

MARCH, 1896.

GOOD



HEALTH

CONDUCTED  
BY

J. H. KELLOGG M.D.

Subscription price \$1.00

PUBLISHED MONTHLY.



<b>GENERAL HYGIENE</b>	65-73
Zoological Health Studies: 2. Pampered Pets ( <i>To be Continued</i> ), by F. L. OSWALD, M. D.— Effects of Tuberculosis on Nutrition, by O. G. PLACE, M. D.— The Battle Creek Sanitarium: Its Gospel of Good Health and Good Cheer, by MRS. C. S. THORP.— A Model Letter from a Grateful Patient— The Fountain of Youth— Why Uncle Sam is Thin and Dyspeptic— Gladstone's Self-control and Method— Alcohol Does Not Keep Men Alive— One American University without Tobacco— A Poor Heritage— The Secret of Health— William Cobbett on the Drink Habit— Nauseous Food— Age to Marry.	
<b>HOME GYMNASIUM</b>	74-77
Mechanical Exercise ( <i>Illustrated</i> ), by J. H. KELLOGG, M. D. ( <i>Concluded</i> )— Care of the Feet When Walking— Advantages of Bodily Activity— How to Breathe— Practical Dress Reform at the Oswego Normal School— Manual Training at Cornell— Injury from Bicycle Riding.	
<b>HOME CULTURE</b>	78-83
How Shall Children Keep the Sabbath?— Some Mother's Child— What to Cultivate— The Battle Creek Sanitarium Dress System, XIV ( <i>Illustrated</i> )— Little Corners— A Great Man's Toys— Some Excellent Batter Breads.	
<b>HOME TRAINING SCHOOL FOR NURSES</b>	84-87
The Symptoms and Treatment of Malarial Disorders in Childhood— The Dangers of Dust— Simple things for the Amusement of Children— Winter Diseases.	
<b>EDITORIAL</b>	88, 89
Is the Opium Habit Harmful?— Human Manikins— The Two Wines— The Use of Horse Flesh— Longevity in France.	
<b>A DOCTOR'S CHATS WITH HIS PATIENTS</b>	90-95
Hasty Eating— Food Combinations— To Remove Foreign Bodies from the Ear— Influence of Tea and Coffee on Digestion— ANSWERS TO CORRESPONDENTS: Granose— Catarrh— Stomach Trouble— Deafness— Pimples— Cold Hands and Feet, etc.— Rubber Boots, etc.— Dr. Chardot's Wonderful Kola Remedy— Stomach Trouble— Ascarides— Hyperesthesia, etc.— The Ralston System, etc.— MEAT EATING, etc. RELIEF DEPARTMENT.	
<b>LITERARY NOTICES</b>	96

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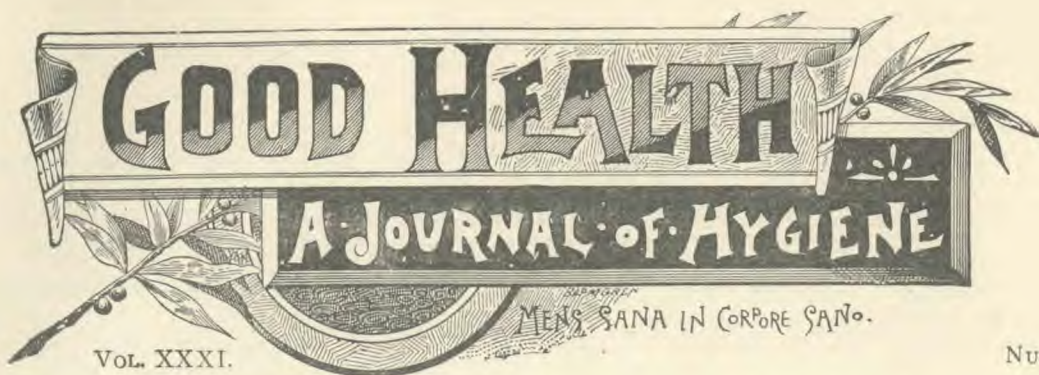
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VOL. XXXI.

NUMBER 3.

BATTLE CREEK·MICHIGAN·

MARCH, 1896.

### ZOOLOGICAL HEALTH-STUDIES.

BY F. L. OSWALD, M. D.,

Author of "Physical Education," "The Bible of Nature," etc.

#### 3. Pampered Pets.

THE depot of a little railway junction near Cumberland Gap, Tennessee, has become a rendezvous for curiosity peddlers. While travelers wait for the frequently belated train of a branch road, they have a chance to buy pet squirrels, mountain crystals, mocking-birds (cage and all for half a dollar), young 'coons, and various species of the *canis domesticus*.

"Say, pap, I want one of those sweethearts," said our youngest fellow passenger, pointing to a corner of the platform where a freckle-faced boy had assembled a number of curious mongrel puppies—half pug and half Skye terriers, to judge by their black snouts and frowzy fur.

"What do you want to do with him, Toodie?" asked the paterfamilias.

"I want to buy it and make it happy," said Toodie, fumbling in her pocket, and producing a couple of silver quarters.

One of those coins was sufficient to effect the purchase; but I felt sure that she would miss her second purpose. The boy took the unsold specimens of the litter back to his highland home, where, in a year or so, a forty-acre mountain meadow will hardly bound their romps; they will share the hunting adventures of their playmate, the foxhound, and his meals of skim-milk and corn bread, sleep under the porch, and at dawn of day, race themselves warm, happy as their hide can hold; while their metropolitan relative will have been stuffed into a wheezing little dyspeptic, waddling about in a silk-lined mantilla.

But he will betray symptoms of distress both before and after the development of second-nature habits, for the first few weeks' indoor confinement is torture to creatures that have known the freedom of outdoor life.

A friend of the Swiss naturalist Tschudi once captured a new-born chamois, and entrusted it to a family of herders, who contrived to make a milch goat raise it with her own kids. Before the end of October the young buck had grown so stout that it took a strong-fisted man to hold him by the horn buds, and the herders noticed that he kept on grazing during a rain-storm, instead of following his foster-parents to the shelter-hut; but the early snowfall augured a severe winter, and about a week before Christmas his proprietors had him brought down from the *alm*, or upland pasture, and put him into the warmest cow stable of a valley settlement—a stout frame building with hay-stuffed double walls, and an abundance of good fodder, straw litter, and summer temperature, derived from the animal warmth of three heifers. His reluctance to enter that abode of comfort was ascribed to his constitutional obstinacy; and when he began to munch a wisp of hay, it seemed probable that he would soon make himself at home. But when his owner entered the stable the next morning, his pet was gone. The door had been locked all night, but an investigation disclosed the fact that the little *wildfang* had broken the roof by leaping, head foremost, against the shingles, and thus opened a gate to freedom.



Country dogs, too, are thoroughly miserable on their first introduction to the comforts of city life; they rise every half minute from their couch in the chimney corner, and hang about the door, looking appealingly at every visitor, even though a blizzard howls without. They seem at first unable to disassociate the ideas of confinement and captivity, and probably also mourn the lost opportunities for exercise and moonlight rambles, or their separation from caches of buried bones, for, with all the relatives of the burrowing fox, the enjoyment of fresh air is a secondary consideration. The proverbial wretchedness of a tan-yard dog has nothing to do with the effluvia of the hide-vat.

The pulmonary resisting power of man's truest friend was strikingly illustrated by a recent tragedy in Chicago. A Danish dairyman, in stress of hard times, prepared for suicide, and conceived the horrible idea of taking all his relatives and pets along. His wife, four children, canary birds, and Newfoundlander, were sleeping in two adjoining rooms; and after locking the doors and screwing down the windows, the desperado turned on the gas, and went to bed. At eleven o'clock the next morning the house door was opened by two policemen, who were almost suffocated before they succeeded in opening the windows. The atmosphere resembled that of a gas tank, and the murderer had attained his purpose in all essentials. He had probably died before midnight. His wife, children, and birds were all hopelessly dead, but the big Newfoundlander was not only alive, but in the full possession of his five senses, and rose with a menacing growl when the strangers approached the bed of his master.

But, as a rule, that four-footed miracle had probably passed the nights in the back-yard of the little cottage, and protracted confinement in a vitiated atmosphere at last affects the respiratory comfort of parlor dogs. They begin to sniffle and get so asthmatic that their efforts at locomotion are attended with an audible wheeze. Their digestive apparatus, however, generally shows the first symptoms of disorder. They become fastidious, turning up their stove-dried noses at dainties which the lank tramp-dogs of the Western prairies would purchase at the price of a fifty-mile trot through the snow; surfeits avenge themselves in retching fits, dietetic caprices (the mastication of rags, as the best available substitute for grass), or, to their patrons' still greater alarm, in a complete loss of appetite. Fido declines to answer the dinner call. He sticks to his couch or the ounge, uttering now and then a querulous whine, wags his tail apologetically in reply to my lady's

inquiries, but snarls at the approach of the man with the medicine bottle.

Still there are specialists for complaints of that sort. In Vienna and Paris they have veterinary hospitals with special wards for the treatment of canine disorders. "Is the dog physician in?" inquires Madame Baizze-Chien, entering the office with a waddling pug-dog.

"Yes; take a chair, madame; kindly state the symptoms of the complaint, and I will take charge of your pet, and warrant a cure in four days."

"Couldn't you just make out a prescription and—"

"Let you physic him at home, you mean? We could hardly guarantee the results. You see, it is necessary to watch the effect of our prescriptions from hour to hour. There is not the slightest risk if you will intrust him to us for half a week."

"O it will half kill me! But if I leave him, please treat him as you would your own—remember his enfeebled condition, I mean, and do not prescribe too violent drugs; promise me that."

"With pleasure. We shall try to dispense with drastic drugs altogether. Kindly let me arrange his bed in this basket of wool."

Madam finally consents, and a minute after her departure the specialist rings a bell. "Here, Jacques, fling a pailful of water on this little monster, and tie him up in the kennel-yard. Give him all the water he wants, but not one crumb of lunch before next Friday night. Then try him with a small slice of bread; but take care he does not snap your fingers off. We have to return him by Saturday noon."

Fido returns, like a regenerate prodigal, and only the deficient caliber of his hide, not lack of appetite, will hinder him from devouring a fatted calf, bones and all.

But a suspicion of their business methods has diminished the popularity of these pug-dog hospitals. Drugs failing, Fido is left to his misery, and its consequences avenge him upon the race of his tormentors. He becomes a night yelper, awakening invalids and anathemas for a dozen blocks around his master's back porch. The watch-dog instinct constitutes half the value of the animal that disputes the horse's claim to supreme usefulness, but no one who has listened all night to the monotonous, querulous yelping of city curs, can doubt that they bark for precisely the same reason that makes city babies squall, and caged jackals howl; viz., the lack of better exercise. Vocal efforts to some degree supplement deficient opportunities for the exertion of the motive organs, and, combined with the promptings of a fretful humor, the close confinement of domestic pets



thus evolves the most horrid forms of that noise nuisance that has made thousands of city dwellers envy the silence of the desert, or even of the grave. The East Indian jungle cock, the ancestor of our barn-yard fowl, crows at daybreak to rally the beauties of his harem, or warn them to seek shelter from the eye of the forest hawk; but only captivity has developed the penchant for those moonlight serenades that make one long for a visitation of that chicken epidemic which in 1859 killed off the poultry of nearly all Southern China.

"If I could get a good sleep," writes Mrs. Jane Carlyle *in tormentis*, "I would have a chance to recover; but that dreadful woman next door, instead of suppressing the cock which we so pathetically appealed against, has produced another. Her servant has ceased to take charge of them. They are stuffed, with ever so many hens, into a small hen-coop every night. Of course they are not comfortable, and of course they crow and screech, not only from daylight, but from midnight, and so near that it goes through one's head every time like a sword. The night before last they woke me every quarter of an hour; but I slept some in the intervals, for they had not succeeded in rousing *him* above. But last night they had him up at three. He went to bed again, and I listened every minute for a new screech that would send him down a second time. What is to be done, God knows. If this goes on, he will soon be in Bedlam, and I, too, for anything I see to the contrary, and how to hinder it from going on? The last note we sent that woman she would not open. I send for the maid, and she will not come. I would give them guineas for peace, but they prefer tormenting us. In the *law* there is no recourse in such cases. They may keep wild beasts in their back-yard if they choose to do so."

A year ago the managers of the Pullman colony were probably the best-hated men in America, but it must have modified the verdict of thousands to learn that one cause of their tenants' complaints was the "tyrannous regulation" against the keeping of pigs and roosters.

Mrs. Carlyle's theory about the approximate cause of crowing concerts agrees with that of a noteworthy Italian couplet:—

*"No for placer, ma per rabbia  
Canta il urello nella gabbia—"*

"It is not pleasure, it is rage,  
That makes the bird sing in his cage."

The crow of a caged rooster is not a shriek of triumph, but of distress and complaint.

The habit of drowsing in a chimney-corner at last grows upon lap-dogs; and when they are put out for the night, their humor may often resemble that of the abbots whom Joseph the Second ousted from their snug convents. In a similar manner the dependence upon dry-goods becomes a second nature with pet monkeys and marmots, and Dr. Brehm's baby chimpanzee insisted on being rocked to sleep, and screeched violently if his nurse stopped the cradle before he had entered the realm of dream-land. Facts of that sort, indeed, often tempt one to conclude that all kinds of unnaturalism can become a "second nature." The sheep of the Shetlands learn to prefer dried fish to grass, and there is a story of an Indian rajah who, by way of experiment, fed a colt on a mixture of meat and meal, and finally on meat-hash alone; and this in the course of a year produced a maned monster that would gallop down billy goats, stamp them out of shape, and tear out pieces with its teeth, snorting viciously if any one attempted to interfere with its wolfish feast.

Corpulent lap-dogs get used to pepper-sauce, to ketchup, and even to strong, bitter coffee, a stimulant unredeemed by the least trace of nutritive ingredient; that is, they learn to prefer it to milk. Their organism somehow adapts itself to the abnormal habit, but experiences the evil consequences the sooner, the less their development is neutralized by the redeeming influence of active exercise. Puffed hounds lose their teeth, and pampered lap-dogs incur what Hippolyte Taine called the "penalty of effeminacy and absinthe"—they perish childless. The wolfish tramp-dogs of the Mexican border raise about nine out of ten pups; dyspeptic pugs, hardly one out of five. The few whelps they do raise are so ill-favored and snappish that the vote of the first referendum is likely to doom them to the Stygian whirlpool.

Overfed pets also forfeit a hereditary accomplishment that manifests itself even in the youngsters of vigorous breeds—they cannot swim. Their adipose tissue may keep them afloat for a while, but they cannot stem the current of any swift stream, and succumb to the problem of climbing a slippery bank.

(To be continued.)



## EFFECTS OF TUBERCULOSIS ON NUTRITION.

BY O. G. PLACE, M. D.

THE "stuffing" process as a method of dealing with patients suffering from consumption has been in the past very greatly practised. To such an extent has this method been employed, both by the laity and some physicians, that it seems difficult for them to learn to do differently, even when an exhaustive array of evidence to the contrary is brought to their attention. In order to a full knowledge of this question, it is necessary first to understand that *appetite* and *digestion* are not synonymous, and that *digestion* and *nutrition* are distinctively different processes.

Our appetites often lead us to eat things that are hurtful. Our digestion does not always protect us by taking care of these things. The appetite is not always a reliable guide as to the quantity we shall eat, even of those things which are most harmless in themselves. The appetite, like the conscience, may be good or bad, according as it has been educated by natural or perverted habits.

Digestion is that process by which food is changed in the body from solids to fluids, with but slight chemical changes in one or two classes; while nutrition is the process by which this fluid food is taken up and changed into living, vitalized tissue. In other words, digestion prepares the material, while nutrition creates new cells to replace those which are destroyed by disease or work.

It is popularly believed that if food is digested and taken into the circulation, that is all that is necessary; but food elements, even after they have undergone thorough transformation by the digestive fluids, have been absorbed into the lymphatics, and carried into the blood-vessels, are not yet *blood*. They are still food, and have done the body no good. There are two conditions yet to be fulfilled before this food may be of benefit to the system; viz., a *demand* on the part of the body for it, and nutritive *force* sufficient to convert such food as is demanded into living tissue.

Vital force can come only through nutrition; good nutrition can only result from good oxidation. Oxidation in the lungs takes place in proportion to the amount of space in which the air comes in contact with the blood. When from any cause an extended portion of the lung becomes obstructed or the tissue thickened, so that the oxidizing process is to a degree frustrated, poisons necessarily accumulate in

the blood, and must be eliminated in some other way. Under these circumstances, when the blood is already surcharged with débris which it handles with difficulty, an excess of food crowded into the circulation only aggravates the condition, instead of relieving it. The whole system suffers from poisoning as truly as it would were the poison introduced by the bite of a dog or a snake. It would be just as reasonable to stuff a patient for hydrophobia as for tuberculosis. In both cases the patient is suffering from accumulated poisons which the body has not the power to eliminate. The harmful results which occur from overfeeding under these conditions are, first, an increase in the bodily temperature, which is usually a destroying element; and second, congestion of the bowels and mesenteric gland, resulting in soreness and chronic looseness, which is so frequently a distressing complication in tuberculosis.

In speaking of this practise of overfeeding tubercular patients, Dr. Andrew H. Smith says: "Sooner or later a time comes when the respiration is so far impaired that enough oxygen cannot be taken into the blood to act upon a sufficient amount of nutritive material to properly maintain the economy. As soon as this stage is reached, the appetite fails in proportion to the defect of hematosi. This is in accordance with the conservatism of nature, and we should heed the warning. Unless we can improve the hematosi and, with it, the whole process of metabolism, we shall only do harm by high feeding."

Dr. Boardman Reed, in an address on this subject to the same association, opens his paper with these words: "Within the past two decades much has been heard of superalimentation and forced feeding in phthisis [consumption]. It seems to have been assumed in many quarters that the more food a consumptive could be made to take, the better his chances for recovery. Recent studies and observations have, however, led the writer to consider seriously whether it is not just as true in disease of the lungs as it admittedly is in other diseases, that any excess of food beyond the amount which can be perfectly digested and assimilated, is injurious. It seems even probable that in pulmonary affections, the gaseous products of indigestion and imperfect oxidation being partly excreted by the lungs, it may be more deleterious than in other cases."



