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GOOD



HEALTH

CONDUCTED
BY

J. H. KELLOGG M.D.

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GENERAL HYGIENE 129-139

International Health Studies: 49. Texas (*Illustrated*), by FELIX L. OSWALD, M. D.—Materials for the House we Live in, by JULIA COLMAN—No Dentists in Scotland—The Sandbag as a Foot-Warmer—Healthy Homes: V, by HELEN L. MANNING—An Unclean People—Ventilation for the Sick-room—A Legend about Cholera—There is Poison in the Can—Fear of Cholera—Lemons *vs.* Cholera—Fish Diet—A Plea for Vegetarianism—A Thought for Posterity—Night Growth.

HOME GYMNASIUM 140-143

The Bicycle for Invalid Women—Better than Another Parlor, by HELEN L. MANNING—A Sensible Criticism—Modern Lack of Symmetry.

HOME CULTURE 144-149

Child-Training (*Continued*), by J. H. KELLOGG, M. D.—A Family Night—Sloyd within a Circle: No. 5 (*Illustrated*) (*Continued*), by MRS. M. F. STEARNS—Children's Questions, by MARY A. STEWARD—Some Day (*Poetry*)—Amusement for Children—A Welcome Guest (*Poetry*),—A New Cruelty in Fashion.

EDITORIAL 150-153

Is Cancer Hereditary?—When Should Fruit be Eaten?—Sighing—Muscle-forming Food.

A DOCTOR'S CHATS WITH HIS PATIENTS 154-159

A Universal Antidote—Removal of Enlarged Tonsils—Cramp—Canker Sores in the Mouth—A Use for Gum—Wet Feet and Colds. ANSWERS TO CORRESPONDENTS: Oatmeal—Horsford's Acid Phosphate—Nutrition in Vegetables—Neuralgia—Peanuts, Canned Fruits, Salmon—Cotton for Bedclothing, What to Put under Carpets, Sugar for Children—Burning and Tingling Sensation in the Arm—Is Salt Necessary for Health?—Piles, Enlarged Tonsils—What to Eat and Drink—Nervous Prostration, Bananas, Cold to the Head during Fomentation—Drinking Water Exposed to Impure Air—Removal of Superfluous Hair. RELIEF DEPARTMENT.

LITERARY NOTICES 160

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BATTLE CREEK MICHIGAN

MAY, 1893.

INTERNATIONAL HEALTH STUDIES.

BY FELIX L. OSWALD, M. D.

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

49.—Texas.

A CHRONICLE of the House of Brandenburg informs us that the building up of the Prussian monarchy has required eight hundred and sixty battles and the labors of twenty-eight rulers, continued through seven centuries of fighting and diplomatic intrigue.

The prize may have been worth the labor, but fifty-seven years ago a convention of American farmers ratified the treaty of a man who in a campaign of less than six months had conquered an empire nearly five times the size of Prussia at the death of Frederick the Great, and still considerably larger than the possessions of the present Kaiser, together with those of all his North German allies.

The territory of the commonwealth of Texas comprises a variety of soil and climate sufficient to suit home-seekers from almost every part of Europe, the hideous ice desert of Northeastern Russia alone excepted. Immigrants having a predilection for a daily diet of frozen fish would better go farther north; but in Oldham country, near the head waters of the Canadian River, Scandinavians might now and then enjoy the luxury of a sleighride in March, while colonists from Southern Italy could regale themselves with winter strawberries on the shores of Matagorda Bay. On the morning of Feb. 15, 1867, when I passed the Rio Grande at Matamoras, and for the first time stood upon the soil of the United States of North America, the "Mustang Prairie" west of Brownsville was all speckled with the flowers of the blue larkspur and white-blooming thorn shrubs, haunted by swarms of tropical butterflies. North of the Red River Valley such harbingers of summer are not seen before the middle of April; in other words, Spring, in her northward progress, spends eight

weeks in crossing the territories of Texas. The Staked Plain on the border of New Mexico, can rival the desolation of the Lybian Desert, the delta of the Brazos River, the fertility of the lower Ganges. In the Guadaloup Mountains there are highland districts as picturesque and solitary as the summit regions of the Pyrennes, and the prairies of the Colorado are for miles so absolutely level that railway builders can save themselves the preliminary labor of grading.

