



C. F. Fairbrother

1888

GOOD HEALTH

A MONTHLY JOURNAL OF HYGIENE, DEVOTED TO PHYSICAL, MENTAL, AND MORAL CULTURE.

GOOD HEALTH PUBLISHING CO.
 BATTLE CREEK, MICHIGAN,
 AND
 48, PATERNOSTER ROW,
 PATERNOSTER CHAMBERS,
 LONDON, ENG.

PUBLISHED MONTHLY AT \$1.00 A YEAR.

• SINGLE COPIES • 10 CENTS •

General Articles	Page	281
Massage, By THE EDITOR, 281—Germs in Beer, <i>Illustrated</i> , 84—Hemp-Eaters and Hemp-Eating, 285—Moses as a Sanitarian, 287—Fujiyama, the Healthy Mountain in Japan, by SHO NEMOTO, 288.		
Dress		290
History of Costuma, <i>Illustrated</i> , 290—Woolen Under-clothing for Summer, 291—Fashion Slavery, A New Fashion, Worth Knowing, 293.		
The Happy Fireside		294
To a Child. Anarchy in the Town of Human Being, by FANNIE BOLTON, 294—Teaching and Training, Evolution, 296—Our Boys, 297—A Chinese Bed-Chamber, <i>Illustrated</i> , 298—"Mother is Nervous To-day," 299—Cause of Failure in Life, 300.		
Temperance Notes		300
Popular Science		301
Social Purity		302
Ambition and Ruin, 302—Dr. Blackwell on Impure Literature, 303—Slang and Morals, 304—The California Slave Trade, Danger from Impurity in Schools, 305.		
Editorial		306
Fashionable Gluttony, 306—Sick After He Got Well, A Mind Cure Investigated, 307—The Nervous System and Overwork, The "Stranger's Cold," 308—Fish as Brain Food, Diseased Milk, A New Argument for Coffee, Tea and Coffee as Food, 309—Lead Poisoning, Disease Germs in Ice, Cholera Hams, Danger in Dust, Adulterated Bread, 310—Patent Medicine, A Bill of Fare in Congo Land, Encouraging, 311.		
Domestic Medicine		312
Oatmeal, Suggestions to Nurses, A New Cure for Hiccough, 312—Fecal Accumulations in the Colon, Diet in Fevers, A New Theory of Malaria.		
Hygiene for Young Folks		314
"A Willing Heart Makes Labor Light," 314.		
Question Box		316
Literary Notices		317
Science in the Household		318
Seasonable Bills of Fare, 318—House Moths, A Chinese Kitchen, 319.		
Publisher's Page		320

MAN, THE MASTERPIECE

—OR—
PLAIN TRUTHS PLAINLY TOLD, ABOUT BOYHOOD, YOUTH AND MANHOOD.

BY J. H. KELLOGG, M. D.

620 OCTAVO PAGES! A PAPER MANAKIN! 30 FULL-PAGE ENGRAVINGS!

17 Copies sold in 4 hrs.
9 in 1 day, and
71 in 1 week,
by one
agt.

It is sure to become one of the most popular of 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; Billiounness—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, 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.

GOOD RELIABLE AGENTS WANTED.
For terms and territory address

CONDIT & NELSON,
Des Moines, Iowa.

PACIFIC PRESS PUBLISHING HOUSE,
OAKLAND, CALIFORNIA,
General Agents for Australia and Islands of
the Pacific.

GOOD HEALTH PUBLISHING COMPANY,
BATTLE CREEK, MICH.,
Agents for the Eastern States, Canada, and
British Possessions.

A NEW BOOK!

“KNOW THYSELF!”





HARVEST-TIME IN GERMANY.



BATTLE CREEK, MICHIGAN

AUGUST, 1888.

MASSAGE.

BY THE EDITOR.

THIS excellent mode of treatment, which is applicable to a great variety of diseases (probably to more than any other one medical means), has been in use, in one form or another, from the most remote ages. It was doubtless employed by the Chinese long before the Christian era, and is known to have been practiced by the ancient Greeks and Romans. Captain Cook found it in use among the natives of the South Sea Islands.

About a century ago, Ling, of Sweden, systematized and enlarged some features of the system, adding a series of gymnastic exercises. He named his system *Swedish movements*, or *gymnastics*. Metzger, of Amsterdam, has, perhaps, done more than any other one person in the last generation, to perfect and systematize what is properly known as *massage*. The various advocates of this new system of treatment have brought forward a great variety of special movements, or manipulations, making a very complicated system, if one undertakes to adopt and carry out all the suggestions and practices of its leading practitioners.

After studying this mode of treatment under its various forms, as practiced in England,

France, Germany, and Sweden, as well as in this country, and having had more than twelve years' experience in its use, we have undertaken to systematize and classify its most important and essential procedures, as follows:—

PROCEDURES.

The principal procedures in massage are seven in number,—touch, passes, friction, kneading, vibration, percussion, and joint movements. Each of these seven procedures comprises several distinct movements, or varieties of movements.

TOUCH consists of the simple application of the hand or some portion of the hand to any part of the body, without movement. There are three modes of application:—

1. *Passive*, the simple laying of the hand upon a part, with which it is held lightly in contact. The benefit derived is due (*a*) to the communication of warmth, or (*b*) to a subtle influence upon the nervous system, as when sleep is induced by holding the hand upon the head.

2. *Compression*, which consists in making light or heavy pressure with one or both hands, upon a swollen or painful part, to control swelling or to relieve pain.

3. *Nerve compression*, in which strong pressure is made with the thumb or a finger upon a nerve trunk, by which means the function

of the nerve is stimulated, and the central nervous system,—that is, the spine or brain,—is favorably influenced.

PASSES.—This procedure consists in light movements made over the surface with some portion of the hand, without sufficient pressure to produce any great degree of friction. When made upon the spine or trunk, the stroke should usually be in a downward direction; when made upon the arms or legs, the movements should be made toward the body. The strokes should always be made in the same direction, never in a to-and-fro manner. The soothing effect of the movement is due to the influence of light pressure and movement upon the nerves of the skin. Passes are made in three forms :—

(1) With the whole palm, (2) with the hands or pulp of the fingers only, (3) with the knuckles of the closed hand.

FRICTION.—In this procedure, the surface is rubbed harder than in passes, either for the purpose of exciting increased activity of the skin, or for the purpose of applying an unguent, as olive or almond oil, or vaseline. Frictions are also employed in the shampoo given in connection with the Turkish bath. This movement also has three forms :—

1. *Centripetal*, in which the movements are always toward the center of the body; that is, when applied to an arm or a leg, the movement should be from the extremity of the limb toward the body. The movements should be at the rate of from twenty to forty a minute.

2. *Circular*, in which a limb is grasped by both hands, which are given an alternating, wringing, or twisting movement, the hands being allowed to glide upon the surface.

3. *Rotary*. The hand being applied to the surface, is made to describe a circle comprising a small or large area, as the case may require. This movement is chiefly useful in applying friction to the trunk of the body.

KNEADING.—This procedure consists in kneading or fulling movements, applied to the tissues in alternate compression and relaxation. Either one or both hands may be employed.

The tissues may be grasped between the fingers and ball of the thumb or the hand, or may be compressed by the two hands acting in conjunction. Care should be taken not to thrust the ends of the fingers into the tissues so as to bruise them; also to avoid injury to the skin by the finger nails, which, on this account, should be trimmed close. There are three forms :—

1. *Superficial*, which is applied to the tissues just beneath the skin, by picking up the skin between the thumb and forefinger.

2. *Deep*, in which the tissues are grasped between the ball of the thumb and the fingers, an effort being made to grasp the tissues as deeply as possible, and at the same moment to lift the muscles from the bones.

This is one of the most useful of all the forms of massage, and should be relied upon more than any other, for developing the muscles and improving the nutritive processes.

3. *Rolling*, in which a limb is grasped between the two hands, the fingers of which are extended. If the patient is lying upon his back, the arms should be extended upward. The manipulator places one hand on either side of the patient's arm, and by moving his hands alternately back and forth, pressing the hands together at the same time, the tissues will be vigorously moved upon the bones. Movement should begin at the hand and terminate at the shoulder, and should be concluded with a few centripetal passes.

VIBRATION.—Vibration consists in a few vibratory movements applied to the body through the hand of the operator, which is either placed against the patient, or grasps some part, as the hand or foot. It is produced by three different kinds of muscular action on the part of the operator :—

1. A simple movement of the hand to and fro, in a sidewise fashion.

2. An ordinary shaking movement caused by slight flexions and extension of the forearm.

3. A jarring movement, caused by moving the arm to and fro in the direction of its length. This last movement is very difficult to produce, and requires a large amount of

practice on the part of the operator. There are four forms in which one or all of these several kinds of vibrations may be employed.

(a) *Superficial*, to which (1) is best adapted. Another form of superficial vibration consists in making passes over the surface with one or both hands, which are sometimes thrown into powerful vibrations, the hands being moved in a lateral, or sidewise, direction.

(b) *Deep*, in which (2) and (3) are employed. This is used chiefly about the trunk of the body, particularly in the region of the liver and lungs.

(c) *Punctate, or digitate*. The thumb or a finger, preferably the former, is placed upon the point to which the vibration is to be applied. A vibratory movement is then given to the arm, which is communicated to the patient through the thumb. This movement is particularly useful in removing the thickenings about swollen joints, particularly after sprains, fractures, and other injuries to the joints. As the thumb sinks into the thickened tissues, it is gradually moved along toward the body, thus making a furrow; and the presses should be repeated until the whole swollen part has been operated upon.

(d) *Corporeal*. The part operated upon is grasped firmly in the hand, and shaken with a fine vibratory movement.

PERCUSSION.—This procedure consists of blows, varying in method and force, and applied to various parts of the body. The two hands are used alternately, with a movement from the wrist, which produces a flexible and elastic blow.

An inexperienced operator uses his whole fore-arm, with a movement from the elbow,—a method which is painful and disagreeable to the patient, and productive of evil rather than of good results. A dexterous operator maintains a muscular freedom in his movements, which materially adds to the good effect of the treatment. The general purpose of percussion is to increase the activity of the circulation in the part operated upon. There are four forms:—

1. *Slapping*, in which the open palm is employed.

2. *Stroking*, in which the inner edge of the lower half of the hand is employed. The fingers should be kept a little distance apart, so as to produce a vibratory effect.

3. *Beating*. This form is somewhat difficult to describe; the closed, instead of the open, palm is employed, the hand being not tightly closed, so that the nearly closed fingers will yield somewhat, as the force of the blow is received upon the heel of the hand and the knuckles of the last joints of the fingers. This movement is chiefly applied to the lower part of the back, the patient standing in an erect position, with the body slightly inclined vertically.

4. *Tapping*. This is simply beating with the ends of the fingers. Either one or more fingers and one or both hands may be employed. It is chiefly used for the head and upper portion of the chest.

JOINT MOVEMENTS.—This procedure consists of a series of movements which are intended to move every joint in the body, to the greatest extent possible. It has three forms:—

1. *Flexion and extension*. At the same time that the manipulator bends or extends the part operated upon, the patient resists the movement, thus giving exercise to the controlling muscles. Much care and skill is required on the part of the operator in giving these movements, to allow the patient just the right amount of work so that the muscles may be strengthened, and the patient not too much fatigued or made lame and sore.

2. *Rotation*. Those joints which are not purely hinge joints—in this class are comprised most of the joints of the body—should also be rotated, the extremity of the limb being grasped by the operator, and moved through as wide a circle as possible.

In giving these movements, the fingers, wrists, shoulders, toes, ankles, hips, and spinal joints should all receive attention.

3. *Stretching*. This consists in pulling the joints in such a way as to draw the

bony surfaces of the joints apart. Care should, of course, be taken not to make too great traction, especially upon the joints of the fingers,

The treatment is best given upon the bare flesh, and in most cases it is advantageous to apply a sufficient quantity of oil to lubricate the surface, as irritation of the skin is thus prevented.



ORGANISMS FOUND IN BEER.

as enlargement of the joints may be thereby occasioned.

In the foregoing, no attempt has been made to indicate the numerous applications of massage, but simply to give an outline of the various procedures and movements employed.

GERMS IN BEER.

An excuse for drinking beer, which is frequently made by beer-drinkers, is that there is so much bad water, they are afraid of contracting disease. They evidently do not stop to consider that beer is chiefly made up of that same bad water which they are so afraid to drink.

But this is not all. Bacteriologists have turned their microscopes upon beer, and according to their report, it is more abundantly supplied with germs than the liveliest specimen of pump-water ever discovered. One glance at the accompanying cut, which we copy from the *Scientific American*, showing some of the principal species of germs which have been found in beer, ought to be sufficient to frighten into sober habits the most confirmed beer-drinker.

We do not hope by this exposure of the sadly insanitary condition of this popular beverage to reform any of our readers from its use, for we dare say we have not a beer-drinker among our subscribers; but it may be a useful addition to the budget of facts and

figures which we are sure most of our readers try to keep ready at hand, for use against intemperance, wherever opportunity offers.

HEMP-EATERS AND HEMP-EATING.

AMONG European nations, alcoholic drunkenness and the milder inebriation of tobacco-using are the chief subjects of discussion. But in some other lands, intoxication, though equally common, is seldom due to alcohol. The *St. James's Gazette* gives the following interesting description of the intoxication produced by hemp:—

“Apart from the Nsairie, or hemp-eating sectaries of Northern Syria—the Hasheeshin, or Assassins of the Middle Ages—who regularly madden themselves to religious ecstasy with the drug, the eating, drinking, and smoking of hemp is as common in the East as dram-drinking is in Western lands. From Morocco and Fez, to Bokhara and Samarkand, hemp in some form or other is a favorite stimulant and solace of all classes of Moslems. It is prepared for use in various ways. In Syria the leaves and stem are dried, cut small, and an infusion prepared, which is drunk well-sweetened. The Moghrebs pound the leaves to a fine powder, mix this with tobacco, and smoke the mixture in the form of small cigarettes or through a narghile. The smoke, which is thick, white, and opaque, is drawn into the lungs, so as to bring the fumes of the drug in direct contact with the blood. In Palestine the powdered hemp is mixed with honey, flour, and spice, and rolled into small cakes called ‘majoon.’

“In Mesopotamia and Persia the leaves are infused, and the infusion is concentrated until it thickens; butter and sugar are then added, and the resulting mass kneaded into small balls about the size of a nut. These are called ‘dawamesk,’ and are carried about by the regular hemp-eater, who takes from four to six boluses in the course of each day. But the most common form of hemp-eating is to take two teaspoonfuls of the finely-powdered leaves, mixed with an equal quantity of pounded sugar; and

after this a pipe, accompanied by a cup of strong hot coffee, well-sweetened.

“But the Eastern hasheeshin differ, just as our dram-drinkers do, in these matters. Some take a little and only occasionally; others, large quantities and regularly. Some take their bolus of dawamesk day after day for years; others indulge from time to time in a regular orgie, in which six or eight join, as in a Persian drinking-bout. However, there is one infallible sign by which a ‘hasheeshin’ may be known—his predilection for sugar and sweetmeats. When a traveler encounters a Moslem who prefers sweets and sweetened things to more substantial foods, it is safe to put him down for a hemp-eater. Sugar adds to the stimulating powers of the drug, while lessening its harmful effects upon the system.

“Speaking from personal knowledge, the writer of this paper can assert that the first experiences of a hemp-eater are far from agreeable. For about an hour after taking two spoonfuls of the hemp, no effects whatever are evident. Then a feeling of chilliness comes over one, increasing to a sensation of severe cold. Then the pulse rises; and, after taking a whiff or two at the narghile as it is passed around, the full toxic effects of the powder are experienced. The room seems to turn round; the people near appear to rise to the ceiling; the pulse beats with extreme rapidity, and the throbbing of the heart becomes audible. The will remains unaffected; but thinking becomes impossible, for one cannot recollect anything—the ideas seem to slip away.

“In another ten minutes the characteristic indications of hemp-eating appear. Every object around attains a monstrous size. Men and women seem of Brobdingnagian proportions, the cushions upon which the hemp-eater sits seem fit for giants, and any trifling obstacle in the way when he attempts to walk, appears so big that he fears to step over it. The room in which he may be sitting seems to stretch beyond the range of sight, and he fancies the street outside is receding before his very eyes. All sense of time is lost now; and when he is spoken to, he fancies

there are long and apparently senseless intervals between the words. His own attempts at speech are similarly marked; the syllables come slowly and laboriously, and minutes seem to elapse between the beginning and end of a word.

"In this stage, it is usual to partake of more coffee, which changes the nature of the sensations. A whiff at the narghile that always accompanies the beverage, and the body seems to rise into the air and float about; though, inexplicably enough, the feet keep firmly pressed to the ground. Then one's legs and arms appear to drop off, and life and sensation concentrate themselves, seemingly, in the back of the head, which feels full to bursting. Gradually strength leaves the smoker; the pipe slips from the nerveless fingers; the will altogether fails, and the body seems to rise and float away into space. A heavy, dreamless sleep usually succeeds such an indulgence in the drug; and, as a rule, the novice awakes none the worse for the evening's experiment. A little lemon juice removes any sensation of nausea or light headache that may ensue.

"Old experienced hemp-eaters go very methodically to work. They say that to relish hemp, one must first abstain from all stimulating food and drink for a brief period; for only after a short fast can one taste, to the full, the delights of hasheesh, and one's system be rendered fully susceptible to its influence. So, for several days previous to the 'orgie,' the experienced hemp-eater eats no meat, drinks neither wine nor spirits, lives mainly upon vegetable foods, light pastry, and ripe fruits, and smokes little. On the day of the debauch, he rises very early, and fasts till afternoon, when the friends who are to join him arrive. They prepare for dinner by taking a strongly-charged pipe, and inhaling the thick white smoke. A light meal is then served, in which plenty of sweet pastry figures, and each of the company retires to his cushion, prepared for the evening's indulgence.

"Musicians are stationed at the end of the apartment, and dancing-girls are introduced; or if the host is a very wealthy man, he orders

in his own slaves. Hemp boluses are passed around, and the pipes are well charged with the drug. For this purpose, tobacco is first laid in the bowl, upon this a small charge of pure hasheesh extract is placed, and the whole is fired by means of a glowing ember of charcoal and saltpeter, which has been mixed with honey, and dried. Strong and well-sweetened coffee is passed around; and while the dancing and music go on, the smokers begin. Lounging back, they suck the smoke into their lungs and air-passages, sending it forth again through the widely-distended nostrils; and, gazing upon the forms and faces posturing and revolving before them, they swim off in a sea of blissful content that verges upon ecstasy.

"As soon as the pipe is exhausted, strong coffee without sugar is taken, and this rouses the dreamers from their vision of delight. But a 'bolus' of hemp-cake, with which another pipe is charged, stimulates afresh the excited imagination, and sends them off again into their dreamland. The singers chant their love songs, and the almes sway in their passionate dances. This goes on for hours, fresh pipes and coffee being passed around at intervals, the smokers waking from one dream only to go off into another. Such an orgie, indeed, is sometimes protracted for two or three days.

"Then lassitude and exhaustion ensue, and the hasheeshin experiences a sort of revulsion against the drug, which lasts for some weeks, when the longing for it returns. In many parts—among the Bektaches, for example—there are regular gatherings for hemp-smoking, just as the Nsairie of Syria meet on certain days to drink hemp-tea. The poorer classes find opportunity for indulging in the drug in the so-called 'meshash,' or hemp-houses. These are forbidden in most Moslem countries. But though the law may prohibit, it cannot suppress these places."

—Spend each day less nervous energy than you make.

—Sleep and rest abundantly. Sleep is nature's benediction.

MOSES AS A SANITARIAN.

