twenty-five cents for the GOOD HEALTH SCIENTIFIC SUPPLEMENT. The double number for April and May will be ready in a few days.

* *

THE overwhelming press of work to which the editors of the journal have been subjected during the last month, has necessitated a few days' delay in the issuing of GOOD HEALTH for May. We trust, however, that the excellence of the contents of the number will make up for its slight tardiness, and hope to be promptly on hand hereafter.

* *

EVERY department of the Sanitarium is flourishing, and the number of patients is greater than ever before at this season of the year.

* *

AMONG other improvements which are in progress at the Sanitarium, is the erection of a large boiler-house, at a distance of between thirty and forty rods from the institution, and also a fine green-house. The beauty of the grounds has been enhanced by the addition of a large number of well-grown trees. Many of the trees and shrubs about the grounds are rapidly putting out their leaves, and the *parterres* and flower-beds dotted over the clean-shaven lawn, are already becoming beautiful with early spring blossoms.

* *

THE five-story addition to the main building of the Sanitarium will constitute the most elegant portion of this already immense structure. The first floor will contain a large parlor, a reception room, and a fine writing-room and library. Each of the other floors will be divided into four elegant suites, all of which will command a fine prospect through a large bay window, and will communicate with a private balcony. With this addition, the main building of the Sanitarium, including the extension on the east side, becomes over four hundred feet in length, with an average width of between fifty and sixty feet, the whole structure being four and five stories in height.

* *

THE GOOD HEALTH SCIENTIFIC SUPPLEMENT, announced a few weeks ago, has not been abandoned, as some of our readers who have sent in their orders may suppose, but has been delayed by the exigencies which always arise in the starting of a new enterprise of this sort; but the engraved headings from original designs are now ready, and the first number, which will be a double one, including both the April and May numbers, will be issued in a few days. The first number will contain, among other important and interesting articles, "An Exposure of the Wilfred Hall Humbug," "The Management of Typhoid Fever," and "The Treatment of Measles," besides the report of a number of sanitary investigations, etc. Each of the several departments, "Home Training in Nursing," "Popular Medicine," "Original Scientific Researches," and "The GOOD HEALTH Detective Bureau," is filled with concise, accurate, and interesting information. Every subscriber to GOOD HEALTH should have the GOOD HEALTH SCIENTIFIC SUPPLEMENT. Price, twenty-five cents additional, when ordered with GOOD HEALTH.

* *

MISSIONARY NURSES.—The managers of the Sanitarium are organizing a corps of missionary nurses, to be sent into the

large cities to engage in caring for the sick poor. There are already nearly a score of candidates for this work, and it is to be hoped that the number will be increased to fifty or more between now and next fall, at which time it is expected that active labor will be begun. A special class for instruction in this line is being organized, and young women who are interested in the effort are invited to offer their services as soon as possible, so that they may enter upon preparation at once. All who enter this field are expected to devote themselves to it for not less than five years. Ample provision is made for the maintenance of those who engage in the work.

* *

THE members of the first session of the Health and Temperance Training School, are all in the field, actively engaged in the work to which they devoted several months of preparation last winter. At this present time, W. H. Wakeham and A. A. John are lecturing, the former in Indiana, the latter in Iowa. Frank Thorp, J. B. Beckner, G. H. Baber, J. L. Rumery, C. L. Kellogg, B. F. Colby, M. E. McMeans, W. L. Bird, and M. A. Aultman, are actively engaged in organizing corps of missionary workers in California, Missouri, Illinois, Michigan, Massachusetts, Vermont, Indiana, Iowa, and Colorado. Miss Evora Bucknum is carrying on a successful series of cooking-schools in West Bay City, Michigan. Miss Eva Wick, president of the Health and Temperance Association of Missouri, is laboring in that State. Mrs. G. H. Baber is holding cooking-schools, and engaging in health and temperance work in other lines, in Illinois. Miss Laura Bee expects soon to be at work in West Virginia, where a large and very important field of usefulness is awaiting her. Mrs. D. H. Cress, whose name was inadvertently omitted from the list of graduates previously mentioned in these columns, is laboring in the interest of health and temperance work, in connection with her husband, who is engaged in home missionary labor in a German colony in Ontario.

* *

THE circulation of GOOD HEALTH in England and Australia, has become so great that it has been found necessary to send an extra set of electrotyped plates to each of these countries, for the purpose of publishing special editions of the journal. Arrangements are also being made for the extensive introduction of the various works published by the Good Health Publishing Company, in these foreign fields.

* *

THE NEW PHOTOGRAPHY.

Photography is certainly a most interesting and delightful study, and the results obtained by means of the improved system of film photography are so beautiful, and the apparatus employed so simple, it is no wonder thousands of our most cultured people are becoming enthusiastic amateurs. The most ingenious, and it seems by far the most popular camera in use among experts and amateurs alike, is the Kodak, a little instrument measuring but $3\frac{1}{4}$ x $3\frac{1}{2}$ x $6\frac{1}{2}$ inches, and weighing only 32 ounces. It is a complete photographic outfit, with lens, instantaneous shutter, and material for making one hundred negatives, and so compact and neat in appearance that any lady can carry it without making herself in the least conspicuous. The Eastman Dry Plate & Film Co., of Rochester, N. Y., are the makers, to whose advertisement in another column, we call attention.

ADVERTISEMENTS.



NEW KODAKS

"You press the button,
we do the rest."

Seven New Styles and Sizes

ALL LOADED WITH **Transparent Films.**

For Sale by all Photo. Stock Dealers.