THE BATTLE CREEK SANITARIUM; ITS GOSPEL OF GOOD  
HEALTH AND GOOD CHEER.\*

BY MRS. C. S. THORP.

IN one of the most favored localities in Southern Michigan, swept by the cool breezes from the great inland seas surrounding that State, and environed by picturesque hills and valleys, is the thriving town of Battle Creek. On one of its highest eminences, sixty feet above the beautiful Kalamazoo River, is located the Battle Creek Sanitarium. The main building, six stories high, and perfectly heated, lighted, and ventilated, is capable of accommodating three hundred persons. From its roof, verandas, and windows, panoramas of beautiful landscape are unrolled in charming variety.

Adjacent is the hospital building, imposing in architecture, and famous for its surgery. From it ascend daily, like sweet incense, the grateful prayers and benedictions of those restored to life and health by the wonderful magic of the skilled surgeon's knife. Because of its close relation to much of our own work, I am asked by our president, who has herself tested the benefits of the Sanitarium, to tell you briefly something of the designs and methods of this famous institution.

The Sanitarium presents no panaceas, no marvelous remedies, no certain cures. The aim of its managers has been simply to gather together in one place, and under favorable conditions, all the means, methods, and appliances for the treatment of the sick, which are recognized in rational medicine, and to utilize these in an intelligent and conscientious manner. The thirteen resident physicians are all thoroughly educated and competent, many of them specialists who give their whole attention to one particular line of work. The efforts of the physicians are ably seconded by two hundred and fifty nurses trained and in training, with as many more ordinary helpers and assistants; and too much praise cannot be given to their faithful work.

The methods of treatment include every form of bath and electricity known to the medical profession. In commodious bath-rooms, provided with every possible convenience, are given the Turkish bath, the vapor bath, the electric bath, and a newly discovered bath, known as the electric-light bath, in which the whole surface of the body is subjected to the heat from the incandescent electric light.

This is an almost perfect substitute for a sun bath. Electricity, Swedish movements, and massage are employed extensively, there being some fifty trained manipulators for the latter purpose.

A capacious gymnasium, thoroughly equipped, is supplied with trained instructors who hold daily classes in gymnastics, *delsarte*, and calisthenics. Walking, and carriage and bicycle riding are encouraged.

The dietary of the Sanitarium consists chiefly of grains, vegetables, and fruits. The use of meat, pastries, pickles, fine-flour bread, tea and coffee, is discouraged. And in this we find an echo from our own Frances E. Willard, who has said: "Entire-wheat flour bread, vegetables, fruits, fish, with milk as the daily drink, will distil in the alembic of the digestive organs into pure, rich, fiberless blood, electric but steady nerves, and brains that can think God's thoughts after him as they have never yet been thought."

The diet of each patient is as carefully prescribed as is his treatment, and the diet-kitchen, supplied with every wholesome product of the earth, serves the same purpose in relation to the diet prescription as the pharmacy serves to the medicinal prescription.

Dress reform in its truest sense is required of every patient. Before any hope of relief is extended to the hundreds of broken-down women who seek the Sanitarium as a last resort, the deadly corset and all other restrictions about the vital organs must be removed. Heavy skirts hanging from the hips, and high-heeled shoes are also tabooed. Comfort and ease in dress are the requirements while under the Sanitarium roof, and the enjoyment once experienced from the wearing of such clothing is not likely to be relinquished afterward.

Extensive missionary work is carried on by this institution. A medical missionary training-school is conducted in connection with it. To this school come students from all parts of the globe. They receive free instruction and sometimes financial aid in preparing themselves to enter missionary fields as physicians or nurses. Some fifty are graduated yearly. As a rule, the foreigners return to their native country, prepared to enter upon a life of service for suffering humanity there. Other charities

\*"Paper read at the Seventh Annual Convention of the South Dakota W. C. T. U., Pierre, South Dakota, Sept. 14, 1895.



sustained by the institution are an orphans' home, a home for friendless aged persons, a free dispensary, and free surgical operations for the poor.

To the chronic invalid, and to the tired and weary in mind and brain, the Battle Creek Sanitarium is especially commended. To such the beautiful building, with its pure moral and social atmosphere,

and the kindly, homelike faces, is indeed a "shelter in the time of storm,"—the storm of life's wearing activities. Within its hospitable walls the aching body finds relief, the tired brain rest, and the heart is uplifted in gratitude, while "behind the dim unknown standeth God keeping watch above his own."

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#### A MODEL LETTER FROM A GRATEFUL PATIENT.

ONE of our subscribers in Japan, our friend Sho Nemoto, kindly sends the following translation of a letter addressed by the famous Chinese viceroy, Li Hung Chang, to Dr. Sato, the Japanese physician who treated him when wounded by a would-be assassin on the occasion of his visit to Japan. It is certainly a model epistle from a grateful patient to his physician, and we feel sure will be of interest to our readers:—

"GREAT AND LEARNED SIR: When I was at Shimono-seki, wounded and in danger, you kindly came from a long distance, and diligently treated me with great skill. The treatment acted like magic, and I was much impressed by the benefits of physicians. Your delicate and accurate diagnosis of my case, and your splendid treatment healed the wound in a little over ten days, and words fail me in which to express my gratitude. Your friendly offices, kindly words, and generous conduct are much appreciated.

"In regard to the presents sent you through Commissioner Ito, by order of the emperor, in acknowledgement, you really appreciate them too highly; they were only sent as an expression of regard, and were

not meant as a reward for the favors received at your hands. Since my return home, I have been quietly meditating; the wound has healed, I eat and sleep well, and am returning to my normal condition. For the space of a month or more it has been raining, and yet there is no pain in the wound; from now forward, if I am careful, there will be no anxiety about it.

"The people of your country are making a study of medicine, and your own skill is remarkable. It could hardly be found in the Middle Kingdom; nor would it suffer in the least in comparison with that of Western surgery. 'He who saves men saves the world,' and has all the merits of a faithful minister of state. I pray for peace in all countries, for universal peace, and for the blessings that attend it. For a long time to come I hope there may be no wounds, not only on my personal account, but for the well-being of all.

"Repeating my thanks, I subscribe myself,

"Your obedient servant,

"LI HUNG CHANG.

"*Kmansí, 21st year, 5th month, 22nd day.*"

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#### THE FOUNTAIN OF YOUTH.

"It is a crime to grow old." The author of this bold sentiment is not given. But sometime, when the world takes down the statues of her heroes and notables which cumber it, perhaps a tablet will be left to the unknown who thus defied time and change. We must all die—fortunately it is presumed, since the decree has no exceptions. But how will you prove the necessity of growing gray, wrinkled, and decrepit? Neither toil nor trouble alone has power to deface the life which was made to resist mortality. Probably no mortal ever had more to endure of overmastering anxiety and danger than the first statesman of whom we read, that he died one hundred and twenty years old, but that "his eye was not dim nor his natural force abated." There are men and women in society to-day who

calmly confess to having turned their half century, who wear often the faces of twenty-seven, and are at all times, to young and old alike, fascinating and impressive.

If there were room and need for another society on this planet of ours, it should be an association against growing old. Twenty people, resolved to do all in their power to resist the usual encroachments of time, and to study the best means of preventing the disabilities of old age, would have a wonderful effect on society. The continent is not wanting in savants who have made it a study to discover the laws of long life and youthfulness, with no small success. Those who remember seeing Dr. Oliver Wendell Holmes going down School street, or about the alcoves of the Boston library, with the step of



twenty and the fun of a schoolboy flashing in his face, will hardly need persuading that intelligent care might carry many another down to the seventies with even less of the waymarks of time, without grizzling or thinning hair, shrunken limbs, or, worse, portliness. For, above all things, the old should be spare of figure, and active, having less of the burdens of mortality, and knowing better how to carry them.

So far, the best light thrown by modern research upon the question of preserving youth is the discovery of the Italian savant who says that life and well-being depend more upon the perfect discharge of wastes from the system, thus preserving the purity and circulation of the blood, than upon any other conditions. Taken by-and-large, the decisions of medical men and long livers reach the same conclusion. Those organs which make so much trouble for human flesh, and, if neglected, keep the medical fraternity in business—the lungs, liver, kidneys, and alimentary canal—must be kept in free working order daily, not by medicines, but by compliance with certain natural lines of good breeding, discussed freely in the best books of hygiene; hardly the popular ones by any means. Outside these limits are the considerations of cosmetic hygiene, which ought to be common property. Wrinkles, for instance. What causes them?—Loss of the natural moisture of the skin, which keeps the tissues full as a rose steeped over night in vapor and dew. Loss of that thin layer of fat, scarce thicker than a sheet of tissue paper, which underlies the skin of the finest beauty like the film of wadding with which dressmakers interline finest silks to give them smoothness. Loss of nutrition and nerve force underlying these conditions, and counting as final physical causes. And this is far enough to go for the causes of the evil. All we have time for is how to counteract them.

The complexion of American women has improved

remarkably in fifteen years, since they learned, as a canon of good looks, to allow oatmeal in some shape to counteract the dyspeptic, consumptive influences of white bread. What they must next learn is that a rather sedentary, nervous, brain-using race needs all the phosphates and delicious particles of wheat for staple food. You can't get out of it; the microscope will show you that white-flour bread throws away just the particles needed for beauty of complexion—the phosphorus next the flinty outer coat, which supplies vigor, flesh, and nerve in a wonderful way, to be tested by any one who will eat whole-meal bread and cracked wheat twice a day, and the delicate flinty layer outside the kernel, which counteracts greatly the most baneful effects of our housed, inactive lives.

Any possible harm which doctors predict from the effect of this silex coating on the weakened, worn-out mucous membrane of the city female patient is *nil* when the wheat is ground to the standard of wheat-meal for bread or the finer whole-wheat flour. The slight, wholesome irritation of sluggish, internal tissues by the infinitesimal particles of silex is as desirable as the stir of blood by exercise, or the electric current, or the dash of a cool bath. It is one of the things which make for health, and without which there can be no clearness of complexion or rose of beauty long. Another point vital to force, life, and looks is that of properly baked and ripened bread; that is, crusty bread, not less than twenty-four hours from the oven. Microscopy shows fearful, irreparable injury by this one evil of daily fresh yeast bread, universal in villages and cities. The reason is simple—the ferment does not pass from yeast bread of any sort in less than twenty-four hours; and if eaten before that stage, it sets up and keeps up a fermentation of food, certainly destructive to health and life.—*Shirley Dare, in Pittsburg Dispatch.*

#### WHY UNCLE SAM IS THIN AND DYSPEPTIC.

“UNCLE SAM,” “Brother Jonathan,” and other supposed types of the average American are always represented as thin and gaunt; while “John Bull,” the corresponding personification of the British nation, appears as a fat and hearty old man. This fact reflects the popular impression that Americans, as contrasted with their English relatives, are thin and dyspeptic. This has been accounted for by laying it to our climate, to a national proneness to worry, or to our haste to get rich. *Modern Medi-*

*cine* (September) tells us editorially that it is largely because we do not chew our food. We quote so much of an editorial on “Fat and Blood” as treats on this particular phase of the subject:—

“The cadaverous appearance of the typical American, as compared with his British cousin, is an indication of a national deficiency in fat and blood, the tissues which suffer first and most from indigestion. The almost universal prevalence of indigestion among Americans is indicated by the enormous



quantities of pepsin, peptones, peptonoids, malt extracts, and various digestants and predigested food elements which are annually consumed by the people of the United States.

"A well-known Chicago packer, some time ago, made up three hundred barrels of pepsin in a single batch; but even this prodigious amount would go but a little way toward supplying the demand for assistance made by the enfeebled American stomach. What the stomach needs, however, is not pepsin, peptone, pancreatic preparations, etc., but the ability to make more pepsin and more hydrochloric acid. The stomach needs peptogens rather than peptones, peptonoids, or pepsin. Nature has so arranged the order of the digestive processes that each digestive act prepares the way for and facilitates the next succeeding act; thus mastication, by the comminution of the food, facilitates the action of all the organs and fluids which deal with the food after it leaves the mouth, as well as that of the saliva which is mingled with the food in the mouth. The

saliva acting upon the starch of the food in the mouth and for some time after the food enters the stomach, in case a sufficient amount of the saliva has been mingled with the food by proper mastication, converts the starch into dextrin and maltose.

"In the careful study of a large number of cases of indigestion the writer has observed that the imperfect digestion of starch in the stomach is one of the most common of all the morbid conditions present."

That this is largely due to deficient mastication is shown by the results of an experiment described in the editorial. Two test meals were taken by the same person, the first with thorough mastication, and the second without mastication. The moral is evident. If we are to be fat, we must assimilate our food; and if deliberate chewing is a necessary condition to this, it follows that we must take down our signs "Quick Lunch," and "Five Minutes for Refreshments," or continue to represent Uncle Sam as a sufferer from chronic indigestion.—*Daily Lancet*.

GLADSTONE'S SELF-CONTROL AND METHOD.—Once in bed, Mr. Gladstone never allows his mind to be charged with business of any kind, in consequence of which he sleeps the sound and healthy sleep of a child from the moment his head is on the pillow until he is called next morning. This absolute power over his thoughts, won by long and strict habits of self-control, must be one of the principal causes of his freshness and youth. As an instance, he went home in the early morning after the defeat of his Home Rule Bill of 1886, and slept as usual, his eight hours.

There could not be a better illustration of his mind than his "temple of peace,"—his study, with its extraordinary methodical arrangement. Away from home, he will write an exact description of the key or paper he requires, as: "Open the left-hand drawer of the writing-table nearest the fireplace, and at the back of the drawer in the right-hand corner, you will find some keys. You will see three on one ring. Send me the one with such and such teeth."

His mind is arranged in the same way; he has only to open a particular compartment, labeled so and so, to find the information he requires. His memory, in consequence, is almost unailing. It is commonly found that in old age the memory may be perfect as regards times long gone by, but inaccurate and defective as to more recent events. But with Mr. Gladstone the things of the present are as deeply stamped on his brain as the things of the past.—*Mrs. Mary Drew, in Youth's Companion*.

MRS. H. M. PLUNKETT, in the *Popular Science Monthly*, sees the best sign for the future in the fact that "women are actually becoming interested in public sanitation, and large classes of them have paid money to be instructed in it in Boston lately. This feminine interest is vital and interstitial, and under woman's influence we look to see physical life made doubly worth the living."

THE first wealth is health. Sickness is poor-spirited, and cannot serve any one; it must husband its resources to live. But health or fulness answers its own ends, and has to spare,—runs over, and inundates the neighborhoods and creeks of other men's necessities.—*Emerson*.

ALCOHOL DOES NOT KEEP MEN ALIVE.—Dr. N. S. Davis, at the annual meeting of the American Medical Association, recently held in Baltimore, read a paper entitled, "Does Alcohol Ever Act as Food, or as a Generator of any Natural Force in the Living Body?" in which he stated that, while men had been kept alive forty or fifty days on water, he had found no case, although he had sought diligently, where men had been kept alive half that time on diluted alcohol. "Vital force, heat force, motor force, nerve force, and muscular force are all impaired," said he, "by the influence of doses of alcohol."

ONE AMERICAN UNIVERSITY WITHOUT TOBACCO.—The president and the faculty of the Ohio Wesleyan



University have decreed that the use of tobacco by the students of the institution shall be rigidly and strictly prohibited. This is a bold move, and it will require no small amount of moral courage and college discipline to enforce the order. But good people everywhere will rejoice that one great American university has the courage to raise the standard of absolute cleanliness, and to break away from the traditional heresy that tobacco-using among students in our home and foreign universities is conducive to mental development. On the contrary, the facts are that the use of this narcotic not only reduces the standard of scholarship, but retards the moral and physical growth of the student. — *National Temperance Advocate*.

A POOR HERITAGE. — Captain Lugard of Uganda fame, has spoken with no uncertain voice on the evils of drink in Africa. In a paper recently read by him before the Royal Geographical Society of England, he said :—

“I regret to say that that fine race, the Yorubas—perhaps the finest in West Africa—is being demoralized by the importation of millions of gallons of the cheapest and most noxious of spirits from Hamburg and Liverpool. That import strangles legitimate trade, and leaves the native worse off for his contact with British merchants. In return for the vast export of palm-oil, together with rubber, capsicum, butter, indigo, and other produce, the Yoruba ought, after the lapse of so many years, to be in possession of abundance of cloth and useful European articles, instead of which he has, as a rule, only a heritage of empty gin bottles and an enfeebled physique to hand down to his posterity.”

THE SECRET OF HEALTH.—Don't worry. Don't hurry. “Too swift arrives as tardy as too slow.”

Simplify! simplify! simplify!

Don't overeat. Don't starve. “Let your moderation be known unto all men.”

Court the fresh air day and night. “O, if you knew what was in the air!”

Sleep and rest abundantly. “Sleep is nature's benediction.”

Be cheerful. “A light heart lives long.”

Think only healthful thoughts. “As a man thinketh in his heart, so is he.”

“Seek peace and pursue it.”

“Work like a man, but don't be worked to death.”

Avoid passion and excitement; a moment's anger may be fatal.

Associate with healthy people. Health is contagious, as well as disease.

Don't carry the whole world on your shoulders, far less the universe. Trust the Eternal.

Never despair. “Lost hope is a fatal disease.”

“If ye know these things, happy are ye if ye do them.”—*Sel.*

WILLIAM COBBETT ON THE DRINK HABIT.—When drunkenness has taken fast hold of a man, farewell industry, farewell emulation, farewell attention to things worthy of attention, farewell love of virtuous society, farewell decency of manners, and farewell, too, even an attention to the person; everything is sunk by this predominant and brutal appetite. In how many instances do we see men who have begun life with the brightest prospects before them, and who have closed it without one ray of comfort and consolation? Young men with good fortunes, good talents, good hearts, and sound constitutions, only by being drawn into the vortex of the drunkard, have become by degrees the most loathsome and despicable of mankind.

In the house of the drunkard there is no happiness for any one; all is uncertainty and anxiety. He is not the same man for any one day at a time. No one knows anything of his outgoings or his incomings; when he will rise, or when he will lie down to rest, is wholly a matter of chance. That which he swallows for what he calls pleasure brings pain as surely as the night brings the morning. Poverty and misery are in the train. To avoid these results we are called upon to make no sacrifice. Abstinence requires no aid to accomplish it; our own will is all that is requisite, and if we have not the will to avoid contempt, disgrace, and misery, we deserve neither relief nor compassion.