THE *Sanitary News* gives the following excellent abstract of an address recently delivered by Dr. Birbeck Nevins, President of the Liverpool Medical Institution, in which he compared the sanitary arrangements of the ancient Hebrew camp with those existing in several large modern British cities:—

“With regard to the disposal of excreta, the lecturer recalled the stringent regulations of Moses, under which every man was to have a ‘paddle, or shovel, among his weapons,’ with which he was to dig a hole at an appointed place, and cover up the excreta before leaving the spot. It has been insisted that nothing is so potent a disinfectant for such purposes, in a hot climate, as some six inches of dry porous earth; and it is worth noting that a high incentive of religious feeling was added to the sanitary obligation by the injunction: ‘For the Lord thy God walketh in the midst of thy camp; therefore, it shall be holy, and no unclean thing shall be in it.’ The same injunction necessitated a proper disposal of the dead; and it is lamentable to think how far we are behind the Israelites in this matter. They buried their dead entirely outside the camp; whereas, as Dr. Nevins states, Liverpool disposes of from 14,000 to 15,000 dead bodies in the ground in that city every year, thus necessarily polluting soil and air. As to the use of disinfectants in connection with the sacrificial processes, the lecturer pointed out that Moses was far in advance of us; for under the name of frankincense and other such titles, fragrant terebinthinate wood and the volatile compounds of creosote and its allies, were largely used to deal with the animal exhalations arising in a hot climate from the processes under which large bodies of people are collected together for public worship. And, adverting to the scale on which these substances were employed, we are reminded that it passed into a saying that ‘the odor of the incense burned in Jerusalem was never absent from Jericho,’ which was twenty miles distant.

“Dealing next with the question of clean or

unclean meats, we find that the general rule was that the class of ruminants of clean-feeding habits and wool-producing powers, but not other four-footed animals, might be eaten. The horse, it is true, although a clean-feeding animal, was not included, but this is regarded as being due to military considerations, which rendered it expedient to favor the multiplication of horses; besides which, the army of the Israelites was essentially composed of infantry. The prohibition as to mice is explained to have been essentially directed against the idolatrous practices of the Zabii. Much the same applies to the eating of blood, which is further an article especially liable to rapid decomposition. With regard to the enactment that in the case of a nest containing young ones or eggs, ‘Thou shalt not take the dam with the young,’ Dr. Nevins is inclined to think that what we term ‘a close season’ was here in view; and that the regulation, covering as it did all classes of birds, had reference to food supplies, as well as to the maintenance of the balance of nature.

“The prevention of the spread of disease is considered in connection with leprosy, a term which is held to have had application beyond the one disease to which that name is generally applied. Thus, the arrangement for dealing with the ‘leprosy of a house or garment’ are considered; and grounds are given for the belief that some of the conditions that are described as calling for cleansing measures were very similar to ‘dry rot’ and fungoid growths about dwellings, and had also in view what we would now call spores or micro-organisms, in connection with that which constituted the ‘leprosy’ of ringworm, scarlatina, etc.—affections in which the clothing was altogether destroyed.

“And lastly, before applying the several principles embodied in the Mosaic laws to the circumstances of his own and other large cities, Dr. Nevins deals with the subject of purifications and ablutions. For men, the purifications amounted mainly to the bathing of the body and the washing of clothes under circumstances which gave to these processes a distinct sanitary value; and it is impossible

not to regard the purifications and ablutions, whether for either sex, as having had, and as still having, an important bearing upon the healthiness of the Jewish race. Indeed, in connection with the extraordinary care which is taken by this people as to purity of diet and as to bodily cleanliness, Dr. Nevins states that in all epidemics of cholera in Europe, record of which he has been able to find, the Jews' quarters have been those where the fewest deaths from this disease have occurred. There is, then, much in the history of this ancient people which affords proof of that which is at times regarded as a modern contention; namely, that there is no more potent influence for good in securing the maintenance of health, than a strict observance of cleanliness in every detail of life."

FUJIYAMA.

THE HEALTHY MOUNTAIN IN JAPAN.

BY SHO NEMOTO.

It is a tradition in Japan that if a sick person once climb up Fujiyama, the most beautiful mountain I have ever seen in my life, he will soon be ten times stronger than before. This tradition, it is claimed, has been tried and proved, in thousands of serious cases. Yet the trouble is that the most delicate persons do not undertake the task, thinking it too hard work. If this is so, the tradition is of no avail. But although you may feel insufficient to the trial of climbing up Fujiyama, I ask you to try once to ascend with me this majestic mountain in Japan. I am confident that you will surely have good health. For your sake I will present some characteristics of this glorious Fujiyama; then you will be at liberty to judge of my recommendation of the healthy mountain of Japan, Fujiyama.

The summers in central Japan are hot. The thermometer often rises to 96° in the shade. But in the most northern part, the snow piles up in winter to a height of six or seven feet, and sometimes so as to completely hide the telegraph posts. The climate of Tokio and Yokohama is about the same as that of New York City; they are just exactly in the same latitude.

During the summer the Japanese take great pleasure, on a warm day, in visiting the mountains and islands whose attractiveness is enhanced by numerous hot springs. If we were in Tokio or Yokohama, we might easily go to the Hakone mountains, about fifty miles south of Tokio. Among these beautiful mountains we shall find Lake Hakone, whose charming surroundings will prompt us to cherish her among our sweet recollections. Here, too, hot springs abound. From this place, if we go only ten miles east, along the beautiful shores of the Pacific, we shall soon come upon Adami Geyser, which, twice a day, with violent explosion, sends up columns of boiling water, to a height of twenty feet. Near by these, have been built, for the entertainment of visitors, many large hotels, which are supplied on every story with water drawn from the hot springs.

Adami Geyser, which stands on the shore of the Pacific, is, from January to the close of December, one of the prominent places in the Empire for recreation. It is sixty miles south of Tokio, and is connected not only by railroad and telegraph, but also by telephone, with Tokio and Yokohama. Through the latter place, if we so desire, we can also communicate with America and Europe by telegraph.

Here, as we look off from an eminence upon the surrounding country, we have a grand view of a boundless sea, whose shore is dotted with a succession of small islands, rivaling each other in attractions. On the right hand is a bold precipice, which stands out prominently in the landscape; on the left, gentle elevations, which reach down a smiling welcome to the scattered villages around. Such magnificent scenery is but a gate to enter upon the ascent of Fujiyama, the most majestic mountain on either side of the Pacific Ocean. Fujiyama was once a volcano, but the last eruption was in 1709. It is now indeed a beautiful mountain. Attired in a blue dress and white bonnet, she proudly lifts her head among the clouds. Her expressive features smile upon all alike, from a distance of about one hundred miles above the horizon.

This glorious mountain is situated ten miles southwest of Tokio and Yokohama.

Fujiyama welcomes us, even before we cast anchor on the shores of the Rising Sun. The height of the mountain is 14,177 feet. During the summer a great multitude of people climb the mountain, and take deep draughts of pure air, as they look off upon the most beautiful scenery, which, it is said, no artist has the power justly to depict, nor poet to describe. So human utterance would fail me in the attempt. It is the work of Nature. She made Fujiyama to beautify Japan.

So, let us try to ascend this noble mountain. Mountains, near at hand and far away, are clothed with waving grass and low shrubs. Close to the road, the groves of bamboo give a peculiar beauty to the landscape. The masses of foliage are almost angular in general shape, yet the whole effect is exquisite and airy. On the way to Fujiyama the little town of Miyanoshita is not only very delightfully situated for summer resort, but has the addition of excellent Americanized hotels, with a natural spring of hot sulphur water. From this place we get a glimpse of the sea, between mountain peaks; we should like to linger, as the scene is lovely beyond description.

While we are ascending to this lofty Fujiyama, suddenly we become enveloped in a soft white cloud. Its touch is moist and chilly. Its folds around us grow thicker and whiter, until we are completely wet through by its moisture, and are hardly able to see a yard ahead. Having reached a point where we are about to lose our way, the winds come gently upon us, and carry the white cloud toward the north. Then the sun slowly appears in the western sky. We sleep one night on the top of Fujiyama, where we engage the very best tea-house on the summit, but it is not more than twelve feet high.

The next morning is brilliantly clear, the sky is blue and cloudless, and the air exhilaratingly pure; the white sands sparkle as if each particle were a diamond. From the summit, through a most powerful telescope, we see the grandeur of heaven and earth. In the front of Fujiyama, in the hazy distance,

is seen the great Lake Biwa, upon whose surface many boats and steamers run to and fro. On the left, the volcano Kama constantly throws out winding columns of smoke. On the right there is a great fertile plain, covered beautifully with a green, velvet sward, very much like a vast, tossing sea.

Soon we shall be in the breezy pass, a pleasant descent into the valley, through fields abounding in wild flowers and the warm fragrance of grass and grain. Fujiyama stands almost alone in its majestic isolation. Scattered far below us are the remnants of the white cloud through which we passed. Over all this glorious picture, the sun has just set in a glory of yellow light, and Fujiyama, the great mountain, raises its symmetrical purple peak clearly into the evening sky.

All the inhabitants of every village, town, and city in Japan are supposed to ascend this glorious mountain. Until recently the pilgrims worshiped Fujiyama, for the purpose of becoming good and beautiful. It was, of course, superstition; yet the idea of this peculiar people was not altogether senseless; their reason for worshiping the mountain was that they loved its sublime beauty, and believed that it was beyond human production. I myself was once one of the worshipers of Fujiyama. However, this practice of worship has now become too foolish for the progressive minds of the Rising Sun.

There is much excellent scenery in Japan. Tsukubayama, Hakoneyama, and Nitsuko are prominent among these places; but the beauty of each is like the morning star, when compared with Fujiyama, which, beside their mild glory, shines as the sun in the heavens.—
University of Vermont.

—You must lead by first climbing the hard places yourself, that you may help others up. . . . All who succeed in life are life-long students of that in which they succeed! You must put into your life more of self-sacrifice; for it is only by serving others that you can truly be their king.



HISTORY OF COSTUME.

THE earliest costumes of which we have any accurate representation are those of the ancient Assyrians and Egyptians, as rudely portrayed upon the bass-reliefs of Nineveh, and the sculptured monuments and tombs which are the sole records of long forgotten



Grecian and Hawaiian Dress.

Egyptian dynasties. The records show the higher classes dressed in long, ungainly robes, cunningly ornamented with designs in needlework. The laboring classes wore only a woolen apron, or a short tunic bound at the waist with a rope.

COSTUMES OF THE ANCIENT GREEKS.

With the rise of the Greeks, dress, like almost every other feature of Grecian civilization, came under the jurisdiction of art, and was thus made the exponent of ideas of

beauty. Nothing that has ever been devised in the way of costume is simpler or more beautiful than the woman's dress shown in the engraving. It consisted of two portions, the *tunic interior*, a sleeveless undershirt, and the *chiton*, a loose tunic with sleeves which were clasped, not sewn, together. The chiton was made long, and caught up by a girdle about the hips, forming broad folds about the waist. Corsets, it need hardly be said, were unknown. The principal outer garment was the *himation*, a large, square piece of cloth, which was thrown over the left shoulder, drawn across the back to the right side below the right arm, and the end thrown over the left shoulder. There were many variations of this arrangement, and the art of wearing the himation gracefully, was studied by the young Athenians of both sexes, with no small amount of zeal. Sandals were worn upon the feet, and several varieties of hats were known, although their use was almost wholly confined to travelers and farmers. Umbrellas, parasols, and canes were in common use, but gloves were worn only by those who were engaged in work of a kind to stain the hands. Bright colors for ordinary clothing were shunned, as savoring of vulgarity. The men never shaved, and the women were satisfied to use simply the hair which grew upon their own heads.

The modern Greeks, like the rest of the world, have departed from the simplicity of their forefathers, although as will be seen by the accompanying cut, their costume is even now less fantastic and picturesque than that of many moderns.

ROMAN DRESS.

The early Romans borrowed their costumes directly from the Greeks, the stola corresponding to the chiton, and the palla, or toga, to the himation. In the days of the emperors, many modifications were imported from the races of the North, as, for instance, the kind of trousers called *braccae*, for which they were indebted to the Britons. The long period of the decline of the Empire witnessed the gradual assimilation of ideas of costume with those borrowed from the surrounding nations; and many of the costumes of the present day seem to be the unfortunate results of the struggle between Roman simplicity of dress, and the barbaric love of finery which characterized the rude tribes of the North.

WOOLEN UNDER-CLOTHING FOR SUMMER.

IN an article entitled, "The Influence of Dress on Health," Dr. Fredrick Treves, of England, thus speaks of the value of woollen fabrics as clothing to be worn next to the skin during the hot season:—

"In cold weather, woollen under-clothing owes its so-called warmth to its remarkably poor conducting properties. These properties allow it to maintain the natural temperature of the body by preventing the heat of the body from being conducted away from the surface. It prevents, indeed, any loss of natural warmth. Linen and cotton materials, on the other hand, being comparatively good conductors of heat, allow the warmth of the body to be conducted away from the surface, and by the loss of this warmth the surface becomes cooled.

"In hot weather, the poor conducting properties of wool are valuable in another way. It fails to conduct to the body the additional heat in the external atmosphere. It may be truly said to protect the organism from the heat by virtue of these non-conducting qualities. Cotton and linen, on the other hand, readily conduct to the skin the heat that is without; they serve as but the feeblest protection from that heat, and allow the body to

be rapidly influenced by the condition of the external atmosphere. The great value of woollen under-clothing, however, is shown by the manner in which it prevents or modifies the evil effects of rapid changes of temperature.

"In this country, at least, the climate is liable to certain abrupt fluctuations. A warm day succeeds a cool, and a cool a warm, with little notice or warning. The temperature that, during the day, has been high, may fall suddenly toward sunset, and a chilly evening succeed a blazing noon. It is needless, moreover, to say that like fluctuations of temperature occur at certain times and seasons all over the world.

"A good illustration of the changes of temperature to which the body may be subjected in a brief interval may be found on any warm day of early summer when a strong northerly or easterly wind is blowing. On such a day an individual sitting in the full blaze of the sun, and well sheltered from the wind, may feel positively 'hot;' while another, equally well protected from the wind, but sheltered also from the sun, may feel but comfortably warm; a third, exposed to the full blast of the wind, or to the rapid passage of colder air over the body, may reasonably complain of being chilled.

"Now it so happens that the disorders resulting from what is known as catching cold depend, for the most part, upon sudden changes of temperature. 'These disorders,' says an authority,* 'are induced by the removal of heat to an unusual extent from the external or internal surface of the body.' The same writer recognizes three factors in the probable cause of a 'cold,'—a low temperature, air in motion, and moisture; and I think that common experience teaches us—a *propos* of these factors—that colds are most frequent when the weather is cold and windy and wet.

"Against these evils of sudden changes, woollen under-garments afford a trustworthy protection. They isolate the body. They

* Seitz, Ziemssen's "Cyclopædia of Medicine," vol. xvi., p. 232. 1877.

prevent it from being influenced by the abrupt changes of temperature that are active around. Their properties are such that they become the poorest exponents of those changes. Linen and cotton, on the other hand, as good conductors of heat, are susceptible to modifications of temperature. They render the body injuriously *au courant* with the condition of the surrounding atmosphere, and would encourage it to take part in all the changes of temperature to which that atmosphere is susceptible. These, then, are among the reasons why it is recommended that, at all times, woolen materials should be worn next to the skin; and from these facts it will be understood why woolen under-clothing is advised for those who visit the Arctic regions, while it forms the best material for under-dress for such as are exposed to the heat of the tropics.

"The body itself, moreover, is liable to certain modifications of temperature, which, although slight in degree, may yet be injurious in character, if abruptly brought about. I allude especially to the cooling of the body that is effected by the evaporation of moisture from its surface. Under certain circumstances this cooling may be excessive and abrupt; and as a result may arise disorders associated with catching cold. This matter is somewhat more concerned with bodily exercise than with external temperature; and its relations to the question of under-clothing may now be noted.

"Let us suppose that two individuals undertake on a day in summer a similar exercise, the one being clad in woolen material, the other in linen or cotton. If they are occupied in the open blaze of the sun, they will, at the commencement, experience about the same sensation of heat, provided that their garments are of the same color; for it has been shown that color, rather than texture, modifies the effects of the direct solar rays. Shortly after commencing exertion, the man wearing wool next to his skin will feel warmer than the man wearing linen. The reason is this. Exercise increases the circulation of the blood in the skin, and induces, thereby, a

sensation of increased heat in the part. The woolen fabric, by its rough surface, would tend, perhaps, to irritate the skin, and by the friction induced by movement would probably still further encourage the circulation. There would be a trifling rise of temperature on the surface, and the skin would endeavor to cool itself by a copious perspiration. Now, the wool, as a bad conductor, would but tardily conduct away this new increment of heat, while at the same time its structure would cause the evaporation of the sweat to be delayed and slow. The individual, therefore, would not at once experience the cooling effects of natural evaporation.

"In the case of the man wearing linen, he would feel less warm than his fellow, because the heat of the body would be rapidly conducted away, and the evaporation from the surface would be free, because the linen fabric would soon become wet, and by adhering to the body, would still further favor the evaporating process. In process of time, however, the evaporation, in the case of the individual clad in wool, would be better established; the sensation of heat would be less marked, and the one man would feel as warm, or as cool, as the other.

"Now, suppose that they both suddenly cease from their exertions, and rest, surrounded by the same conditions. In the individual wearing linen next to the skin, the evaporating process will, for reasons already given, be vigorous; and its cooling effects, coming with the cessation of exercise, will be somewhat sudden. A great deal of heat will be rapidly removed from the body, and the condition necessary for catching cold will be established. In the case of the man clad in woolen materials, the evaporation will proceed leisurely; the properties of the wool with regard to heat would tend to prevent a sudden loss of animal warmth, and the body would cool slowly.

"It is needless, therefore, to say that woolen under-clothing has overwhelming advantages; and that wool is, of all materials, the best suited for the varying circumstances of human life. One might conclude, therefore, by

saying that under-clothing should be of wool, and that that material should be worn next to the skin, while under no ordinary circumstances should linen be worn next to the skin. It is, perhaps, needless to add that the thickness and density of the fabric worn must be influenced by the climate and season of the year."

FASHION SLAVERY.

HESTER M. POOLE, in *Good Housekeeping*, among other good things about the philosophy of living, speaks as follows concerning some of the follies to which the slaves of fashion are addicted:—

"Another vulgarity arising from ignorance is personal mutilation. Under what other name can be classed that fashion of hanging the earlobes with barbaric gold and gems? Why not pierce the nose also, like the inhabitants of Barbadoes and Africa? The delicately molded curves of a beautiful ear are certainly not enhanced by this savagery, but even that is not so bad as the compressed waist. If there be one thing more vulgar than another, it is to suppose that the lovely curves that enclose the form, free and graceful, as are all nature's flowing outlines, can be improved by pinching, dwarfing, and distorting.

"Who that has ever seen even a copy of that incarnation of splendor and grace, the Venus de Milo, but revolts at the mincing, tortured, unnatural waist line under which are compressed all the organs that give richness, strength, and beauty to the human frame? Every particle of artistic sensibility reacts against the mutilation; and every instinct of health, wholeness, and completeness, cries out against the outrage. Those rivers of life that course through the heart and lungs on their task of replenishing, and return through the veins, loaded with waste and sewage, once checked in their career, are compelled to hold in solution the impurities that poison the fountains of life. Better far to pinch the feet like the Chinese, and leave the vital organs free to do their wonderful work.

"It seems as if the Prince of Ignorance, in league with the originators of fashion and dress-makers, gleefully said, 'Go to now, and see how much women will bear! Twist the hair from the nape of the neck, leaving that exposed to cold winds, and compress the waist with stays,—tight, tighter, tightest,—till it measures eight inches less than in its normal condition. Don't let them draw a full breath, and keep them in that vise till they feel uncomfortable without the corset. Make the sleeves so tight that they cannot raise an arm to the head. For dress occasions, cut down the bodice till the most tender parts of the lungs are exposed; and if you can, persuade them to go *decollete*. Pile heavy skirts on hips and back, contrary to reason and experience, taper down the clothing so that it is less warm at the feet. Line the dress with heavy facings, and cover it with draperies and ornaments, till it weighs several pounds; and leave it long enough to draggle through mud, and flop from stair to stair. Then let some woman of fashion don the costume, and every working-woman and housewife will be sure to follow. They lose health and freedom, joyousness and freshness, but they have style; and style is worth more than these. Long live ignorance and fashion!'"