Since the time when the victorious Visigoths crossed the borders of Spain, the North Caucasians have never been turned loose in a healthier Garden of the Sun, and the interaction of man and nature has, on the whole, led to results of mutual benefit. Between Waco and Old Fort Belknap, large areas of once treeless prairie land are covered with orchards, spreading at a rate that would make it difficult for a pioneer of the Sam Houston era to recognize his old hunting grounds. The swampy alluvial of countless coast plantations has been reclaimed by drainage. Artesian wells have provided the means of irrigating the almost rainless uplands of the Rio Concho, and throughout the extensive hill country between the Rio Grande and the upper valley of the Colorado, the "improvements" effected by American colonists deserve that name in a sanitary sense of the word.

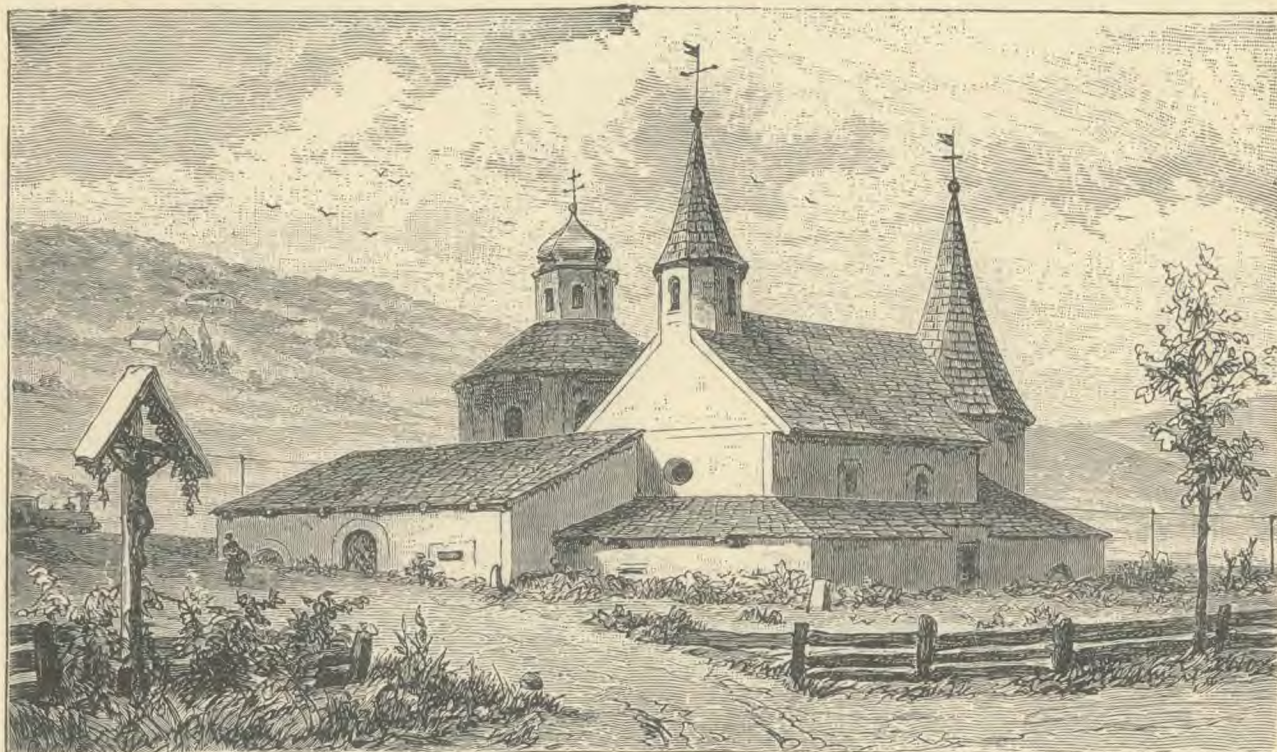
In the course of a hundred years' communion with the aborigines, the English speaking settlers have gotten rid of numerous hygienic prejudices. They have begun to construct their dwelling houses in the airy, Spanish-American fashion, with open lattice windows, excluding the glare of the sun, but admitting every breath of the summer wind; and in Navasota,

seven miles east of the Brazos River, I once saw a Herculean teamster who for years had stuck to the Indian fashion of going bareheaded in wind and weather, and who in that way had preserved the ornament of his chestnut brown natural headdress without a shade of gray, at a time of life when many city dwellers use skull caps to hide the extent of their barren summit plateau.