NAUSEOUS FOOD.—Said a date-eating Bedouin chieftain, on being told that the use of salted flesh was a common practise in America, “How is it possible for people to eat such nauseous food?”

Who is this natural beauty who advances with so much grace? The rose is on her cheek; her breath is pure as morning dew; joy tempered with modesty animates her countenance. It is Health, the daughter of Exercise and Temperance.—*Albitis, Hindu.*

AGE TO MARRY.—Plato insisted that no man should marry younger than thirty, and no woman should marry under twenty years of age. Aristotle placed the age of marriage for man, at thirty-seven.





## MECHANICAL EXERCISE.

BY J. H. KELLOGG, M. D.

(Concluded.)

**TRUNK-EXERCISING APPARATUS.**—Figs. 17 and 18 represent forms of apparatus which are of substantial service in exercising the muscles of the trunk. Although the results obtained are different, the principle of both machines is the same, and is based upon the fact that the body involuntarily seeks to maintain its equilibrium.

*Active-passive Rotation of the Hips.*—Fig. 17 is an apparatus so constructed as to cause a seat to revolve in such a manner that its plane shall continually change, thus inducing the patient, when seated upon the apparatus, to contract the muscles of the trunk in maintaining his equilibrium, the body being steadied by the hands. There is thus secured a complete and perfect rotation of the hips. This is a most excellent form of exercise for persons with weak trunk muscles, which is the condition of most women who come under the care of the gynecologist, as well as of a large share of the cases of nervous dyspepsia in both men and women. This apparatus has the advantage over the other forms of gymnastic apparatus in that it brings the muscles into action automatically, as in walking, and thus secures a more complete and natural movement of the muscles of the trunk. The first applications with this apparatus should be brief,—not more than one or two minutes,—as the muscles of the trunk are brought into such vigorous action that they are likely to be overtaxed, especially in feeble persons. The apparatus may be used either with or without power attachment, but is usually employed without.

*Trunk Flexion.*—In the apparatus shown in Fig. 18 the movement is a tilting of the seat from side to side. It is used in two positions: (1) With the patient sitting parallel with the line of movement; (2) with the patient sitting at right angles to the line of movement. In the first position, the patient is induced to make alternate flexion of the trunk forward and backward; in the second position, the patient flexes the trunk from side to side.

The use of this apparatus is indicated in the same class of cases as the preceding. Its action is less powerful, and consequently it is especially adapted to feeble patients at the beginning of a course of treatment, and as an introduction to the more vigorous movements. The action of this apparatus being less energetic than the preceding, the applications may be somewhat longer—two or three minutes at first, and longer after the patient becomes accustomed to them.

**MECHANICAL RESPIRATION.**—In Fig. 19 is shown an apparatus by means of which artificial respiration may be mechanically administered. In its use the patient is seated upon a stool, the arms being placed over movable rests, which fall in the axillæ. The back is supported by a padded rest placed between the shoulders. When the machine is set in motion, the shoulders are lifted upward and backward in such a way as to expand the chest in an efficient manner, producing a strong inspiratory movement quite independent of any effort on the part of the patient. The effect is to correct the condition known as flat, or hollow, chest, and to give flexi-





FIG. 20. CANNON-BALL MASSAGE.

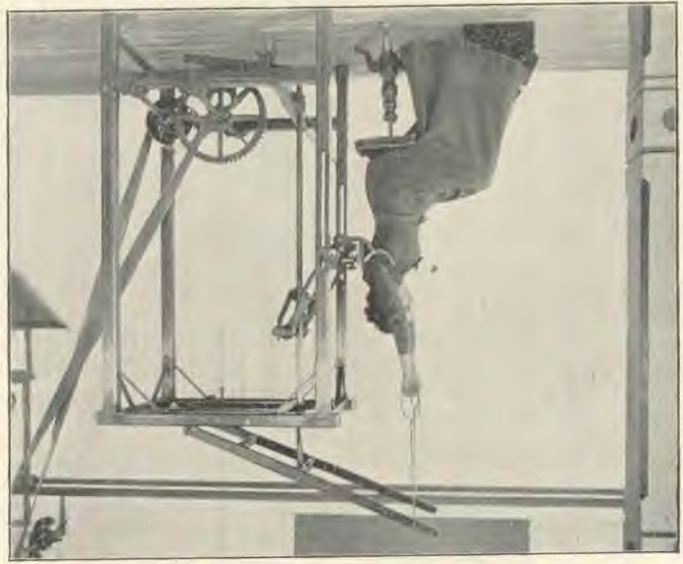


FIG. 19. APPARATUS FOR ARTIFICIAL RESPIRATION.

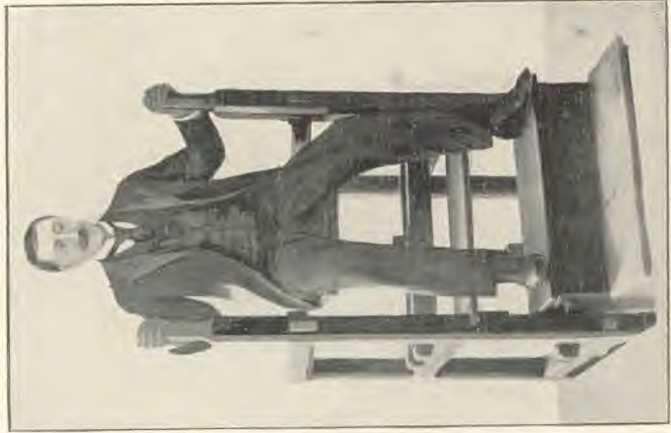


FIG. 18. TILTING SEAT.



FIG. 17. REVOLVING SEAT.





FIG. 21. WEIGHTED COMPRESS.



FIG. 22. MUSCLE BEATING.

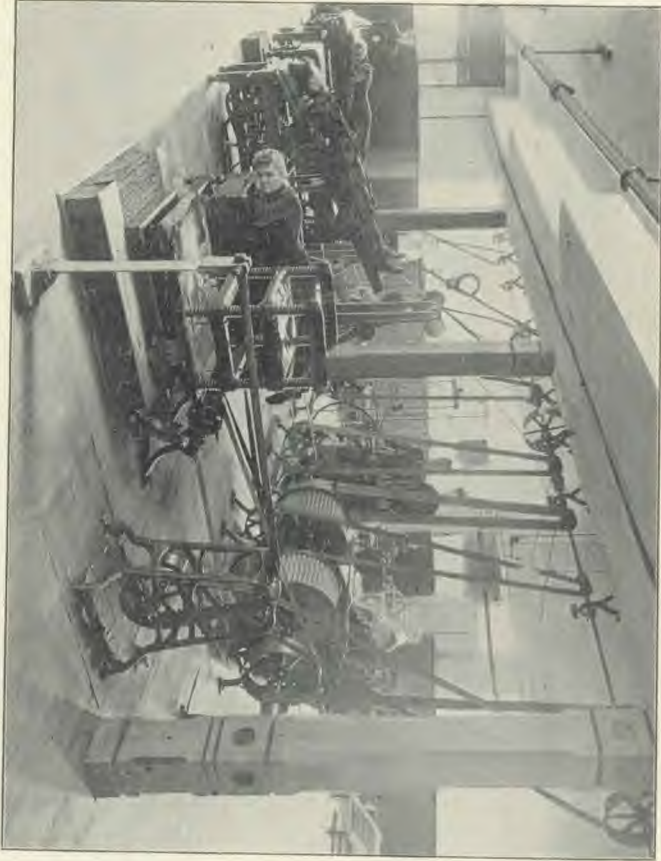


FIG. 23. MECHANICAL SWEDISH MOVEMENT DEPARTMENT OF THE BATTLE  
CREEK SANITARIUM.



bility to the chest walls when they have become rigid in consequence of insufficient use. This apparatus is in part modeled after a similar arrangement by Zander, but several improvements have been added; among others, is a device by means of which the arms, as well as the shoulders, are raised, thus increasing the vigor of the inspiratory movement.

In the use of this machine, the shoulders are alternately elevated and lowered, thus imitating exactly the movements executed in artificial respiration. The action of this apparatus being purely passive, the application may be somewhat extended — five to ten minutes or longer.

**CANNON-BALL MASSAGE.**—A cannon-ball (Fig. 20) covered with leather is a valuable mechanical accessory in the application of abdominal massage. The ball is simply rolled upon the abdomen, following the course of the colon from right to left. A ball weighing from four to six pounds is usually employed. I have found the cannon-ball very useful when employed in connection with other measures of treatment. It has an advantage in that it may be employed by the patient himself. It should be used for fifteen minutes morning and evening. In the morning it may be employed just before rising, or half an hour after breakfast.

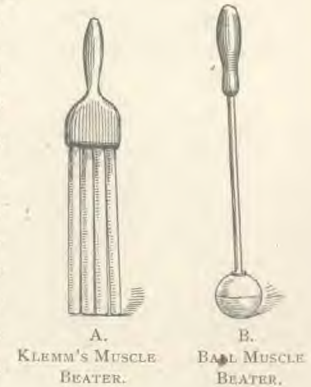
**THE SHOT-BAG.**—This is simply a bag containing a quantity of fine shot. The weight should be three or four pounds. It is used in a manner similar to the cannon-ball, being slowly rolled along the colon from right to left. In the writer's experience the shot-bag is less convenient for use in most cases than the cannon-ball. It is, however, better suited to cases in which there is a considerable degree of abdominal tenderness.

**THE WEIGHTED COMPRESS.**—A quilted compress (Fig. 21) containing several pounds of fine shot, large enough to cover the anterior portion of the abdomen with the patient lying down, has been recommended and successfully used as an aid in inducing intestinal activity. The weighted compress acts simply by increasing the intra-abdominal tension, thus compelling the patient to breathe with greater vigor, and thereby administering to himself a sort of automatic massage to the abdominal contents, through the descent of the diaphragm, and the compression of the organs between the diaphragm and the weighted abdominal wall. The cannon-ball may sometimes be advantageously employed in connection with the weighted compress.

The chief advantage of the cannon-ball, shot-bag, and weighted compress is that they may be used by

the patient himself, without the assistance of the masseur. In the majority of chronic cases requiring abdominal massage, they are not, however, sufficient in themselves to accomplish the results desired, but may be useful adjuvants.

**MUSCLE BEATERS.**—Some twelve or fourteen years ago, Klemm, a German empiric, introduced his so-called "muscle beater," consisting of elastic rubber tubes attached to a handle, which were used as a sort of cat-o'-nine-tails in whipping and flagellating various parts of the body. The inventor created quite an impression for a time by the cures effected by this simple means alone; but the muscle beater is certainly a very imperfect substitute for massage, although it acts quite effectively in stimulating the surface circulation.



The muscle beater may be most advantageously employed upon thick and fleshy masses, and upon those portions of the body which are but slightly sensitive, as the back. The mode of application by a masseur is shown in Fig. 22. When the muscle beater is used by the patient in self-treatment, but one beater is ordinarily employed.

Various forms of muscle beaters have been devised. A form which I have found more convenient than that invented by Klemm (A) consists of one or more rubber balls attached to a flexible rattan or whalebone handle (B). One, two, or more balls may be employed, and of any size desired. The last-described form is an American invention.

**ELECTRIC MASSAGE.**—Various appliances have been proposed for administering massage by means of a specially constructed electrode, thus applying massage and electricity at the same time. A much better mode is the application of electricity through the hand, by connecting the patient with one pole, while the masseur connects himself with the other pole by grasping the electrode with his other hand or fastening it about his arm. The application of electricity through the hand is often useful, and sometimes even necessary; but I have never been able to see any special advantage in the simultaneous application of massage and electricity otherwise than in the employment of the electrical current by the hand, either held upon a fixed point, as in passive touch, or with gentle stroking.



## CARE OF THE FEET WHEN WALKING.

THE human foot is a wonderful piece of mechanism, which is too often maltreated at the dictates of fashion, its flexibility being neutralized by the paralyzing influence of tight boots, etc.

There are twenty-six bones in the foot, seven tarsal bones, forming the ankle and heel, five metatarsal, forming the instep, and fourteen phalanges, forming the toes. The tarsal bones are remarkable for their strength, direct communication with the upper part of the body, and comparative fixity. It is the metatarsal and phalanges in which the flexibility and elasticity are most found, and powerful muscles are attached to these parts of the feet. The heel gives the stability; it is the base of a peculiar column, and any heavy blow or jar upon it is at once communicated to the spine, the base of the skull, and the brain. But with the toes and ankle, the greater play possible for each bone distributes any shock, and gives elasticity. The light, springy step of the child is largely due to the natural tread, the use of the toes as so many levers, though it is true that there is more elasticity, owing to the immaturity of the bones. One of the reasons why walking in towns is so much more tiring than walking in the country is the hardness of the roadway; there is no reciprocity to the elasticity of the front part of the foot, and there is consequently a tendency to walk more flat-footed, or to depend more upon the heel. This causes a jar to the foot and to the body. When much walking is done, or athletics indulged in, it is necessary to give as great freedom to the foot as possible.

There is a very direct sympathy between the foot

and the brain. Mental composure is well-nigh impossible when the feet are in discomfort, bruised, or even chilly. Sores and blisters destroy all comfort, and cause more general uneasiness than their insignificance would seem to warrant. But the connection between feet and personal comfort has long been recognized. In Eastern countries, and in our own early Anglo-Saxon land, the provision of fresh water and oils or ointment for anointing the feet of weary wayfarers was a duty incumbent on hospitality. With us who wear boots, the necessity for perfect cleanliness and for keeping the feet dry is still greater. Let the walker wear thin socks and water-tight boots, and when the day's walk is over, bathe the feet in warm water, rub dry till in a glow, and put on clean, perfectly dry socks, and either shoes or slippers. When the exercise is prolonged, the way rough, and the weather warm, it is wise to anoint the foot. The ancients used sweet oils, modern soldiers have found tallow excellent, but a good brand of soap will answer the purpose as well, and be more cleanly. Turn your socks inside out, and rub the feet, especially sole, heel, and toes, with slightly moistened soap. This lubrication will prevent soreness and blisters. Many prefer to bandage the feet in soft linen bands, duly soaped. In any case, when the day's walk is over, wash the feet, if possible, and at all events rub dry and put on clean socks. With these simple precautions, long walking tours can be undertaken in comfort, and even if the feet get wet in the daytime, no harm will result.—

*The Gymnasium, London, Eng.*

ADVANTAGES OF BODILY ACTIVITY.—1. Any man who does not take time for exercise will probably have to take time to be ill.

2. Body and mind are both gifts; and for the proper use of them our Maker will hold us responsible.

3. Exercise gradually increases the physical powers, and gives more strength to resist sickness.

4. Exercise will do for the body what intellectual training will do for the mind—educate and strengthen it.

5. Plato called a man lame because he exercised the mind while the body was allowed to suffer.

6. A sound body lies at the foundation of all that goes to make life a success. Exercise will help to give it.

7. Exercise will help a young man to lead a chaste life.

8. Varied, light, and brisk exercise, next to sleep, will rest the tired brain better than anything else.

9. Metal will rust if not used, and the body will become diseased if not exercised.

10. A man "too busy" to take care of his health is like a workman too busy to sharpen his tools.—  
*The Reflector.*

THE Greeks made their statues according to the following mathematical proportions: The whole figure is six times the length of the foot. The face, from the highest point of the forehead, where the hair begins, to the chin, is one tenth of the whole statue; the hand from the wrist to the end of the



middle finger is the same. If the length of face from the roots of the hair to the chin be divided into three equal parts, the first division determines where the eyebrows meet, and the second the place of the nostrils. The height from the feet to the top of the head is the same as the distance from the extremity of the fingers when the arms are extended. — *The Bath-Room, Detroit, Mich.*

HOW TO BREATHE.—An old gentleman gave some good advice recently to a young lady who complained of sleeplessness. He said: "Learn how to breathe, and darken your room completely, and you won't need any doctoring."

"Learn how to breathe! I thought that was one thing we learned before coming into a world so terribly full of other things to be learned," the insomniac said ruefully.

"On the contrary, not one in ten adults knows how to breathe. To breathe perfectly is to draw the breath in long, deep inhalations, slowly and regularly, so as to relieve the lower lungs of all noxious accumulations. Shallow breathing won't do this.

"I have overcome nausea, headache, sleeplessness, seasickness, and even more serious threatenings, by going through a breathing exercise—pumping from my lower lungs, as it were, all the malarial inhalations of the day, by long, slow, ample breaths. Try it before going to bed, making sure of standing where you can inhale pure air, and then darken your sleeping-room completely. We live too much in an electric glare by night. If you still suffer from sleeplessness after this experiment is fairly tried, I shall be surprised."—*Ram's Horn.*

PRACTICAL DRESS REFORM AT THE OSWEGO NORMAL SCHOOL.—Dr. Merry V. Lee, who has charge of the physical culture department of the State Normal School at Oswego, N. Y., after waging a successful war against corsets and high-heeled shoes, both of which have been abolished, has made such a vigorous attack upon the fashionable garter that it has

also been forbidden, and the young ladies of the school are now healthfully equipped in garments supported from the shoulder, and elastic hose upheld by suspenders attached to the waist of an undergarment.

It would be fortunate indeed if every normal school and every young ladies' seminary—indeed, every school attended by young women—had a physical culture department presided over by so sensible and efficient an instructor as Dr. Lee.

MANUAL TRAINING AT CORNELL.—A student of mechanical engineering at Cornell is obliged to learn seven trades before he can receive a diploma. A former dudish student objected very much when asked to learn blacksmithing, one of the required trades, but he is now very thankful for having done so, as he has become the superintendent of a mine in Colorado, and, on a recent occasion, found himself able to weld a main shaft, which must otherwise have been sent three hundred miles over the mountains for repairs.

INJURY FROM BICYCLE RIDING.—Dr. Frederick T. Simpson, of Hartford, Conn., reports the case of a young man twenty-six years of age, of rather delicate physique, who suffered severely in consequence of riding fifty miles one day in August. He was obliged to climb several hills, which made him very warm, and produced profuse perspiration, while he became quite cold when coasting down the hills. A week later he began to have strange sensations, and in a day or two experienced numbness in his hands, which soon after manifested itself in his feet and chest. Various other symptoms appeared which justified a diagnosis of the disease known as multiple neuritis.