A New Fashion.—One of the latest fashions among New York ladies is that of having a diamond set in one of the front teeth. The jewel cannot be put into a natural tooth, as it would cause it to decay; but the devotees of fashion are willing to endure the operation of having two-thirds of the natural tooth cut off, so that a false tooth in which the diamond is set, can be pivoted on.

Worth Knowing.—A fashion writer asserts that Worth refuses to fit a gown over a wasp waist. If this is true, it is well worth knowing, as it is a sign of progress, that the makers of fashion are coming to see the folly of their ways, and are beginning to aid in the education of the unthinking masses, who follow wherever they are led.

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.

TO A CHILD.

O MY child, I hold your hand, and tremble,
 When I think of all that you must meet
 On the way, where there is naught to guide you,
 Save my clouded eyes and stumbling feet.

All the nobleness that sleeps within you
 Waits my touch to waken into grace;
 Ah, the man you will be, haunts my future
 With reproach, not love, upon his face!

Is the gardener not appalled and daunted,
 When he sees but leafless twigs, and knows
 That within the bare, brown things there slumbers,
 Waiting for his waking hand, the rose?

So I fear, from fingers all unskillful,
 Some rude touch your perfect growth may mar;
 If the pruning-knife slip but a little,
 You must carry, all your life, a scar.

O my child, unknown, unconscious currents
 Meet and mingle in your young, warm blood;
 So, God help me when your soul shall blossom,
 And—God help me, should I blight its bud.

—Bessie Chandler.

ANARCHY IN THE TOWN OF HUMAN BEING.

BY FANNIE BOLTON.

THERE was a great stir in the town of "Human Being." It seemed as if every one was on the *qui vive*." Everybody was blaming everybody else; finally an indignation meeting was called. "Now," said Governor Will, as the people assembled, "let the party that has suffered most, tell his grievances."

There was a general rising to the feet, and everybody began to talk at once. Oh, what a hubbub! Mr. Stomach rolled and growled,

and looked as sour as a fermented stomach could look. All the telegraph officers, the Nerves, fairly cracked and bustled with rage. Judge Intellect put on his spectacles, and towered above the rest, like a thunder-cloud. The huckster, Liver, dove into the midst as bitter as gall; and every one was screaming, "Mr. President, Mr. President." Even the old man, who had been the backbone of the whole town, Mr. Spinal Column, rose up and tried to squeak out the complaints that he had been indulging in for years. The whole town was in a general ferment.

"Well, well," shouted the Governor, "it seems that every one considers his case the most deplorable. Let's have order, and we'll hear from each in turn. Now, Judge Intellect, as you are accustomed to weighing matters *pro* and *con*, we'll hear from you first. Who is guilty of this great disturbance in our town? I'm sure it has been laid out with the greatest care. Every one has had his apportioned work; and for years we've been doing fairly, but now, like the 'wonderful one hoss shay,' we seem to be suddenly giving way. The Judge has the floor."

Judge Intellect rose with great dignity. "For some time," said he, "I've been treated with the greatest disrespect by my fellow-citizens. No one has taken any pains to consult my opinion about the affairs of our town, and consequently, things have been going to destruction. One would think that we were living under the 'no-law party.' There is

the greatest disorder. I telegraph here and there, but my messages either never reach their destination, or are wholly unheeded. The officers send back such erratic responses to my telegrams that I have concluded that they were trying to make either a fool of me or of themselves.

"I am filled with perplexity and anxiety at the situation of affairs. I get no rest night or day. Our town used to be quiet in sleep during the hours of darkness; but now the alarm bells ring in the Brain courts, and the cells are filled with miscreants and sluggards. I can't attend to my official duties, and have been blamed bitterly; but documents of official importance will continue to pile up on my desk, from Lungs, and Heart, and Liver; and unless matters change, there is no possibility of attending to the wants of these centers.

"Why, we are years behind in our work. The supreme court is burdened with petty disorders, and cases of real importance are put off indefinitely. I give warning to-day, that if this continues, I shall vacate. Some day, my fellow-citizens will come to my court and inquire for Judge Intellect, and echo alone will answer. Perhaps they will then appreciate my efforts better than they have of late, and will wish they had given me more support in my arduous tasks.

"There is the greatest confusion in my court-room of late,—coarse, low-browed fellows, from the lowlands of Passion. When they are kept in their place, they can be used to advantage; but, fellow-townsmen, we must rule them, or they will rule us with no gentle hand. Keep them in their place, I say. Where are the guards? These intruders have stepped in through somebody's neglect. I've heard their harangues, and I declare to you, that they are a set of anarchists. They are 'no law' advocates. 'All things in common' is their cry; and if they have their way, we'll have all things *common*. They claim to be warring for liberty; but there is no liberty, save within the jurisdiction of law. They simply want license to indulge their unholy desires, and I say, Beware! Things

have gone on until now we must make the most determined resistance.

"I want to inquire, also, of Heart, why he has pumped such impoverished liquid to our towns-people? There is a system of fraud going on in our government. Who is getting the benefit of the rich tides that ought to go to supply the great engines in our various factories and warehouses? I notice that the lowlands of Passion are fairly teeming with new activities. Let us arouse to the peril we are in, my townsmen, and never turn our backs to the foe till we have peace within our borders."

Engineer Heart had been almost trembling with eagerness to speak. He fairly shook the town when he did begin. "Fellow-citizens," said he, "perhaps you have noticed that I've been rather unsteady of late. I've been forced to dissipation. My work has increased of late, and my force has diminished; and I've been compelled to use stimulants to whip up my flagging energy. These very fellows that the Judge has been describing have been loitering around my engines. The blood has come to me with a loss of those nutritive qualities that it used to possess; and in their stead there has been a spurious foreign substance, that seems to clog the machinery.

"There have been boxes of dynamite smuggled into our town, and some wicked hand has helped it to do its deadly work. This is the reason that the alarm bells have pealed in the night. Many serious accidents have occurred; we have suffered the loss of the best friends of our government; and lives have been sacrificed that we can never restore.

"At times there have been fumes of alcohol; and its burning tides have scorched and seared the membranes, the most delicate and useful members of our work-shop. Nicotine, theine, and opium have been discovered by our chemists in the very vital tides of my factories; but how they have come there is a perplexity to me. Of course, these deadly gases are dangerous, for the least touch makes them explode; and then comes disaster of every kind. I don't blame the Nerves so much as

I do Liver; what business has he to let such material into the city?"

"I tell you what it is," cried Liver, in a rage, "if Heart can do any better than I have, with the material supplied, just let him step down and try it. I'm ready to resign at any time. You ought to be thankful that you have any blood at all. My warehouses are overloaded with undigested material. An ordinary Liver would have succumbed long ago; but there is a considerable amount of 'stick-to-it-iveness' in my composition. Why don't you talk to Stomach? It's my opinion that we've got a set of sluggards on the floor above; for the work is turned out only about half done. You've got a lazy Stomach on hand, one that you would better discharge or discipline."

Stomach scowled at Liver, and exclaimed, "I'll pay you for that, sir. Just wait till this meeting is over. If ever a person was overworked, I am. There is not an individual in the town that has to grind as incessantly as I do. Now you know I used to be a jovial fellow; but I'm soured completely, and I'll show you the reason. Just step in here, gentlemen." Stomach opened a door into his warehouse.

"Whew! Hold your noses. This is an unsanitary quarter," said Judge Intellect.

"Here," said Heart, "is where those noxious gases are brewed. Be careful. Don't strike a match for your lives, or we shall be blown to atoms. Liver was right. I think we have come to the root of the matter."

"Look here," said Judge Intellect, overturning a pile of decaying matter, behind which skulked a number of the hated intruders. There was a frightful heat and fermentation in Stomach's store-house, and the coating was wearing into holes. There were great sores on the arms of the workmen, and they looked as though they had been roughly used.

"What have you been doing here, anyway?" asked the Judge sternly.

"Doing!" said Stomach, "we've been having anarchy for the last six months. About a year ago I noticed a few of these intruders. They said they had simply come to visit our

beautiful town, and would do no harm, so I let them pass. You know we all passed them on through our town; but it was not long after, that I had a most terrible conflict with 'Nicotine' and 'Alcohol,' and since then we have had regular fights here every day. You see how my workmen are all bruised up, with eyes swollen shut, and arms in slings. I think if we had only shut out that saucy young Pepper and Miss Mustard in the first place, we should not have come into such a condition. They tickled us with their pert ways; but, depend upon it, they were sly rogues, preparing the way for the entrance of these terrible warriors and anarchists.

"I would like to inquire, however, of Governor Will, why it is that I telegraph for Nerve Force in vain? Am I not entitled to have help from our military reserve corps, when cases of such perilous emergency arise?"

"I tell you, things have come to a terrible pass," said the Governor. "The fact is, I have supplied you with extra force until the reserve is completely exhausted."

"Then we might as well give up," said Stomach, in despair, looking more glum than ever, "and have a general prostration. That is what we are coming to, anyhow."

(To be Continued.)

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

Evolution.—Tight boots make a corn, corn makes whisky; whisky makes a man tight in his boots.—*Boston Commercial Bulletin.*

OUR BOYS.

In glancing over the possible openings for boys, one is forced to admit that unless a lad have genius, perseverance, and a good physical constitution, he will find the beginning of a professional life almost insurmountably difficult, if he be obliged from the start to depend upon his profession for a living.

Of the thousands of young men graduated from our universities and schools of learning each year, only a very small proportion are ever heard of afterward, in the real contests of life. And it has become a notable fact that an advertisement for a man to fill any but a manual position will bring a number of college graduates out of all proportion to the total applicants. This proves nothing against our schemes of education, for the contrary evidence is too overwhelming. The men of whom, as a nation, we are most proud,—the brightest minds in science, literature, law, medicine, theology, and the fine arts,—have been, for the most part, educated in universities and colleges. But the failure of such a large proportion of college-bred men to attain even ordinary usefulness in the events of life does prove that, for them at least, some element was lacking which should have contributed to their preparation for subsequent duties. Had they been blessed with the three qualifications already enumerated, success would have been possible in almost any direction. But, unfortunately, very few have genius; a smaller proportion than should, have good health; and of the three, perseverance alone appears to be a cultivable quality, and even this is largely limited by physical endurance.

It is not a utopian tenet that teaches the possibility of success for all normally constituted men. The essential condition is the right choice of a vocation. What to do with our boys is a serious question, for it is just here that so many fatal blunders are made. The parent or guardian, actuated by the best motives in the world, is very apt to lay out a plan of life framed entirely from his own point of view, and unmindful that what may prove eminently successful in one case, may

be equally disastrous in another. And very often the decision is rendered more difficult by the necessity laid upon the boy, of earning his daily bread as he eats it. Then, too frequently, circumstances usurp the place of decision; and what should be the result of careful thought is left to mere accident. Though one be the most extreme of optimists, it is impossible to deny that the plan of life pursued by the majority of men does not lead to success. And since this plan begins when the man is still a boy, it is in the boy that our hope for the future lies. How is he to be trained, and his skill and character developed?

We are accustomed to believe that demand and supply regulate themselves; but in this very problem of the future of our boys, we are brought face to face with a curious incongruity. We see on the one hand the overcrowded professions, the hosts of clerks who are ready to apply for any vacant position, however low the salary; while on the other hand we see a market for labor which is so far from being glutted that its supplies must be brought from foreign countries. But between these equally balanced classes, little or no exchange is possible; for it is a characteristic of the latter class that its members must be able to use their hands and eyes, as well as their brains, and must have a manual dexterity sufficient to place them among the ranks of the great industrial army of producers.

What is wanted to-day in our own country is skilled labor. Education in its highest form is wanted, but it must be coupled with an ability to *do* something, if it is to gain for its possessor any position in life. It must find some mode of expression, or the world is none the richer. Americans are noted for their ingenuity, but in how few cases has a thorough technical education brought out its highest powers of expression! Here is a field which can be heartily recommended to any boy who has decided to take the reins of life into his own hands, instead of leaving them to the caprice of circumstances. If he has a taste for the mechanical arts, he has a splendid opportunity for exercising his powers. The acquisition of manual dexterity is not difficult. It re-

quires little beyond intelligent perseverance. But when this skill of hand is once acquired, it brings an independence which many a man in apparently easier circumstances of life might well envy. Nor is it the humble calling which the drawing-room is apt to picture it. The possibilities open to the skilled worker are almost unlimited. Some new and more excellent creation is always possible; and from the workshop the directors of large undertakings are commonly chosen.—*Scientific American.*



A CHINESE BED-CHAMBER.

A CHINESE BED-CHAMBER.

WE are wont to consider a bed as a place in which to rest; but if the accompanying picture is an accurate representation of a Chinese bed, we imagine that the slumbers of an American woman, accustomed to the spring mattresses and downy pillows of her native land, would be anything but sweet, if she were compelled to sleep in it. A lady missionary gives the following graphic description of the home and sleeping accommodations of one of her pupils:—

“What would you think of living in a house only twelve feet long and ten wide? In one corner is the bed, and I must tell you what that is like. Two narrow benches,

across them about seven boards, and over the boards a piece of matting! That is all. Two hard, queer-looking things, which you might think were boxes or stools, but would never guess were pillows, are lying on the bed. In winter there is one very thick cotton comforter.

“In front of the bed is a narrow table; it is three feet long and two wide, the only table in the house. It stands lengthwise, so as to leave room for one bamboo stool between it and the doorway. This is the only seat in the house.

“There is no door; a piece of an old mat is hung up to keep out the sun, wind, and rain. Against the wall is the furnace where the rice is cooked; but sometimes there is no rice to cook. At the foot of the bed is a small cupboard. Even with these few things, there is only a narrow passage left. The house rent is two thousand and forty cash—about two dollars and ten cents a year.

“In this poor little house lives Ling-Ling and his adopted father, brother, and grandmother. The grandmother is an old lady of about eighty-six years.”

The use of the pillows above described is necessitated by the elaborate head-dresses with which the women adorn themselves.

—“There are three things for which, of all others, I will never strive: the wall, the way, and the best way. If I deserve well, a low place cannot disparage me so much as I shall grace it; if not, the height of my place shall add to my shame, while every man shall condemn me for pride matched with unworthiness.”—*Rubenstein.*

"MOTHER IS NERVOUS TO-DAY."

"Go away, child, and amuse yourself; mother is nervous to-day."

Perhaps mother was present last night at the late supper indulged in by the theater-party she enjoyed so much; or she has been called upon to settle some domestic difficulty in the kitchen cabinet; or a tiresome discussion about bills and expenditure has ruffled the placid tenor of her way. There's no end of things calculated to disturb adult nerves.

It is nurse's afternoon out, and the house is so big and empty and still! If he had been a grown man, "like papa," he could have put on his tall silk hat, and taken his gold-headed cane, and gone somewhere to get rid of other people's nerves and his own *ennui*; or, if he had been just a little bigger, he might have aspired to the privilege of being taken along with the tall hat and the gorgeous cane, which to him symbolize manhood, clinging to one grown-up finger while he puts his small legs on their mettle to keep up with a full-grown stride; but he is only a tiny mite, in short skirts and abbreviated socks, and father "can't be bothered with him."

He "must amuse himself." What a stupendous undertaking! He would like, above all things, to romp with the corpulent pug that lies curled up in the silk-lined basket at the foot of mother's sofa. But overfeeding does not conduce to hilarity, and pug's snarling protest against undue familiarity augments mother's nervousness.

There's no end of toys. But the puzzle pieces *won't* fit into each other, and the Noah's ark elephants *won't* stand up, and everything *will* go wrong this long afternoon, which seems to stretch out forever.

There are the windows, as the last resort. It looks lively out there on the Avenue. There's a lot of boys out there playing tag, with the lamp-post right in front of the big, empty house, for a base of operations. They are not very nice-looking boys. They are just the sort of looking boys that nurse would pull him away from very vigorously, if their rag-

ged jackets came too near his embroidered petticoats, when she had him in charge. But they look happy, and they are laughing. He wants to laugh and be happy too. The big front door yields reluctantly to the stealthy touch of a tiny hand, and he alights among the tag-playing gamins like a bird-of-paradise among a lot of barn-yard fowls. They receive him into democratic comradeship. With an agitating sense of guilt fluttering his baby pulses, he joins in the rough sport. Conscience, ever on the alert to protect the undefiled, whispers that he "ought to have asked mamma." But mother is nervous to-day, and one of humanity's earliest lessons is to "avoid repulses."

It is prime fun, careering up and down the broad pavement, with these hatless, shoeless, curb-stone revelers. Babyhood is democratic; it is not given to nice discriminations. It is prime fun until his inadequate legs prove treacherous, and his inexperienced feet land him head-first into the gutter, from which his comrades fish him out, a soiled and frightened culprit, with all the joy extinguished in his eyes.

It is not of the bedraggled sash or the torn petticoats he is thinking, as he climbs slowly back up the stone steps. It is of the wrath to come. But his plebian comrades stand by him. They are schooled in subterfuges, adepts in lying. They manufacture his first lie for him, and it comforts him to "know what to say." Such a flimsy little lie, that slips so clumsily off the unskilled tongue, and receives such prompt contradiction from the truth-telling eyes, that nobody is imposed on. But it is baby's first lie,—the very hardest of all lies to tell. Before he stole stealthily out from the loneliness that could not be endured any longer, his soul was as white as the snowy skirts that met defilement in the gutter. The skirts can be bleached; the stain of the lie is indelible.

Who shall say that it was not the mother's hand that sowed the seed of that first lie, when she forgot the imperative demand of the baby-soul for loving sympathy, and remembered only her own—nerves?—*Babyhood.*

Cause of Failure in Life.—The failures of many young men in life are distinctly due to the absence of perseverance. I can easily give you not a few instances that have come under my notice here; lads, not deficient in ability, not addicted to vice, but so destitute of the power of application, that no matter what line of business they enter into, they cannot stick to it. A young fellow enters a merchant's office,—good opening, excellent prospects,—but before a twelvemonth is out, he finds he has made a mistake. He now determines to be a doctor; starts a course of medical study; but in a few months gets heartily wearied of that, and is persuaded he is cut out for the law. So he sets forth on a fresh line of rails, only to discover that a professional life will not suit him at all; his ambition now is to be on the Stock Exchange. But the work there soon proves equally distasteful, and he throws it up in disgust; and, unless he marries a rich wife (which such a man often contrives to do), he hangs about, a penniless good-for-nothing to the end of his days.

It is an excellent thing for a youth, almost as soon as school-days are over, to have to depend to a great extent upon his own exertions. If he is saved from the effort of making his own way in the world, and the necessity of establishing a position for himself, he is denied a powerful stimulus to toil and perseverance. The late President Garfield, who rose by his own exertions from the humblest to the highest station in his own country, once observed, "In nine times out of ten, the best thing that can happen to a young man is to be tossed overboard, and compelled to sink or swim for himself. Among all my acquaintances, I never knew a man to be drowned who was worth saving."—*Dr. Thain Davidson.*

—"The true way to meet the sorrows of life is to have some purpose which lifts one above them, and to make that purpose so engrossing and controlling that it will sustain one as the inspiration of battle carries one almost indifferent to danger and death."

Temperance Notes.

—A Russian tea-merchant has finally been made blind by years of tea-tasting.

—One of the features of the Fourth of July celebration at Staten Island, was the formal opening of the Prohibition Park.

—The Republican party, according to a resolution adopted at its late convention in Chicago, declared itself "cordially in sympathy with all wise and well-directed efforts for the promotion of temperance and morality."

—A novel temperance crusade has been organized in Leamington, England, under the presidency of the mayor. A score of temperance workers who are cyclists, ride together to surrounding villages, preceded by a bugler, and hold temperance meetings in the open air.