THE EASTMAN COMPANY,

ROCHESTER, N. Y.

Send for Catalogue.

PLAIN FACTS

FOR OLD AND YOUNG,

BY J. H. KELLOGG, M. D.

Member of the American Public Health Association, The American Society of Microscopists, The State Medical Association, The Association for the Advancement of Science, etc., etc.

NEW EDITION, REVISED AND ENLARGED.

This work has passed rapidly through several large editions, aggregating over **10,000 COPIES**, all of which have been sold within the last five years. The book is commended by leading journalists, clergymen, physicians, and all who examine it thoroughly. The new edition contains many new and interesting chapters, making a handsome octavo volume of 644 pages, handsomely bound in the following styles:—

Cloth, Embossed in Gold and Jet. Leather (Library Style).
Half Morocco, Gilt Edges.

This work is sold exclusively by subscription, and is one of the best selling books published.

RELIABLE AND ENERGETIC AGENTS WANTED

In Canada, and in every township in the United States, to whom liberal compensation will be paid. For Agent's Outfit, and full information, address,

I. F. SEGNER & CO., PUBLISHERS
BURLINGTON, IOWA.

Or, PACIFIC PRESS, Oakland, Cal., Agents for Pacific Coast, Australia and New Zealand.

Gate City Stone Filter.

46 MURRAY ST.,
NEW YORK.



CHEAPEST, most **ORNAMENTAL**, and **BEST** Filter for Family and Office use on the market.

Fine China and Gray Stone-ware jars to hold the water.

A **NATURAL STONE** for a Filtering Medium.

Fitted with separate Patent Ice Chambers, to cool the water.

As easily cleaned as a Water Pitcher.

No objectionable material used in the construction of this Filter.

All water is filled with impurities during the rainy season.

This Filter will **ABSOLUTELY CLEANSE IT**.

Open Cut shows Filter Disc used in our Filters, and Separate Patent Ice Chamber.

Address as above for Descriptive Price List.

Typewriter Headquarters

Unprejudiced authority on Writing Machines; Wholesale and Retail Dealers, and largest handlers of all makes, at lowest prices, in the world. Two entire floors devoted to selling, renting and exchanging

TYPENRITERS

of all descriptions. Instruments shipped with privilege of examination. Exchanging a specialty. Three large illustrated catalogues free. Typewriter Supplies, Attachments and Novelties for all machines. Do not fail to write us



"COLUMBIAS" HIGHEST GRADE ONLY.

Catalogue Free.

POPE MFG. CO.

BRANCH HOUSES:

12 Warren St., NEW YORK.

77 Franklin St., BOSTON.

291 Wabash Ave., CHICAGO.

E. C. ADAMS, Agent, 50 Poplar St., and 23 N. Jeff. St.,
BATTLE CREEK, MICH.

Unfermented Wine.

We are prepared to furnish a Fine Quality of unfermented wine, for

SACRAMENTAL OR MEDICINAL PURPOSES,

Guaranteeing the same to be made from fine table grapes, to be strictly unfermented, and free from any chemical preservative. This wine is put up in bottles hermetically sealed, and will keep indefinitely.

The method of preservation retains the Natural, Delicious Flavor of the Grape, unimpaired, and there is no better appetizer or healthful tonic for a chronic invalid or a convalescent from any acute disease.

PUT UP IN PINT BOTTLES.

PRICE,

Single bottles, 50 Cts.

In cases of one dozen bottles (pints), \$5.00.


Shipped, securely packed, to any address, on receipt of price.

SANITARIUM FOOD COMPANY,
BATTLE CREEK, MICH.

**FINEST LINE
EVER PRESENTED**

COLUMBIA

BICYCLES
TRICYCLES
TANDEMS
SAFETIES



ILLUSTRATED CATALOGUE
FREE

POPE MFG. CO.

BOSTON NEW YORK CHICAGO

THE LADIES FAVORITE

THE LIGHT RUNNING

NEW HOME

THE SEWING MACHINE THE BEST

THE FINEST WOODWORK ATTACHMENTS

NEW HOME SEWING MACHINE CO. ORANGE - MASS.

CHICAGO, ILL. 28 UNION SQUARE, N.Y. SAN FRANCISCO, CAL.
ATLANTA, GA. ST. LOUIS, MO. FOR SALE BY DALLAS, TEX.

**DIXON'S "CARBURET
OF IRON."**

STOVE POLISH

IS THE BEST.



THE

Caligraph

LIFESHORT WRITE OLD WAY

Address: The American Writing
Machine Co., Hartford, Conn.
New York Office, 237 Broadway.

LADIES'
Skirt · Suspender.



The accompanying cut represents the most improved form of Skirt Suspender for ladies and misses. This Suspender is so convenient, so comfortable, so simple, so light, and yet so durable, that every lady who appreciates the increased comfort and health to be obtained by the use of such an article becomes a purchaser at sight.

The Suspender is made of beautiful silk stripe web, and is adjustable for either ladies or misses. Sent by mail, postage paid, on receipt of 50 cents, or three for \$1.00.

SEND FOR CIRCULARS OF HEALTHFUL CLOTHING OF
EVERY DESCRIPTION.

Address,

Sanitary Supply Co.,

Battle Creek, Mich.

The Dick Seamless Foot Warm-

ers again. Warm, Soft, Strong, Noiseless, woven by hand, lined with wool. If your dealers have none (canvassers wanted) order of us. Ladies' sizes \$1.35, Gents' \$1.60. (All sizes made.) Sent postpaid to any address. Write plainly and give size of shoe worn. We advertise in the early winter only, but fill orders throughout the year. **W. H. DICK, Manfr., Dansville, N. Y.**



D. L. DOWD'S HEALTH EXERCISER.



14th Street, New York.