*Haverly*—Does bicycle riding give people plenty of exercise?

*Austen*—I should say it did! You ought to see the pedestrians dodging us on the boulevard.—*Puck.*





# Home - Culture

CONDUCTED BY  
MRS. E. E. KELLOGG, A. M.

\*

## HOW SHALL CHILDREN KEEP THE SABBATH?

To the Christian mother anxious to win for the Master the souls he has given into her care, the problem of how, with her little ones, to keep the Sabbath holy, making it a day of delight, pleasing and acceptable to the Lord, is often quite a perplexing one. Let her not begin by making the mistake of presuming that the manner in which grown people enjoy keeping the Sabbath is *the* proper and only way in which children can keep the day holy; neither let her imagine that the Lord will hold her guiltless if she leaves her children to follow their own promptings while she makes a personal endeavor to keep the day holy by reading the Bible, studying her Sabbath-school lesson for her own edification, and otherwise gratifying her own inclinations for quiet and rest.

Week-day thoughts and week-day words desecrate God's holy day as surely as week-day work, and children left to their own devices are rarely so conscientious and self-controlled as to be able without help to lay aside worldly things and devote themselves to that which is holy. To tell the children, "Now you must be quiet to-day, because it is the Sabbath; you must not play nor run nor scream," and various other "must nots," is not helping them to keep the Sabbath. Enjoined thus to keep quiet, prohibited from doing what their inclination naturally prompts them to do, but offered no suggestions as to what they may properly do, perhaps told to read the Bible or their Sabbath-school paper, and not disturb their elders, their active minds are likely to become as restless as their bodies, and much holy time be spent in evil thinking, even though their bodies are, to outward semblance, in a quiet state.

That the Sabbath may be kept holy necessitates holy thoughts as well as holy speech and acts. At the very beginning of life it should be the mother's

purpose to instil into her child's mind holy *thoughts* on the Sabbath. If the thoughts are holy, the speech and acts will be, for "out of the abundance of the heart the mouth speaketh." I think this is where parents often fail; they give all heed to the outward forms of Sabbath observance, but they do not seek to fill the vacuum which is left when the week-day thoughts are emptied out, with those appropriate to God's day of rest; and since nature abhors a vacuum, the week-day thoughts rush back again to fill the mind. If the child has been deprived of his ordinary means of amusement, it is hardly possible to expect him to keep the day holy without giving him something in return. The reason why parents fail in this is sometimes a lack of knowledge on their part. They fail to see that the child mind differs from the adult mind; and that while they may be able to control their own thoughts, and keep them fixed upon whatever they choose, the child is yet lacking in reason, judgment, and stability, and must be helped along the right path. More frequently, however, I think the difficulty lies in the fact that it is so much trouble to give so much attention to the children that it leaves the mother almost no time for rest herself, and therefore she seeks her own ease, and trusts that Satan will leave her little ones alone for one day — but he will not. There is no day on which he more surely delights to entangle the child's thoughts than on the sacred rest-day. There is no day on which the mother needs to be more surely wide-awake, equipped with the whole armor of God, and in active service, fighting for the souls of her children.

I am speaking particularly of children under the age of twelve years. Beyond that, if the early training has been thorough, the child should be sufficiently grounded in right principles to be able to keep the Sabbath holy under most circumstances. But you will say, What shall the mother of half a



dozen little ones do? is she to have no rest at all on the Sabbath? Let us remember that rest is not mere inaction, mere quiet and self-ease; that the rest enjoined in Scripture means a cessation from week-day employments and week-day thoughts, a turning of one's thoughts Godward, and that if our hearts are right, we can worship the Lord just as acceptably while talking and reading to the children in such language as they can understand, as in studying quietly alone by ourselves, and that if we seek it, grace sufficient for all our needs will be given us. To make the Sabbath a delight to the children, a day to which they will look forward all the week, a day that they will hail with rejoicing, should be the mother's earnest endeavor.

Let her teach them to reverence the Sabbath, and make its sacred character impressive to them by careful preparation for it. On the day previous, let extra pains be taken with all rooms to be used on the Sabbath, that they be in fitting condition without additional work on that day. I think it is a good plan to sweep and dust on the afternoon previous, putting away all week-day books, sewing utensils, and other reminders of secular work, placing upon the table such books and papers as have been selected for the Sabbath reading, arranging a fresh bouquet of flowers, putting the best tidies on the chairs, fresh towels on the hooks, laying the cloth for the Sabbath breakfast, etc. Let each individual lay out her Sabbath clothing in her own room, that not even a hair-ribbon or pin shall be missing to provoke a hurry and flurry in the morrow's preparation for church. All preparations for the Sabbath meals, save the actual heating of foods, can and should be made the day before. The children should be given their baths, and changed to clean, whole garments in anticipation of the Sabbath, being early taught that nothing soiled or ragged is suitable in which to worship God. Cleanliness of house, of body, and of clothing will help to impress upon their minds that the Sabbath is sacred time, and that we should strive to enter upon it with cleanliness of heart. Even the babies can learn to understand thus that there is a difference between the six days and the seventh.

Says one author upon this point, "Long before a child can know what is the distinctive idea of the Sabbath, he can be trained to perceive that the Sabbath is different from other days; that its standard is higher, and its spirit more joyous; that its tone is quieter, and its atmosphere more reverent. Even a dog or a horse learns to know and to prize some of the privileges and enjoyments of the Sabbath, and

an infant in arms is as capable as one of the brutes of receiving an impression of truth in this realm of fact and sentiment; but in the case of the infant or of the brute, everything depends upon those persons who have it in training. A common error is that the training does not begin early enough. If a child is permitted to go on for months, if not years, without any direct suggestion of a difference between the Lord's day and other days of the week, when the first attempt is made to show him that such a difference ought to be recognized, he is already fixed in habits which stand in the way of this recognition, so that the new call upon him breaks in unpleasantly upon his habitual course of action. A child's life should be so ordered that his earliest consciousness of life is linked with the evidence of the light and joy and peace of the day that is above other days of the week in his nursery experiences, and that his earliest habits are in the line of such a distinction as this. It is for the parents to make clear the distinction that marks, in the child's mind, the Lord's day as a day of days in the week's history. There may be different clothing, there may be a sweeter song sung in his hearing, a peculiar favor of some sort granted to him, to make a difference between his Sabbath experiences and those of other days. By one means or another he should have the Lord's day to look back upon as his brightest memory, and to look forward to as his greatest anticipation. In this way he can be trained to enjoy the Lord's day even before he can know why it is made a joy to him."

What shall we do on the Sabbath to instil good thoughts into the young child's mind?—Let the parents keep the Sabbath in mind during the week. Whenever they come across a suitable engraving, an excellent paragraph in their reading, a book or a paper with articles appropriate for the Sabbath study, let these be kept in store, that the children may have a feast of good things on the Sabbath. Choose books that will widen the children's field of Scriptural knowledge,—lives of missionaries, and stories of noble self-sacrifice and patient perseverance in the Master's service. Choose maps that will help them to understand the geography of the Holy Land; and when the children are quite small, such may be pasted on cardboard and cut in pieces, thus making a dissected map which they can put together. Give them a topic or a suggested word, and let them hunt Scripture verses appropriate to it. There are books of Scripture texts to color; there are blank books with small engravings of Bible scenes, under which the child is to write an explanatory verse; there are many pictures of Bible lands



and Bible subjects which may be studied and enjoyed on the Sabbath, and on some week day cut out and made into a scrap-book. In every household there ought to be a drawer or a cupboard devoted to the Sabbath, in which are stored in readiness for that day the things that every wide-awake mother can hardly fail to find to interest the children on that day. For the wee tots there may be a Noah's ark, some building blocks with which they can make the temple, to be reserved for Sabbath use alone. A song service will greatly help to add interest to the Sabbath-day. But do not spend all the day indoors. The children need out-of-door exercise on the Sabbath as well as on other days, and nothing could be a more appropriate observance of the Lord's day than a walk abroad amidst his creations, studying nature and looking from nature to nature's God. Such walks and talks, if rightly directed, are most valuable.

Of course the children should attend Sabbath-school; and if old enough to keep quiet, should be present at divine service. Just how old they should be before they begin to go to church will depend much upon the child and its training. No child should be allowed to disturb a congregation in order to be broken into church-going. Neither should church-going be made a burden and a fatigue to the child. Most children of three years of age greatly enjoy going to church, and can be kept still if given a flower to hold or some little thing to divert their attention. They are too young at that age to under-

stand what is said, and must needs be occupied, if quiet; but whatever is given them should be something appropriate to the day, and not in any wise a reminder of week-day joys and pleasures,—a Sabbath pencil and tablet, a Sabbath book, may be used until they are old enough to control themselves and sit quietly without occupation.

It is desirable, whenever the parents' income will permit, to have surplus dishes enough so that the dinner table on Sabbath may be laid without washing those used for breakfast. It helps to make the day a delight to the little ones if some of these are especially pretty and dainty, some that are not ordinarily used on other days. As to the dinner itself, it should be healthful, more so, if there is any difference, than on week days, and more easily digested, since less exercise is usually taken. There may be some unusual food in the shape of fruits or nuts, but no rich dishes, and nothing that will tax time and strength to make ready.

And one additional word about the clothing. While it should always be clean and whole, let it be so simple in character as not to claim a moment of the child's special attention. Let it not be so delicate in color or in fabric that the mother must needs be constantly reminding the child not to soil or muss it, but let it in every way be so unobtrusive that it will cause the mother no anxiety and the child no undue thought. Let the spirit pervading the home life during the entire day be that of reverence and gladness and good cheer.

E. E. K.

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### SOME MOTHER'S CHILD.

At home or away, in the alley or street,  
Wherever I chance in this wide world to meet  
A girl that is thoughtless or a boy that is wild,  
My heart echoes softly, " 'T is some mother's child."

And when I see those o'er whom long years have rolled,  
Whose hearts have grown hardened, whose spirits are cold,  
Be it woman all fallen or man all defiled,  
A voice whispers sadly, "Ah! some mother's child."

No matter how far from the right she hath strayed,  
No matter what inroads dishonor hath made,  
No matter what elements cankered the pearl,  
Though tarnished and sullied, she is some mother's girl.

No matter how wayward his footsteps have been,  
No matter how deep he is sunken in sin,  
No matter how low is his standard of joy,  
Though guilty and loathsome, he is some mother's boy.

— Francis L. Keeler.

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WHAT TO CULTIVATE.—An unaffected, low, distinct, silver-toned voice.

The art of pleasing those around you, and seeming pleased with them and all they may do for you.

The charm of making little sacrifices quite naturally, as if of no account to yourself.

The habit of making allowances for the opinions, feelings, or prejudices of others.

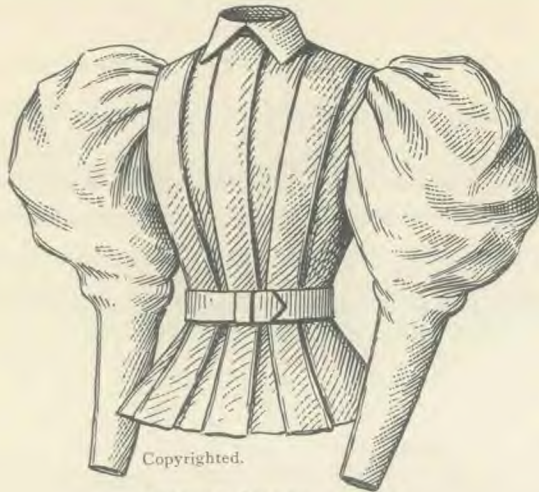
A good memory for faces, and facts connected with them, thus avoiding giving offense through not recognizing or bowing to people, or saying to them what had better be left unsaid.

The art of listening without impatience to prosy talkers, and of smiling at the twice-told tale or incident.— *Christian Observer.*



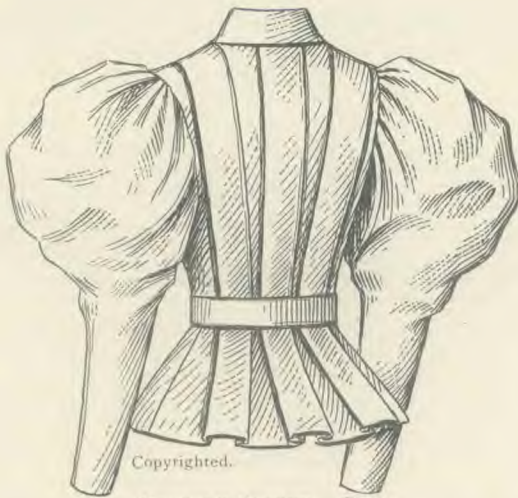






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NORFOLK JACKET.—FRONT.



Copyrighted.

NORFOLK JACKET.—BACK.



Copyrighted.

DOUBLE-BREASTED JACKET WITH SKIRT  
OF BUSINESS SUIT.



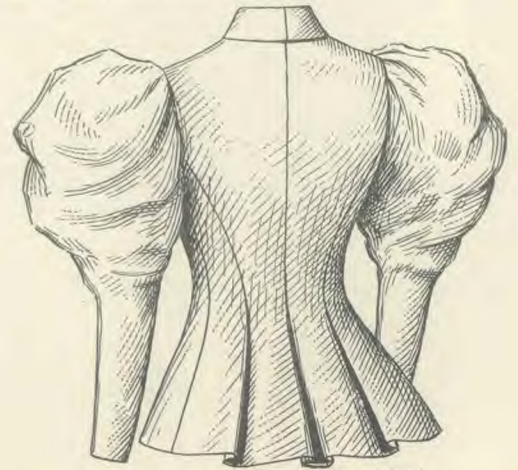
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DOUBLE-BREASTED JACKET.—FRONT.



Copyrighted.

NORFOLK JACKET WITH SKIRT OF BUSINESS SUIT.



Copyrighted.

DOUBLE-BREASTED JACKET.—BACK.



## THE BATTLE CREEK SANITARIUM DRESS SYSTEM.—XIV.

OUR designer gives us this month two novelties in spring garments which are well worthy our consideration. The double-breasted jacket is made preferably of cloth, and is to be worn as an outer wrap throughout the spring months and in the cool nights and mornings of early and late summer. It



FIG. 1.

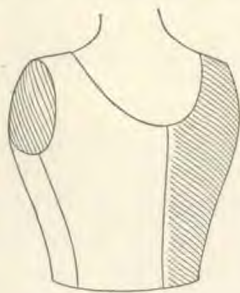


FIG. 2.

will also demonstrate its usefulness as an accompaniment to all outing trips, bicycle and boating excursions, etc. It may be arranged either to close tightly at the throat, or the revers may be turned back, showing the waist underneath. The Norfolk jacket is simply a basque, blouse, and waist in one, and is a garment which both now and later in the season will be of infinite service, as it may be made of any variety of heavy or light-weight goods, and is at all times of undeniably good form. It is usually worn with a belt, but is so adjusted to the figure that the belt can be dispensed with at the taste or caprice of the wearer. It is a most enjoyable garment for warm weather, and the material used may then be percale, muslin, or any variety of silk or wash goods. The chances are largely that the Norfolk jacket will divide the honors with the shirt waist in public favor the coming season.

It is suggested that the Norfolk jacket be worn in connection with the skirt of the business costume given in our November number, thus forming a neat and serviceable suit which might suitably be made of the pretty mohairs so popular this spring. Mohair seems particularly adapted to spring suits, as it is of such varied weaving, design, and finish as to be suitable for any taste and occasion, while the stiffness of the fabric serves to preserve the garment in good shape, is not at all unpleasant to the touch, and is really for this very reason cooler and more soothing and grateful in the warmer weather of the advancing season than are softer and more clinging wool goods. Mohair wears well, and is not overexpensive, ranging in price from fifty cents per yard to three dollars and fifty cents for 48- to 54-inch goods.

In wearing the Norfolk jacket with the skirt of the business suit, as proposed, there will of course be needed an underwaist (Figs. 1 and 2), as the jacket itself affords no support for a skirt. The skirt waist sewed to the skirt of the business suit will readily supply this lack. From the description already given of the business costume, it will be seen how admirably adapted this combination is for a jaunty, comfortable, and convenient spring suit. It has already won golden opinions as a tourist costume, and for mountain-climbing and excursions of a kindred nature its popularity is destined to increase in proportion as its merits become known. Its bifurcated nature, as shown in the accompanying illustration (Fig. 3), especially commends it as a cycling suit, and as a street dress, an exercise dress, a rainy-day dress, it has no equal. With leggings to match (see November number), a lady clad in this costume has only to don an outside wrap (the double-breasted jacket shown in the plate), when she is fully equipped for work or business in the roughest weather.

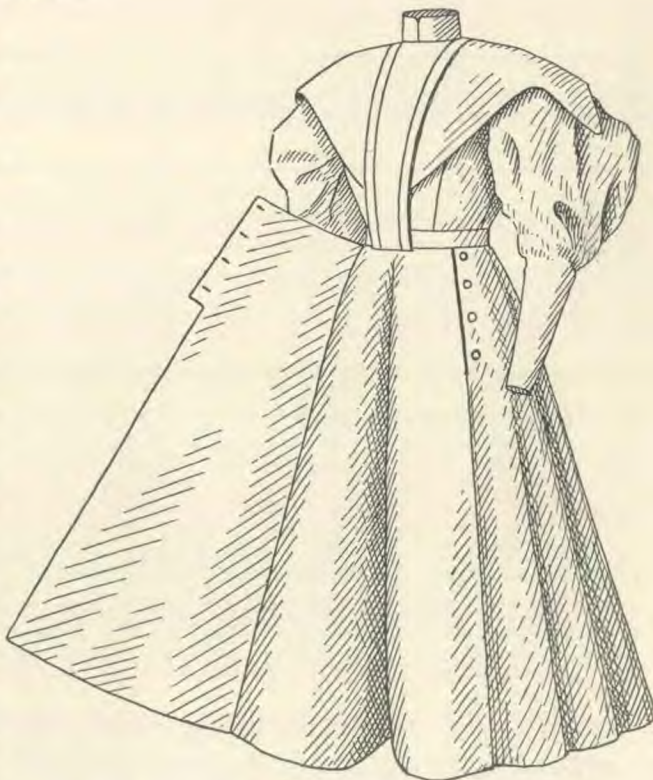


FIG. 3.