—The Convention of Societies of Christian Endeavor, which recently convened in Chicago, adopted the following resolution in favor of temperance: "Resolved, That the Societies of Christian Endeavor commit themselves definitely and unreservedly to the cause of personal abstinence from intoxicants, and to the work of undoing the power of the drunkeries that line the streets in many of our cities and towns."

—New Jersey has an excellent law which forbids the sale of cigarettes to minors; and the police board of the city of Newark have determined that in that city at least, it shall not be a dead letter. An order has been given to patrolmen to arrest all small boys seen smoking, and through them discover, if possible, from whom they procured the cigarettes, in order that the dealers may be proceeded against under the law.

—The *Union Signal* says: "A gentleman who had spent several months in Kansas, said recently: 'The debasing effect on children which comes from a familiarity with liquor saloons was never forcibly presented to me until I went to a State where saloons were unknown. Kansas is filled with boys ten years old and under, who never saw a saloon since they can remember. They never saw a man under the influence of liquor. Being wholly withdrawn from the sight of it, nearly all of them, on arriving at man's estate, will have no more desire for drink than they will have for opium or hasheesh. Though I am not a Prohibitionist, it really looks to me as if the Kansas people are doing a wise thing in keeping public drinking-places out of their State.'"

—The *Temperance Record* says that James Albert, the champion athlete, attributes all his success to the fact that he is a total abstainer, not only from intoxicating drinks, but also from tobacco.

A Cigarette Analyzed.—We clip from an exchange the following result of an analysis of a cigarette, made recently by a physician: "The tobacco was found to be strongly impregnated with opium, while the wrapper, which was warranted to be rice paper, was proved to be the most ordinary quality of paper, whitened with arsenic. The two poisons combined were present in sufficient quantities to create, in the smoker, a habit of using opium, without his being aware of it, his craving for which can only be satisfied by an incessant consumption of cigarettes."

Popular Science.

—The first telescope was used in England in 1608.

—Glass windows were first introduced into England in the eighth century.

—French engineers have devised a method of lessening the labor and expense of surveying, by means of photography. The method is not quite so accurate as that in common use, but is sufficiently accurate for most purposes.

—Prof. Leclere, writing in *Cosmos*, maintains that odors are due, not to the emanations, *as such*, of so-called odoriferous bodies, but to the vibratory movement among such emanations, due to processes of oxidation. Scent, on this theory, is analogous to sound.

Artificial Rubies.—A French chemist has succeeded in making artificial rubies, which are identical with those found in nature. Notwithstanding numerous experiments, however, the diamond has never yet been produced artificially.

Milk and Butter Trees.—The rich and little-known vegetation of Upper Senegal and Upper Niger includes curious forest specimens whose fruit or sap furnishes men with food products analogous to milk and butter. In the first place, we may mention a sort of oak called the *karite*. This tree bears fruit somewhat like that of the horse-chestnut tree, having a white compact flesh. These nuts, dried in a furnace and then decorticated, are crushed and powdered, and the resulting pasty flour is put into cold water. This forms a white substance of buttery aspect, which rises to the surface of the liquid,

and which, beaten and pressed, constitutes a sort of butter which the natives use as a food. Commander Galleni, who has studied this substance and its production *in situ*, considers it very nourishing, and thinks that it might also be used in making soaps and candles analogous to those manufactured from paraffine.

In Venezuela, the *karite* has a vegetable competitor in a tree of another species, the *tubayba*. In this case, it is the abundant lacteous sap of the tree that is utilized. This is collected by the natives by simply making an incision in the bark. According to explorers, the milk of this tree is fatty, has an agreeable odor, and is nutritive. Perhaps the most remarkable of these milk trees is found in the forests of British Guiana. The pith and bark of this tree contain so large a quantity of sap that the least incision made in the surface causes the valuable liquid to flow. The natives hold it in high esteem as a food. This product, called *hya-hya*, not only resembles milk in appearance, but also in unctuousness and taste.

Subterranean Fishes.—In the Algerian Sahara there are numerous subterranean lakes in which a number of small fish and mollusks live and multiply. Moreover, the artesian wells of the Sahara often throw out fish two inches in length. The governor of the oases of Thebes and Grabes, in Egypt, in 1849, asserted that he took from an artesian well, four hundred and forty feet deep, near his residence, fish in sufficient quantity to supply his table.

An Experiment to Illustrate Inertia of Matter.—Upon the forefinger of your left hand, held vertically, lay a visiting card, and upon this, place a silver dollar; and try to remove the card without touching the coin. In order to do this, give the card a smart fillip with the fingers of the right hand, and it will fly to a distance, leaving the coin balanced upon the forefinger. Care must be taken to give the fillip in an exactly horizontal direction, and in the plane of the card.

Death by Electricity.—The State of New York has decided to substitute death by electricity instead of hanging, as a means of capital punishment. The apparatus will consist of a chair, to which the criminal will be secured, a metal piece to be attached to the neck, and metal wristlets. One pole will be connected with the wrists, the other with the neck. The current will be supplied with a powerful battery, or a dynamo. An execution by electricity may be something of an improvement over hanging; but the reform required by the civilization of the present day is not refinement in the *mode* of killing, but an abolishment of capital punishment altogether.



"Blessed are the Pure in Heart."

AMBITION AND RUIN.

ABOUT five years ago, Maria P. —, a young girl, the daughter of a farmer in Pennsylvania, became tired of churning, baking, and sewing, and more than all, of the monotony of country life, and resolved to seek her fortune in the city. In story papers she had read of congressmen, millionaires, and foreign noblemen, who had fallen in love with pretty clerks or shop-girls, and married them. Why should not such good fortune be hers? She packed her calico gowns and her Sunday merino, and went to Philadelphia. To a great shop in that city Maria went, and asked for employment. She was frankly warned, that, as she was totally unskilled, for the first year she would be paid wages insufficient for her support. She was advised to go home again, and raise chickens and make butter.

But the girl was obstinate. The glimpse of city life bewildered her. What chance in the country was there for her ever to ride behind liveried servants, or to wear velvets and diamonds? Doubtless many of the richly dressed women that she saw on the street had begun life as shop-women! In the store in which she found employment she was paid three dollars a week, and found it necessary to wear her one woolen dress every day. It was impossible for her to find boarding (even at the houses of the Women's Christian Association) for less than three dollars and a half.

"What am I to do?" she asked one of the shop-girls.

"Do as the rest of us do. Four of us hire a room with two beds in it. We have tea and a roll, for breakfast and supper. Dinner at a cheap lunch-counter costs fifteen cents. We just graze starvation, but what better can you do for the wages?"

Maria "clubbed" with two other girls in this way. The room was close and untidy, the food scanty, the work steady. She had no friends in the city, hence no rest or recreation came into her life. She grew wan, thin, and sick at heart for some break in the dreadful monotony with which her life endlessly revolved,—from the counter to her wretched garret, and back again.

One day, two handsome, well-dressed men, passing through the shop, stopped to buy a trifle from her, and joked with her pleasantly. They came again the next day. A few days later they met her on the street, and bowed respectfully. After this had happened once or twice, they invited her and one of her companions to go to the theater and to supper at a restaurant afterwards. The play, the music, the well-cooked food, the kindness,—it was all like a glimpse of Paradise to the tired, hungry girl. One of these men became Maria's "friend," as lovers are called by these girls. He proposed a secret marriage, and she consented. She had a certain slight fancy for him, but her real temptation was the carriage, the velvets and diamonds which he promised her.

Two months later he threw her off, and she

found that he was already a married man. Maria is now in the almshouse, a miserable wreck of womanhood. This story is true in every detail. It is true also in general, if not in detail, of hundreds of girls who throng into the cities to seek fortune, and who find ruin.—*Youth's Companion*.

DR. BLACKWELL ON IMPURE LITERATURE.

In her very valuable little work on "The Moral Education of the Young," Dr. Elizabeth Blackwell thus speaks of the relation between impure literature and vice:—

"The dangers arising from vicious literature of any kind, cannot be overestimated by parents. Whether sensuality be taught by police reports, or by Greek and Latin literature, by novels, plays, songs, penny papers, or any species of the corrupt literature now sent forth broadcast, and which finds its way into the hands of the young of all classes and both sexes, the danger is equally real. It is storing the susceptible mind of youth with words, images, and suggestions of vice, which remain permanently in the mind, springing up day and night in unguarded moments, weakening the power of resistance, and accustoming the thoughts to an atmosphere of vice. No amount of simple caution, given by parents or instructors, suffices to guard the young mind from the influence of evil literature. It must be remembered that hatred of evil will never be learned by intellectual warning. The permanent and incalculable injury which is done to the young mind by vicious reading, is proved by all that we now know about the structure and methods of growth of the human mind. Physiological inquiry is constantly throwing more light upon our mental, as well as our physical, organization. We learn that nutritive changes take place in the human brain, by the effect of objects which produce ideas; that permanent traces of these changes continue through life, so that states or changes connected with certain ideas remain stored up in the brain, capable of recall, often presenting themselves in the most unexpected way. We see the importance of the last impressions made on the brain at night,

indicating the activity and fixity of the cerebral changes of nutrition, during the quiescence of sleep. All that we observe of these processes show us that different physical changes are produced in the brain, by different classes of ideas, and that the moral sense itself may be affected by the constant exercise of the brain in one direction or another; so that the actual individual standard of what is right or what is wrong, will be quite changed, according to whether low or high ideas have been constantly recorded in the retentive substance of the brain.

"These important facts have a wide and constant bearing on education, showing the really poisonous character of all licentious literature, whether ancient or modern, and its destructive effect on the quality of the brain. It is necessary, therefore, to prepare the young mind to shrink repelled from the debasing literature with which society is flooded, and which is one of the greatest dangers to be encountered. The great help towards this object is the cultivation of strong intellectual and moral tastes in children,—the pre-occupation of the mind with what is good. Truth should be in the field before falsehood. All children and youth are fascinated by narratives of adventure, endurance, heroism, and noble deeds. The home library should be selected in order to brace the mind and character, and enlist the interest of the child or youth in what is manly and true. Every child, also, has some special taste or tendency, which can be found out, if carefully looked for. It may be for art, for science, for construction, for investigation, adventure, or beneficence,—but whatever it be, it may be made the means of intellectual and moral growth. The special youthful tendency is of extreme value, as indicating the direction in which a taste, even if slightly marked, may be cultivated into a serious interest, and become a powerful help in the formation of character. The study of natural science, and of all pursuits which develop a love and observation of nature, are of great value in education. Such pursuits have the additional advantage of promoting life in the open air.

"All experience shows us that the calling of the great muscular apparatus of the human body into constant vigorous life, is an indispensable means for securing the healthy, well-balanced growth of the frame, and for preventing the premature development of the sexual faculty. It is a subject worthy of the especial study of parents, in relation to the education of both sexes. Abundant exercise in the fresh air, with a simple, healthful dietary, may be considered the two great physical aids to morality in youth."

SLANG AND MORALS.

THE necessity of shielding children from the contamination of low associates and from the habits which such companionship will surely bring, is of the utmost importance. Low expressions—"slang phrases," as they are termed—will be one of the first fruits. A "free-and-easy" way of talking and acting among strangers, in the streets, or in stores, and at last ventured upon at home, will be the next. These two most offensive habits usually go hand in hand, and, very strangely, unless we look at it as an evidence of natural depravity, are eagerly caught up by the young. With girls especially, if they are allowed to use such low phrases, other unfeminine traits will soon follow, often a coarse, swaggering manner instead of the graceful, lady-like carriage that indicates refinement and modesty. When girls or young ladies (?) are seen with their hands thrust deep into the ulster pocket, or surtout, as is now the term, and the Derby tipped on one side, talking and laughing loudly, walking with masculine strides, they have no cause of complaint if the rude, ragged little gamins of the street, take infinite satisfaction in running after such nondescripts, and calling, "I say, mister!" We cannot but think that the attire and manner of such girls mark them as lawful victims for their insults and ribaldry.

These reprehensible and offensive habits of speech and manner have crept into youthful society with amazing rapidity of late, and are so closely allied to unsafe and immoral license, that parents cannot be too quick or peremp-

tory in restraining the least approach to any such liberties. If left unrebuked at first, under the impression that, if apparently unnoticed, their children will soon see the folly of it, and correct it themselves, they will find that they have made a sad mistake. Once allowed to take root, the evil will soon be beyond parental control, ripening into fixed habits, that will be a blot on the character of the children during their whole lives.

Says Mrs. H. W. Beecher: "This kind of vulgarity carries with it a seductive fascination for the unbalanced youthful mind, and tends to moral deformity, even if it leads to nothing worse. Such evils, like sin, are at first repulsive and disgusting, but

"'Seen too oft, familiar with its face,
We first endure, then pity, then embrace.'"

Boys are enticed more easily into the use of vulgar and low expressions by coming in contact with coarse, rough boys, as they are naturally outdoors or in the streets more than girls, and often less under their mother's influence and supervision. They are, therefore, in danger of having the habit fixed, before it is suspected at home. When temptations are not resisted and repelled at the beginning, they find easy victims. If a boy is tempted to indulge in low conversation, and yields, he will find that profanity is near of kin.

Girls seldom fall into habits of profanity; but from lack of proper restraint at home, too often indulge in speech and actions which are far from lady-like or refined, and not many years ago would not have been tolerated in good society. But of late, at home, making or receiving calls, on the streets, or in the cars, this loud, boisterous, free-and-easy behavior is painfully noticeable. If seen in little girls, who should be as sweet and gentle as the birds or flowers, one cannot avoid thinking that their mothers have not guarded their jewels as they are in duty bound to do, when such priceless treasures are committed to their charge. If our little girls greet their brothers and sisters, and, perhaps, even their parents, boisterously; if, instead of "good-morning," they cry, "Halloo,

papa!" or, "Halloo, mamma!" and call to playmates in the street, in the same rough manner, who will be surprised if this style follows them as they grow up and appear as young ladies?—*Mothers' Magazine.*

"Into the path of sin
One step may take you,
For wrong lies near
To the path of right;
But lower down,
From right to wrong,
The way descends;
While back again to right,
'T is steep and rugged."

THE CALIFORNIA SLAVE TRADE.

WE have several times called attention to the trade in Chinese girls, who, for infamous purposes, are brought to this country by San Francisco steamers, and are exposed for sale in markets located in the portion of San Francisco known as China-town, where they are disposed of to the highest bidders.

We now learn through a letter from an American lady residing in Shanghai, addressed to Miss Willard, President of the N. W. C. T. U., that a similar trade is carried on between San Francisco and Shanghai, in which American girls are carried to Shanghai for the same purpose, being there kept in a state perfectly identical with servitude.

This state of things could not possibly exist without the connivance of the civil authorities, and the managers of the great steam-ship lines through which the traffic is carried on. The exposure of this great iniquity ought to be promptly and thoroughly made. Every Christian newspaper in the land should join in raising a voice which even the obtuse ears of men who would sacrifice, not only their own souls, but the souls and bodies of their fellow-men for money, may be made to hear.

—Purity of heart depends much, so far as our moral agency is concerned, on keeping the imagination free from the secret contemplation of forbidden objects. Keep the door of the imagination barred against unlawful visitors, and the citadel of the soul is safe.

DANGER FROM IMPURITY IN SCHOOLS.

EMERSON truly says: "You send your child to the school-master, but it is the school-boys who educate him. You send him to the Latin class, but much of his tuition comes on his way to school from the shop window." The prevalence of immorality among the pupils of public schools is something that should cause much concern to every lover of purity. Teachers everywhere should be aroused to the immensity of the evil, and made to feel the responsibility in this matter. This work is one that mothers should be doing. Few mothers, however, realize the greatness of the evil. They know little of the school, and still less of the teacher to whom their child is intrusted two-thirds of every day. It is simply taken for granted that the teacher is all he should be, simply because he is a teacher. Unscrupulous and conscienceless teachers are rare, but those who are ignorant respecting the evils of impurity and the importance of watchfulness and care in this respect, are by no means so few. Let mothers seek to know to whom they intrust their children. Let them insist upon faithful watchfulness over their little ones, not only during their study hours, but if permitted to have recesses, during their play-time also; and let them use their voice and influence with the school-board in the election of women members upon such boards, and the selection of such teachers as are known to feel their responsibility for their foster charges. Let them insist upon clean and decent out-buildings, and such other conditions as are most favorable to the development of purity; and above all, let them warn and fortify their own little ones against the temptations sure to assail them.

E. E. K.

—Thirty years ago Dr. Sanger made an inquiry into the causes of prostitution in New York City. Of two thousand fallen women, five hundred received but one dollar a week in wages while virtuous, whereas an impure life yielded them ten dollars. Nearly one-third of the two thousand had earned only two dollars or less weekly.

GOOD HEALTH

J.H. KELLOGG M.D. EDITOR.

BATTLE CREEK MICHIGAN

FASHIONABLE GLUTTONY.

SOME years ago, while exploring the ruins of the palaces formerly occupied by some of the old Roman emperors, the writer's attention was called, by his guide, to a small apartment adjoining the spacious hall once devoted to epicurean feasts, to which it is claimed that the ancient Romans, who once vied with each other in gastronomic feats, retired at intervals to relieve their overburdened stomachs, in order to enable them to continue their gluttonous repasts.

We quote from the *Medical Record* the following satirical paragraphs, from which it appears that it is not necessary to visit Rome or to go back to ancient times, to find specimens of abandonment to the sensuous gratification of the appetite as gross as any which history produces, although, perhaps, through the aid of modern improvements in medical science, they are made a shade less repulsive:—

“Our esteemed contemporary, *Gaillard's Medical Journal*, says: ‘We are credibly informed that in the city of Washington it is not unusual for young men, before going to dinner parties, to wash out their stomachs a short time before the appointed hour, in order to better prepare themselves to play the part of gluttons.’ Our contemporary is pained at such popularization of a valuable hygienic and therapeutic measure.

“We venture, however, to say a word in behalf of these young men. The practice of stomach-washing is a legitimate one. There is no reason why a young man should not wash his stomach as well as his face, before going out to dinner; and there is no doubt that the youth of Washington do both. It might even be regarded as an act of courtesy to the host to bring to his table a stomach that has been scientifically laundered, and which lies in neat and antiseptic emptiness, folded beneath the diaphragm. Perhaps America, with the curse of dyspepsia upon it, needs more such young men as are produced in Washington. Our contemporary should not too hastily condemn the fresh enthusiasm for clean mucous membranes that is developing in our nation's capital.”

“Gluttony,” says an old writer, “may be defined as an immoral and unintellectual abandonment of the soul o' man to his gustative nature. I defy a brute animal to be a glutton. A swine's no a glutton. Nae creatur but man can be a glutton. All the rest are prevented by the definition.”

This definition of gluttony impresses us as being a good one. It requires a degree of intellectual development which is not possessed by brutes. The hog, as the writer says, cannot be a glutton, as he is not capable of moral debasement by gorging himself with a surplus of food. Nevertheless, he suffers

the physical punishment just the same, for he frequently becomes extraordinarily obese, and sometimes suffers the pangs of indigestion. In the latter particular, however, he is at a disadvantage, as compared with the young Washington gormand, whose human intelligence enables him, by the aid of a stomach-pump, to wash out his stomach, just as one would empty and disinfect a garbage box, and renders it possible for him to even excel the ancient glutton in his gormandizing, and to outdo the hog in hoggishness.

Some years ago the writer met a man of this stamp. He claimed to be a dyspeptic. The following is a copy of his dinner order, which would indicate that he had, or at least ought to have, a pretty powerful stomach:—

One quart of milk, one pint of custard, vegetables in variety, two or three kinds of fruit, bread, sponge-cake, a cup of tea, and sundry other eatables, equaling in bulk not less than three quarts. When expostulated with respecting the incompatibility of several of the articles named, and the impossibility that his stomach could dispose of so much, he at once explained that he had no idea of retaining in his stomach all the articles which he had ordered; that he intended first to make a square meal of his vegetables, fruits, grains, custard, etc.; and then, as was his usual custom, to dump the contents of his stomach into the cuspidor. He would then take the quart of milk for his meal, as he had found milk the only article that his stomach would digest.