FOR BRAIN-WORKERS AND SEDENTARY PEOPLE: Gentlemen, Ladies, Youths; the Athlete or Invalid. A complete gymnasium. Takes up but 6 in. square floor-room; new, scientific, durable, comprehensive, cheap. Indorsed by 20,000 physicians, lawyers, clergymen, editors, and others now using it. Send for ill'd circular, 40 engravings; no charge. Prof. D. L. Dowd, Scientific Physical and Vocal Culture, 9 East

EUREKA INCUBATORS
.. & BROODERS.

Send five one-cent stamps for 108-page catalogue. Tells how to make the best brooder in use.

J. L. CAMPBELL,
West Elizabeth, Pa.

Prof. Loisettes
MEMORY

DISCOVERY AND TRAINING METHOD

In spite of adulterated imitations which miss the theory, and practical results of the Original, in spite of the grossest misrepresentations by envious would-be competitors, and in spite of "base attempts to rob" him of the fruit of his labors, (all of which demonstrate the undoubted superiority and popularity of his teaching), Prof. Loisettes Art of Never Forgetting is recognized to-day in both Hemispheres as marking an Epoch in Memory Culture. His Prospectus (sent post free) gives opinions of people in all parts of the globe who have actually studied his System by correspondence, showing that his System is used *only while being studied, not afterwards*; that *any book can be learned in a single reading, mind-wandering cured, &c.* For Prospectus, Terms and Testimonials address
Prof. A. LOISETTE, 237 Fifth Avenue, N. Y.

SHARP & SMITH,

MANUFACTURERS AND IMPORTERS OF

Surgical Instruments,

Apparatus

For Weak Ankles, Bow Legs,
Knock Knees, Spinal Curvature,
Wry Neck,

Elastic Stockings

For Enlarged Veins and Weak
Joints,



Batteries, Inhalers, etc.,

Invalid Chairs,

Invalid Cushions,

Ear Trumpets,

Conversation Tubes,

Ice Bags, Ice Caps, Hot-Water Bags, Syringes of all kinds,

Artificial Limbs, Artificial Eyes,

Abdominal Supporters.

Send for Directions for
Measurement.

73 Randolph St., CHICAGO.

New Temperance Charts.

By J. H. KELLOGG, M. D.,

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

- PLATE 1. The Alcohol Family.
- PLATE 2. A Healthy Stomach.
- PLATE 3. Stomach of a Moderate Drinker.
- PLATE 4. Stomach of a Hard Drinker.
- PLATE 5. Stomach in Delirium Tremens.
- PLATE 6. Cancer of the Stomach.
- PLATE 7. *A.*—Healthy Nerve Cells. *B.*—Fatty Degeneration of Nerve Cells. *C.*—Healthy Blood. *D.*—Blood of an Habitual Smoker. *E.*—Blood of a Drunkard. *F.*—Blood Destroyed by Alcohol. *G.*—The Drunkard's Ring. *H.*—Healthy Nerve Fibres. *I.*—Fatty Degeneration of Nerve Fibres. *J.*—Healthy Muscle Fibres. *K.*—Fatty Degeneration of Muscle Fibres.
- PLATE 8. Smoker's Cancer. A Rum Blossom. A Healthy Brain. A Drunkard's Brain. A Healthy Heart. A Drunkard's Heart.
- PLATE 9. *A.*—A Healthy Lung. *B.*—Drunkard's Consumption. *D.*—A Healthy Kidney. *E.*—Enlarged Fatt. Kidney of Beer-Drinker. *F.*—Atrophied Kidney of Gin-Drinker. *G.*—Healthy Liver.



- H.*—Liver of Drunkard, Showing Nutmeg Degeneration. *I.*—Magnified Section of Fatty Liver of Drunkard. *J.*—View of an Eye Diseased from the Use of Tobacco and Whisky. *K.*—View of the Interior of a Healthy Eye.
- PLATE 10. Alcoholic Drinks, showing the percentage of Alcohol contained in the common Alcoholic Beverages. Adulterants of Alcoholic Drinks, showing a list of poisons used in adulterating the various liquors. Sphygmographic Tracings of the Pulse, showing the effects of Alcohol and Tobacco upon the pulse. *A.*—Pulse of a Healthy Person. *B.*—Pulse of a Moderate Drinker. *C.*—Pulse of a Drunkard. *D.*—Pulse of an Old Tobacco-User. *E.*—Pulse of a Young Smoker.
- Statistics of Stimulants and Narcotics. A diagram exhibiting in a graphic way the fact that the annual cost of Alcoholic Drinks, Tobacco, Rum, Tea and Coffee, exceeds the cost of Bread, Meat, Clothing, Education and Missions.

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

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

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

GOOD HEALTH PUBLISHING COMPANY,
Battle Creek, Mich.

ADVERTISEMENTS.



Deservedly the Favorite

BECAUSE it furnishes the Best Accommodations for Invalids, Tourists, Pleasure Seekers, Sportsmen, and all classes of travelers going to or returning from Manitou, the Garden of the Gods, Pike's Peak, Cascade, Green Mountain Falls, Glenwood Springs, Monument Park, Palmer Lake, Idaho Springs, Twin Lakes, Green Lake, the Hunting and Fishing Grounds, Mountain Parks, Sanitary and Fashionable Resorts and Scenic Grandeurs of Colorado

THE DIRECT ROUTE to all important cities, towns and sections, West, Northwest or Southwest from Chicago, making terminal connections in Union Depots with lines diverging to any locality between the Lakes and the Pacific Coast to which the traveler is destined.