*Double-Breasted Jacket.*—This pattern is in five pieces,—front, back, under-arm gore, collar, and sleeve. Jackets in this style for spring are made of



medium-weight cloth, and very attractively trimmed with large buttons. The seams may be plainly pressed, stitched, or strapped, according to taste. The quantity of material required is three yards of 36-inch goods. Patterns can be furnished in the even sizes from 30 to 44 inches, bust measure. Price of pattern, twenty-five cents.

*Norfolk Jacket.*—This pattern is in seven pieces,—front, back, under-arm gore, two collar portions, sleeve, and box plait. The garment in the illustration is developed in mohair, but silk, serge, bril-

liantine, alpaca, flannel, or suiting goods may be satisfactorily employed, with lighter fabrics as the season advances. The quantity of material needed is three yards of 36-inch goods. Eight yards of 36-inch goods will make the spring suit described above, the Norfolk jacket and skirt of business costume. Patterns can be furnished in even sizes from 30 to 44 inches, bust measure. Price of pattern of jacket, twenty-five cents; of costume, forty cents. Address, Sanitarium Dress and Pattern Department, Battle Creek, Mich.

### LITTLE CORNERS.

GEORGIA WILLIS, who helped in the kitchen, was rubbing the knives. Somebody had been careless and let one get rusty, but Georgia rubbed with all her might; rubbed, and sang softly a little song,—

"In the world is darkness,  
So we must shine,  
You in your little corner,  
And I in mine."

"What do you rub at them knives forever for?" asked Mary. Mary was the cook.

"Because they are in my corner," Georgia said brightly. "'You in your little corner,' you know, 'and I in mine.' I'll do the best I can, that's all I can do."

"I would n't waste my strength," said Mary. "I know that no one will notice."

"Jesus will," said Georgia, and then she sang again,—

"You in your little corner,  
And I in mine."

"Cooking the dinner is in my corner, I suppose," said Mary to herself. "If that child must do what she can, I s'pose I must. If Jesus knows about knives, it's likely he does about dinners," and she took particular pains.

"Mary, the dinner was very nicely cooked to-day," Miss Emma said.

"That's all along of Georgia," said Mary, with a pleased face, and then she told about the knives.

Miss Emma was ironing ruffles; she was tired and warm. "Helen will not care whether they are fluted or not," she said; "I'll hurry them over;" but after she heard about the knives, she did her best.

"How beautifully my dress is done," Helen said; and Emma, laughing, answered, "That is owing to Georgia;" then she told about the knives.

"No," said Helen to her friend who urged, "I really cannot go this evening. I am going to prayer-meeting; my 'corner' is there."

"Your 'corner'! What do you mean?"

Then Helen told about the knives.

"Well," the friend said, "if you will not go with me, perhaps I will with you," and they went to the prayer-meeting.

"You helped us ever so much with the singing this evening."

That was what their pastor said to them as they were going home. "I was afraid you would n't be there."

"It was owing to our Georgia," said Helen, "she seemed to think she must do what she could, if it were only knives."

Then she told him the story.

"I believe I will go in here again," said the minister, stopping before a poor little house. "I said yesterday there was no use, but I must do what I can." In the house a sick man was lying; again and again the minister had called, but the invalid would n't listen to him; but to-night the minister said, "I have come to tell a little story."

Then he told him about Georgia Willis, about her knives and her little corner, and her "doing what she could," and the sick man wiped the tears from his eyes, and said, "I'll find my corner too; I'll try to shine for Jesus." And the sick man was Georgia's father. Jesus, looking down at her that day, said, "She hath done what she could," and gave the blessing.

"I believe I won't go to walk," said Helen, hesitating. "I'll finish that dress of mother's; I suppose I can if I think so."

"Why, child, are you here sewing?" her mother said; "I thought you had gone to walk?"

"No, ma'am; this dress seemed to be in my 'corner,' so I thought I would finish it."

"In your 'corner'?" her mother repeated in surprise, and then Helen told about the knives. The door-bell rang, and the mother went thought-



fully to receive her pastor. "I suppose I could give more," she said to herself, as she slowly took out the ten dollars that she had laid aside for missions. "If that poor child in the kitchen is trying to do what she can, I wonder if I am? I'll make it twenty-five."

And Georgia's guardian angel said to another angel, "Georgia Willis gave twenty-five dollars to our dear people in India to-day."

"Twenty-five dollars?" said the other angel.

A GREAT MAN'S TOYS.—The mother of John Ruskin was in every sense a remarkable woman. Her son, in summing up her character, speaks of her as "having great power, with not a little pride," and adds that she was "entirely conscientious, and a consummate housekeeper." The home rule of Ruskin's mother was well-nigh Puritanic in severity; his toys were few, and his sources of amusement limited. "For toys," he says, "I had a bunch of keys to play with as long as I was capable of pleasure in what glittered and jingled; as I grew older, I had a cart and a ball; and when I was six years old, two boxes of well-cut wooden bricks. With these modest, but I still think entirely sufficient, possessions, and being always summarily whipped if I

"Why, I thought she was poor?"

"Oh, well, she thinks she is, but her Father in heaven isn't, you know. She did what she could, and he did the rest." But Georgia knew nothing about all this, and the next morning she brightened her knives and sang cheerily:—

"In the world is darkness,  
So we must shine,  
You in your little corner,  
And I in mine."

— *The Pansy.*

cried, did not do as I was bid, or tumbled on the stairs, I soon attained serene and secure methods of life and motion, and could pass my days contentedly in tracing the squares and comparing the colors of my carpet, examining the knots in the wood of the floor, or counting the bricks in the opposite houses. There were also intervals of rapturous excitement during the filling of the water-cart through its leathern pipe from the dripping iron post at the pavement edge, or the still more admirable proceedings of the turncock, which was turned and turned until a fountain sprang up in the middle of the street. But the carpet, and what patterns I could find in bed-covers, dresses, or wall-papers, were my chief resources."—*Sel.*

#### SOME EXCELLENT BATTER BREADS.

*Graham Puffs.*—Beat together vigorously until full of air bubbles, one pint of unskimmed milk, the yolk of one egg, and one pint and three or four tablespoonfuls of graham flour, added a little at a time. When the mixture is light and foamy throughout, stir in lightly and evenly the white of an egg, beaten to a stiff froth; turn into heated irons, and bake in rather a quick oven. Instead of all graham, one third white flour may be used if preferred.

*Graham Puffs No. 2.*—Beat the yolks of two eggs in two cupfuls of ice-water; then add gradually, beating well meantime, three and one-fourth cupfuls of graham flour. Continue the beating after all the flour is added, until the mixture is light and full of air bubbles. Add the whites of the eggs last, beaten to a stiff froth, and bake at once in heated irons.

*Currant Puffs.*—Prepare the puffs as directed in either of the foregoing recipes, with the addition of one cup of Zante currants which have been well washed, dried, and floured.

*Snow Gems.*—Beat together lightly but thoroughly two parts of clean, freshly-fallen, dry snow, and one part best granular corn-meal. Turn into

hot gem irons and bake quickly. The snow should not be packed in measuring, and the bread should be prepared before the snow melts.

*Corn Puffs.*—Beat together one and one-half cupfuls of unskimmed milk, and the yolks of two eggs, until thoroughly blended. Add two cupfuls of flour, and one cupful best granular corn-meal. Beat the batter thoroughly; stir in lightly the whites of the eggs, beaten to a stiff froth, turn into heated irons, and bake.

*Popovers.*—For the preparation of these, one egg, one cupful of milk, and one scant cupful of white flour are required. Beat the egg, yolk and white separately. Add to the yolk, when well beaten, one half the milk, and sift in the flour a little at a time, stirring until the whole is a perfectly smooth paste. Add the remainder of the milk gradually, beating well until the whole is an absolutely smooth, light batter about the thickness of cream. Stir in the stiffly-beaten white of the egg, and bake in hot earthen cups or muffin rings; and to prevent their sticking, sift flour into the rings after slightly oiling, afterward turning them upside down to shake off all the loose flour.

E. E. K.





## THE SYMPTOMS AND TREATMENT OF MALARIAL DISORDERS IN CHILDHOOD.

THE malarial diseases of children are frequently unrecognized because the symptoms are not as marked as in the adult. The chill and the sweating stage are both often omitted. Before the age of six years the chill is often replaced by a convulsion, or by blueness of the skin and coldness of the extremities, with labored breathing and sometimes unconsciousness. There is always a high temperature,  $106^{\circ}$ – $108^{\circ}$  F. being quite frequent at the beginning of the attack. This very high temperature does not usually continue long, temperatures of  $100^{\circ}$ ,  $104^{\circ}$ , and  $105^{\circ}$  being very frequent, and sometimes continuing for a long time, unless the patient is properly treated, or removed to some place free from malarial germs.

The effect of all malarial poisons upon the blood is to destroy its nutritive elements, especially the red blood corpuscles. This is more marked in children than in adults, as they are more susceptible to morbid influences because of the unstable condition of all their tissues. A severe cough often accompanies malarial attacks in young children, and this, with the fever and wasting, frequently leads to the diagnosis of tuberculosis; indeed, it sometimes seems impossible to distinguish one disease from the other except by the use of the microscope. The examination of the sputa and the blood will show either bacilli or plasmodia, and thus indicate the proper treatment. If taken in time, and properly treated, most cases of malarial fever will recover, but a neglected case may result in the degeneration of every organ in the body. The first and most important thing in the treatment of this disease is to remove all sources of infection, thus as far as possible lessening the amount of poison taken into the body. If practicable, remove the little patient attacked with it to a more healthful locality. If this cannot be done, boil all his food and drink; and this, by the way, is a measure for the prevention of disease which should never be neg-

lected either for the sick or well whenever there is any suspicion that there may be contamination in the food or water supply. Unless children are carefully instructed, they will, when thirsty, drink water wherever they find it, no matter how impure it may be, some stagnant pool, filthy stream, or unclean faucet on the public street serving to slake their thirst, and plant the seeds of disease at the same time.

In a malarial region, children's sleeping-rooms should be on an upper floor, at least one story above the ground. They should also be on the side of the building away from the marsh or swamp, and if possible, have a southwestern or southeastern exposure. Great pains should also be taken to have them dry, clean, and well aired. In cool and damp weather, always dry out the room and the bedding by a fire in the stove or grate, unless the room is warmed by a register or some other method of heating. This warming and drying should be done early in the evening, and the room allowed to cool before bedtime; otherwise the children will be restless in the forepart of the night, and throw off the bedclothes, and thus expose themselves to taking cold in the afterpart of the night.

At night all the secretions of the body are much less active than during the day; therefore the seeds of disease meet with much less resistance. Many children suffer from nasal catarrh, and cannot breathe through the nose; hence always sleep with the mouth open. Thus the mucous surfaces become dry, and do not entangle and keep back the foul dust from the throat, as the moist, irregular surface of the nasal cavity is especially prepared to do from its structure. It has been proved by actual microscopic examination of the healthy secretions of a normal nasal cavity, that all germs are either retained in the external parts of the nose or else destroyed by the healthy secretions farther in. Whenever a child manifests symptoms of a chronic



hindrance to the free passage of air through the nostrils, a physician should be consulted, and treatment given to remove the obstruction and restore the diseased organs to health at once, as this condition is often the cause of dulled mentality as well as of physical disease.

There has been many a warning given against the harmfulness of "night air," but as the only air we can get at night is night air, it is simply a question of which is the more harmful—fresh outside air, or impure, stagnant inside air. Doubtless the germs of malaria are in both outside and inside air in malarial regions. Thus it becomes not a question of how to keep the outside air out, but how to get it in as pure as possible. It has been demonstrated by experiments in hot, miasmatic climates that surrounding the bed by fine-meshed mosquito netting, or putting screens of it into the open windows, will serve to filter the air, and thus render it more wholesome. That cotton fiber is a very efficient air filter has been demonstrated over and over again in the laboratory of the bacteriologist, the sterilized culture fluids remaining free from germs and unspoiled for weeks, when stoppered only by a wad of cotton-wool loosely put in. The meshes of the fibers allow the air to pass in, while the passing of it over the fibers frees it from microbes.

Children should be kept in the house until after sunrise in the morning, and also be warmly clothed, and never allowed to go out into the damp, chill morning air for any length of time without breakfast. They should be forbidden to play in a swampy place or to bathe or wade in stagnant bodies of water. In new countries, freshly broken soil is sometimes a source of malaria; hence the children should be warned away from this, and a suitable playground provided for them. A clean, grassy lawn on a sunny hillside, sheltered from the malaria-infected swamp by a grove or a row of some fast-growing trees, or even a row of sunflowers, will afford some protection. In the long hot days of summer, also in the autumn, when, while the mornings and the evenings are cool, the midday sun is often hot and scorching, the children are apt to become warm and their underwear wet with perspiration; then they take off their outer garments, and forget to replace them when the chill of evening comes on. The surface of the body thus becomes chilled and the internal organs congested; the excretory functions cease to act properly; waste matters are retained in the body, and the malarial parasites find plenty of food, and meet from the weakened, unhealthy secretions no resistance to their peaceable possession of the body. As the air near

the ground is much more laden with malarial germs in the evening than any other time in the day, it would pay every one to come inside at that time, and also add to their clothing. It is poor policy to wait until one is ill before taking care of the health.

The most important health problem which mankind has to solve is how to provide itself with air, water, and food—the three essentials of human life—in a pure and unadulterated state. These necessities of life, clean, and in suitable quantity and of good quality, are the mediums not only of physical health, strength, and vigorous mentality, but of a moral strength and ability to meet and overcome life's temptations. Many and many have been the experiments of the alchemists of the past to discover and give to mankind the philosopher's stone and the elixir of life, the only result of which has been that deadly drug, alcohol. All this time the ignorance of mankind was poisoning the fountain of health by bad hygiene, and neglecting to acquire the knowledge that would have enabled them to provide for themselves clean food, air, water, and other surroundings.

It is probable from recent investigations that the malaria-producing parasite enters the body by the absorbents of the alimentary canal principally, and thus infects the blood. Many children have faulty secretions, and very imperfect action of the digestive organs, which are unable either to digest food properly or to protect the health of the organism by destroying disease germs. The way is thus prepared for any disease germ to grow on the unhealthy surface of the alimentary canal. A slight cold, over-fatigue, loss of sleep, or overeating—and the work of putting on the last straw is done. The child's sleep is broken; it wakes in the morning tired, feverish, and out of sorts. A chill or convulsion marks the onset of a malarial attack; then follow weeks of illness, perhaps death, all of which might have been avoided by a little knowledge and the proper care of the child's health.

After the onset of the disease, as marked by the chill and fever, the little patient should be kept quiet in bed, and the diet be of the simplest kind. The proper measures of treatment are a fast of twenty-four hours, especially if there has been overeating before; a simple enema of hot water or some mild cathartic to cleanse the alimentary canal of spoiled food, unhealthy mucus, and disease germs; a hot pack or full bath to increase the action of the skin; and a fomentation over the liver and stomach to stimulate that organ to increased activity, that it may do its work as a depurating organ more per-



fectly. Sterilized milk, or milk and water if the child is very young, or gruel well cooked and strained, constitute a proper diet. About the time a chill is due, the patient should be kept especially warm and quiet, and be given plenty of hot water to drink.

In the case of infants, where a convulsion is likely to occur in place of a chill, take care to have the stomach free from undigested food, as that is always a cause of more or less cerebral congestion, and may add enough potency to the depressing effects of the malarial poison to cause a fatal collapse. It might be better to omit the meal before the chill, but, as the food will not digest, but only spoil in the stomach.

After using all hygienic measures, the parasites in the blood may sometimes have to be reached by an antiseptic. Quinine is the best-known and most sure remedy for malaria known at present; but it is, like all other drugs, a poison, and should never be given to any one, especially children, except under the supervision of a competent physician. Infants and young children are very susceptible to the influ-

ence of drugs, and therefore need to be carefully watched when taking medicine, or they may be injured from overdosing.

Children often prolong an illness by getting up too soon, or by fretting and becoming irritated because they are kept in bed after they begin to improve. It requires considerable skill to keep them amused during this time, and to prevent them from doing themselves injury either by too much exertion or by overeating. They should never be tempted to fret for forbidden food by seeing other members of the family eating it before them. They are too weak to exercise self-control, and the disappointment will be depressing, and liable to make them worse, and perhaps may be the cause of a relapse. It requires tact and some thought to invent work or plays for them that will keep them interested, and yet not overtax their strength. Do not give them more than one or two things at a time, so as to have a variety with which to make frequent changes. Toys, books, albums, scrap-books, may all thus be made to do their part in helping the little ones to health by making them happy.

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#### THE DANGERS OF DUST.

THE reputation of the good housewife's old enemy, dust, does not improve when subjected to scientific investigation, and its composition made known. Indeed, it bids fair to rank as the chief agent by which certain kinds of disease germs invade the human body. It also forms a protective covering for these enemies of human life, and shields them from being destroyed by those natural disinfectants, fresh air and sunlight. Securely covered with dried mucus, the tubercular bacilli invade every crack in the wall, every seam in the floor, and settle with the dust upon the top of every piece of furniture in the room of the consumptive who carelessly expectorates on everything within reach. The carpets and the dust under them become filled with these microbes. One member of the family after another falls a victim to that dread disease, consumption, and Providence is charged with mysteriously afflicting the ill-fated family. And after they are all in their graves, the germs are left behind in their late habitation to continue their deadly work.

Smallpox, scarlet fever, and other eruptive diseases are found to be contagious for but a short distance around the patient, until the scaling time begins; then in the dried scales and scabs the germs may be carried any distance, and in some unaired

corner, in clothing, book, or toy used about the patient during his illness, may be preserved any length of time. The unprotected microbes given off by the breath soon lose their vitality by becoming mixed with the air, but those protected by a watertight varnish of scales, scabs, or dried mucus, are safely shut in, ready to enter upon active life again as soon as the warmth and moisture of the mucous surfaces of the body shall liberate them and furnish food for them to grow on.

Just how long the spores of a contagious disease will live when dried and protected from air and sunlight is not known. Clothing which has been worn by persons caring for patients ill with scarlet fever, and which has remained packed away in trunks for more than a year, has infected children coming in contact with it. Sailors returning from long voyages, themselves protected from the disease by a previous attack, have carried the infection of smallpox to their families, although the disease had stopped on shipboard many months before. Many epidemics of contagious diseases which seem to begin without any source of infection from another case, probably came about in this way; and it is undoubtedly true that if the real facts could be known, every case could be traced to some previous one of the same disease.