The shifts of frontier life have also served to demonstrate the possibility of dispensing with coffee and other narcotic drinks, and only the belief in the necessity of two daily meals of flesh food has become

digestive troubles, or the irritable temper of the carnivorous redskins.

A specimen of that race, a young bow-legged Comanche, who for several years haunted the streets of Brownsville, had become such a caricature of whimsical ferocity that the love of fun rather inclined the citizens to connive at his outrages. His chief source of subsistence was a suburban slaughter house, where he was permitted to rummage the scrap piles, and with an occasional chance for a job on the levee he managed to keep out of the poorhouse, though his vocabulary of the English language was limited



OLD SPANISH MISSION.

prevalent to a degree altogether unjustified by the vegetable production of the soil and the climatic conditions of a country enjoying the long summer of the Mediterranean coastlands. A West Texas school-teacher of my acquaintance boasts his immunity from the coughing nuisance of the Yankee States, but admits that both boys and girls often "sit moaning with toothache,—youngsters in every other respect, the very pictures of health." That same florid complexion makes our butcher boys the envy of their paler, but in reality often healthier, contemporaries; and when the plethoric effect of animal diet is counteracted neither by a frigid climate nor by an active mode of life, the pathological penalty is pretty sure to be exacted in some form or other: toothaches,

to three phrases: "You bet" (yes), "you lie" (no), and "shell out!" when he wished to stimulate the liberality of his fellow-men. But one day a charitable merchant took him to a restaurant and treated him to a good dinner, including a plateful of fried sausages that terminated his career of savage freedom. A stranger, who had taken a seat at the same table, mistook that dish for a part of the public menu, and helped himself to a sausage or two, when Antonio jerked the fork out of his hand, and grabbed his dish, growling like a bulldog over a departed bone. The stranger, in hot wrath, hurled a mustard pot across the table, and in the next moment the Comanche attacked him with a butcher knife, slashing away like a drunken desperado, till he was over-

powered and dragged off to jail, when it required the application of four-guard power remedies to suppress his paroxysms of fury.

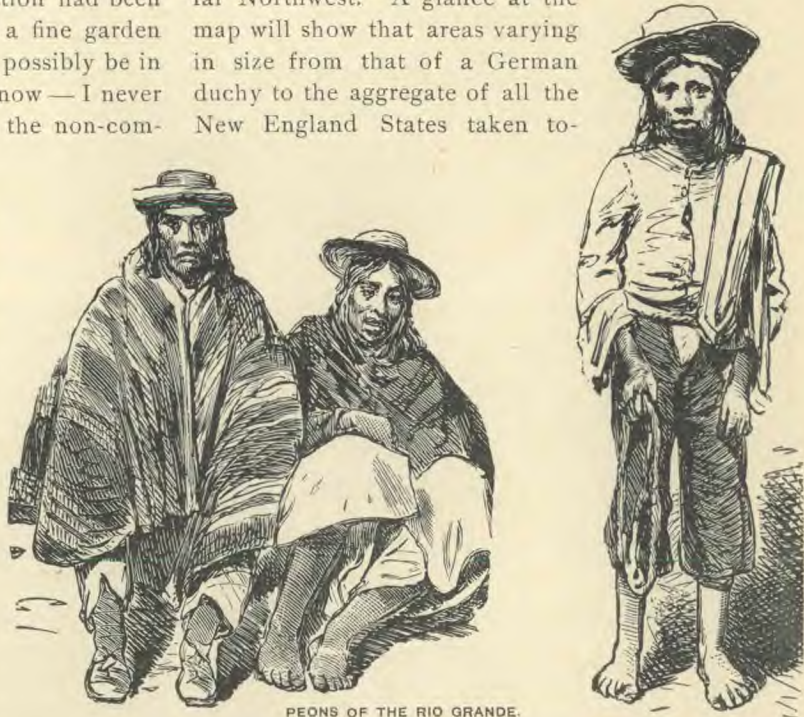
A bread and fruit diet would have effected a speedier cure, and along the entire Rio Grande frontier the truculent episodes ascribed to the natural disposition of our Spanish-American neighbor, are largely due to the effect of undigested bullbeef.