Magnificent Solid Vestibule Express Trains,

Cool in summer, warmed by steam from the locomotive in winter—the coaches forming continuous and connecting parlors under one roof—daily each way between Chicago and Des Moines, Council Bluffs and Omaha; between Chicago and St. Joseph, Atchison and Kansas City, and between Chicago and Denver, Colorado Springs and Pueblo. New and elegant Day Coaches, Pullman Palace Sleepers, FREE Reclining Chair Cars, and Dining Cars.

Daily Fast Express Trains to and from Watertown, Sioux Falls, Minneapolis and St. Paul (via ALBERT LEA ROUTE), and to and from all points in Southern Nebraska, Kansas, and Kingfisher, in the Indian Territory. Pullman Palace Sleepers to Wichita, FREE Reclining Chair Cars on all Express Trains.

For Tickets, Maps, Folders, copies of the *Western Trail* (issued monthly) or further information, apply to your nearest Coupon Ticket Agent or any representative of this road, or address

E. ST. JOHN,
General Manager.

JOHN SEBASTIAN,
General Ticket and Passenger Agent.



MICHIGAN CENTRAL

"The Niagara Falls Route."
Corrected March 9, 1890.

STATIONS.	EAST.		WEST.		Chicago Express.	Pacific Express.	Evening Express.	Kalamazoo Accom'n.	Local Pass'gr.
	†Mail.	†Day Express.	†Mail.	†Day Express.					
Chicago.....	am 7.55	am 10.35	pm 3.19	pm 10.10	pm 4.25	pm 4.50			
Michigan City	10.20	pm 12.50	5.21	am 12.48	11.46	7.55			
Niles.....	11.40	1.45	6.15	2.17	am 1.05	8.35	pm 3.35		
Kalamazoo.....	pm 1.25	2.55	7.21	4.0	2.49	am 10.15	5.25		
Battle Creek.....	2.07	3.27	7.55	4.50	3.27	7.10	6.13		
Jackson.....	3.45	4.50	9.05	6.0	4.50	9.35	7.55		
Ann Arbor.....	5.15	5.56	9.58	7.52	6.00	10.43			
Detroit.....	6.45	7.01	10.58	9.20	7.30	11.50			
Buffalo.....	3.3	am 4.25	am 7.15	pm 5.55	9.08	pm 8.50			
Rochester.....		6.00	9.2	8.00		11.20			
Syracuse.....		8.10	11.32	10.20		am 1.30			
New York.....		pm 4.30	pm 8.54	am 7.20		pm 9.42			
Boston.....		8.30	10.57	9.35		pm 2.50			

* Daily. † Daily except Sunday. ‡ Daily except Saturday.
O. W. RUGGLES, General Pass. & Ticket Agent, Chicago.
GEO. J. SADLER, Ticket Agent, Battle Creek.

HAVE YOUR BAGGAGE CHECKED. Midland Railway of England.

The picturesque route from Liverpool to London. Drawing-room saloons by day trains without extra charge. Fast express trains. Through tickets to London, Paris, or any part of Europe. Baggage checked through from residence or hotel in New York to hotel, residence or railway station in London. Time tables, maps, and all information at the Company's office, 261 Broadway, corner of Warren St., New York. M. H. HURLEY, Agent.

Chicago & Grand Trunk R. R.

Time Table, in Effect Jan 19, 1890.

GOING WEST.		STATIONS.		GOING EAST.	
pm 3.00	pm 7.00	Boston.....	am 8.30	pm 7.50	pm 7.30
5.00	8.00	New York.....	11.10	7.40	10.10
am 6.20	am 10.15	Buffalo.....	9.50	5.40	7.30
am 7.45	am 11.20	Niagara Falls.....	8.15	5.17	6.30
am 8.30	am 1.00	Boston.....	9.50	12.10	12.11
pm 8.30	pm 11.55	Montreal.....	8.00	7.45	7.45
pm 1.00	pm 1.00	Toronto.....	8.40	7.25	7.25
pm 4.45	pm 7.45	Detroit.....	9.45	7.45	11.50
am 5.55	am 7.15	Dep. Port Huron Arr.	10.2	1.05	7.35
7.28	8.50	Lapeer.....	8.4	11.45	6.17
8.05	6.20	Flint.....	7.55	11.17	5.40
8.48	7.15	Durand.....	7.15	10.48	5.03
10.00	8.25	Lansing.....	5.55	9.51	4.00
10.37	9.10	Charlotte.....	4.57	9.27	3.25
1.00	10.00	BATTLE CREEK.....	4.05	8.45	2.35
1.49	pm 2.50	Vicksburg.....	3.19	8.01	1.48
2.00	pm 1.08	Schoolcraft.....	3.05	7.16	1.38
2.52	6.19	Cassopolis.....	2.19	7.16	12.45
3.40	5.50	South Bend.....	1.25	6.40	12.00
5.00	6.10	Haskell's.....	12.05	5.20	10.30
5.30	6.10	Valparaiso.....	11.50	5.20	10.30
pm 10.10	8.10	Chicago.....	9.05	3.15	8.15

Where no time is given, train does not stop.
Trains run by Central Standard Time.
Valparaiso Accommodation, Battle Creek Passenger, Port Huron Passenger, and Mail trains, daily except Sunday.
Pacific, Limited, Day, and Atlantic Expresses, daily.
Sunday Passenger, Sunday only.
W. E. DAVIS, Gen. Pass. and Ticket Agt., Chicago.
A. S. PARKER, Ticket Agt., Battle Creek.