By this ingenious method he proposed to satisfy both his appetite and his stomach,—to please both his taste and his doctor. In this case the poor man had probably become such a slave to appetite that he was undoubtedly in a diseased condition, and could hardly be called a glutton, unless gluttony may sometimes be considered a form of disease.

Sick after He Got Well.—A native of the Emerald Isle, without seeing any incongruity in his remark, complained to his doctor that he had given him so much medicine that he was "sick a long time after he got well."

A MIND-CURE CASE INVESTIGATED.

For many years an instance, claimed to illustrate the cure of a broken limb through the mind-cure process, has been widely advertised by the mind-cure fraternity. Recently, Professor Lloyd, of the University of Pennsylvania, undertook the investigation of this case, with the following result, to which it is not necessary to add comment:—

"The case was that of a little son of Dr. Reed, a physician of Philadelphia, who fell and broke both the bones of his fore-arm. The account says that the patient insisted, the following morning, upon having the dressings removed, because 'Jesus had made it well;' that the child was so confident and persistent that, on the third day, the surgeon, who was the boy's uncle, did remove the splints, and exclaimed, 'It is well, absolutely well!' and hastened to the door for air to keep from fainting. The patient has now grown to manhood, and is a graduate in medicine from the University of Pennsylvania. A letter was addressed to him by Dr. Lloyd, and the following reply received:—

"DEAR SIR: The case you cite, when robbed of all its sensational surroundings, is as follows:—

"The child was a spoiled youngster who would have his own way; and when he had a "green-stick" fracture of the fore-arm, after having had it bandaged for several days, concluded he would much prefer to go *without* a splint. To please the spoiled child, the splint was removed, and the arm carefully adjusted in a sling. As a matter of course, the bone soon united, as is customary in children, and, being only partially broken, it united all the sooner. This is the miracle!

"Some nurse, or crank, or religious enthusiast, ignorant of matters physiological and histological, evidently started the story. . . . I have been pestered with letters on the subject from ministers and members of the fraternity who seek to rob us of our patients, but have consigned all such to the wastebasket.

"Respectfully yours,

"CARL H. REED."

THE NERVOUS SYSTEM AND OVERWORK.

DR. JOHN BROWN, a very sensible Scotch physician, penned, in his characteristic way, some excellent thoughts in the following paragraphs:—

“You see, my dear working friends, I am great upon your sparing your strength, and taking things cannily. ‘All very well,’ say you; ‘it’s easy to say, “Take it easy;” but if the pot’s on the fire, it maun bile.’ It must; but you needn’t poke up the fire forever; and you may now and then set the kettle on the hob and let it sing, instead of leaving it to burn its bottom out.

“I had a friend who injured himself by overwork. One day I asked the servant if anybody had called, and was told that some one had. Who was it? ‘O, it’s the little gentleman that *aye rins when he walks!*’ I wish this age would walk more and ‘rin less.’ A man can walk farther and longer than he can run, and it’s poor saving to get out of breath. I am constantly seeing men who suffer, and indeed, die, from living too fast; from true, though not consciously immoral, dissipation, or scattering of their lives.

“Many a man is bankrupt in constitution at forty-five, and either takes out a *cessio* of himself to the grave, or goes on paying ten per cent for his stock in trade; he spends his capital instead of spending merely what he makes, or, better still, laying up a purse for the days of darkness and old age.

“Forty years ago a queer man, Mr. Slate, or, as he was called, *Schlate*, who was too clever, and not clever enough, and had not wisdom to use his wit, always scheming, full of go, but never getting on, was stopped by his friend, Sir Walter Scott, one day in Prince Street. ‘How are ye getting on, *Schlate?*’—‘Oo, just the auld thing, Sir Walter; *ma pennies a’gang on tippenny errands.*’ And so it is with our nervous power, with our vital capital, with the pence of life—many of them going on ‘tippenny errands.’ We are forever getting our bills renewed, till down comes the poor concern with dropsy or consumption, blazing fever-madness or palsy.”

THE “STRANGERS’ COLD.”

ST. KILDA is a small island lying off the coast of Scotland. For more than two hundred years it has been known that the natives of the island of St. Kilda are subject to an attack of influenza immediately on the arrival of every new vessel. Rev. Macaulay, great grandfather of the historian, wrote an account of this island, in which he mentions this strange disease. Dr. Samuel Johnson undertook to prove the disease to be impossible. He argues thus: If one stranger gives them a cold, two strangers would produce two colds; ten strangers ten colds, and so on, so that a ship-load of people would certainly produce such a prodigious cold as would kill every one attacked, and thus depopulate the island. Dr. Johnson was evidently quite satisfied with this argument, and it seems not to have occurred to him that the same argument would apply to small-pox and all other contagious maladies.

Various writers have asserted the actual existence of the “strangers’ cold;” but as yet there has been no scientific investigation for the purpose of determining its cause. There seems to be nothing improbable in the account of this curious disease. Indeed, travelers have reported a parallel observation as regards the islands of Tonga and Samoa, in the Pacific Ocean. Some months since, the writer was told by a traveler who had visited Pitcairn’s Island, that almost the only sickness upon the island for many years had been an influenza which appeared after the arrival of a ship.

These facts are certainly easily understood, and entirely credible, when viewed in the light of modern theories of disease. A small island constantly swept by ocean breezes may be supposed to have an atmosphere practically free from germs. A ship arriving from some crowded sea-port town, loaded with infected merchandise, and with stagnant bilge water in its hold, must be, on the other hand, swarming with disease germs of every description. One would naturally expect that the arrival of such a ship, with its miscella-

neous assortment of germs, would produce, in a community free from germs, if not a "strangers' cold," some similar manifestation of disease.

Fish as Brain Food.—Some years ago, Prof. Agassiz, in a dinner-table conversation, remarked that the richness of fish in phosphorus ought to make it a good brain food. The idea quickly became popular. Doubtless many tons of fish have been consumed, with the idea that they were contributing to supply the consumer's deficiency of brains. Mark Twain made a very good reply to a young man out West who wrote to him, asking how much fish would be needed to satisfy the daily requirements of his system, when he replied that a small whale would probably about meet the requirements of the case. He was careful to suggest that the young man ought not to undertake to consume a large whale—only a moderate-sized one.

Dr. W. Godding, of Washington, recently remarking upon this subject, said: "Fish has for years enjoyed the reputation of being rich in phosphorus, and hence adapted to the growth of brains. How such a notion originated I do not know; perhaps, because that, in the dark, stale fish shines with phosphorescent light. As a food, fish is richer in water than in phosphorus; and to feed it to children, expecting thereby to grow them into philosophers, would be on a par with the scholar who boiled his dictionary in milk for supper, hoping thus to acquire the language. As a matter of fact, physiological experiments, often repeated on a large scale, rather negative the popular idea of the value of fish as a 'brain food.'"

Diseased Milk.—It is now well known that milk may be the means of communicating tuberculous disease, when obtained from cows suffering with consumption. Typhoid fever, and even scarlet fever, may also be communicated through milk. It is important that it should be known that all danger in the use of milk may be obviated by simply boiling it, before it is used for food.

A New Argument for Coffee.—A new argument in favor of the use of coffee has been discovered by a German professor. Without wishing to depreciate the scientific standing of the learned gentleman, we suspect that teutonic love for the fragrant beverage has had something to do with the new virtue attributed to a decoction which has so often been proved to be productive of serious disease. The claim made by Prof. Heim is that from experiments which he has recently made, he has discovered that coffee is death on germs. He even insists that coffee destroys the germs of cholera and of pus. We have not yet had time to repeat any of the Professor's experiments, but if it turns out that coffee is good to kill germs, we shall have another argument against, instead of in favor of, its use. There are plenty of things good to kill germs which are not good to eat, such as carbolic acid and corrosive sublimate. Besides, anything that will kill germs will kill human beings. Germs are harder to kill than men and women are.

Tea and Coffee as Food.—Prof. Atwater, in an article in the May *Century*, speaking of tea and coffee, remarks, "Tea and coffee are not foods, in the sense in which we use the word.

* * * * *

"The effect of tea and coffee upon the nerves and the brain seems to be due chiefly to a substance called caffeine, when it comes from coffee, and theine, when it comes from tea."

He adds, "The expression which long usage applies to tea and coffee, 'the cups that cheer, but not inebriate,' is a true statement of food." The Professor insists that the newspaper statements about tea making leather in the stomach are grossly exaggerated, but deems that it interferes with the digestion of albuminous foods.

We quite agree with the Professor in all but one particular; namely, his defense of the poetic claim that it simply cheers without inebriating. It has been well known to medical men for a number of years that intoxication closely allied to alcoholic inebriation may result from the use of tea; indeed it is

stated on good authority that at one time, a few years ago, there existed a tea and coffee club in the eastern end of London, the members of which were accustomed every Saturday to get together and have a regular spree on tea. Before morning, every member of the club was as thoroughly intoxicated as though he were under the influence of some alcoholic drink.

Dr. Edward Smith, with his assistant, was made unconscious for three hours by drinking a strong decoction of coffee. As a matter of fact, a strong cup of tea contains more intoxicating potency than does an equal quantity of lager beer.

Lead-Poisoning.—In most cities supplied with public water-works, water is furnished to consumers through lead pipes. Plumbers always prefer putting in lead pipes on account of the ease with which the pipe can be adapted to various positions and the greater profit accruing from it when this kind of pipe is used. Persons using water for drinking or cooking purposes are constantly exposed to danger of serious poisoning, especially when hot water is used from the pipes. Water which has stood in the pipes over night, or for several hours, should never be used under any circumstances. There is always constant danger that children or domestics, not appreciating the need of care in this matter, may make use of the water in such a way as to result in sickness. On this account, it is much better to convey water from the street main through galvanized iron pipe, which is rarely attacked by water suitable for drinking purposes, to a sufficient degree to give rise to danger of poisoning from zinc.

Disease Germs in Ice.—The public cannot be too often reminded that freezing does not necessarily purify foul water. Ice obtained from lakes or streams contaminated with sewerage is liable to communicate typhoid fever and other diseases. The germs of various maladies of this class have been found in water obtained by melting ice. In view of this fact, all users of ice should take care to

ascertain that it has been obtained from a pure source. Artificial ice is, of course, liable to contamination as well as the natural product, as the water employed may be from an impure source.

Cholera Hams.—Here is an extract from the testimony of a St. Louis pork-packer, given before the Agricultural Committee, at Washington.

Question. "Did you, while you were packing hogs in St. Louis, with a large Southern trade, use cholera hogs, and put them into the food-products?"

Ans. "I did, and so did every other packer." He also testified that he had cut diseased hogs into hams, etc., "just as every other packer did."

In view of these facts, it is not a matter of wonder that American pork is excluded from French and German markets; but it is a matter of astonishment that the flesh of the scavenger finds so ready a market at home.

Danger in Dust.—Whoever thinks of dust as anything more than an inconvenience? Of what is dust made up? Think of this a moment, and its very complex and dangerous character will become apparent. Here are a few of the components of dust: fine earth, fragments of wood, cotton, wool, feathers, and almost everything under the sun. Dried excreta, spittle, filth from the gutter, and every possible kind of offensive matter.

Dr. Mackenzie, of London, has observed that there is much more sickness in dusty weather than at other times. Sore throats, catarrhs, colds, sore eyes, and numerous other maladies abound during dusty weather. House dust is simply street dust brought indoors by the wind, or adhering to uncleaned boots and shoes.

Adulterated Bread.—It has recently been discovered that wholesale lead-poisoning has been going on in Philadelphia for some time past, through the coloring of tea buns with chromate of lead, which is added to give them a rich yellow color. One physician reported

eight cases of illness in a single family, four fatal, which were traced to poisoning from these adulterated buns. The baker who made the buns had had in his own household within two years nine cases of illness of the same sort, seven of which had been fatal. It seems astonishing that this wholesale poisoning could have continued so long a time without being discovered. We do not think adulteration of bread is a common thing among bakers; but buns, cakes, and other fancy bakery goods doubtless frequently contain very deleterious articles.

Patent Medicine.—Professor Chandler, of New York, one of the most eminent chemists and sanitarians in this country, has been investigating patent medicines, the manufacturers of which, he claims, frequently endeavor to bribe him to certify to the value of their decoctions. Prof. Chandler calls attention to the enormous business done in these mischievous nostrums. "Some of these," he remarks, "are admirably managed, having regular staff organizations. There is the literary man, who writes the letters, giving marvelous accounts of marvelous cures; there is the artist, who shows the patient before and after taking twenty-two bottles of the medicine; there is the poet, who composes poems upon the subject; there is the liar, who swears to what he knows is n't true; and the forger, who produces testimonials from his own imagination. Without exaggeration, I should say that nine out of ten of these proprietary medicines are frauds, pure and simple; the real business is advertising for dupes. The medical part of it is but a side issue. I am pretty sure, if I were to pound up brickbats, and spend \$100,000 advertising it, at \$1 an ounce, as a sure cure for some disease which cannot be cured, I should get back at least \$110,000; thus getting \$10,000 for my trouble. Ninetenths of the medicines sent out in this fashion have no more curative properties than brickbat dust."

—Dr. Gross summed up the cause and prevention of disease in two words,—dirt, water.

A Bill of Fare in Congo Land.—A traveler describes the bill of fare presented at a royal banquet in Congo land, which, notwithstanding some unusual dishes presented, can hardly be regarded as more sensuous in its conception than the courses which are served up on festival occasions in more civilized lands:—

"Then followed gazelle cutlets *a la papilote*; two small monkeys served cross-legged and with liver sauce on toast; stewed iguana, which was much admired; a dish of roast crocodile's eggs; some slices of smoked elephant (from the interior); a few agreeable plates of fried locusts, land crabs, and other crustacea; the breasts of mermaid, or manatee, the grand *bouche-bouche* of the repast; some boiled alligator and some hippopotamus steaks."

"While this dinner does not equal in courses some of the elaborate feasts of civilized lands, certainly no one will say that it lacked variety. Lotus seeds form one of the most common dishes known to the Barri of Central Africa. The pods, when gathered, are bored and strung on reeds, and hung in the sun for drying, after which they are prepared for the table. Along the upper Nile, another wing of the Barri tribe bleed their cattle monthly, and cook the blood with their flour and meal. They esteem this a luxury, and the dish is eaten with great relish."

Encouraging.—It is reported that Mr. Wasals, a Methodist clergyman, was recently dismissed from his church in Mendon, Massachusetts, for being a tobacco-smoker. He had endeavored to conceal his vice, but did not succeed in doing so. It is to be hoped that all the tobacco-using ministers will be treated in the same way. The example of one smoking clergyman will lead to the moral ruin of large numbers of young men who might, by a more cleanly example, have grown up to be useful members of society. No little mischief has resulted from the blasphemous assertion of an eminent London clergyman, who defended his practice of smoking, by declaring that he "smoked to the glory of God."

DOMESTIC MEDICINE



OATMEAL.

SOME prejudice has existed against this excellent grain food, on the ground that it is productive of skin diseases, a notion which is wholly without foundation, as will be seen from the following paragraphs from the pen of James C. White, M. D., Professor of Skin Diseases in the medical department of Harvard University:—

“Oatmeal forms an essential part of the breakfast of a large proportion of the inhabitants of the northern United States and Canada. For this purpose, it is raised here in vast quantities, and is also imported from Scotland. It is eaten in the form of porridge and cakes chiefly, with the addition of milk, cream, sugar, molasses, or butter.

It is commonly believed to be ‘heating,’ to be the cause of eruptions, and is often abstained from under this fear, by those who have skin diseases. Is there any foundation for this belief?—I know none. It is eaten by vast numbers of people from infancy, who never exhibit the slightest disturbance of the skin; and the cutaneous affections, in the causation of which it is so often regarded as a probable factor, are those of the most common occurrence among all classes and races, including those who never use it.

“I have for years sought for an explanation of this prejudice among my patients who entertain it, but I have in no instance found a reason why any individual should hold it. I have repeatedly looked for some effect in re-

moving it from, and adding it to, the diet of patients having affections which it is supposed to influence; but I have never seen the slightest ill result from its free use. I believe it to be entirely harmless in itself. Of its supposed value above other cereals in the dietary table, it is unnecessary to speak.”

Suggestions to Nurses.—How many nurses ever think of washing a baby’s mouth, either before or after it eats? This should always be done. Babies’ mouths, like the mouths of older people, collect more or less impurities from the air, sometimes from other sources. The baby’s mouth should be rinsed out before eating; and after eating, the remains of food should be carefully removed by means of a soft brush or the corner of a wet napkin. Borax water is cleansing and antiseptic. It may be used with benefit, in the proportion of two drams to a pint of water.

A New Cure for Hiccough.—The following description of a new cure for hiccough, published by the *Pharmaceutical Journal*, is not so lucid as it might be, but perhaps some of our readers will get a sufficiently clear idea of the method, to be induced to make a trial of it:—

“Procure a glass of water, and pour a little of it down the patient’s throat. While he is drinking the water, he should press a finger on the orifice of each ear. By this method you open the glottis, and in five seconds the

thing is done. Should you by any chance meet with an obstinate case, you may rest assured that the throat and ears were not closed at the same time; either the water was swallowed before the ears were thoroughly stopped, or the water was not sufficient to fill the throat. Another precaution is to keep the chin well up. This cure was obtained by the writer from an old Indian medical officer, who had experimented for some years to discover a method of relieving the terrible stage of hiccoughing in yellow fever, and this cure was the outcome."

Fecal Accumulations in the Colon.—The late Dr. J. S. Jewell made very extensive observations upon the relation of an accumulation of fecal matter in the colon, to various forms of disease, particularly nervous disorders. Dr. Jewell claimed that he found in a very large proportion of persons suffering from frequent attacks of headache, bilious attacks, etc., very considerable accumulations in the colon. The absorption of poisonous matters thus obtained is undoubtedly capable of producing various forms of grave diseases. The use of purgatives of various sorts is not a good remedy for this condition. A proper remedy is found in diet and regimen. The use of fruits, coarse grains, and vegetables, and avoidance of meats, fats, and concentrated foods, together with abundant out-of-door exercise, constitute the best means of combating this condition.

Diet in Fevers.—In all classes of fevers, the diet should be farinaceous in character. The reason for this is that the kidneys are overworked, and the use of meat not only adds to the overwork, but also increases the production of heat. Besides this, in fevers there is a tendency towards accumulation of the products of waste within the system. This also is greatly increased by the use of a flesh diet. The free use of milk may be equally objectionable in some cases. The best food for fever cases is some preparation of grain, such as gruels made of the whole-wheat flour, barley meal, oatmeal, etc. The ob-

jection to the use of these foods is that in cases in which the temperature is high, the action of the salivary glands is almost wholly suspended, so that the digestion of starchy foods is interfered with. This objection applies with much force to other foods as well. Fortunately this difficulty is not difficult of solution, as regards grain foods. By the prolonged action of heat, as well as by the action of malt, the work of the saliva may be accomplished before the food is received into the stomach. Granola, wheatena, avenola, and gofio, health foods prepared by the Sanitarium Food Co., are heat-digested foods, and are exceedingly valuable in the nourishment of fever patients. They may be eaten with water in the form of gruel, or with the addition of milk, or milk and water.

A New Theory of Malaria.—At a late meeting of the American Medical Association, held at Cincinnati, Dr. H. B. Baker, Secretary of the Michigan State Board of Health, and Chairman of the Section of State Medicine of the American Medical Association, read a very valuable and interesting paper, in which a new theory of the causation of malarial diseases was presented. The essential element of the theory advanced by Dr. Baker was that the principal cause of malarial disease is variations in temperature, by which the body becomes chilled, particularly the great difference between night and day temperature. A great array of facts was set forth in support of this theory, and a number of scientific observers are found to be in accord with this view. If the truth of this theory be admitted, it at once becomes apparent that malarial attacks may be prevented by proper attention to the maintenance of equable temperature of the body, by clothing or otherwise. At night, one should be especially careful to avoid chilling during sleep, while the vital forces are naturally lowered, and the ability to react against chilling is necessarily lessened. This theory is certainly interesting, and in the writer's opinion, promises to explain much which has heretofore been inexplicable, respecting this widely prevalent class of maladies.