"Would you like to sell that dog?" asked a burly rancher, who had just disposed of a herd of cattle and was taking a stroll through the streets of a South Texas border town. The dog in question had been snapping about his heels as he passed a fine garden villa, but the owner thought he might possibly be in need of a good watch-dog. "I don't know — I never thought of selling him," he replied in the non-committal manner of an Anglo-Saxon business man, "he's a sort of family pet." "A fancy dog, is he? All right; I'll pay you a fancy price," said the rancher, and at last clinched the bargain by an offer of fifteen dollars cash. He actually paid the money, watched the owner of the villa pocket it, then suddenly snatched up the dog by his hind legs, whirled him in a circle, and dashed out his brains against the next tree. A couple of street Arabs had witnessed the transaction, and the perpetrator of the expensive vendetta handed one of them a Mexican half dollar: "Get some water, Chulito, and clean that tree there," said he, and walked off quietly in the direction of the depot.

But the five hundred thousand families, who, in the last ten years, have made their home in the Lone Star State, include immigrants from frugal France and thrifty Germany, and some of their farms combine conditions of happiness unsurpassed in any part of the American continent. The winters of the Central Texas hill country are dryer and colder than those of Southern California, but very short. Night frosts are rare after the middle of March, and early in April the shrubs of the semi-tropics are in full bloom; the nights, even in midsummer, are always cool, and the four months from the end of August to Christmas often bring a series of indescribably pleasant dryland weather, unknown alike on the sea coast and the swampy bottomlands of large river valleys. Then, if ever, consumptives get a chance to expurgate their lungs by nature's own specific,— outdoor exercise in

a pleasant and yet bracing climate; and the State includes regions where such weather can be enjoyed the year round, or at least from August to June, when the dry heat (though tempered by nightly dews) becomes too intense to encourage open-air sports.

There is no fruit known to Northern Europe that has not been made to thrive in Texas with less labor; and in spite of the rapid growth of half a hundred cities, land is still very cheap, and the lover of elbow room need not yet flee to the deserts of the far Northwest. A glance at the map will show that areas varying in size from that of a German duchy to the aggregate of all the New England States taken to-



gether, have not yet been touched by the spreading network of railways, and some of these reservations of the wilderness contain fairly wooded uplands teeming with game, and prairies out and out more desirable than the boomer claims of Oklahoma, and practically cheaper, since a valid title can be secured at the \$4 per acre compromise-rate of Old Spanish land grants, if not directly from the State government.