ADVERTISEMENTS.

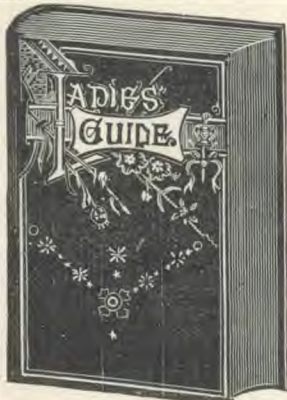
REVISED AND ENLARGED EDITION.

LADIES' GUIDE IN HEALTH AND DISEASE.

BY J. H. KELLOGG, M. D.,

Member of the American Association for the Advancement of Science, American Public Health Association, American Society of Microscopists, Michigan State Medical Association, State Board of Health of Michigan, Editor of "Good Health," Author of "Home Hand-Book of Hygiene and Rational Medicine," "Man, the Masterpiece," and various other works.

A NEW BOOK.



672 OCTAVO PAGES.

123 ILLUSTRATIONS.

THIS new work fills a want long recognized in all parts of the land, and is admitted by physicians to be the most complete and practical work of its kind. An eminent lady physician pronounces it "the best book ever written in the interest of humanity." Another writes, "It is destined to work a great reformation in the rising generation, and to alleviate the ills of the present." The author in a very chaste and delicate manner graphically describes the great mysteries of life—the Anatomy and Physiology of Reproduction, and considers the several phases of woman's life under the respective headings, "The Little Girl," "The Young Lady," "The Wife," and "The Mother,"—embracing all subjects of interest pertaining to the health or disease of the sex; as Education; Mora and Physical Culture; Clothing; Diet; Puberty; Mental Equality of Sexes; Personal Beauty; Marriage; Dignity of Wifehood; Prevention of Conception; Criminal Abortion; Change of Life; Heredity; Signs, Hygiene, and Disorders of Pregnancy; Complications of Labor; Symptoms and Treatment for Diseases of Women; and an Appendix giving Rational Home Treatment for Diseases of Childhood; Instruction for Baths, Swedish Movements, Postural Treatment, Electricity, Massage, many valuable Dietetic Recipes; Medicinal Recipes and Prescriptions.

ONE LADY SOLD 205 COPIES FIRST MONTH.

NO OTHER WORK COMBINES SO MUCH OF INTEREST AND VALUE TO DAUGHTERS, WIVES, AND MOTHERS.

"Know Thyself."

ACTIVE AGENTS WANTED.

ADDRESS,

GOOD HEALTH PUB. CO.,
BATTLE CREEK, MICH.,
Sole Agents for the Eastern States, Canada, and the British Possessions.

W. D. CONDIT & CO.,
DES MOINES, IOWA.

Rev. C. C. McCabe, the famous "Chaplain" of the civil war, who travels from one end of the land to the other looking after the missions of the Methodist Episcopal Church, writes to Mr. Shoppell, the architect, as follows: "You are filling the land with beautiful homes. I meet them everywhere. The plans are all you claim for them. The cheapest houses may be beautifully and tastefully built." Hundreds of similar letters are at Mr. Shoppell's office.

READ ABOVE.



READ BELOW.

Mr. Shoppell has a full list of Classified Designs (estimates guaranteed)—the most helpful aids ever devised for the intending builder. Every design is beautifully printed on plate paper (size of page 10 1/2 x 14 inches), with full descriptions and floor plans. Each set or "class" is inclosed in a handsome cloth portfolio, as follows:—

*Portfolio of \$1,000 Houses, 30 designs,	Price \$2
" " 1,500 " " 30 " " " " " " " " " " " "	" 2
" " 2,000 " " 30 " " " " " " " " " " " "	" 2
" " 2,500 " " 30 " " " " " " " " " " " "	" 2
" " 3,000 " " 32 " " " " " " " " " " " "	" 2
" " 3,500 " " 36 " " " " " " " " " " " "	" 2
" " 4,000 " " 30 " " " " " " " " " " " "	" 2
" " 5,000 " " 30 " " " " " " " " " " " "	" 2
" " 6,000 " " 28 " " " " " " " " " " " "	" 2
" " 7,500 " " 22 " " " " " " " " " " " "	" 2
" " 10,000 " " 16 " " " " " " " " " " " "	" 2
" " Stables " 16 " " " " " " " " " " " "	" 2

*The first Portfolio contains designs that cost as low as \$500, \$600, \$700, and \$800.

Any 3 of the above Portfolios for \$5; any 7 for \$10; the complete set (12) for \$15. Pamphlet of specimen pages, 50c. Large bound volume containing over 200 designs selected from the portfolios of various costs, \$5, returnable if not satisfactory. Address R. W. Shoppell, Architect, 63 Broadway, New York. Mention this paper.

The West Shore Railroad

IS one of the most popular routes for business and pleasure travel leading to and from New York City, as well as being the most substantially built and elegantly equipped double-track line, traversing, as it does, the west shore of the historic and world-famed Hudson River, and passing through the beautiful Mohawk Valley.

By this route three express trains are run daily, in each direction, between New York, Albany, Utica, Syracuse, Rochester, Buffalo, Niagara Falls, Toronto, Detroit, Chicago, St. Louis and the West.