The lesson taught by this persistent vitality of dried disease germs is to destroy them by thoroughly disinfecting all discharges from the patient's body. All scales, scabs, and other solid matter, as the sweepings of the room, hair-combings, and the like, should be burned.

If heavy curtains, carpets, or drapery have been unfortunately left in the room during the illness, it would perhaps prove the better economy to burn them, as when once soiled with spilled discharges, scabs, or scales, it is impossible to cleanse them without spoiling them. Care should be taken to avoid spilling discharges on the floor, or allowing the patient to spit or vomit over everything within reach. It is sometimes difficult to prevent this with

ing delirious patients; but should such an accident occur, the greatest pains should be taken to clean up the discharge at once, and not allow it to dry and become infected dust.

When renovating a room after a case of contagious disease, remember that there is danger of germ preservation in all the seams and cracks, and so make sure that all such hidden places are reached by strong disinfecting solutions. Take special care that no germs are folded away in unclean clothing or bedding. As people become more acquainted with germs, and better instructed in the methods of destroying them, epidemics of contagious disease will be much less frequent and wide-spread than they are at present.

SIMPLE THINGS FOR THE AMUSEMENT OF CHILDREN.—Those who have had the care of active children during their convalescence from a serious illness know how hard it is to keep the little one in bed until the danger of a relapse from getting about too soon is over. As a rule, children with many toys are the least contented with their resources for amusement. They soon tire of expensive toys, and turn to the beloved rag dolly with a warm affection never bestowed on the expensive French doll too fine for common use. A mother or nurse with a jack-knife and a bunch of pine sticks, or a pair of shears and a supply of old illustrated newspapers, may give a child both pleasure and recreation while it is passing the tedious time of getting strong. There are many other simple things that can be made useful in this way. Corncobs make excellent substitutes for building blocks. They are soft and velvet-like to the touch, and may be used to rear many a stately castle, to build forts and walls, and churches with steeples, as well as to fence fields and barnyards. One advantage of having toys that are of little value, is that they may be destroyed without loss, and can be easily replaced.

In some cases of eruptive fevers, as scarlet fever, the scaling stage is very long, and the little patient is liable to a relapse from getting up too soon, besides being at this time dangerous to other children. But all these things the child is unable to understand, and must therefore be amused and wiled into being a companion to himself as much as possible. This discipline may serve not only to pass a tedious time of convalescence pleasantly, but to make him self-reliant and independent, and able to enjoy solitude. It is of great advantage to either a child or an adult to have learned how to use time without be-

compelled to kill it. This knowledge will often be a great comfort to those who are compelled by circumstances to spend much of their time alone. The natural condition of the human mind and body is that of activity, and they rebel against enforced rest.

WINTER DISEASES.—Diseases due to air-borne germs are as a rule most prevalent in winter, as this is the time when people shut themselves up in sealed houses, and live in a summer temperature without the boundless out-of-door air and breezes to carry off the waste which is continually given off from the surface of the body, and exhaled by the breath. Smallpox, scarlet fever, measles, influenza, whooping-cough, etc., are all much more prevalent in winter than in summer. When the homes of the land begin to be opened to admit the free entrance of fresh air and sunlight, the epidemics of these diseases begin to wane, the seeds too often hiding away in the dark, unaired places, ready to begin tormenting and killing next winter when storm-doors and double windows shall shut out the fresh air and sunlight.

The lesson taught by regular winter disease invasion is that everything should be done to keep fresh air circulating freely through the rooms of every dwelling-house, care being taken that the source from which the incoming air is brought is not infected; also that, when disease comes into the family, it is not, for lack of cleanliness, given a permanent residence in the house. The body should be kept so well fortified, and the secretions so active, that they will be able to destroy any stray germs that may seek to find an entrance into the tissues.



# GOOD HEALTH

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## IS THE OPIUM HABIT HARMFUL ?

THE idea that the opium habit could be otherwise than harmful has doubtless never occurred to the average medical man. Nevertheless, astonishing as it may appear, a Philadelphia physician has recently advocated in a medical journal of wide circulation, the notion that the habit is harmless. We quote his words : —

“Speaking of the opium habit, many physicians still have the idea that it causes a great deal of injury. The habit alone, probably never does. A careful investigation into the details of any case will soon convince the experienced observer that the habit is not what produced the decline of health.

“The English government recently appointed a scientific commission to investigate the subject. The most experienced and ablest physicians, who gave the testimony, are unanimously of the opinion that the opium habit has not only no deleterious effect on the general health, but that it proves beneficial in many cases, especially in miasmatic districts, where the use of opium alone secures to the individual the enjoyment of good health. Like many superstitious and wrong ideas, the one concerning the dangerous effects of the opium habit is hard to eradicate, but the evidence proving the contrary to be true is fast accumulating.”

A statement like the foregoing is calculated to do a vast deal of harm, not only to physicians, but to their patients, at any rate if it is received with any degree of credence. Physicians are already too reckless in regard to the manner in which they prescribe various preparations of opium and other narcotics. Thousands of opium habitués are annually made such by the prescriptions of physicians.

It has been the lot of the writer to practice his profession for more than twenty years in connection with a large sanitarium, which is annually visited by many persons whose chief object is relief from the

opium habit. It has been very rare indeed that the investigation of cases of this kind has not disclosed the fact that the habit was begun under the prescription of a physician, the patient only discovering his slavery when too late to emancipate himself. Not infrequently patients have been sent to the writer by physicians for the purpose of being relieved from the baneful influence of this drug.

We can bear most positive testimony to the fact that among some hundreds of cases of this nature which have been under our professional care, we have not in a single instance failed to observe pernicious effects from the use of opium. It is true the patient has not always been haggard and emaciated, although in the majority of cases there has been marked evidence of physical deterioration ; but there has been almost invariably present, evidence of disorder of the liver, disturbed bowel functions, and often serious indigestion, while nervous derangements of various kinds have been nearly universal. In addition to this we have found almost uniformly a marked deterioration in the moral qualities of the one addicted to the use of opium. It is rare indeed that the opium-taker is not more or less addicted to falsifying ; and not infrequently he has a tendency to theft, in addition to the propensity to lie. A loss of regard for public opinion, a marked depreciation in the individual's sense of propriety in speech and conduct, and other aberrations from the mental and moral state are almost constantly observed, except in cases in which the amount of the narcotic used is very small and the habit of recent origin.

The report presented to the English government by the commission recently appointed to investigate this subject, is scarcely to be trusted. The commission was appointed at the instigation of a society which has been for many years belaboring the English government for its attitude in relation to the



opium traffic between India and China. The government has been constantly taunted with the fact that it forced opium upon China against the wishes of the Chinese government and at the point of the bayonet, and has encouraged the development of opium-raising in India to such a degree that opium has come to be a cheap and common product in that country, and is used by the natives of India very widely within recent years. The demand upon the government for an investigation of this matter finally became so great that it was necessary to give the subject some attention. The government consequently appointed a commission, the report of which shows very clearly that it was composed of men selected with reference to their preconceived opinions in favor of opium, or at any rate that it, like the commission appointed some years ago for the investigation of the origin of cholera epidemics, practically formulated its report before it went out to investigate, and made one in harmony with the known wishes of the government. The German commission, sent out at the same time with the English commission to investigate the cause of cholera, found the germ which produced it, and prescribed the remedy by which its dissemination

might be prevented; namely, efficient quarantine; while, on the other hand, the English government found no germs, and put itself on record as opposed to quarantine, which, for a country so largely dependent upon its commercial interests as is England, means paralysis of trade, and all the consequent financial evils.

The opium habit is an unmitigated evil, a dreadful vice, — a veritable calamity to the individual, and a growing source of danger to human society. We do not know of any way in which a physician could use his professional influence to the greater detriment of his fellows, than by advocating such views as are expressed in the paragraphs we have quoted.

The terrible exposures of the evils of the opium habit in India, and its relation to vice, made by Dr. Kate Bushnell and Mrs. Andrew, and published in the report of the Special Committee appointed by the English Parliament to investigate the matter affords abundant evidence of the lawful character of this soul-and-body-destroying drug. The labors of these noble women in this cause alone have erected for them an enduring monument in the hearts of all good men and women.

HUMAN MANIKINS.—The *British Medical Journal* calls attention to the evils of cigarette-smoking and the use of tobacco in general upon boys and young men, and declares that schoolboys should be taught that premature indulgence in tobacco, whether in the form of cigarettes or any other, "is likely to make them grow up into manikins rather than men." This idea ought to be impressed upon the mind of every boy and young man in the land, and it should also be made clear to older men that what is bad for a boy of twenty must be bad for a man of twenty-one, twenty-five, or a greater age.

THE TWO WINES.—It is somewhat unfortunate for temperance principles that the translators of the Bible have rendered the one word "wine" for two entirely different Hebrew words, *yayen* and *tirosh*. The Lexicon of Gesenius, together with Ewald and other translators, translate *tirosh* as "unfermented grape juice," and *yayen* as "fermented wine."

THE USE OF HORSE FLESH.—The flesh of horses has long been a common article of diet in France, Switzerland, and some other European countries, but its use in this country has been confined chiefly

to imported Bologna sausages, which, as is well known, are largely composed of donkey flesh. Recently, however, the use of horse flesh has been rapidly increasing in this country. It is said that for a number of years it has been freely sold in Chicago. A large establishment has also been put in operation in Portland, Ore., for the purpose of canning the flesh of horses, these animals often being purchased there in large numbers at two or three dollars apiece.

LONGEVITY IN FRANCE.—The French people are degenerating. This fact has long been painfully evident to the French statisticians, and the French government has made many most earnest efforts to find some remedy, thus far, however, without effect. A gradual depopulation of the country is taking place, as each census shows a smaller number of births than deaths.

The latest census of centenarians showed only 213 persons in the entire country who were over one hundred years of age. Of these, 147 were women and 66 were men. The "oldest inhabitant" is always a woman. It is reported that a woman aged 150 years recently died in the department of Haute Garonne. All of these centenarians were peasants.





### HASTY EATING.

THE evils resulting from hasty eating may be enumerated as follows:—

1. From deficient mastication, the food is not properly divided, so that the digestive juices cannot gain access to its various elements.

2. By being retained in the mouth too short a time an insufficient amount of saliva is mingled with it, so that salivary digestion cannot be properly performed. As the saliva is also a stimulus to the secretion of gastric juice, stomach digestion must necessarily be imperfect.

3. Again, the food entering the stomach in a coarse, un-masticated state, may act as a mechanical irritant to the delicate lining of the stomach, and thus occasion congestion and gastric catarrh, one of the most common disorders of the stomach, and one which is often very obstinate in its nature.

The best remedy for the habit of hasty mastication is the use of dry food. The importance of this is well shown by a series of experiments conducted by the author for the purpose of determining the amount of saliva produced in masticating dry food as compared with moist and liquid foods. The results were as follows:—

A piece of paraffin chewed for five minutes produced two thirds of an ounce of saliva.

One ounce of granose, a dry food prepared from wheat, increased in weight to two ounces. The addition of pepper and salt to the granose slightly decreased the amount of saliva produced. The addition of vinegar still further diminished the secretion.

One ounce of moist bread chewed for five minutes caused the production of one ounce of saliva.

One ounce of raw apple produced one and one-fourth ounces.

An ounce of water produced but one tenth of an ounce of saliva, or about one sixth as much as a

piece of paraffin, and one thirtieth as much as an ounce of granose.

One ounce of milk was slightly more active in producing saliva than the same amount of water.

An ounce of pea soup chewed for five minutes produced twice as much saliva as did water, but only one third as much as paraffin, and one tenth as much as granose.

The use of "slops" so common in the United States, and to a great extent also in other countries, is one of the most serious of dietetic errors. The American eats in a hurry, rinses down his food with copious drafts of tea, coffee, iced water, iced milk, or iced tea; and in consequence the salivary glands are not stimulated to proper activity, so that the amount of saliva produced is altogether inadequate to digest the starchy elements of food in the acid medium of the stomach contents, and the small amount produced is so diluted that its efficiency is greatly impaired. What wonder that starch indigestion is coming to be an almost universal complaint, as shown by acidity, eructations of gas, flatulence, and a great variety of stomach disturbances, to escape from which multitudes are continually swallowing quantities of magnesia, soda, neutralizing cordials, and alkaline mineral waters of various sorts, together with malt extracts and other digestants.

The inability to digest starch is doubtless one of the great causes of the inordinate consumption of beef and other animal products to which the English-speaking race has come to be addicted, as a method of escaping the pangs of starch indigestion.

The abundant provision made in the human body for the digestion of starch,—first, the saliva; second, the bile and pancreatic juice; third, the intestinal juice; and finally, the liver,—is evidence that nature intended man to subsist largely upon farinaceous foods. The arguments of the "natural



food" advocates, who insist that man should live upon fruits and nuts, are based, not upon physiological facts, but upon the morbid experiences of the disciples of this doctrine. The writer had an opportunity, a year or two ago, to examine the stomach fluid of one of the most earnest and stalwart advocates of the fruit-and-nut diet, and the stomach was found greatly dilated, and almost completely inert.

I have cured many scores of chronic and very obstinate cases of dyspepsia by simply requiring the patient to subsist upon a dry diet, whereby he was compelled to thoroughly masticate his food. A fa-

vorite prescription with the writer, which is applicable in most cases of indigestion, is one or two ounces of dry granose eaten at the beginning of each meal. This introduces into the stomach an abundant quantity of saliva,—probably from four to six ounces in most cases,—and ensures efficient starch digestion.

The dextrin and maltose produced by the action of the saliva upon the starch are exactly what the stomach needs to stimulate it to healthful activity, whereby a proper quantity and quality of gastric juice will be produced.

FOOD COMBINATIONS.—Careful experiments have shown very clearly that different classes of food require a particular quality of digestive juices for their digestion. For instance, a gastric juice that will digest animal food the best, is inferior for the digestion of vegetable food, and *vice versa*. The obvious conclusion to be drawn from this fact is that the simpler the dietary, the more perfectly will the digestive process be performed. For persons whose digestions are naturally weak this is a matter of especial importance. The following table represents the best and worst food combinations:—

GOOD COMBINATIONS.	
Grains and Fruits.	Grains and Milk.
Grains and Meat, or Eggs.	Grains and Vegetables.
FAIR COMBINATIONS.	
Grains, Sweet Fruits, and Milk.	Meat and Vegetables.
BAD COMBINATIONS.	
Fruits and Vegetables.	Milk and Vegetables.
Milk and Meat.	

Those foods agree best whose chief constituent elements are digested by the same fluid, in the same part of the alimentary canal, and in about the same length of time. Vegetables contain a great amount of coarse, woody structures, which are retained in the stomach a long time before they are sufficiently broken up to be easily digested in the intestines. Fruits, on the other hand, remain but a short time in the stomach. The large amount of saccharine matter which fruits contain, makes them likely to set up fermentation in the stomach, if retained too long. Acid fruits are also likely to delay starch digestion. This is another reason for their interference with vegetables, the starch of which is rather more difficult of digestion than that of grains.

Milk and vegetables are likely to disagree, for the reason that milk, when taken by itself, is retained in the stomach but a short time, its digestion being carried on chiefly in the small intestine. Milk and

meat are a bad combination for the same reason. Meat requires long digestion in the stomach, whereas milk, when taken by itself, is quickly passed on, to be digested by the pancreatic juice. When taken with meat or vegetables, milk, being long retained in the stomach, undergoes fermentation, resulting in sour stomach, biliousness, and various other unpleasant symptoms.

If the bill of fare taken at a single meal were confined to three or four articles of food, there would be fewer dyspeptics scanning the newspapers for some patent nostrum to "aid digestion."

TO REMOVE FOREIGN BODIES FROM THE EAR.—Dr. Zeim has discovered the interesting fact that the best means of removing such small, round bodies as peas, coffee beans, beads, etc., from the ear is by introducing oil into the ear. A little oil should be placed in the ear as soon as possible after the object has been introduced, and the canal plugged by means of a little cotton. The patient should lie as much as possible on the ear containing the foreign body; and the next morning, when the cotton is removed, the intruding substance will probably be found next to it, ready to be expelled. It is probably forced out by contraction of the muscular fibers surrounding the auditory canal.

INFLUENCE OF TEA AND COFFEE ON DIGESTION.—Dr. Schultzenstein, in experimenting upon the digestion of chopped boiled egg with hydrochloric acid and pepsin, found that digestion was very materially interfered with by both tea and coffee. Experiments by Dr. Roberts have shown us that tea and coffee are equally detrimental to stomach digestion of starch, almost wholly neutralizing the influence of the gastric juice.



## ANSWERS TO CORRESPONDENTS.

GRANOSE.—Mrs. S. E. B., Wis., writes as follows: "1. Granose is advertised as a specific for indigestion and constipation. I purchased a quantity, but find no directions for its use on the packages. Kindly state the best use to make of it. 2. Should it be used exclusively for a longer or shorter period, or should it be combined with the usual food at a meal?"

Ans.—1. The following directions for the use of granose are printed on the end of each package:—

## METHODS OF USING GRANOSE.

*Dry.*—Eaten dry, granose is the most delicate and delicious of all grain foods. Used thus it is almost a panacea for most forms of indigestion. It never disagrees with the most delicate stomachs.

*Granose with Liquid Foods.*—Granose, like wheat bread, combines admirably with every flavor. It is unequaled as an addition to liquid foods of all sorts, but is, by the mode of manufacture, rendered so extremely soluble that it softens at once; hence to preserve, in part, its delightful crispness, it should be combined with liquid as eaten, instead of being added and allowed to soak, as in the case of zwieback and crackers.

*Granose Shortcake.*—Cover the bottom of a shallow pudding-dish with a thin layer of granose flakes, add a layer of fresh strawberries, chopped and slightly sweetened, then a second layer of granose. Fill the dish thus with alternate layers of granose and berries. Set away in a cool place for an hour, when it will be ready to serve. Cut in squares. No dressing is required, but it may be served with cream, if desired. A delicious dish, and one which is as wholesome as delicate. Raspberries and other small fruits may be used in the same manner.