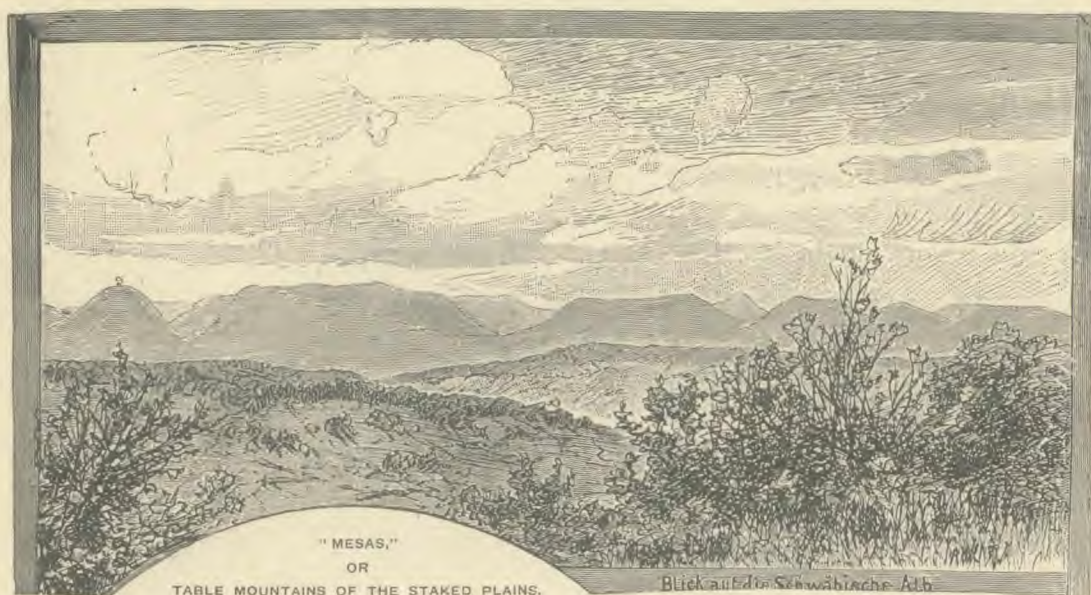
Many tourists in the southern Alleghanies must have regretted the sudden termination of the highlands at the gate of the summerland zone, and wished that Blue Ridge with its airy summits could be prolonged across Georgia to the borders of Florida, or the Cumberlands from Northern Alabama to the latitude of Mobile. In Texas a mountain range of that sort actually rises near the headwaters of the Navasota River in Hill county, and extending east-

ward across the old Indian Reservation of Cherokee county, attains its maximum of attractiveness north of Palestine, where dry, airy, and yet magnificently wooded highlands exhibit all the peculiarities of the southern Appalachians — minus their liability to heavy snowfalls. The latitude, 32°, is that of Jerusalem, Morocco, and Savannah, Georgia, and the climate a close approach to the perennial spring which the natives of the southern Apennines enjoyed

before the destruction of their highland forests.

Neither drought nor mosquitoes trouble that Arcadia of the West, and its settlers can really plead no excuse for dying before the term of Hufeland's "normal age of 110," especially since the reduction of the dog tax enables them to keep mastiffs enough to protect their homes against the patent-medicine peddlers, that are becoming a chronic plague of our southern border States.

(To be continued.)



MATERIALS FOR THE HOUSE WE LIVE IN.

BY JULIA COLMAN.

I WAS recently a visitor in a well-preserved country brick house built in 1819. Innumerable other houses have gone up and down since that time, but this stands almost as good as new. Outwardly it has had important repairs, a new roof and a portico, but within it remains almost unchanged. There is scarcely a gaping joint to be seen in the woodwork. The doors swing easily on their hinges, and close perfectly; and the window blinds have hardly missed a slat. It is true that it has been well cared for, but the great secret of its rare endurance is that it was built of good materials. The strong foundations were well laid, the lumber was carefully selected and seasoned, and the builder's hardware was the best obtainable. I know something of the history of that house, for my mother was one of the fair daughters married in its parlor, and it is still the "old homestead" of the family.

We have no difficulty in recognizing the importance of such care in the construction of our family dwellings, but are often paid in making the application to the individual houses in which we should live at least one hundred years. We see half these human houses go down suddenly in from five to seven years. We call them old at sixty, and marvel when they stand ninety years.

Yet these bodies of ours have a great advantage over hand-made houses, in that we are not so entirely dependent on the original materials, though the importance of these should not be underrated. We have the privilege of a constant daily rebuilding while we busy ourselves about the thousand and one occupations claiming our attention. For these daily repairs we are called upon to furnish the best materials. How many of us give the matter any serious thought or set about it with a tenth part of the care

which this old-time housebuilder bestowed on his lumber and bricks and mortar?

It is true that in a general way much has been done to cultivate well selected fruits, grains, and vegetables. These are the materials we must use, whether we take them in their primitive strength, or after that is half used up in feeding the organism of some other animal. But do we usually make certain that intelligent care has been bestowed upon its preparation so that it does not turn to dust and ashes before it reaches the vital processes that should build it up into living tissue? Take, for example, the preparation of common bakers' bread.