Palace sleeping-cars are attached to these trains, and run through without change between the points named. The West Shore, in connection with the Fitchburg Railroad, is, also, the shortest line between Boston and Chicago.

Buffet Smoking Cars, with revolving chairs, are a special feature of the splendid service on the West Shore.

Tickets via West Shore can be purchased at ticket office of all connecting lines, and they are sold and baggage checked through to destination from all stations on the West Shore Railroad.

For further information regarding West Shore Railroad, address:

H. B. JAGOE, General Eastern Passage Agt., 363 Broadway N. Y.
C. E. LAMBERT, General Passenger Agt., 5 Vanderbilt Ave., N. Y.

THE AMERICAN SENTINEL.

AN EIGHT-PAGE WEEKLY JOURNAL
DEVOTED TO

The defense of American Institutions, the preservation of the United States Constitution as it is, so far as regards religion or religious tests, and the maintenance of human rights, both civil and religious.

It will ever be uncompromisingly opposed to anything tending toward a union of Church and State, either in name or in fact.

Single Copy, per year, post-paid . . . \$1.00.

In clubs of ten or more copies, per year, each 75c.

To foreign countries; single subscriptions, post-paid, . . . 5s.

Sample copy free. Address,

AMERICAN SENTINEL,
No 43 Bond St., New York City.

ADVERTISEMENTS.

GOOD HEALTH, WITH OTHER Popular Journals.

The publishers of GOOD HEALTH have been able to make such arrangements with the publishers of the best periodicals, that they can supply many of them with this journal at the price of one, and thus make a great saving to the subscriber. Those who wish to subscribe for one or two good journals besides GOOD HEALTH, will find this a very advantageous offer.

The price of GOOD HEALTH for 1890 is \$1.25. The following list comprises some of the principal journals which we are able to furnish, thus:—

NAME OF JOURNAL.	Price of Journal Alone.	Price with GOOD HEALTH.	NAME OF JOURNAL.	Price of Journal Alone.	Price with GOOD HEALTH.
A merican Inventor.....	\$ 1 00	\$ 2 00	I ndependent.....	\$3 00	\$3 75
" Agriculturist.....	1 50	2 25	I nter Ocean.....	1 00	2 00
" Architect and Building News.....	6 00	6 35	" (daily and Sunday).....	10 00	10 25
" Teacher.....	1 00	2 00	" (daily, except Sunday).....	8 00	8 45
" Journal of Education.....	1 50	2 15	" (semi-weekly).....	2 00	2 95
" Poultry Journal.....	1 00	1 85	J ournal of Education.....	2 50	3 25
" Bee Journal.....	1 00	2 15	" American Folk-Lore.....	3 00	3 65
" Journal of Philology.....	3 00	4 25	L aws of Life.....	1 00	2 00
" Traveler.....	1 00	2 00	Lippincott's Monthly Magazine.....	3 00	3 25
" Rural Home.....	1 00	2 00	Littell's Living Age.....	8 00	8 25
" Poultry Yard.....	1 50	2 25	L'Art.....	12 00	10 85
Advance, The.....	2 50	3 25	M other's Magazine (new sub's only).....	1 50	2 25
Magazine of American History.....	5 00	5 25	" Macmillan's Magazine.....	3 00	3 75
" Art.....	3 50	4 05	Musical Herald.....	1 00	2 05
Arthur's Home Magazine.....	2 00	2 50	N ature.....	6 00	6 40
Art Amateur.....	4 00	4 50	" North American Review.....	5 00	5 25
Art Age.....	2 50	3 25	National Magazine.....	1 00	1 75
Atlantic Monthly.....	4 00	4 45	New York Medical Journal.....	5 00	6 25
Andover Review.....	4 00	4 45	New York Herald.....	1 00	2 05
Arkansaw Traveler.....	2 00	2 75	O ur Little Ones and the Nursery.....	1 50	2 45
B oston Traveler.....	2 00	2 75	" Our Little Men and Women.....	1 00	2 05
Ballou's Magazine.....	1 50	2 25	Orchard and Garden.....	50	1 60
Babyhood.....	1 50	2 25	P oultry World.....	1 25	2 00
Boston Globe.....	1 00	2 00	" Popular Science News.....	1 00	2 00
Boston Weekly Advertiser.....	1 00	1 75	" Gardening (new sub's only).....	1 00	1 90
Babyland.....	50	1 65	" Science Monthly.....	5 00	5 25
Beekeeper's Magazine.....	50	1 65	Practitioner, The.....	3 50	4 15
Brain.....	3 50	4 15	Pansy, The.....	1 00	2 05
Book Buyer.....	1 00	2 05	Paper Trade Journal.....	4 00	4 25
C assell's Family Magazine.....	1 50	2 45	Peterson's Magazine.....	2 00	2 70
" Country Gentleman.....	2 50	3 00	Q uilver.....	1 50	2 45
" Cosmopolitan (new sub's only).....	2 00	2 90	R ural New Yorker.....	2 00	2 75
" Cottage Hearth.....	1 00	1 75	S cribner's Magazine.....	3 00	3 65
" Christian at Work (new sub's only).....	3 00	3 25	" Sanitary Engineer.....	4 00	5 25
" Century.....	4 00	4 75	" Speculative Philosophy (Journal).....	3 00	3 50
" Chicago Weekly Times.....	1 00	2 00	" Scientific American.....	3 00	3 75
" Chautauqua Young Folk's Journal.....	1 00	2 05	" " —Supplement.....	5 00	5 25
" Chautauquan.....	2 00	3 05	St. Nicholas.....	3 00	3 75
" Chicago Weekly Herald.....	1 00	2 00	T oledo Blade.....	1 00	2 10
D emorest's Magazine.....	2 00	2 75	" The Daily Tribune (Chicago).....	6 00	6 65
" Domestic Monthly.....	1 50	2 25	V ick's Floral Guide.....	1 25	2 05
E nglish Illustrated Magazine.....	1 75	2 60	" Seedman.....	1 25	2 05
F ield and Farm.....	2 00	2 75	W ide Awake.....	2 40	3 25
" Farm and Home.....	50	1 65	" Worke.....	2 50	3 25
" Farm and Fireside.....	50	1 60	" Weekly Enquirer.....	1 15	2 15
" Farm Journal.....	25	1 40	" World Weekly, The.....	1 00	2 05
G ood Housekeeping.....	2 50	3 13	" " Daily, The.....	6 00	6 50
" Golden Argosy.....	4 00	4 75	" Woman's World.....	3 50	4 05
" Globe, The (Boston).....	1 00	1 95	Y outh's Companion (new sub's only).....	1 75	2 50
" Golden Days.....	3 00	3 50	" Young Woman's Magazine.....	1 00	1 85
H ousehold.....	1 10	2 00			
" Housekeeper.....	1 00	1 85			
" Harper's Magazine.....	4 00	4 25			
" " Weekly.....	4 00	4 45			
" " Bazaar.....	4 00	4 45			
" " Young People.....	2 00	2 75			
" Household Magazine.....	1 00	2 00			
" Hawkeye, Weekly.....	1 00	2 00			