Granose is of the highest value as an aid to digestion when eaten dry. We commonly direct our patients to eat one or two ounces at the beginning of each meal, dry. It may be used with cream, milk, fruit juices, soup, or any other liquid food. Its highest value is as a palatable dry food.

2. In certain cases, especially dilatation of the stomach, and cases of extreme tendency to acidity, granose may be used in connection with nut meal, bromose, or some other fat-containing food as an exclusive dietary for a few days, or even a week or two when other food cannot be digested. Ordinarily it is used in combination with other food.

CATARRH — STOMACH TROUBLE — DEAFNESS.—Mrs. M. G. F., Ky., asks the following questions: "1. Is there any cure for catarrh? When the patient has a running from the head to the throat that disarranges the stomach, causing sudden dizziness and sometimes instantaneous falling to the floor, is there any remedy? 2. Sometimes there are attacks of great distress at the pit of the stomach, so the patient can neither sit up nor lie down for hours. Warm applications or foot-baths often cause vomiting and discharge from the bowels, which leave the patient free from pain, but very weak. Plain diet seems an inefficient remedy while catarrh remains. What course of treatment

ought I to pursue? 3. The patient has become gradually entirely deaf. Would you advise special treatment for this malady?"

Ans.—1. Yes. See answer to B. M., Canada, in the February number of this magazine.

2. The catarrh should receive proper attention, and in addition, the stomach disorder should be treated by proper attention to the diet, and administration of suitable remedies. For diet and treatment, the patient is referred to "The Stomach: Its Disorders, and How to Cure Them," published by the Modern Medicine Publishing Company, Battle Creek, Mich., as the case seems too complicated for a simple prescription.

3. It is probably too late to secure any material improvement in the hearing.

PIMPLES — COLD HANDS AND FEET, ETC.—Miss H. G., N. Y., asks: "1. What diet would you prescribe for a person having pimples on the face? 2. There is a spot on my lip that the skin continually drops from, and has done so for a long time. What ought I to do for it? 3. I suffer from cold hands and feet in winter, while my head is very warm. What is the cause?"

Ans.—1. An aseptic dietary such as granose, bromose, and other articles which do not easily ferment in the stomach, avoiding especially butter, cheese, meats, and all articles difficult of digestion, especially fat. You should also take an intestinal antiseptic. We would recommend especially the antiseptic charcoal tablets, two or three after each meal.

2. You should consult a physician at once, as it is possible the disease may be malignant.

3. You are doubtless suffering from dyspepsia, with irritation of the abdominal sympathetic nerve, and possibly may have dilatation or prolapse of the stomach. Your case ought to receive careful attention; we would advise a visit to a sanitarium.

RUBBER BOOTS, ETC.—Mrs. F. B. B., Mich., asks: "1. Would you advise ladies to wear high rubber boots, wool-lined, for walking in winter? 2. What is the medical value of 'Virchow's Wine of Pepsin'? It is represented to be a wonderful blood and nerve food; it is said also to kill disease germs and spores."

Ans.—1. Yes, if obliged to walk in mud or water; otherwise not.

2. We have no faith whatever in this nostrum, or in others of the same class.

DR. CHARDOT'S WONDERFUL KOLA REMEDY.—C. E. C., Minn., writes: "As one of your patients, I write you for information concerning the above much-advertised drug, which is extensively sold in the Northwest."

Ans.—We know nothing of this nostrum, but on general principles we do not hesitate to condemn the use of patent and advertised medicines of all sorts as unwise, and likely to be damaging.



STOMACH TROUBLE.—A. G. G., Ind., writes thus: "I am a single man thirty-one years old, and by occupation a clerk. I have been suffering more or less from stomach trouble for about three years. Since winter began, I have suffered more than usual with cramps and acute pain in the stomach, accompanied with belching. The pain usually begins two or three hours after a light meal, and continues from one half hour to an hour. I do not sleep well at night. I do not use tea, coffee, liquors, or tobacco. 1. Would a milk and egg diet be good for me? or would you advise a dry diet? 2. What form of stomach trouble would you call mine? 3. Is there any hope of my being cured? 4. Would any of the Sanitarium Health Foods help me? 5. I have been advised to eat an egg-shell for seven consecutive mornings. Do you think I would derive any benefit from this? 6. Would hot-water drinking do any good? 7. Please advise me as to diet and treatment."

*Ans.* 1.—The pain is doubtless caused by fermentation, the formation of gas in the stomach, or by the formation of an excessive amount of hydrochloric acid. A milk diet would probably not agree with you; a dry diet will probably be found most suitable.

2. There is a septic condition of the stomach, probably hyperpepsia.

3. Yes; you can doubtless be cured by the application of proper means.

4. Yes.

5. Do not do it. Probably too much rubbish has already been introduced into your stomach. You would derive no benefit from such a prescription.

6. The employment of lavage, or stomach washing, would doubtless be of great service to you.

7. You should take an aseptic and dry diet, avoiding meat, cheese, fermented bread, and all articles liable to ferment and sour. Sugar must also be avoided. Take such food as will be easily dissolved in the stomach. We can recommend nothing better than granose, granola, gluten, and other of the Health Food Company's products. Bromose would be excellent for you. You should take two or three antiseptic tablets after each meal. (Send to the Modern Medicine Company, Battle Creek, Mich., for samples of bromose and antiseptic tablets.) Lavage of the stomach two or three times a week; fomentation over the stomach at night, followed by a wet girdle worn over night; a cool sponge bath every morning; vigorous kneading of the bowels daily, either before or after breakfast; and two or three hours' hard work out of doors daily will be likely to benefit you. You ought to become a patient at the Battle Creek Sanitarium for a month or two, to have an exact examination of the condition of your stomach made, and to learn how to live.

ASCARIDES.—C. B., Oregon, writes as follows: "I am a man thirty-five years of age. For the past two years I have suffered very much from ascarides, or threadworms; every night before retiring I have to use an enema of warm water, when they come away in numbers; otherwise I could not sleep. My general health is good. Please suggest a remedy for the worms."

*Ans.*—Empty the colon thoroughly by a large enema taken lying on the back, taking pains to work the water

over into the cecum, which lies low down at the right side. After emptying the colon thoroughly, introduce one quart of water in which an ounce of quassia chips have been boiled for one hour. This should be retained for fifteen minutes. The remedy should be repeated daily for two or three weeks.

HYPERESTHESIA, ETC.—Mrs. E. C. P., Ill., writes thus: "In the November number of GOOD HEALTH, in the communication of Mrs. A. D. C., there was a good description of my own case. The answer given to her is that she is suffering from hyperesthesia of the abdominal sympathetic nerve. What is meant by 'hyperesthesia'? 2. I have an occasional jerking in my chest, and a pain at times low down on the left side just under the short ribs. In the case already mentioned, the treatment is indicated, but not the diet. Please outline the diet in such a case."

*Ans.*—1. Hyperesthesia is a condition of the nerve in which it is abnormally sensitive, generally the result of congestion or irritation arising from reflex action.

2. Diet alone is not always curative in these cases. A diet consisting largely of granose, granola, and other equally digestible foods, with the use of antiseptic charcoal tablets after each meal, are measures adapted to most cases.

THE RALSTON SYSTEM, ETC.—R. J. M., Wash., asks: "1. What do you think of the Ralston system? 2. Is the 'Oxydoner Victory' constructed on the same principle as the electropoise? 3. Are either of these articles justified by physiological or chemical science? I would like to have something clear on these subjects by some disinterested person who knows."

*Ans.*—1. From the investigation we have made of the so-called Ralston system, we cannot see that it contains anything which justifies its being called a "system." It appears to us to be a shrewd advertising scheme for the sale of books. The books contain much sound hygienic teaching mingled with nonsense of the baldest type.

2. All of these trinkets are worthless.

3. No; we have taken pains to make a careful investigation of the electropoise, having two in our possession, of which we have made a careful examination, and we are obliged to pronounce it one of the most thorough humbugs of anything in this line we have ever investigated.

MEAT-EATING, ETC.—C. G., Ill., writes: "1. I have understood that when one leaves off meat-eating, he has to give it up gradually; otherwise the change affects him so that he feels sick and despondent. Is this true? 2. My mother is very thin in flesh, and can eat no oatmeal nor any of the breakfast foods on account of a sour taste arising after eating them. Please state what kind of food would build her up and enable her to put on flesh."

*Ans.*—1. No.

2. The mother should eat granose, granola, and gluten, manufactured by the Battle Creek Sanitarium Health Food Company. Bromose will be of great service to her, also antiseptic charcoal tablets.



## RELIEF DEPARTMENT.

[THIS department has been organized in the interest of two classes:—

1. Young orphan children, and
2. The worthy sick poor.

The purposes of this department, as regards these two classes, are as follows:—

1. To obtain intelligence respecting young and friendless orphan children, and to find suitable homes for them.
2. To obtain information respecting persons in indigent or very limited circumstances who are suffering from serious, though curable, maladies, but are unable to obtain the skilled medical attention which their cases may require, and to secure for them an opportunity to obtain relief by visiting the Sanitarium Hospital. The generous policy of the managers of the Medical and Surgical Sanitarium has provided in the Hospital connected with this institution a number of beds, in which suitable cases are treated without charge for the medical services rendered. Hundreds have already enjoyed the advantages of this beneficent work, and it is hoped that many thousands more may participate in these advantages. Cases belonging to either class may be reported in writing to the editor of this journal.

It should be plainly stated and clearly understood that neither orphan children nor sick persons should be sent to the Sanitarium or to Battle Creek with the expectation of being received by us, unless previous arrangement has been made by correspondence or otherwise, as it is not infrequently the case that our accommodations are filled to their utmost capacity, and hence additional cases cannot be received until special provision has been made.

Persons desiring further information concerning cases mentioned in this department, or wishing to present cases for notice in these columns, should address their communications to the editor, Dr. J. H. Kellogg, Battle Creek, Mich.

He wishes especially to state that those who apply for children will be expected to accompany their applications by satisfactory letters of introduction or recommendation.]

Nos. 262 AND 263.—A little boy and girl six and eight years old living in Pennsylvania have been brought to our attention. They are motherless, and their father, being in very poor circumstances, needs assistance. He desires to place his children in the homes of Christian people. We learn that they are good children, easy to teach, and of good appearance. They are now with their aged grandparents, who cannot care for them longer.

No. 282 is a boy seven years of age. He has blue eyes and light hair. His father and mother are both dead, and he has been cared for by his grandparents for three years. They cannot provide for him longer, and rather than place him in the poor-house, they apply for a home in a Christian family.

Nos. 285 and 286 are boys living in Pennsylvania. Their condition is like several that have been referred to us before; and from what we learn of them we are satisfied that they are worthy of help. Their father is dead and the mother not able to care for them. She has tried for the past few years to keep them with her, not wanting to part them, but has

now reached the point where she can see no other way than to place the children in homes. The boys are seven and eight years old, have blue eyes and brown hair, and are in good health. The mother has kept them with her most of the time.

Nos. 298 and 299 are two little girls aged six and eight years respectively, who are living in one of the New England States. They have blue eyes and light hair, and have had the best of training while their mother was alive. The father is very anxious to find good homes for them, as he does not feel competent to give them proper care and training. Here is a chance to do real missionary work.

Nos. 312 and 313 are two little boys aged eight and five years respectively, whose father has deserted them. The mother being away from home all day to earn a living, they are thus left to themselves. The older one has brown eyes and hair, and the younger one blue eyes and light hair. Will not some one offer them a home, and train them for usefulness? They are now living in New York State.

Nos. 318-321.—This is a group of four little boys living in Michigan, aged ten, eight, six, and three years respectively, whose mother has abandoned them, and whose father is not able to support and care for them. They are said to be obedient and well behaved, and to have acquired no bad habits. They have dark eyes and light hair and are all in good health. Will not some mother open her heart, and take them into her home?

No. 328 is a little Holland boy nine years old living in Michigan. He has dark eyes and hair, and is said to have good health. His mother is dead, and his father has deserted him. The stepmother, who has supported him, is dependent upon her relatives for support, but they are not willing to care for this little boy. Is there not some home that will offer this child a mother's love and tender care, and thus train him for usefulness?

THE little baby boy, No. 306, for whom we received so many applications, has been placed in a home in South Dakota. His new mother writes us that she thinks him a very nice baby. She says, "He is just as represented to us. My prayer is that we may bring the little one up as the Lord would have him go."



NOS. 332, 333, AND 334.—Here is a group of three little boys, aged eight, seven, and four years respectively, living in Michigan. Their father is dead, and the mother, having to work out by the day, is not able to care for them. The children have been living with their grandparents, who are old and in feeble health, and so cannot properly care for them. They have blue eyes and brown hair, and are said to be very bright children. They have had good training and learn very readily, and we doubt not, if they are surrounded by good influences and receive proper instruction, they will be an honor to those who will thus direct their steps in the right path.

SEVERAL months ago we tried to find homes for two fatherless boys, Nos. 242 and 243, but we did not succeed in finding any such as we wanted; so the mother thought probably she could manage to support them herself. This she managed to do by hard work, but she found she could not do so very long, so she applied again for assistance. After a little correspondence with parties who had been highly recommended to us, she found places for the boys; one going to the State of Iowa and the other to Minnesota. Since the boys have been in their new homes, their mother has been quite sick, so as she says it seems providential that they obtained homes just when they did, for she does not know what would have become of them during her illness. There is oftentimes a period of waiting—a chance for us to exercise trust—but He who knows all, gives us the needed help at the right time.

THE case of a young man eighteen years of age, without a relative in the world, who is in need of a home and kind Christian friends, has been brought to our notice. He is well and strong, and would like a home on a farm, where he can have some school privileges and assist about the chores. Is there not some family in one of the Eastern States that will give him the influence of a Christian home?

FROM a letter of another lady, who adopted a little boy some time ago, we extract the following:—

“Your kind inquiry after our little boy is just received. He is well and happy. You would not know him. He is plump and rosy, and such a busy little body,—never still unless asleep. He is a dear little fellow, and I am not sorry he is here. We were getting selfish before he came, and now we have something to do for one of Christ's little ones, and it is a good work. I only wish we were able to take another, but at present we cannot. The children think that if you saw him, you would want him back.”

WE are in receipt of a letter from a lady who adopted a little girl some time ago, making application for two boys. She writes:—

“We are only too glad to help in caring for some of these dear little lambs. We know what it is to care for these dear ones, but O, what a blessing there is in it! Our little girl, now three years and a half old, is such a treasure. When I read of the homeless ones, she will look up with tears in her eyes and say, ‘Mamma, get one; papa, take one. I will give it some of my clothes, and it can have my playthings.’ Her papa asked, ‘Would you ever strike them?’ She answered, ‘O no, papa. Jesus loves them.’”

PERSONS making applications for children advertised in this department are requested to send with their applications the names and addresses of two or more persons as references. If possible, these should be known, either personally or by reputation, to some member of the Board of Trustees.

PERSONS intending to visit the Haskell Home will please note that the visiting days are Sundays and Wednesdays, from 4 to 6 P. M. J. H. KELLOGG.

### CLOTHING FOR THE POOR.

THE call for clothing of all kinds and the numerous offers to supply assistance of this sort, have led us to organize a Clothing Department to receive and properly distribute new or partly worn garments which can be utilized for the relief of the very poor. In connection with this work it is very important that a few points should be kept in mind and carefully observed:—

1. Clothes that are so badly worn that repairs will cost more in money or labor than the garment is worth, will of course be of no service. Garments that are old, though faded, or which may be easily repaired by sewing up seams, or made presentable by a few stitches judiciously taken at some point in which the fabric is nearly worn through, may be utilized to most excellent advantage. But garments so badly worn that they need extensive patching, or clothes which have become much soiled and grimy by long use in some dirty occupation, should find their way to the rag bag instead of the missionary box.

2. Freight must always be prepaid. It costs as much to send 25 pounds or any amount less than 100 pounds as to send the full 100 pounds; consequently it would be well for those who think of sending clothes to be used in this department, to put their contributions together in one shipment, so as to get the benefit of the 100-pound rates. *We are obliged to ask that freight should be prepaid as a means of preventing loss to the work in the payment of freight upon useless packages.*

3. Clothes that have been worn by patients suffering from any contagious disease—such as typhoid fever, erysipelas, consumption, and skin disorders of all sorts, as well as scarlet fever, measles, mumps, diphtheria, and smallpox—should not be sent. Infected clothes may be rendered safe by disinfection, but we cannot trust to the proper disinfection of such garments by those sending them, who, in the majority of cases, are quite inexperienced in such work; neither should those who unpack the clothes be exposed to the risk of contamination while preparing them for disinfection at this end of the line. Such clothes should, as a rule, be destroyed. If they are not destroyed, almost infinite pains is required to render their use perfectly safe.

4. All articles received here are carefully assorted and classified, and are then placed as called for, where they will do the most good.

5. Clothing intended for the Chicago mission should be sent to Chicago Medical Mission, 40 Custom House Place, Chicago, Ill.



## LITERARY NOTICES.

GENERAL A. W. GREELY'S article in the March *Ladies' Home Journal* upon "The Personal Side of Washington" will show that Washington was largely influenced by his environments, but also that he steadily tended toward the higher standards of the present age, especially as regards his habits and ideals. Of the first election in which he actively participated, General Greely writes: "In his younger days Washington extended at his first election the usual post-election hospitality, which, in those days, consisted in the minimum amount of food with the maximum amount of spirits. . . . His reflective mind and acute observation soon noted the ravages made by drink, and doubtless confirmed that personal moderation which never permitted him to run into excess of any kind. In the Provincial army, when general charges of drunkenness were made against the Virginia troops, there was no word against Washington personally. He had, moreover, thus early deplored it as a serious vice, forbade it by stringent orders, and applied a hundred lashes to every man found drunk. Still later he wrote that 'gin-shops served to ruin the proprietor and those who make the most frequent application to them;' and in advising his nephew he adds, 'Refrain from drink, which is a source of all evil and the ruin of half the workmen of this country.'"