And then what about our condiments? What part do the mustard and pepper and salt, the spices and the extracts, play in building up this important structure? "Oh," says their apologist, "they make things taste good. They help the materials to go in and get digested. They are like the grease on the 'ways' that helps the ship down to its proper element."

But what would we say to the attempt to put the grease inside, to build it in as a part of the ship? All these condiments go in with the food, and there is not one of them but must be thrust out again by the wiser instincts of the internal economy. And this separation and expulsion interfere seriously with the quiet and harmony of the house, and not only mar its beauty, but undermine its strength. All good foods, in good condition and properly prepared, have flavors that commend themselves to the unperverted organs of taste, and if there are some that we prefer, there has been kindly provided a large variety, so that we may exercise our undoubted right of choice. The mingling also of wholesome foods for the improvement of their flavors, is admissible; but that is quite different from the addition of materials that are not only innutritious but hurtful. A fairly good test would be to consider, if, as a rule, we could safely eat these articles by themselves. What sort of a lunch could we make of capsicum or nutmegs or asafetida or black pepper, or that mixture of a dozen flavors known as curry powders? How many of us, if we were actually starving, would think of satiating our hunger with salt or vinegar? This gives our own estimate of the food properties of these articles.

"Surely you would not exclude salt! why, everybody uses that!"

We are not inquiring how we may run with the multitude to do evil, but how to find out what they use that is hurtful. The larger the number of those that use any such substance, the more necessary the investigation.

Let us examine the question on its own merits. What does it build in the human house?—No bone nor muscle, no organ nor fiber nor tissue. There can be no doubt about the presence of salt in the system, since we put it in, morning, noon, and night. The system must use or expel it. No drones nor enemies are tolerated. We look in vain for proofs of its usefulness. How about its expulsion?

It is found in the secretions and excretions. Try the tears. They are proverbially "briny." It is a curious and suggestive fact that those who do not use salt have no briny tears. The few they do shed are bland. The same may be said of the perspiration. That of salt eaters is salt and brackish. They can sometimes perceive this for themselves, though constant salt eating perverts the taste and makes them less sensible of its presence. Non-users can perceive its presence on occasional use much more readily. During the hottest weather of the past summer, a non-salt eater perceiving an unusual prickling as the perspiration dried on the surface, found it salty, the result of salt unintentionally taken in bread.

This continued effort to expel a useless intruder must be a great tax on the vital powers, and induce more or less serious results. What forms these will take depends largely on hereditary predisposition. They seem to affect specially the consumptive and rheumatic tendencies. Salt-rheum is also recognized in the very name. Salt is a cold and heavy article, and the system, when saturated with it, is far more sensitive to cold and damp, and it chills more readily. Salivation does not occur exactly as in the case of saturation with mercury, though large discharges are often made through the mucous membrane.

A very observing man of good habits and of sedentary pursuits, was seriously troubled with "colds." He made a careful study of them, and came to the conclusion that they were caused by an effort of the system to throw off some foreign substance that had gradually accumulated, and that they occurred at somewhat definite intervals, whether provoked by exposure or not. Mentioning this to a friend, they went over together the culinary supplies usually taken, to ascertain which were not assimilable, and selected salt. So clear was his conviction on the subject, that if he could have had his own way, he would have made the experiment of relinquishing its use. This not being practicable, he went on with the usual routine, and less than three years later, after a heroic struggle, died of rheumatism, in the prime of life.

I am acquainted with several individuals who have given up the use of salt. They do not have it in any of their foods, cooked or uncooked, and they are almost entirely free from colds so long as they are true to their regimen. One of these, a physician of some note, after a long walk on a hot summer day, his clothing drenched with perspiration, stood or sat in a draught until thoroughly dried off, with no bad results, and this was not an unusual experience.

Another has had a series of crucial experiments. After having given up the use of salt as a part of a prescribed diet, nothing having been said about colds, she was one day surprised by a visit from one of these old-time acquaintances. She looked back over the five years since they last met, and found the time to coincide with the period when she had given up salt eating. She then recalled the fact that the previous week she had been obliged to eat food that was highly salted. By repeated trials afterward she found that she could bring on a "cold" at any time by salting her food for a few days after the common fashion, and then omitting it again, making no other change in her diet or habits. She observed on these occasions that the sputa tasted of the salt. Making no statement of the case, she simply asked an elderly medical friend of large practice what was the role of salt in the system, and was told that it was an irritant of the mucous membrane, and that many cases of nasal catarrh could not be cured without relinquishing its use.