We can furnish any other periodicals with GOOD HEALTH at about the same rates as above. When the clubbing journal furnishes a premium, we will supply the same at publisher's rates.

GOOD HEALTH PUBLISHING COMPANY,

BATTLE CREEK, MICH.

GOOD HEALTH

SCIENTIFIC SUPPLEMENT.

FOR years the managers of GOOD HEALTH have contemplated the addition of certain features to the journal, which are evidently needed, but which the limited space has not heretofore permitted. The subject of practical hygiene has grown immensely since this journal was started, twenty-five years ago, and the almost daily discoveries and new developments in this line of knowledge, render it extremely difficult to present within the limits of a thirty-two page magazine anything more than a meager representation of the progress being made in this direction. There are also some subjects of a more strictly medical character, especially in the department of nursing, a consideration of which would scarcely seem to be appropriate in a journal devoted to hygiene, and intended for family reading, and yet are most worthy of attention. There are also many scientific questions which might not interest every reader, but which are of such practical importance, nevertheless, that they should be widely discussed. It is now proposed to publish in connection with GOOD HEALTH, a supplement to be known as "THE GOOD HEALTH SCIENTIFIC SUPPLEMENT," which will possess the following features:—

Home Training in Nursing.

A department devoted to nursing, in which will be given a regular course of instruction in the science of nursing, by various competent writers. All branches of nursing will be considered—general nursing, obstetrical nursing, surgical nursing, etc. The subjects treated under these various heads will include descriptions of, and careful instructions in, the giving of the various baths, applications of electricity, massage, Swedish movements, gymnastics, and all kinds of hygienic treatment. Dietaries for the sick, with recipes and careful directions for preparing food for the sick, will also receive attention. Under the head of obstetrical nursing will be given the most minute and careful directions for antiseptic midwifery, which has marvelously lessened the sufferings and dangers incident to confinement. There is no department of medicine, in fact, in which the employment of antiseptic measures have produced more beneficent results, and it is of the utmost importance that the public should be enlightened respecting the advantages to be derived from this recent application of antiseptic methods. Under the head of surgical nursing will be given careful directions for the treatment of all sorts of wounds and injuries, the application of bandages, and the application of dressings of various kinds. This subject, as well as others, will be so thoroughly illustrated that it may be easily comprehended.

Popular Medicine.

A department devoted to the description of diseases, with their rational treatment. The purpose of this department will be to present a sufficiently clear outline of the nature of disease and its rational treatment to render the reader intelligent upon the subject to such extent as to be able to discriminate between an honorable and scientific practitioner of medicine and the charlatan. Quackery thrives upon ignorance, and the only protection against the horde of quacks that swarm the country, will be found in the education of the public in medical subjects to such

a degree as will give them proper ideas as to what may be expected of scientific medicine. Upon this subject the people are in error in two opposite directions: First, the patient sometimes expects from the physician what cannot be accomplished, and spends time and money in fruitless efforts to accomplish the impossible; and second, on the other hand, thousands of sufferers are languishing upon beds of pain and anguish, to whom scientific medicine, by the aid of its most recent advances, offers speedy and complete relief. It will be the business of this department to aid in clearing away the rubbish of superstition and the mists of ignorance, the existence of which are everywhere productive of a vast amount of needless suffering and preventable death.

Original Scientific Researches.

A department will be devoted to original research, in which will be reported and recorded the results of special scientific inquiries in various departments in hygiene. This department will contain frequent contributions from the Sanitarium Laboratory, in which physiological and sanitary investigations are constantly being made. This Laboratory has already been in operation for several months, and a large amount of interesting material has been accumulated.

The Good Health Detective Bureau.

A special department will be devoted to sanitary investigations and analyses, for the benefit of subscribers. Each subscriber to GOOD HEALTH and SUPPLEMENT, will have the privilege of sending to the Laboratory for analysis, one specimen of any of the following classes of articles likely to contain injurious substances, as the result of adulteration, or otherwise: Water, milk, foods or drinks of any description, wall-paper, colored clothing, colored papers, patent medicines and nostrums of all descriptions, and any article intended for common use or for medical purposes, suspected of being injurious to health or of being fraudulent in character.