**"A WILLING HEART MAKES LABOR
LIGHT."**

A CARD, bearing this text, was given to a little girl at Sabbath-school. She repeated it over and over again, until she had learned it by heart, and then, turning to her little companion, she said, "What do you think it means, Carrie?" Carrie read it over carefully and thoughtfully, and then answered, "I am sure I do not know. It seems to me it must always be *hard* to work; and I cannot see how it could be called *light* under any circumstances."

As they walked along, their little faces wore a puzzled expression; and as each one was busy with her thoughts, nothing was said for quite awhile. Then the first speaker, whose name was Alice, turned to her friend, with a bright smile, and a look which plainly told that her thought was satisfactory, at least to herself, and said, "I know what I will do, I will ask Auntie about it, for she can make us understand it, if any one can."

Having disposed of the vexed question, for the time at least, the two children put off their "thinking caps," and darted hither and thither, peeping in at the windows, or stopping to gaze at some object of childish interest, as happy and careless as the little sparrows that flitted across their pathway.

After supper that evening, as they sat on the cool veranda, watching the glories of the setting sun, as they slowly faded into the quiet shades of night, a thoughtful mood again took possession of Alice; and addressing her aunt, who was always her helper in all her schemes for pleasure, as well as out of all her troubles, she said, "Auntie, I want you to tell me how a willing heart can make labor light."

"Well, Alice, watch those boys at play down by the creek, and tell me what you see." Alice turned, and the look of curiosity deepened to one of interest. Seeing that the question was forgotten (Alice was a very little girl, and could not think of one thing very long at a time), her aunt said, "Well, what do you see?"

"O Auntie, the boys are working very hard, carrying heavy stones down the hill, and building a dam across the creek. See how red their faces are!"

"Well, now let me tell you of a picture I have in mind. It is a little girl, picking up chips and putting them in a basket. Every little while she sits down to rest, and with her hat fans herself vigorously, although she is under a shady tree, and the grass moves as though there were a gentle breeze. Every little while she glances up at the house, with a pout on her face."

Alice's face was getting suspiciously red, and she cried out, "O Auntie, don't say any more. I see what my card means. Although the boys are really working very hard, it is only play, because they want to do it; and gathering up the chips was hard only because I was not willing in my heart to do it."

"You are right; and now I want you to notice all this week, and see how many things you can tell me of, which make you think of your text. One week from to-day, you and Carrie and I will talk of it again."

With this, the subject was laid aside, except for a moment, when the boys passed, on their way home, with bright and happy faces, talking of how much fun they had had. Alice glanced up at her aunt, and one could plainly see that she now thoroughly understood the meaning of the card.

When the week rolled around, the girls were quite ready for the "little talk" which had been promised them, and with a warm interest related the following incidents, which I can only briefly mention:—

They told of one boy, whom they saw sitting before a piano, and playing on three instruments at one time. He had a guitar in his hands; and by means of piling a number of books on the piano in front of him, he had managed to place a French harp in such a position that he could lean forward and play on it; while a "call-bell," placed on the floor, was operated with his foot. He sat in this cramped position a full hour, making beautiful music, which seemed to fully repay him for his efforts, though they cer-

tainly would have been considered cruelly tiresome, had they not been self-imposed. The girls thought this also illustrated the saying, "Where there is a will, there is a way."

And then they told of the street-sweeper, who, with hot and dusty face, accepted the pennies, with a smile of gratitude, to think of the good they would do the sick mother at home; and of the young girl who so kindly cared for her little brothers and baby sister, that mother might "rest awhile"; and of the school-boys, who went, in a body, to cut the sick widow's wood, counting it only play.

And then their faces sobered, as they told of a child that they had seen, who never seemed willing to do anything. She was "too tired" to get brother a drink; her "head ached," if she was asked to help wash the dishes; she was "too sick to play," when there was just one more needed to play the game at school, though she was perfectly able, a few minutes before, when it was not a matter of specially obliging another.

"I am sorry," said Auntie, "that there should be a little girl so disobliging; but let me tell you something that you have, perhaps, never thought of before. We are apt to excuse people when they are 'cross,' by saying it is because they are 'sick.' This is sometimes true, but I believe it is also true, that many people are sick because they are cross. A 'cheerful spirit' has much to do with making us feel 'well.' When one allows himself to be 'cross,' he certainly 'looks' sour, and I think in some way it 'sours' the digestive fluids in his stomach, so that it does not do its work properly, and after awhile it really makes him sick. Now, I want you, Alice and Carrie, and all my little friends, to watch carefully, and see if this is not true. I will give you for another text, 'As a man thinketh, so is he.'"

The next week found the children critically examining every person they met, for illustrations of the new text, which they thought a rather hard one.

The old colored washer-woman was their first example. They found her one morning, lamenting over the loss of her pig. "Nobody, chillun, nebber had such trouble, as I hab. De Lord dun shore forgot dis chile;" and she leaned back in her chair, covering her face with her apron, and groaned as though she had nothing left to live for. She had evidently been sitting so for a long while, for her breakfast dishes were still on the table, and it was almost noon. Not knowing what to do for her, the children started out to see the dead pig; but they quickly returned, crying, "O Dinah, the old hen and chickens are ruining your garden." "Just my luck! Just the way it always am wid me!" And while she sat down to weep, the children put the old hen back in her coop, and fed her.

When they went home, they related the story, saying, "Auntie, this is not quite like our text. It

did n't exactly make Dinah sick, but it made her lots of trouble. If she had made the best of it when the old pig died; and fed her chickens, as usual, instead of sitting down and doing nothing, the old hen would not have broken out and spoiled her garden. And I should not wonder if the old pig died because she neglected it, while worrying about something else."

That afternoon the children were sent to Widow Smith's, with a basket of provisions. They politely inquired how she was, as was their usual custom.

"O my dears, I have a 'great misery' in my chest, and my back aches so that I can scarcely sit up. My poor eyes burn, and feel as though they would certainly drop out of my head. My hands and feet are as cold as ice, though I have done nothing but sit over the fire, with this shawl around me, all the morning. And my heart aches so that it seems as though I have nothing to live for; I am of no use to myself nor any one else. I have outlived my usefulness." And the old lady rocked to and fro, weeping bitterly.

The children were used to hearing her talk like this, but for some reason it seemed to have a different effect upon them than usual. Presently, Alice walked up, and put her arm around the old lady's neck. "Will you be offended if I tell you something, dear Mrs. Smith?"

"Of course not, my child. What is it?" said Mrs. Smith, greatly surprised.

"Well, I was thinking that maybe if you would try to talk more cheerfully, it might make you feel better, by putting sunshine into your heart. And I expect if you would walk about more, and not lean over the fire so much, your chest and back might not hurt so. And maybe the reason your eyes feel so bad, is because you cry so much. I think it would do you good to get out into the sunshine; and if you would like me to, I will ask Auntie to send you some flower seeds."

Mrs. Smith sat silently thinking awhile, and then she said, "I always liked flowers. You may ask her to send me some, though I fear I am not able to tend them."

About two months after this conversation, the girls called again. Beautiful roses blossomed by the door, and long beds of bright, well-tended flowers nodded a welcome to them. By the window, sat old Mrs. Smith, looking so contented and happy that the children scarcely knew her.

"Come in, little ones, while I tell you what a grand lesson you have taught me. You are, no doubt, wondering what has become of the cross old woman you used to know. She has disappeared, I hope, never to return. I planted the seeds you sent me, and it has been such a pleasure to watch the dear little plants grow! I take care of them till I get tired, and then I come in and rest awhile, and I find

that my back and chest do not ache so badly as they did before. My eyes are as young, and my heart as light, as they were twenty years ago.

"The ladies from the cottage up on the hill, come every day to buy flowers of me, and I have given a great many to the poor little sick children at the hospital. The flowers bloom, and bloom, as if they, too, enjoyed the good they are doing. I can never thank you enough for the lesson, how to be happy and well, which you have taught me. I am like another woman. Where did you learn the secret, child?"

"O, I heard Auntie read something like it from the GOOD HEALTH; and then she is always saying that, if people would keep themselves busy, and try to do good to others, and do it with a cheerful heart, there would be no room for unhappiness, and very little need for doctors."

"Good-by, Mrs. Smith. Auntie will be very glad to hear you are so much better. MARIAN LEE.

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.]

Freckles.—K. A. H. B., Michigan, has had freckles since childhood, and wishes to know if there is any sure remedy; also wishes to know whether any of the advertised remedies for freckles may be used with safety.

Ans. Freckles which are caused by sun and wind may be removed by the application of a strong solution of borax, or of borax and lemon juice,—1 dram borax to 1 oz. lemon juice. Apply at night, and leave on over night. It is unsafe to use the advertised nostrums for the face. Some of them are harmless, but some are exceedingly deleterious.

Physical Exercise and Mental Work.—C. E. W., Illinois, inquires as follows:—

"1. Other things being equal, is great physical strength a benefit in intellectual work? or,

"2. Compared to the above, is it better that one should be an all-round gymnast? and

"3. What is the effect on mental capacity of almost entire cessation of physical exercise?

"4. If you have written on the effects and benefits of physical culture, please state the title."

Ans. 1. Excessive physical strength is not necessary for the best intellectual work.

2. It would be better for one to be "an all-round gymnast," that he may have a good symmetrical development, than to be able simply to perform one or two extraordinary feats.

3. A sedentary life produces an unhealthy state of the body, which necessarily lessens the amount of activity, or at any rate depreciates the quality of work done by the brain.

4. Our correspondent will find in a little work entitled, "Man the Masterpiece," a chapter entitled, "How to be Strong," in which the benefits of exercise are set forth, and methods described by means of which one may attain a good physique.

Poisonous Flannels.—M. M., New Jersey, inquires whether flannels of a cream white color are poisonous, when worn next to the skin.

Ans. We are not acquainted with any coloring matter of a poisonous character used in producing the color named. Red flannels are sometimes poisonous, in consequence of the arsenic used in setting the aniline with which they are dyed. The arsenic is removed by washing, so that it may be considered a proper precaution to always wash red flannel before wearing. Indeed, it would not be unwise to pass all new underwear through the laundry before wearing it.

Whisky-Drinking.—A correspondent wishes to know how long the human system can withstand the poisonous influence of whisky, taken at the rate of a quart a day.

Ans. It is impossible to say just how long a person may endure such abuse as that referred to. The human system sometimes shows an amount of endurance which is, indeed, surprising, but the ultimate result is certain to be appalling. We should expect a few months of such abuse to produce a well-developed case of Bright's disease, gin liver, or delirium tremens, or all three of these diseases combined. Certainly some such a combination of results will follow speedily.

To Reduce Flesh.—A Louisiana correspondent wishes to know how a person who has excessive fat may reduce his weight with safety.

Ans. There are three things to be done: 1. Drink an abundance of water to encourage elimination; 2. Avoid the use of sugar, butter, and fat meats; and eat moderately, being careful to avoid any excess; 3. Take daily as much physical exercise as possible without exhaustion. Such measures as frequent bathing to keep the skin moist, and all other measures to maintain good health, should be taken.

Oxygen Enemata.—R. T., California, asks for information concerning oxygen enemata. As several inquiries have been made for information on the subject, we have decided to publish an article written several months ago, and republished in the Therapeutic Gazette. It will appear in our next number.

Salt for the Hair.—J. M. H. asks whether it is beneficial to the hair to wash it in salt and water?

Ans. No.

Cotton Seed Oil.—Mrs. M. F. N., a missionary in Indian Territory, referring to our answer to a correspondent in the November number of last year, states that she has used cotton-seed oil quite freely for a number of years as a substitute for animal fats, and with no unpleasant results.

Rheumatism.—A. M. P., of Chicago, wishes to know what to do for rheumatism.

Ans. The best remedies for acute rheumatism are:—

1. Rest.
2. A spare diet, excluding flesh meats, sugar, and fats. Fruits and simply-cooked grains may be taken in moderation, also milk sparingly.
3. Abundant use of water, particularly hot water, to the extent of two to six pints daily.
4. The skin should be kept active by frequent warm baths, and the affected part should be kept very warmly covered with cotton or with flannel cloths. Pain of the affected parts may usually be relieved by fomentations. In the advanced stages of the disease, gentle massage, or rubbing with oil, is found most beneficial.

Lead Pipe.—A. C. C., of Ohio, inquires: "Is it proper to use lead pipe for drawing water from the cistern for drinking purposes?"

Ans. It is hardly safe to use lead pipe for the purpose named. Zinc or galvanized-iron pipe should be used instead.

Noise in the Ear.—T. T., of Connecticut, asks: "What can I do for throbbing in the ear, which has troubled me for nearly a year?"

Ans. The difficulty may be due to disease of the ear, or to some other cause. We would recommend you to consult some good aurist.

Water-Drinking.—W. A. B., California, inquires, "Is the habit of drinking large quantities of water beneficial or injurious?"

Ans. We might answer both *yes* and *no* to this question. Persons who have catarrh of the stomach should avoid the use of very large quantities of water at a time, but may take a considerable amount of water in small quantities. All persons should avoid taking large quantities of water at meals. Persons suffering with acid dyspepsia may, with benefit, take water, particularly hot water, in very considerable quantities, from one to two pints at a time, an hour before each meal. Persons suffering from enlargement of the heart, as the result of organic disease, should avoid taking large quantities of water, especially hot water.

Literary Notices.

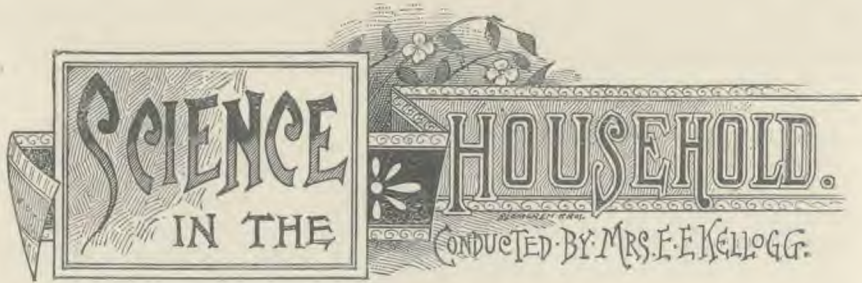
THE August number of *Scribner's Magazine* contains contributions from Robert Louis Stevenson, Sarah Orne Jewett, Henry James, and other noted writers. The leading article, "Rivers and Valleys," with illustrations from photographs, showing some of the most romantic scenery in this country, by Prof. N. S. Shaler, is a most entertaining one. The Railway Series is continued in this issue, with an acute and luminous account of the evolution and present perfection of American locomotives and cars; while a variety of other articles make the current issue a most valuable and interesting number. CHAS. SCRIBNER'S SONS, New York.

THE *Phrenological Journal and Science of Health*, for July, opens with a notable man,—not one of the presidential candidates, for it will have something about them in its August edition,—but Dr. N. S. Davis, of Chicago, who is one of our best-known and really progressive physicians. Thomas Wentworth Higginson, the author, is also discussed and illustrated. So is Sir Morell Mackenzie, the English specialist, who was so long in attendance upon the late Emperor Frederick. "Funerals, Mourning Robes, and Such Like," is a sensible demand for moderation. "An Early Bird; or, An Early Worm" is a capital pen portrait of a character met with in rural districts. "Frederick of Germany" is an appreciative sketch of a noble, heroic character. The reader of this number will be pleased by its variety of topics, and the useful entertainment he will get from it.

Price, 20 cents; subscription, 2.00 per year. The publishers offer it the balance of this year, six months "on trial," for only 75 cents. Address FOWLER & WELLS Co., PUB., 777 Broadway, New York.

AMONG the good things with which *St. Nicholas*, for July, is brimful, may be mentioned "Dogs of noted Americans," illustrated from photographs; "A Pig that Really Caused a War;" "Recollections of the Naval Academy;" and "Ringing in the Fourth." CENTURY PUB. Co., New York City.

YEAR-BOOK OF ALBION COLLEGE is a neat pamphlet, in four parts. Part I. Contains Outline Discussions—College Studies. Part II. is devoted especially to the discussion of the relations of education to the various vocations of life. Part III. consists of information in regard to the work of the College at Albion, Michigan; and Part IV. is the catalogue of officers and students, with the calendar for the coming year. It contains much timely and profitable reading matter, which all interested in educational topics will find of value.



SEASONABLE BILLS OF FARE.

DINNER NO. 1.

Green Bean Soup,
 Mashed Potato, Summer Squash,
 Hominy, Sliced Tomatoes,
 Farinose with Cream,
 Avena, Whole-Wheat Bread,
 Whortleberries, Water-melon,
 Banana Blanc Mange.

DINNER NO. 2.

Tomato and Macaroni Soup,
 Baked Potato with Celery Sauce,
 String-Beans, Baked Corn,
 Potato Biscuit, Lunch Rolls,
 Whortleberry Pudding, Peaches and Cream.

Potato Biscuit.—Heat a pint of new milk to boiling, and stir into it two cups of hot mashed potato, then cool to blood-heat. Rub through a colander to remove all lumps, add one half-cup of good hop yeast, and stir in enough white flour to make a batter that will pour from the spoon. Let this rise, and when light, add graham flour, or half graham and half whole-wheat, until stiff enough to knead. Knead very thoroughly, shape into small cakes or biscuits, and set in a warm place to rise a second time. When very light, bake in a quick oven.

Green Bean Soup.—Prepare a quart of fresh string-beans by pulling off ends and strings, and breaking the beans into very small pieces. Put them to boil in a small quantity of water; if the beans are fresh and young, three pints will be sufficient; if

wilted or quite old, more will be needed, as they will require longer cooking. There should be about a teacupful and a half of liquid left, when the beans are perfectly tender and boiled in pieces. Put the beans into the water at the first boil, cover closely, and simmer slowly till perfectly done. Turn all into a colander, and rub all the tender portions of the beans through. Return to the kettle, and for each cup of the bean liquid add a half-cup of thin cream and a cup of milk. Salt to taste, and boil together for a few minutes; thicken with a little flour, and serve. The quart of beans should be sufficient for about three pints of soup.

Whortleberry Pudding.—One quart of new milk; one quart of fine bread crumbs; two quarts of fresh whortleberries; one or two tablespoonfuls of sugar. Heat the milk to boiling. Fill a pudding-dish with alternate layers of bread crumbs and berries, beginning and ending with crumbs. Add the sugar to the milk, let it dissolve, and pour the whole over the pudding. Cover closely, place the dish in a pan of hot water, and bake in a slow oven nearly an hour. Serve warm with cream or milk sauce.

Baked Corn.—Scrape one and a half quarts of corn from the cob into a baking-dish. Season with salt if desired, add enough milk—part cream is desirable—to just barely cover the corn, and bake in a hot oven twenty-five or thirty minutes.

Banana Blanc Mange.—Heat a quart of milk to boiling, then stir in four tablespoonfuls of sugar and an equal quantity of smooth corn-starch; boil until thickened; cool, and stir in three sliced bananas; flavor with a very little vanilla. When cold, serve with cocoanut sauce or whipped cream.

Celery Sauce.—Cut a head of celery into finger lengths, and simmer in a pint of milk until it is well flavored. Remove the pieces of celery with a skimmer. Thicken the sauce with a little flour, and season with salt and cream.

HOUSE MOTHS.

The following conversation, quoted from the *Chicago News*, no doubt will be of interest to housekeepers who are troubled with moths:—

“Have you anything that is sure death to moths?” asked an anxious-looking housekeeper of a druggist the other day.

“The druggist smiled, and answered: ‘So you belong to the moth-persecuted multitude of housekeepers? Well, for articles to be packed away in boxes or drawers, there are several things I can recommend. Some people prefer one remedy, some another. You will find some families putting their faith and their winter clothes in snuff or tobacco; others favor red pepper; but for many years I have used camphor, and consider that the best of anything. There is nothing disagreeable about it, and moths don’t seek it as a regular diet; in fact, will never come where there is the camphor odor.’