It is well-known that New England is scourged with colds and consumptions. These are laid to the east winds, the sea-air, close houses, overheated rooms, anything and everything but this heavy mineral with which they saturate the system, and wonder

that they cannot resist the cold. They use salt with special freedom. It is observed by visitors from other localities. It is easily noticeable in the "New England kitchens" introduced elsewhere. It can be read on every page of their cook books, not only in the teaspoons and great-spoons of salt required in various recipes, but in the fried salt pork which forms so common an ingredient in their made-up dishes. Possibly this marked taste for salt may have been handed down from the times when, as one of the devout Plymouth elders remarked, they "sucked up the abundance of the seas," and lived largely on salted food, before they had raised a sufficient supply of fresh fruits and vegetables. Few other new sections of the country have passed through experiences of so great privation.

The greater ease with which unsalted provisions can now be obtained ought to conduce to a higher degree of health in the present generation. Many large hotels and some restaurants are taking advantage of this fact, and serve vegetables and some other dishes without salt, leaving its addition to the taste of the eater. This and the fact that many safely dispense with its addition, is another indication that no fixed quantity is required, and that its use is merely a habit. As we have already intimated, some have set aside this habit with decided advantage to health. While it may be fairly doubted, in the present state of investigation, whether all colds, consumptions, and rheumatisms are always caused by its use, it is well worth our while to ascertain if their number might not be largely diminished. Experiment in this direction is safe, and it has many hygienic arguments in its favor. We commend the candid examination of this subject to thoughtful students in hygiene everywhere.

HAPPINESS has been defined as having things; better still, of having what you want; still better, as being able to do without what you want.— *The Century*.

NO DENTISTS IN SCOTLAND.—The statement was made before the Dental Association of Michigan, that there are no dentists in Scotland—that is, those who follow that as a profession. The people of that country have lived on plain food so long, especially on oatmeal, that decayed teeth are almost unknown. The habitual use of good Graham flour and other wholewheat preparations would arrest the decay of the teeth, and be a great benefit to health in every way.

THE SANDBAG AS A FOOT WARMER.—An exchange suggests that a sandbag may be a "very useful article for the household. It is equally as good as the hot-water bag, and the cost is considerably less. The sand should be fine and clean, and should be carefully looked over before being put in the sack. Make the sack of cotton, and fill with sand, and then make another sack of flannel for the outside. Flannel is much to be preferred to cotton, as it retains the heat longer, and is more grateful to the touch. A bag not larger than ten inches square is an available size. Mothers whose children are subject to earache will find these bags invaluable; they hold the heat a long time, and their composition is such that they are easily adjusted to the affected parts."

HEALTHY HOMES.

V.

BY HELEN L. MANNING.

ARRANGEMENT AND ADAPTATION OF ROOMS.

"HOUSES," says Lord Bacon, "are built to live in, not to look on, therefore let use be preferred before uniformity, except where both may be had." While it is eminently true that the health and comfort of the inmates should ever be the first consideration in planning and building a house, there is little excuse, with present architectural progress, for building an ugly one; no necessity for putting up a right-angled, barn-like structure, with not a line of beauty about it. A five or seven room cottage can be made as picturesque and pretty as a stately mansion, if the owner and the architect so will. Porches and bay windows add much to the comfort and the appearance of a house; the one promotes out-of-door living, and the other provides for the entrance of more sunlight and cheer, while both may or should be ornamented.

Large or small, the living rooms, sleeping rooms, and kitchen are the important rooms of a home, and the plan should provide that they be as desirably located as possible. The family room should have a southern exposure, and so ought the children's room, which is so often a play room and sleeping room combined. If possible put a grate or open fireplace in the sitting room and one in the children's room, not merely for the cheer which an open fire affords, though this is important, but as a ready means of driving out dampness when the weather is chilly, and as an excellent ventilating shaft.