IN these days of international irritation, it is a satisfaction to learn just what the "British Opinion of America" really is. Richard Whiteing, of the *London Daily News*, a very well-known English journalist, in an article on this subject in the March *Scribner's*, directs attention, not to the opinion of the social and political leaders, but to the "Man of the Street," and to the great mass of work-a-day people throughout England. They have revised their ideas of America in the past twenty or thirty years, and no longer regard this country as a Mecca for the laboring man. They see that there are industrial and social problems here as well as in England. But, what is most important in view of the recent Venezuelan dispute, is that "the Non-conformist conscience is for peace with America, as the first of human concerns." The article closes with a reference to the Transvaal affair. Mr. Whiteing comes to his task of voicing the average Englishman's views, unusually well qualified to judge both of them and their application, having had, besides his observation at home, an extensive experience as a special correspondent abroad. Charles Scribner's Sons, New York.

HOUSEKEEPERS will be especially happy over the February number of *Table Talk* (the American authority on culinary matters), in which are given many recipes in the "Housekeeper's Inquiries." "A Few New Books for the Housekeeper's Library" will also be found interesting. Mrs. Burton Kingsland tells of several enjoyable "February Fêtes," while Mrs. M. C. Myer describes two new forms of entertainment, which, when tried, will be found to produce most delightful evenings. Other articles are, "Dentition and its Attendant Disorders," by Dr. H. H. Hawxhurst; "Fashionable Luncheon and Tea Toilets," by Tillie May Forney; "Some German Methods," given from experience, by Lucy A. Geise. Table Talk Publishing Co., Philadelphia, Pa.

*Good Housekeeping* for February may properly be called a floral number. In addition to other seasonable topics, it has a number of papers and much poetry relating to flowers and their cultivation; while the puzzle department, which has become widely famed, presents as its leading feature a floral anagram, with a large number of valuable prizes. The number contains the first of a series of practical papers on "Domestic Economy;" there are some short stories of good merit, and a wide variety of original papers and carefully edited selections. This excellent journal touches every worthy interest connected with the home, and its pages are always fresh and bright. Clark W. Bryan Company, Springfield, Mass.

"JOSIAH WEDGWOOD, F. R. S. His Personal History." By Samuel Smiles, LL. D., author of "Self-Help," "Character," "Jasmin; Barber, Poet, Philanthropist," etc. With portrait. 12mo, cloth, ornamental. Harper & Brothers, New York.

A man whose uncommon ability and admirable traits of character were employed in the creation of a great industry in England during the second half of the last century is the subject of this biography. The story of Wedgwood's life is told with forceful directness and transparent simplicity, winning the reader's confidence at the outset, and, at the end, leaving an enduring impression upon his memory. And it is a pleasant thing to remember this artistic workman who, when he went through his workshops and found a plate or vase not properly made, would take up the stick on which he usually leaned, and break it to pieces, saying, "This won't do for Josiah Wedgwood!"



## PUBLISHERS' DEPARTMENT.

THE Battle Creek Sanitarium reports a larger number of patients than ever before at this season of the year; and there are among its guests many people from the sunny South. Our Southern friends seem to be learning that the cool, frosty weather of the winter months in the North is one of the best of tonics, and that there is nothing like a winter spent where the thermometer touches zero now and then, as a means of general invigoration, and especially as an aid to recovery from chronic disease. The "biliousness" of the South is not altogether due to malaria, but is largely owing to the relaxing influence of continuous warm weather. Modern researches show a close relation between biliousness and germs. Germs do not grow under the snow; the zero temperature puts them all asleep. There is nothing purer upon the earth than the air which has swept for a thousand miles over snow-fields. The dense, pure oxygen of the winter months in Michigan and the surrounding States, with a temperature agreeably modified by the great lakes, affords one of the most essential conditions for recovery from liver disorders, indigestion, and other chronic ailments.

\* \*

SPECIAL interest at the Sanitarium centers around the investigations now being conducted in the bacteriological department of the Sanitarium Laboratory of Hygiene. These researches have, within the last few months, shown that a healthy stomach is able to carry on the work of digestion entirely without the aid of germs, which have, by some scientists, been considered necessary for digestion; and that, indeed, a healthy stomach contains no live germs

during the period of digestive activity, provided the food itself is free from microbes, and of such a character that it does not encourage their growth in the stomach. By means of this examination it is possible to determine when the patient is suffering from the unnatural development of germs in the stomach, what kind of germs are present there, their approximate number, and the sort of mischief they are capable of producing. By means of this investigation, physicians are also able to learn without experiment what is necessary to correct the morbid conditions which may be present; for example, in a recent case, there were found to be more than sixty million germs in every ounce of the fluid obtained from the stomach of a certain patient. It is evidently necessary that under such conditions the stomach should be cleansed by daily washing, which may easily be accomplished by means of the stomach-tube, and the stomach soon become able to digest wholesome food without difficulty.

\* \*

A HALF dozen new electric-light baths are in process of manufacture at the Battle Creek Sanitarium for use in that institution and its four branches located west of the Mississippi River. The electric-light bath has, for several years, been in use at the Sanitarium and at its branch in Chicago, and is considered by those who have experienced its benefits, as the most valuable of all forms of baths in the institutions in which it is employed. It certainly is the most luxurious and enjoyable of baths. One feels while in it the pleasurable thrill of resuscitated sunbeams, which, crystallized in the form of coal, have lain buried thousands of



# HYDROZONE

IS THE STRONGEST ANTISEPTIC KNOWN.

One ounce of this new Remedy is, for its Bactericide Power, equivalent to two ounces of Charles Marchand's Peroxide of Hydrogen (medicinal), which obtained the Highest Award at the World's Fair of Chicago, 1893, for its Stability, Strength, Purity and Excellency.

### CURES DISEASES CAUSED BY GERMS:

DIPHTHERIA, SORE THROAT, CATARRH, HAY FEVER, LA GRIPPE,—OPEN SORES: ABSCESSSES, CARBUNCLES, ULCERS,—INFECTIOUS DISEASES OF THE GENITO-URINARY ORGANS,—INFLAMMATORY AND CONTAGIOUS DISEASES OF THE ALIMENTARY TRACT: TYPHOID FEVER, TYPHUS, CHOLERA, YELLOW FEVER,—WOMEN'S WEAKNESSES: WHITES, LEUCORRHOEA,—SKIN DISEASES: ECZEMA, ACNE, ETC.

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Chemist and graduate of the "Ecole Centrale des Arts et Manufactures de Paris" (France).

28 Prince St., New York.



PUBLISHERS' DEPARTMENT.

years, but are now brought into activity again through the magic influence of the modern steam-boiler and the dynamo. The three electric-light baths in use in the Sanitarium are now taxed beyond their capacity, and an additional one will soon be added. The bath departments of the Sanitarium at Battle Creek are so admirably and tastefully arranged that they may well rank with the finest facilities of the kind to be found anywhere in the world. The Battle Creek Sanitarium does not allow itself to be behind in anything by which the interests of its patients can be advanced.

\* \* \*

THE hundreds of patients now stopping at the Sanitarium have improved the opportunity of having little sleighing parties almost daily. Sometimes those who are strong enough to do so, take advantage of the proximity of a fine hill for tobogganing, which is, perhaps, the most enjoyable of all winter sports. "Sliding down hill" is so delightful that one is encouraged to toil up the hill again, and in climbing the ascent he gets his lungs and heart in such vigorous action that the body is supplied with more than double the usual amount of oxygen, so that he returns from a half hour of this sport with a feeling of vigorous vitality tingling to his very finger-tips. Out-of-door air is the best of all nature's tonics.

\* \* \*

DR. ADDIE C. JOHNSON, who recently left her position at the Chicago branch of the Battle Creek Sanitarium to engage in medical missionary work at Guadalajara, Mexico, reports herself as having reached her destination safely, and as being actively engaged in medical work for the sick, both rich and poor, meanwhile putting in her spare time in learning the language. All acquainted with her at Chicago will regret her departure to a foreign field, but will congratulate our Mexican friends on their acquisition, as there is but one other lady physician in Mexico; and, if we are correctly informed, Dr. Johnson is the only lady physician at present in active practise in that great country.

\* \* \*

WE are glad to see that work has begun on the sanitarium located at Guadalajara, Mexico. A fine site has been secured, and a large number of workmen are already employed in making brick, and preparing for the erection of a building which will have the honor of being the first sanitarium in all Mexico.

\* \* \*

DR. LOPER reports the sanitarium at College View, a suburb of Lincoln, Neb., as highly prosperous. Every room in the commodious addition recently completed was spoken for before it was ready for occupation, and the main building is now entirely filled. Convenient arrangements have, however, been made for the accommodation of patients in another steam-heated building just across the street, so that none need remain away for fear they cannot be accommodated. Dr. Loper is assisted by an excellent corps of Sanitarium nurses. The doctor recently reported seven patients in the surgical ward, and all doing well, which is certainly an indication of a prosperous work.

DR. KELLOGG's new book on the stomach will be ready for delivery in a few days, as it is nearly ready to put in the binder's hands. The book has been considerably enlarged, and a good many pages added since first announced, making it necessary to change the price to \$1.50. A fuller announcement will be found on another page.

\* \* \*

THE Battle Creek Sanitarium Health Foods are gaining ground every day. The following are a few of the commendations recently received:—

From MRS. JULIA A. POND, Member Board of World's Fair Managers for the State of Michigan.

"I have used your health foods since 1892, always finding them good, pure, and palatable. I wish especially to thank you for caramel-cereal, that delightful substitute for coffee, which I use altogether, and would not do without; also to express my appreciation of granose, which I find a valuable food, possessing all the merit you claim for it."

From W. J. HERDMAN, M. D., of the University of Michigan.

"I wish to acknowledge the receipt of several packages of granose which you so kindly sent me. I have taken the trouble to place this preparation in the hands of several of my patients who have been suffering from feeble digestion, and I find that it has in several cases proved very acceptable. These patients seem to have no trouble in digesting it. Although my experience with it is yet limited, still it appears to give evidence of meeting a need, and in all probability will come into general use. I shall certainly do what I can to let its good qualities be known."

From MISS NELLIE S. KYLE, of New York City.

"In bromose I feel as if I had found a pearl of great price, for it has more than surpassed my expectations. Having been a victim of bronchial trouble for years, and subsisting on maltine and other like drugs, I have at last found in bromose not only a preventive from colds but a nerve tonic and wonderful restorer. It has given me a new lease of life, and I find I have gained one pound of flesh for every pound of bromose. I have not had a return of my usual winter bronchial trouble, the first time in many years that I have escaped. Having tried every conceivable remedy, I certainly cannot speak too highly of bromose. It shall be my purpose to convert the many who are using cod liver oil through the winter months for various ills in New York City, with disastrous results to the stomach and digestion. I have taken no medicine of any kind except the bromose. This is the first time in many years that I have not been under the influence of some stimulative drug. I cannot sound the praises of bromose too highly for all it has done for me in less than three months' time."

There is nothing like granose and bromose for making fat and blood. A lady who recently left the Sanitarium had gained fourteen pounds in fourteen days, by living upon a diet exclusively composed of granose and bromose. This lady had entered the institution but three weeks before. She was a confirmed invalid, having been ill for several years, and unable to rise from her chair without assistance. Her stomach was in so bad a state that the nurse who administered the first lavage, or stomach-wash-



PUBLISHERS' DEPARTMENT.

ing, declared that she believed the patient's stomach contained everything she had eaten for a week, the mass being, of course, in a state of advanced decomposition. The poor woman was both poisoned and starved. At the end of three weeks this lady left the institution with rosy cheeks, bright eyes, and able to walk several miles, wholly as the result of adhering absolutely to a diet of granose and bromose until her stomach had become able to do its work in a normal manner. Her starved tissues assimilated pure nourishment with such avidity that her progress was something phenomenal.

Not every patient will have just this experience, but granose and bromose are working wonders every day for persons who have difficulty in digesting starch, who are troubled with biliousness, sick-headache, inactivity of the bowels, sour stomach, and other symptoms of chronic indigestion. There is nothing like granose and bromose for persons suffering from dilatation of the stomach.

\* \*

FOR BETTER ROADS.—The governor of Michigan has set a good example for the chief executives of other States, in calling a "Good Roads" convention, which is to meet in the city of Lansing, March 3, 1896, at 2 P. M. The improvement of our public roads is a matter in which every good citizen should be interested. No civilized country in the world possesses such wretched roads as are to be found in America. In England, France, Germany, Switzerland, and even in poor Italy, the public highways are almost invariably found in excellent condition, the inhabitants of these old countries having learned, long ago, that a poor road is an expensive luxury, and one which no government can afford to maintain.

Hon. Alfred A. Pope, of the Columbia Bicycle Company, and others, have for a number of years past continually called attention to the enormous loss occasioned to farmers and others by bad roads. It is to be hoped that this convention will devise some satisfactory means for correcting this great evil.

\* \*

THE MEXICAN INTERNATIONAL EXPOSITION.—The Mexican International Exposition of Industries and Fine Arts will be dedicated April 2, and formally opened in the city of Mexico, September 15, and will remain open for a period of at least six months.

For the convenience of manufacturers, the Exposition has opened an office in New York, the managers of which will be prepared to answer all inquiries which may be sent them as to space, terms, and conditions. At the same time, information will be sent from week to week to exhibitors in regard to the progress of the Exposition, and any questions as to consignment of goods, customs, duties, and so forth will be cheerfully answered without delay.

It is hoped that since this Exposition is the first of its kind ever held in the Republic, it will be, through its novelty and the attractions of the country, a means of drawing to Mexico a large number of buyers from the Southern Republics, and thus insure to manufacturers a larger market than Mexico would in itself offer. It is also believed that the scenic attractions of Mexico will draw from Europe, from

the West Indies, and from the United States a large number of persons who have heretofore spent their money in European travel, and who may be induced to alter their trips to our Southern and sister Republic.

The directors of the Exposition have made arrangements with competent parties to represent such manufacturers as do not desire to incur the expense of sending their own men to take charge of their exhibits.

In natural resources, especially in metals and other minerals, Mexico is favored more than almost any other portion of the globe. She has endless and inexhaustible mines of nearly every metal, of marble, onyx, and other valuable stones, which in themselves would insure wealth to millions. Thousands of tons of the most valuable metals lie hidden beneath her soil.

It is now time that the United States showed its inclination to give a helping hand to its nearest neighbor by extending to it our valuable and improved mining methods, which will be appreciated, and encourage purchasers to develop this hidden wealth.

In agriculture and horticulture lie an amount of wealth almost as great as the development of minerals.

After noticing the forward movement of the Mexican nation, it can be readily understood that the needs of the people are increasing proportionately, and that a market of enormous value is being opened to the world.

Every natural reason exists for reciprocal trade relations between the United States and Mexico. The promoters and projectors of the Mexican International Exposition, appreciating the above facts, desire to and will do everything in their power to bring about a closer relation between the sister republics, by making this one of the most complete and extensive expositions ever held, with the object of mutual benefit in view.

Applications for space, concessions, and all inquiries should be addressed to the Mexican International Exposition, 45 Broadway, New York City.

\* \*

BAPTIST ANNIVERSARY AT PORTLAND, OREGON.—For this meeting, which is to be held in May next, the Chicago, Milwaukee & St. Paul Railway will sell excursion tickets at one fare for the round trip. This company has its own line between Chicago and St. Paul and Chicago and Omaha, and runs solid vestibuled electric-lighted trains every day in the year. Close connection is made at both Omaha and St. Paul with through trans-continental trains on connecting roads.

Any information desired concerning routes, rates, etc., will be cheerfully furnished on application to Harry Mercer, Michigan Passenger Agent, Detroit, Mich., or to any coupon ticket agent in the United States or Canada.

\* \*

COPIES OF GOOD HEALTH WANTED.—We are anxious to secure copies of the November (1895) GOOD HEALTH, and will extend two months the subscription of any subscriber who will forward to us a copy of this number in good condition, sending a postal at the same time calling our attention to the fact. Address, Good Health Publishing Co., Battle Creek, Mich.



# Modern Medicine Library.

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\$1.00 a Year.  
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THE publishers of MODERN MEDICINE will issue each month during the year 1896, under the above title, a brochure on some practical medical topic. The first number consists of a paper by Dr. J. H. Kellogg, entitled, "What is the Matter with the American Stomach?" which presents the results of new and interesting inquiries respecting the morbid conditions of the stomach, and their causes.

The following additional numbers are already in preparation:—

- "The Liver: Its Diseases and Modern Methods of Treatment," by Dujardin-Beaumetz.
- "Auto-Intoxication and Its Relations to Diet and Therapeutics," by Bouchard and Rogers.
- "The Importance of Intestinal Asepsis and Antisepsis in Abdominal Surgery."
- "Scoliosis: Its Etiology, and Rational Treatment by Massage, Swedish Movements, Gymnastics, and Electricity," by Dr. T. J. Hartelius, Director of the Central Institute of Gymnastics, Stockholm, Sweden.
- "Diabetes: Its Causes and Successful Modes of Treatment."
- "Enteroptosis, or Dislocation of the Abdominal Viscera and Its Relation to Neurasthenia, Indigestion, Constipation, Rheumatism, Bright's Disease, and other Chronic Maladies; Its Cause and Rational Methods of Cure," by Trastour, Glenard, and others.
- "The Value of Strength Tests in the Prescription of Exercise, and a Comparative Study of the Strength of Individual Groups of Muscles, and of Homologous Muscles, in Men and in Women," by J. H. Kellogg, M. D.

Several of these brochures will be good-sized pamphlets, any one of which will be well worth the price charged for the entire series.

MODERN MEDICINE PUBLISHING CO., Battle Creek, Mich.

## Perfection Vaporizer,



*A New Instrument  
which has no  
Equal as a Means  
of Applying  
Medicaments to  
the Nose, Throat,  
and Lungs.*

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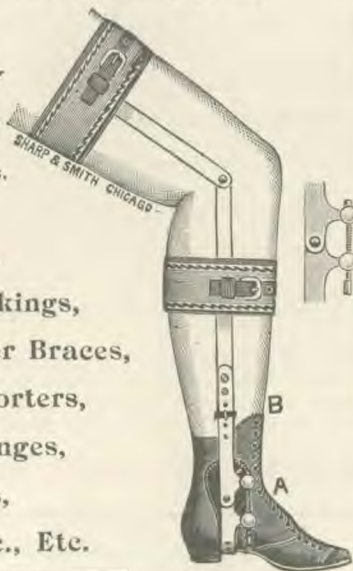
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Superintendent of the Battle Creek (Mich.) Sanitarium;  
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Battle Creek (Mich.) Sanitarium

HEALTH



FOODS.

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