“Does n’t it evaporate too quickly?”

“No. Put in good-sized pieces, and there is no danger from that source. A piece as large as your fist in six months or a year will be the size of a hickory nut, and the odor will penetrate every part of the box or drawer where the clothing is packed.

“Cedar chips are also a preventive,” he continued. ‘Sprinkle them in among goods packed away, and you will have no moths. But they are not very easily obtained. Sometimes they can be found at a cigar-box factory, but there are not enough to make their use very general.

“The best way of all,” he added, ‘is to have a large cedar chest, and pack everything in that. But such chests are expensive, and common mortals must content themselves with other methods.’

“Can moths be kept out of things that are in every-day use, like carpets, furniture, curtains, etc.?”

“A good housekeeper should never be troubled with moths in a carpet, for if it is swept thoroughly, especially the edges and corners, moths will not make it their abiding place. Newspapers laid under a carpet are said to be an effective aid in driving away these troublesome pests, but hard sweepings are more reliable. If a room is to be shut up for any length of time, something should be sprinkled over the floor.

“Portieres and all curtains must have frequent shakings, or the moth millers will be sure to lodge in their folds. The great object is to keep them out of a house, for when they once locate and take up a claim, they have the ‘squatting’s right,’ and only force can drive them out.’

“But how are the unfortunates who already have them in their houses to get rid of them?”

“For such cases I know of nothing better than some of the moth-powders. The other things I have

mentioned are preventives against moths, but these powders kill the moths themselves.’

“Are they poisonous?”

“No; they are perfectly harmless. The moths do n’t eat the powder, but are suffocated by it. The powders are made from a tree that grows in Persia, and will kill anything that has n’t lungs. I sprinkle it plentifully around a room where there are moths, shut up the room for a while; and what moth-heaven gains, we lose! The powders are good to put under carpets, and if a house is to be closed, should be liberally used in every room. A carbolic acid dilution is also very good for anything that can be dampened without injury.”

A CHINESE KITCHEN.

THE first thing one notices on entering a Chinese kitchen is the stove, if it can be so called. It is made of ordinary brick, with holes in front, about six inches square, through which the charcoal fires can be fanned. Sometimes small earthenware stoves are built in solid, in which case small holes are drilled in the bottom to allow the air to reach the fire from the square apertures below. These stoves are of all sizes to suit, some being used for small earthenware pots, while others are large enough to receive the great family pan, in which the rice, or “great vegetable,” as it is sometimes called, is almost always cooking. These large pans, shaped like huge saucers, are used equally for frying, boiling, or stewing; and the wooden cover goes into the pan, not upon it, and floats on whatever may be boiling at the time. All of these fire-places communicate with one chimney, but as there is very little smoke, except when lighting the fire with wood, the natives do not care much whether the chimney “draws” or not. The only other furniture in the kitchen is the table, which is generally like its surroundings, as black and dirty as can well be conceived.

Upon the grimy chimney are pasted red papers, covered with Chinese characters, in honor of Chow Kun Kong, the god of the kitchen, and before these, on the fifteenth of each moon, red candles and incense are religiously burnt. He is implored to protect not only the kitchen, but the fires, the cooking, the meals, and the cooks; and if the rice is not properly boiled, poor Chow Kun Kong (like our cat) is often blamed for it. Another thing one notices in every kitchen is a sheet of paper pasted on the wall, with a number of black marks upon it. This is the tally of the water-carrier, who, when he brings in a load of water (two pails), presses his thumb on the bottom of a pan, and with the smut makes a mark on the paper. This mark cannot possibly be either erased or copied.—*Good Housekeeping*.

—Carpets may be brightened by dusting with a damp flannel cloth.

Publisher's Page.

Thanks to the efforts of the numerous friends of this journal, its circulation continues to grow in a satisfactory manner. We are continually receiving letters from new subscribers in all parts of the country, and occasionally from remote foreign countries, testifying to the benefits derived from a perusal of the journal. We know of no publication which gives so much valuable information, furnished in as attractive form, and, also, for so small a price, as this.

Our readers will take interest in the article entitled, "Fujiyama," when they learn that the writer, Sho Nemoto, is a young native of Japan, who has obtained an education in this country, at the University of Vermont. His vivid portrayal of the landscape beauties of his native country certainly could hardly be surpassed. Mr. Nemoto is an active temperance worker, greatly interested in the work of the W. C. T. U. We hope to have another article from his pen.

The new edition of "Social Purity," which is having such an unprecedented sale, is ready for delivery. We trust this little pamphlet is doing much good in connection with the social-purity movement. It is sold at retail at the small price of 15 cents per copy. For further information, address GOOD HEALTH PUB. CO., *Battle Creek, Mich.*

The Sanitarium is enjoying, this year, an unprecedented patronage. The family of patients and helpers now numbers between five and six hundred persons. The managers regret that their new building is not yet finished, as it doubtless would be filled this summer, but they hope to be able to use some portions of it in a month from the present time. In the meantime, all who have come, have been comfortably cared for, although it has been necessary to rent nearly all the available rooms in the neighborhood.

The Sanitary Supply Company have just brought out two useful articles: first, a new health waist, which is undoubtedly the nearest to perfection of anything which has ever been produced in this line, a description of which has already appeared in this journal. Another article of scarcely less value, and of great convenience, is a pocket fountain syringe. It is a complete fountain syringe, which can be used with any kind of a vessel, pitcher, wash-bowl, pail, or jug,—anything that will hold water. There are no valves to get out of order, no rubber bag to leak, nothing which can wear out. It ought to last twenty years. Price, with a whole set of tubes, put up in a box so small that it can be easily carried in the pocket, \$1.50. For a description of these articles and an illustrated catalogue of health goods and sanitary conveniences, address SANITARY SUPPLY CO., *Battle Creek, Mich.*

Sanitary Foods.—It is well known to every intelligent physician that a large share of the diseases which prevail during the summer season are due to errors in diet. Indigestible foods,—foods which contain in themselves the elements of disease,—are among the most active causes of summer diseases. We know of no better means of warding off these distressing and often fatal maladies, in old and young, than by the liberal use of such excellent food preparations as are furnished by the Sanitarium Food Company, an advertisement of which appears in this number. These foods were originally prepared under the direction of Dr. Kellogg, the superintendent of the Sanitarium, for the benefit of a large number of persons under treatment for all forms of digestive disturbances, and have proved so serviceable that their reputation

has greatly extended, until now their manufacture has been undertaken on a large scale, and orders from all parts of the country are daily received. These foods are genuine. They are not made simply to sell, and it is believed they fill a place which has not been previously filled. Every article can be relied upon as being exactly what it is claimed to be; and the prices charged are not exorbitant, but are in reasonable proportion to the cost of material and manufacture. All who are interested in these wholesome articles, may get full information concerning them by addressing the Sanitarium Food Company, inclosing stamp for postage, in return for which will be sent an interesting pamphlet, giving a description of a large variety of the most excellent, nourishing, and palatable food preparations ever placed in the market.

There has just been laid on our desk a circular of the Sanitarium, from the Sanitarium Printing Office. For elegance of design and execution, we have seldom seen the circular surpassed. The cover is a beautiful design in black, red, and gold, printed on enameled paper. The pamphlet consists of thirty-two pages, half-quarto size. The engravings number twenty-two, illustrating the inside as well as the outside of the building. One engraving, a bird's-eye view, shows the front of the main building, the new building, and also the Battle Creek College and grounds.

The Sanitarium managers will be happy to send copies of this circular to any one who will place them in the hands of persons likely to be benefited by what they contain. Address, SANITARIUM, *Battle Creek, Michigan.*

Michigan is enjoying a very comfortable summer. While the temperature at Chicago, Cincinnati, Denver, and numerous other large cities has reached 104 degrees in the shade, the mercury in this locality has touched 90 degrees only on a few occasions. A splendid breeze has made even that temperature comfortable. According to the weather prophets, the hottest days of the season were to be between the 15th and 20th of July. That week, at the Sanitarium, was very cool and comfortable. When we hear about our neighbors' suffering from sun-stroke, and business almost paralyzed by the excessive heat, we congratulate ourselves that we live in Michigan, a State which is swept from nearly all directions by water-cooled breezes, even when the most hot and sultry weather prevails elsewhere.

Agents canvassing for "Sunbeams of Health and Temperance" report excellent results in all parts of the country. Some agents average ten to twelve orders per day, which gives them a handsome profit. Those who engage in the sale of this very attractive work have the satisfaction of knowing that they are doing good to others, as well as making money for themselves. General agencies are established in nearly every Northern State. Those who would like to engage in the sale of the work may address the publishers, and will either be supplied with an outfit or referred to the General Agent in the territory in which they reside.

Physical Culture for Home and School.—By Prof. D. L. Dowd: Fowler and Wells Co.: New York. This little work, of nearly three hundred pages, is intended to be a practical guide for physical culture in the home and school. We have not had an opportunity to give it a critical review, but the examination we have given it impresses us that it will be a valuable addition to the literature on this subject. Physical culture in the home and school is, in our opinion, one of the most efficient means of antagonizing the growing tendency to physical deterioration, which is apparent in all civilized communities. Hence, we welcome all works of the character of this one by Prof. Dowd, and trust the author and publishers will be rewarded by a large sale and the appreciation of the public.

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

Sample packages containing specimens of each of our foods sent 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,

SANTARIUM FOOD COMPANY,
Battle Creek, Mich.



Does 'Cycling aid to vigorous appetite, good digestion, exhilarated spirits, innocent pleasure and health for all?

YES!



Would the majority of American riders of first-class machines have ridden for ten years, and continue to ride Columbia Bicycles and Tricycles, if they were not the best?

NO!



The most comprehensive 'Cycling catalogue published, free upon application.



POPE MFG. CO.,

79 FRANKLIN STREET, BOSTON; 12 WARREN STREET, NEW YORK; 291 WABASH AVENUE, CHICAGO.



THE FAIRY TRICYCLE.

Easy, Cheap, Healthful, Graceful. Best for girls, adults, and invalids. Only practical machine for cripples to run by hand power. For circulars, address, **FAY MFG. CO.,** Elyria, O.

HEALTH SCIENCE LEAFLETS.

The following list of twenty-five new four-page tracts deals with almost every phase of the

Great Health Question,

Including the subject of **NARCOTICS AND STIMULANTS.** The subject is considered from a scientific standpoint, and the arguments made are striking and convincing.

Each Tract is illustrated by a fine engraving made expressly for this series of tracts. They are just the thing for general circulation by Health and Temperance Organizations, and are offered at *very low rates.* More than **ONE AND A QUARTER MILLIONS** OF THESE TRACTS were sold in advance of publication:—

1. The Code of Health. 2. How to Live a Century. 3. Pure Air. 4. How to Ventilate a House. 5. A Back Yard Examined. 6. Inventory of a Cellar. 7. What's in the Well? 8. Cayenne and its Congeners. 9. A Live Hog Examined. 10. A Peep into a Packing House. 11. The Contents of a Tea-pot. 12. Tea Tasters. 13. Tea Drinking and Nervousness. 14. Tea Toppers. 15. Tea and Tippling. 16. Tobacco Poisoning. 17. A Relic of Barbarism. 18. Tobacco Blindness. 19. Science vs. Tobacco-Using. 20. The Smoke Nuisance. 21. The Rum Family. 22. A Drunkard's Stomach. 23. Gin Livers. 24. A Rum Blossom. 25. Alcoholism.

Put up in neat packages of 25 each. At retail, 10 cents per package; in lots of 100 packages or more, \$5.00 per hundred; in lots of 1,000 packages, \$3.50 per hundred.

Address, **GOOD HEALTH PUB. CO.,**
BATTLE CREEK, MICH.

EVILS -OF- FASHIONABLE DRESS,

And How to Dress Healthfully. The subject of fashionable dress considered from a medical standpoint. 40 pp., 10 cents. Address, **GOOD HEALTH PUB. CO.,**
BATTLE CREEK, MICH.

ALCOHOLIC POISON.

The best compendium of the Temperance Question published. Statements brief, concise, and to the point. 128 pages, 25 cents. Address, **GOOD HEALTH PUB. CO.,** Battle Creek, Mich.

SHARP & SMITH,

MANUFACTURERS & IMPORTERS OF

Surgical Instruments

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



ELASTIC STOCKINGS
For Enlarged Veins
& Weak Joints.
Batteries, Inhalers,
Etc.

ARTIFICIAL LIMBS.

Abdominal Supporters. Artificial Eyes.

SEND FOR DIRECTIONS FOR MEASUREMENT.

73 Randolph St., CHICAGO.

TO ADVERTISERS!

For a check for \$20 we will print a ten-line advertisement in One Million Issues of leading American Newspapers and complete the work within ten days. This is at the rate of only one-fifth of a cent a line, for 1,000 Circulation! The advertisement will appear in but a single issue of any paper, and consequently will be placed before One Million READERS. If it is true, as is sometimes stated, that every newspaper is looked at by five persons on an average. Ten lines will accommodate about 75 words. Address with copy of Adv. and check, or send 30 cents for Book of 256 pages.
GEO. P. ROWELL & CO., 10 SPRUCE ST., NEW YORK.

We have just issued a new edition of our Book called "Newspaper Advertising." It has 256 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:—

DAILY NEWSPAPERS IN NEW YORK CITY with their Advertising Rates.
DAILY NEWSPAPERS IN CITIES HAVING more than 150,000 population, omitting all but the best.
DAILY NEWSPAPERS IN CITIES HAVING more than 20,000 population, omitting all but the best.

A SMALL LIST OF NEWSPAPERS IN which to advertise every section of the country: being a choice selection made up with great care, guided by long experience.

ONE NEWSPAPER IN A STATE. The best one for an advertiser to use if he will use but one.

BARGAINS IN ADVERTISING IN DAILY Newspapers in many principal cities and towns, a List which offers peculiar inducements to some advertisers.

LARGEST CIRCULATIONS. A complete list of all American papers issuing regularly more than 25,000 copies.

THE BEST LIST OF LOCAL NEWSPAPERS, covering every town of over 5,000 population and every important county seat.

SELECT LIST OF LOCAL NEWSPAPERS, in which advertisements are inserted at half price.

5,472 VILLAGE NEWSPAPERS, in which advertisements are inserted for \$2.15 a line and appear in the whole lot—one-half of all the American Weeklies.
Book sent to any address for THIRTY CENTS.



AN EIGHT-PAGE SEMI-MONTHLY RELIGIOUS PAPER.

STRICTLY committed to those cardinal BIBLE DOCTRINES which are so vital at the present time. The SICKLE is made up of short, crisp articles, doctrinal and practical, Scriptural and incisive.

Price, Per Year, Postpaid,

ONLY FIFTY CENTS.

This is just the paper to send to your neighbor, your absent friend, or far-off relative. The SICKLE is an uncompromising herald of the Commandments of God, and the Second Advent near. It should be circulated far and wide, by land and sea. The Temperance Question receives attention in each issue, and the Theological World is not overlooked. The "Notes and Comments" are a very interesting feature, while Condensed Notes from the great harvest field keep the reader posted in regard to the progress of the cause. If you have fifty cents to spare, subscribe for the GOSPEL SICKLE and send it to your friend.

Address,

REVIEW & HERALD,

Battle Creek, Mich.

ANNOUNCEMENT.

We now have facilities for doing all manner of Printing, and solicit your orders. We have continually added to our facilities in the way of presses, new type faces, and other material, until we have a

❖ Model Job Printing Office. ❖

With these means at our command, and employing a corps of first-class printers, we feel able to give satisfaction in all particulars.

ESTIMATES CHEERFULLY FURNISHED.

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

THE HOME HAND-BOOK OF

DOMESTIC HYGIENE AND RATIONAL MEDICINE.

An encyclopedia of the subjects named in the title. More necessary for every household than a dictionary or an almanac. Contains 1624 royal octavo pages, over 500 cuts, 26 colored plates, and a paper manikin. Muslin and Library. Send for circular. Address,

GOOD HEALTH PUBLISHING CO., Battle Creek, Mich.

TEMPERANCE CHARTS.

A series of ten chromo-lithographic plates illustrating the effects of alcohol and tobacco upon the body. Size, 34 x 37 inches. On plain rollers, \$10.00.

Address, GOOD HEALTH PUB. CO., Battle Creek, Mich.

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

100,000 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.

A General Depot of Temperance Literature.

Some of our Specialties are

- | | |
|--|--------|
| Helps for School Teachers, aside from their Text Books, | \$0.50 |
| Helps for S. S. Teachers, | .25 |
| Helps for Juvenile Temperance Work; Outfit for Beginners, 50 cts.; Advanced, | .50 |
| Chart for Home Instruction, | .50 |
| Chart and Book, for Home Instruction, | 1.00 |
| The "Medical Temperance Journal," an excellent imported Scientific English Quarterly, per annum, | 1.00 |
| "The Tobacco Problem," by Meta Landu (the best on this topic), | 1.25 |

Chromo Cards for all Seasons, and at all prices from 25 cts. per 100 to 50 cts. each.

Card Booklets (a new device), all with Temperance Mottoes. Books selected for S. S. and other Libraries. Supplies looked up and questions answered. Give us a call. Address,

JULIA COLMAN,

Supt. Lib. Dep't, N. W. C. T. U.,

47 Bible House, New York.



LUCRATIVE EMPLOYMENT

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

T. M. GARDNER, Mr.,
So. Vineland, N. J.

ARE YOU POSTED

— ON THE —

Temperance Movement?

IF NOT, READ

“THE VOICE.”

Lyman Abbott, D. D., editor of the Christian Union, says:—

“It contains more information and less mere theorizing to the square inch than any other temperance paper within our knowledge.”

President McCosh, Princeton College, says:—

“*The Voice* utters no uncertain sound; it advocates a cause second to none in importance.”

Enlarged to Eight Pages.

Farm and Household Departments, Market Reports, Literary Items, Choice Short Stories. A sermon each week by Spurgeon, Talmage, or other eminent divines. Good, large type, well printed.

ONE DOLLAR PER YEAR

SPECIMEN COPY GRATIS ON REQUEST.
Address,

18 and 20 Astor Place,
New York.

Chief-Justice Noah Davis says:—

“It is conducted with remarkable energy and ability. Its statistical information collated in each number has never been surpassed.”

Howard Crosby, D. D., LL.D., says:—

“I have always admired the talent and vigor with which it is conducted. I always read *The Voice* and find great profit in it.”

GROWING RAPIDLY IN POPULARITY.

— THE —

MISSIONARY REVIEW OF THE WORLD.

EACH NUMBER CONTAINS

the following departments, each of which is crowded with timely and interesting articles, news and correspondence

From all Parts of the World:

- I. Literature of Missions.
- II. Organized Missionary Work.
- III. Correspondence and General Intelligence.
- IV. International Department.
- V. Progress and Results of Mission Work.—Monthly Bulletin.
- VI. Monthly Concert of Missions.
- VII. Statistics of the World's Missions.
- VIII. Editorial Notes on Current Topics.

Joint Editors } Rev. J. M. SHERWOOD, D. D.
Rev. A. T. PIERSON, D. D.

The N. Y. Christian at Work, says:—

“No lover of the mission cause ought to be without this grandest and most inspiring of all missionary publications. While no clergyman, of whatever denomination, can, in this day, afford to be without its regular visits and the information which it brings him at such trifling cost.”

Terms of Subscription.

One subscription, \$2; 2 subs., \$3.50; 3 subs., \$5; or one sub. for 2 yrs., \$3.50; 3 yrs., \$5. Club rates of 10 and above, \$1.50 each. Single number, 25 cts.

READ EACH
MONTH BY 20,000
CLERGYMEN.

THE HOMILETIC REVIEW.

An international monthly magazine of religious thought, sermonic literature, and discussion of practical issues.

Rev. C. H. Spurgeon, D. D., London, says:—

“I have always valued THE HOMILETIC REVIEW. The contents are varied, but I think everything is kept to the point of practical assistance to preachers. It should have an ever-growing circulation.”