The SUPPLEMENT will consist of eight pages, in somewhat finer type than those of GOOD HEALTH; and it is believed that each number will be worth to the subscriber more than the price of the entire journal for a year. The SUPPLEMENT will be furnished to the subscribers of GOOD HEALTH for twenty-five cents a year, which barely pays the publishers the actual cost of paper and printing, leaving nothing for the labor of preparation, which the Editor of the journal will undertake in the interest of hygienic and sanitary progress.

The first number of the SUPPLEMENT will appear about April 1. A sample copy will be sent free to any one desiring it on receipt of one cent to cover postage and expense of mailing.

The first number of

The Supplement will Appear about April 1st.

A Sample Copy will be sent free to any one desiring it, on receipt of one cent to cover postage and expense of mailing.

Address, GOOD HEALTH PUBLISHING CO.,
BATTLE CREEK, MICH.

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

Cents per lb.	Cents per lb.	Cents per lb.
Oatmeal Biscuit.....12	White Crackers.....10	Wheatena (Bulk 10).....12
Medium Oatmeal Crackers....10	Whole-Wheat Wafers.....10	Avenola (Bulk 10).....12
Plain Oatmeal Crackers.....10	Gluten Wafers.....30	Granola (Bulk 10).....12
No. 1 Graham Crackers.....10	Rye Wafers.....12	Gluten Food No. 1.....50
No. 2 Graham Crackers.....10	Fruit Crackers.....20	Gluten Food No. 2.....20
Plain Gr ^h m Crackers Dyspeptic 10	Carbon Crackers.....15	Infant's Food.....40

Sample Packages containing Specimens of each of our Foods sent postpaid for 50 cents. Selected Samples, 25 cents.

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

SANITARIUM FOOD COMPANY, Battle Creek, Mich.

A. New
Bools.

Man, the Masterpiece,

or, Plain Truths Plainly Told about Boyhood, Youth and Manhood.

BY J. H. KELLOGG, M. D.

Know
Thyself.

620 Octavo Pages.

A Paper Manikin.

30 Full-Page Engravings.

17 Copies Sold in 4 hours.

9 in one day, and

71 in one week,

By ONE AGENT.

Is sure to become one of the most popular and rapidly selling subscription books, because of **INTRINSIC MERIT** and **PRACTICAL VALUE.**



THIS new work is designed to make man better, physically, mentally and morally, and may be very briefly described as follows, to-wit: A Brief Description of the Human Body and its Functions; The Mystery of a New Life; Boyhood to Manhood—*dangers which threaten the physical, mental and moral welfare*; Physical Culture; Ethics; Social Ethics; Getting a Wife—if suggestions in this chapter were universally regarded, the divorce courts would close for want of business; An Evil Heritage; How to Make Life a Success; Stomachs—*points out the methods by which the great army of dyspeptics are recruited*; Invaluable Prescriptions for Disorders of the Stomach; Biliousness—a sure cure; Hygiene of the Lungs—*principles and methods of successful ventilation*; Physical Effects of Alcohol; The Tobacco Habit; Germs—of disease—*sources, dangers, and methods of destruction, etc.*; What to Wear for Health; How to Bathe; Sexual Sins and their consequences; Diseases of the Sexual Organs—*description and treatment*; General Hints about Health—*care of Skin, Eyes, Ears, Rules for Dyspeptics, etc.*; Treatment and Prescriptions for Common Ailments, as Chronic Inflammation of the Throat, Nasal Catarrh, Hay Fever, Granular Sore Eyelids, Boils, Corns, Freckles, Dandruff, Tapeworms, Piles, Baldness, Sleeplessness, Heartburn, Acute Sore Throat, Erysipelas, Sunstroke, Ingrowing Toe Nails, Burns, Sprains, Nervous Headache, Sexual Nervous Debility, etc.

CLOTH, Embossed in Gold and Jet, - - - - - \$3.96

LEATHER, Library Style, - - - - - 4.50

HALF MOROCCO, Gilt Edges, - - - - - 5.00

If you wish a copy of this book, and an agent is not known to be in your vicinity, please send your order to the General Agents, and they will see that is filled.

AGENTS WANTED IN ALL PARTS OF THE UNITED STATES AND CANADA.

Good Health Pub. Co., Battle Creek, Mich.



Medical & Surgical
SANITARIUM,

Battle Creek, Mich.

The Oldest and Most Extensive Sanitarium,
 Conducted on Rational and Scientific
 Principles, in the United
 States.

SPECIAL ADVANTAGES.

An elevated and picturesque site. Remarkably salubrious surroundings. "Water of extraordinary purity."—*Prof. A. B. Prescott.*
 Baths of every description.
 Electricity in every form.
 Massage and Swedish movements by trained manipulators.
 Pneumatic and vacuum treatment.
 All sorts of Mechanical Appliances.
 A fine Gymnasium with a trained director.
 Classified dietaries.

Unequaled ventilation, perfect sewerage.
 Artificial climate created for those needing special conditions.
 Thoroughly aseptic surgical wards and operating rooms.
 All conveniences and comforts of a first-class hotel.
 Incurable and offensive patients not received.
 Not a "pleasure resort," but an excellent place for chronic invalids who need special conditions and treatment not readily obtainable at home.

RATES REASONABLE.

For Circulars Address, } **SANITARIUM,** } **BATTLE CREEK, MICH.**