SUBSCRIPTION PRICE PER YEAR, \$3.

To Clergymen and Theological Students, \$2.50, invariably in advance. Single Copies, 30 cts.

Subscribers to these REVIEWS save much more than the cost of their subscriptions by the special discounts they receive on our publications.

ALL THE ABOVE PERIODICALS ARE PUBLISHED BY

FUNK & WAGNALLS, 18 AND 20 ASTOR PLACE,
NEW YORK.

(See opposite page.)

NEW AND IMPORTANT BOOKS

PUBLISHED BY

FUNK & WAGNALLS.

Any of these Books Sent on Receipt of Price.

Number One, and How to Take Care of Him. A Series of Popular Talks on Social and Sanitary Science. By Joseph J. Pope, M. D., Staff-Surgeon Army Royal Artillery; Lecturer on the Special Staff of National Health Society, London. "This series of talks on the art of preserving the health is marked by sterling common sense and a mastery of sanitary science. A wide circulation of this little book is bound to insure four things: better bodies, better dispositions, better minds, and give inspiration for a clear conscience."—*The Interior, Chicago*. 12 mo., 160 pp., cloth, 75 cents.

Dance of Modern Society, The. By William Cleaver Wilkinson. This powerful little book deals with the dance from the standpoint of health, social tendency, morals and religion. "The most pungent attack on the modern dance we have ever read."—*Harper's Magazine*. 12 mo., 78 pp., cloth, 60 cents.

What Our Girls Ought to Know. By Mary J. Studley, M. D., graduate, resident, physician and teacher of the Natural Sciences in the State Normal School, Farmingham, Mass.; also graduate of the Woman's Medical College, New York. "These essays are written in a clear and chaste style, and the book is one which every sensible mother will wish to place in her daughter's hands."—*The World, New York*. 12 mo, 261 pp., \$1.00.

The Famous First Folio Edition (A. D., 1623) of Shakespeare's Plays. Crown 8 vo., cloth, \$2.50. A photographic fac-simile. Every curious and important detail accurately reproduced. Sole authority for text of many of the plays. Commended by personal letter from President of N. Y. Shakespeare Society. A literary treasure.

Miss Holley's Poems. "Josiah Allen's Wife's" Latest Book. A companion volume to "Sweet Cicely." Illustrated by W. Hamilton Gibson and others. 64 poems. Tastefully bound. Square 12 mo., cloth, 225 pages, \$2.00.

A Bundle of Letters, to Busy Girls. By Miss Grace H. Dodge. As is well known, the author is a member of the N. Y. Board of Education, and no one knows better than she what the girls should know. Neatly bound, cloth, 50 cents.

Captain of the Janizaries. A Historical Novel. By James M. Ludlow, D. D. "The material of the book is rich; and the artistic structure of the tale, in plot, narration, character work, and local coloring, all unite to make it a masterpiece. We predict this book will run a good race with 'BEN-HUR.'"—*Methodist Review*. 12 mo, cloth, \$1.50.

Paradise. A Novel by Gen. Lloyd S. Bryce. 12 mo, paper, 25 cents. A bright, humorous, and telling satire on divorce. "Irresistibly funny." Of intense interest.

18 and 20 Astor Place, New York.

(See opposite page.)

MEN AND WOMEN Differ in Character, as they do in Looks.



If you want something to read that will interest you more thoroughly than any book you ever read, send for a copy of

HEADS & FACES: HOW TO STUDY THEM.

A new Manual of Character Reading for the people. It will show you how to read people as you would a book, and see if they are inclined to be good, upright, honest, true, kind, charitable, loving, joyous, happy, and trustworthy people, such as you would like to know, and be intimately associated with; or are they by nature dishonest, untrustworthy, treacherous and cruel, uncharitable and hard-hearted, fault-finding, jealous, domineering people, whom you would not want to have intimate with yourselves or your families?

A knowledge of Human Nature would save many disappointments in social and business life. This is the most comprehensive and popular work ever published for the price, 25,000 copies having been sold the first year. Contains 200 large octavo pages and 250 portraits. Send for it and study people you see, and also your own character. If you are not satisfied with the book, you may return it, in good condition, and we will return the money. We will send it carefully by mail, post-paid, on receipt of price, **only 40 cents**, in paper, or **\$1.00** in cloth binding.

Address, **FOWLER & WELLS CO., Publishers, 777 Broadway, New York.**

N. B.—If you will mention **GOOD HEALTH** in ordering, we will send—**FREE**—a copy of the "Phrenological Journal" (20c. a number, \$2 a year). A magazine of human nature.

IMPORTANT WORKS.

Health in the Household,

Or, **Hygienic Cookery.** By Susanna W. Dodds, M. D. One large 12mo volume, 600 pages, extra cloth or oil-cloth binding, price **\$2.00.**

Undoubtedly the very best work on the preparation of food in a healthful manner ever published, and one that should be in the hands of all who would furnish their tables with food that is wholesome and at the same time palatable, and will contribute much toward **Health in the Household.** AGENTS WANTED to sell this.

PHYSICAL CULTURE.

For Home and School. Scientific and Practical. By D. L. Dowd, Professor of Physical Culture. 12mo, 322 pages, 80 illustrations, fine binding. **\$1.50.**

The best work on the building up of Health and Strength by systematic exercise ever published. It will be called for by professional and all sedentary people, and all who do not have the necessary and proper exercise in their daily occupation; it also tells how to work for health and strength.

THE NATURAL CURE

Of Consumption, Constipation, Bright's Disease, Neuralgia, Rheumatism, "Colds" (Fever), Etc. How Sickness Originates, and How to Prevent it. A Health Manual for the People. By C. E. Page, M. D. 1 vol. 12mo, 278 pp., ex. cloth, **\$1.00.**

A new work with new ideas, both radical and reasonable, appealing to the common sense of the reader. This is not a new work with old thoughts simply restated, but the most original Health Manual published in many years. It is written in the author's clear, attractive manner, and should be in the hands of all who would either retain or regain their health, and keep from the hands of the doctors.

THE MAN WONDERFUL IN THE HOUSE

BEAUTIFUL. An allegory teaching the Principles of Physiology and Hygiene, and the effects of Stimulants and Narcotics, by Drs. C. B. and Mary A. Allen. **\$1.50.**

To all who enjoy studies pertaining to the human body this book will prove a boon. The accomplished physician, the gentle mother, the modest girl, and the wide-awake school-boy will find pleasure in its perusal. It is wholly unlike any book previously published on the subject, and is such a thorough teacher that progressive parents cannot afford to do without it.

Sent by mail, post-paid, to any address on receipt of price. AGENTS WANTED.

ADDRESS, **FOWLER & WELLS CO., Publishers, 777 Broadway, New York.**

N. B.—For a Sample number of the PHRENOLOGICAL JOURNAL, and our large list of works on Phrenology, Physiology, Health, Hygiene, Dietetics, Heredity, Children, &c., send your address on a Postal Card. Mention **GOOD HEALTH.**

SANITARIUM SCHOOL OF DOMESTIC ECONOMY.



THE necessity for scientific instruction in cookery and the various arts connected with house-keeping and home-making, has long been recognized. In foreign countries, particularly in England and Sweden, successful efforts have been made in this direction, but there is yet a very evident and urgent demand for this kind of practical education. In this country, especially, very few attempts in this line have been made, and those have been but partially successful. In view of the great need of a school of this sort, the managers of the Sanitarium have opened a

SCHOOL OF DOMESTIC ECONOMY.

The attendance at this School is already very large, but more can be accommodated.

COURSE OF INSTRUCTION.

The Course of Instruction continues through twenty-five weeks, and consists of daily LECTURES, RECITATIONS, DEMONSTRATION LESSONS, and Practical Drills in the following subjects:—

Scientific Cookery, in all its Branches.

≡ Laundrying, Dress-Making, ≡

General Housework, Household Hygiene,

Personal Hygiene, and

≡ Miscellaneous Subjects,

Including HOUSEHOLD CONVENIENCES, ECONOMICAL HOUSEKEEPING—THE KEEPING OF FAMILY ACCOUNTS, MARKETING, SELECTION OF CARPETS, DRESS GOODS, ETC. The study of these subjects will be pursued under competent teachers in each Department. Instruction will be given chiefly in the form of lectures, accompanied by practical training. The course is exactly what every young woman needs, to make her an efficient and economical housekeeper, competent to make a home and its inmates comfortable and healthful, conditions which form a good foundation for happiness.

DIPLOMAS given those who pass a satisfactory examination at the end of the course.

○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Tuition and Board, including Room and Washing, \$100.00.

○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Deserving persons, who are well recommended, will be given a chance to pay their way. For Circulars, giving full particulars, address,

SANITARIUM SCHOOL OF DOMESTIC ECONOMY, Battle Creek, Michigan.

MICHIGAN CENTRAL

"THE NIAGARA FALLS ROUTE."

TRAINS EAST.	Mail.	Day Exp's	N. Y. Exp's	Atl'c Exp's	Night Exp's	Kal. Acc'n	Local Pass.
STATIONS.							
Chicago.....*	A. M. 5.00	A. M. 9.00	P. M. 8.10	P. M. 10.50	P. M. 9.10	P. M. 4.40	.....
Michigan City.....*	7.23	11.03	4.64	1.03	11.27	6.57	.....
Niles.....*	8.40	12.10	5.49	2.30	12.55	8.20	4.00
Kalamazoo.....*	10.22	1.33	6.58	4.06	2.27	9.50	5.88
Battle Creek.....*	11.15	2.15	7.33	4.57	8.18	7.10	6.30
Jackson.....*	1.20	4.15	8.49	6.35	4.50	9.35	8.20
Ann Arbor.....*	2.43	5.30	9.41	8.08	6.08	10.40	.....
Detroit.....**	4.10	6.45	10.45	9.30	7.30	11.50	.....
	P. M.	P. M.	P. M.	A. M.	A. M.	A. M.	P. M.

TRAINS WEST.	Mail.	Day Exp's	Ch'go Exp's	Pac'fic Exp's	Eve'g Exp's	Kal. Acc'n	Local Pass.
STATIONS.							
Detroit.....**	A. M. 7.30	A. M. 9.10	P. M. 11.20	P. M. 10.15	P. M. 8.00	P. M. 4.00	.....
Ann Arbor.....**	8.51	10.40	2.24	11.35	9.15	5.30	.....
Jackson.....**	10.13	11.45	3.27	12.54	10.55	7.10	6.50
Battle Creek.....**	12.00	1.23	4.58	4.23	12.27	8.52	8.21
Kalamazoo.....**	12.50	2.04	5.15	3.07	1.20	9.45	9.05
Niles.....**	2.27	3.27	6.27	4.28	3.03	6.40	10.40
Michigan City.....**	3.48	4.35	7.32	5.43	4.32	8.03	.....
Chicago.....**	6.10	6.40	9.30	7.45	7.00	10.30	.....
	P. M.	P. M.	P. M.	A. M.	A. M.	A. M.	A. M.

*Connects with railroads diverging. †Connects with L. E. and W. and L. N. A. & C. †Connects with C. W. & M. ‡Connects with G. R. & I. and L. S. & M. S. †Connects with L. S. & M. S. and Grand Trunk. **Connects with T. A. A. and N. M. ††Connects with railroads diverging and Steamboat lines. † Daily. All other Trains daily except Sunday.

O. W. RUGGLES, General Pass. & Ticket Agent, Chicago. O. E. JONES, Ticket Agent, Battle Creek.

CHICAGO & GRAND TRUNK R. R.

Time Table, in effect June 24, 1888.

GOING WEST.					GOING EAST.						
Chgo. Pass.	Mail	Day Exp.	Pac'ic Exp.	6 Crk. Pass.	STATIONS.						
.....	am	am	pm	pm	Dep.	Arr.	pm	am	am	am	
.....	5.55	7.15	8.05	4.10	Port Huron	.....	10.30	1.15	7.35	40.50
.....	7.28	8.31	9.34	5.40	Lapeer	.....	8.42	11.57	6.17	9.17
.....	8.05	9.10	10.15	6.20	Flint	.....	7.55	11.27	5.40	8.40
.....	8.43	9.53	10.58	7.20	Durand	.....	7.05	10.58	5.05	8.05
.....	10.00	10.30	11.53	8.25	Lansing	.....	5.20	10.07	4.00	6.45
.....	10.47	11.00	12.25	9.03	Charlotte	.....	4.42	9.37	3.25	6.15
am	11.30	11.45	1.15	10.05	A } BATTLE CREEK } D	.....	3.45	8.55	2.35	5.30
6.30	am	12.05	1.20	pm	D } A	.....	3.40	8.50	2.30	am
7.15	.....	12.50	2.31	.....	Vicksburg	.....	2.52	8.11	1.44	.....
7.25	.....	1.00	2.32	Val.	Schoolcraft	.....	2.40	.....	1.33	.....
8.15	Sur.	1.50	3.13	Acc.	Cassopolis	.....	1.50	7.26	12.45	Val.
8.55	Pass.	2.30	4.07	.....	St. Bend	.....	1.05	6.50	12.00	Acc.
10.05	am	3.43	5.30	.....	Haskell's	.....	11.54	.....	.....	.....
10.20	7.20	4.00	5.50	6.55	Valparaiso	11.40	5.30	10.30	3.40	7.00
12.40	10.00	6.25	9.10	9.45	Chicago	9.05	3.25	8.15	1.15	4.25
pm	am	pm	am	Arr.	Dep.	am	pm	pm	pm	pm	pm

*Stops only on signal. Where no time is given, train does not stop. Trains run by Central Standard Time. Valparaiso Accommodation, Battle Creek Passenger, Chicago Passenger, Ft. Huron Passenger, and Mail trains, daily except Sunday. Pacific, Limited, Day, and Atlantic Expresses, daily. Sunday Passenger, Sunday only. GEO. B. REEVE, Traffic Manager. W. J. SPICER, General Manager.

Rural Health Retreat, CRYSTAL SPRINGS, ST. HELENA, CAL.



THIS delightful Resort offers unrivaled advantages to Tourists and all classes of Invalids, both for Winter and Summer. It is situated on the southwestern slope of Howell Mountain, 500 feet above and overlooking the noted and beautiful Napa Valley, and 2½ miles from St. Helena. This place is noted for its Pure Water, Dry Atmosphere, Clear and Balmly Sunshine, Even Temperature, Mild Breezes, and the absence of high winds.

THE RATIONAL TREATMENT

By all known remedial agents is employed in this Institution. With these natural and acquired advantages, pleasant and desirable surroundings, thorough and judicious treatment, and wholesome diet, most invalids who avail themselves of these agreeable facilities, rapidly recover. Patients have the care of a regularly graduated Physician of experience, who is assisted by well-trained and courteous gentleman and lady assistants.

All Invalids and Tourists may feel assured that they will be courteously received, and kindly cared for.

For Circulars and further particulars, address
**RURAL HEALTH RETREAT,
St. Helena, Cal.**

Knowlton's Bathing Apparatus!



Universal Bath. Full, Stead, In use. Vapor and Water—fresh, salt, Mineral. Artificial Sea Bath. Weighs 16 lbs. Adjustable. Many Thousands in use. Centennial Award, Medal and Diploma, against the world. Wholesale & Retail. Old Baths Renewed. Send for Circulars. E. J. KNOWLTON, Ann Arbor, Mich.

BEST BATH EVER KNOWN.



GOOD SENSE

IMPROVED CORSET WAISTS

FERRIS' RING BUCKLE AT HIP For HOSE SUPPORTER.
PATENT TAPE FASTENED BUTTONS—will not pull off.
CORD EDGE BUTTON HOLES—will not wear out.

Be sure your Corset is stamped "Good Sense." Sold by LEADING RETAILERS everywhere. Send for circular FERRIS BROS., Mfrs. 341 BROADWAY, NEW YORK.

THOUSANDS NOW IN USE by Ladies, Misses and Children. **BEST** For Health, Comfort, Wear and Finish. BEST MATERIALS used throughout. MARSHALL FIELD & CO., CHICAGO, Wholesale Western Agents.





LUNGS, LEGS AND LIVER

MADE NEW BY RIDING CYCLES!

There is no recreation so healthful and invigorating, no sport so enjoyable! It is out in the air, and the work is done in a position which insures free action of the heart and lungs and the use of all the large muscles. *You* can do it, and when you commence you will wonder that you didn't do it sooner. You want the *Best Machine You Can Find*, and we are prepared to show you that this means

A VICTOR

Send for Illustrated Catalogue of BICYCLES, TRICYCLES, AND SAFETIES.

OVERMAN WHEEL CO.

Makers of Victor Cycles,

BOSTON.



No More Round Shoulders!

SHOULDER BRACES FOR CHILDREN OF ALL AGES, AS WELL AS ADULTS,

Carefully Fitted at Reasonable Prices.



ESTABLISHED AS
SPENCER & MOORE IN 1871.

INVALID ROLLING CHAIR.



Mention this paper.

(Reclining.)
A Priceless Boon to those who are unable to walk. The LARGEST FACTORY and BEST CHAIRS in the world. Send for Circular to



M. A. SPENCER & CO.,

SURGICAL INSTRUMENTS
AND APPLIANCES.

195 & 197 West Seventh Street,

CINCINNATI, OHIO.

Syringes, Supporters, Crutches, Invalid Chairs, Rubber Goods, Ear-Trumpets, Atomizers, Batteries, etc.

We are fitting TRUSSES, SUPPORTERS, SHOULDER BRACES, Etc., daily, and give it special attention. Lady attendant and separate room for Ladies, where will be found many articles of interest to ladies.

STORE OPEN TILL 9 O'CLOCK ON MONDAY AND TUESDAY EVENINGS.

DENTAL • TOILET • ARTICLES
RETAILED AT WHOLESALE RATES.

Seamless Heel Elastic Stockings,



For ENLARGED VEINS AND WEAK JOINTS.

Call or send for Measure Blank.

APPARATUS FOR DEFORMITIES.

Of Best Quality and at Reasonable Prices.



Also Publishers "CINTI MEDICAL JOURNAL." Send for Sample Copy.

SCHOOL CHARTS.

A series of ten chromo-lithographic plates, each 34x48 inches, illustrating anatomy, physiology, and hygiene in a manner never before approached for completeness. Mounted on plain rollers, and in single case, on spring rollers. For circulars, address,

GOOD HEALTH PUBLISHING CO., Battle Creek, Mich.

THE KINDERCARTEN

FOR HOME AND SCHOOL.

Illustrated: Single copy, 20c.; One Year, \$2.00. Kindergarten Stories and Typical Lessons. The June Number contains a portrait and sketch of HELEN KELLER, who, though deaf, dumb and blind, learned to read and write in four months. Circulars free.

BEST TERMS TO AGENTS.

ALICE B. STOCKHAM & CO., Chicago, Ill.



The Largest
SANITARIUM
 In the World.

THIS Institution, one of the buildings of which is shown in the cut, **STANDS WITHOUT A RIVAL** in the perfection and completeness of its appointments. The following are a few of the methods employed:—

Turkish, Russian, Roman, Thermo-Electric, Electro-Vapor, Electro-Hydric, Electro-Chemical, Hot Air, Vapor, and Every Form of Water Bath; Electricity in Every Form; Swedish Movements—Manual and Mechanical—Massage, Pneumatic Treatment, Vacuum Treatment, Sun-Baths. All other agents of known curative value employed.

AN EXCELLENT COLD WEATHER RESORT. A SALUBRIOUS SUMMER CLIMATE.

A Lakeside Resort, Steamers, Sail Boats, Row Boats, Bathing, etc.

Special Departments for the Treatment of Diseases of the EYE, EAR, NOSE, THROAT, LUNGS, and DISEASES OF WOMEN. Special Advantages afforded Surgical Cases.

GOOD-WATER, PERFECT VENTILATION, STEAM HEATING, ELECTRIC LIGHTING, PERFECT SEWERAGE.

The managers have permission to refer to leading members of the medical profession. For circulars, with particulars, address,

MEDICAL AND SURGICAL SANITARIUM, Battle Creek, Mich.