"My boys do not go down town nearly so often as they did before we put in this pleasant fireplace," said one mother to me, as we were enjoying the genial warmth of an open grate, and this shows that a fireplace is not without its moral as well as its physiological influence in a home.

Happily, in the interests of healthy homes, the little seven-by-nine box bedrooms are largely done away with, except in old-fashioned country houses. The sleeping apartments should be invariably large, light, and well ventilated, for in them we pass about one third of our lives,—something which cannot be said of any other one class of rooms. The sun needs to come into them some part of each day, with its special purifying influence which nothing else can supplant.

The room specially set apart for the children of the family should be large and airy, carefully ventilated, and free from dampness. It cannot well have too much sunshine during the waking hours of the little ones, but let the windows be supplied with easily adjusted shades, so that quieting twilight effects can be secured for the midday nap, so valuable as a preparation for the work of digestion. A strong light is irritating to the nerves, and does not promote restful slumber.

The kitchen should be carefully planned for, that it be light, well ventilated, and dry, and if possible, arranged so that the vapors and steam of cooking food are conveyed through a funnel into the chimney. A hardwood floor is the easiest to keep clean, though painted white pine does very well. Basement kitchens and dinning rooms are unwholesome, and should not be tolerated in homes built for health and comfort. If the kitchen is provided with sinks with drainage pipes attached, the utmost care should be exercised in their construction, and afterward in looking after them, that their condition shall not invite disease.

An isolated invalid chamber should be provided, if possible, for though sickness is a guest unbidden and unwelcome, provision must be made for his appearance sometimes. The sick room should have an outside door, and be so situated that it can be cut off from direct communication with other parts of the house when there is danger of contagion. It should be remote from the living rooms, that the noise of the household machinery may not disturb the ears of the sensitive invalid. A hardwood floor, hard finished walls, and plain, simple furniture which can be easily disinfected, are among its necessary adjuncts; so also are abundance of fresh air and sunshine, two of nature's best disinfectant and curative agents.

Every house, even a cottage, should be equipped with a good bath-room. When public water works furnish the water supply by means of pipes, this is easily arranged for; but if that is not the case, some ingenious way may be devised to supply the bath tub with hot and cold water and drainage. Some make use of a force pump, having a cold water tank in the attic and hot water tank attached to the

kitchen stove. The cost need not be very great, while its frequent use would do a great deal toward promoting health in the home.

The library, parlor, or drawing room may or may not be supplied, just as individual circumstances and tastes dictate, but they are not entitled to first consideration. But whether the house be large or small, and contains few or many rooms, let it all be for family use every day in the week. Surely no transient guest is worthy of more consideration than the dear ones composing our own household. It is a sad fact, in town and country, that many and many a house is like a closed dungeon except when "com-

pany" comes. The family that "Josiah Allen's wife" found living in the woodshed, which was made to serve as kitchen, dining room, sewing room, and sitting room, is no figment of the imagination, any more than the pathetic tale of its mistress, who remembered that she spent several hours "last summer" in driving out "four flies" that had had the temerity to invade her handsomely kept, unused rooms. More husbands and sons are driven to the saloon and the club, however, in real life, by such immaculate, senseless housekeeping, than to the "barn," the only refuge of the poor man in the sketch.

AN UNCLEAN PEOPLE.

THERE is no immediate danger of my filling a millionaire's grave, and yet stranger things have happened. Either you or I may fall heir to a colossal fortune. I do n't lose sleep over the prospect myself, nor need you, my dear, but in this world of ups and downs who can tell what a day may bring forth?

Shall I tell you a few of the things I propose to do with my possible millions? In the first place, I shall build bath-houses and stock them with soap, perfumes, and towels for humanity at large. Next to saving the soul comes the care of the body, and most people are fully as heedless of the one as the other. Indeed, to my manner of thinking, a sanctified soul in an unwholesome body would be hardly worth the keeping.

I declare unto you, and if I do not speak the truth, come forth and dispute me, ye who can, that the masses of mankind know less about cleanliness than animals do. Watch the old cat sitting in the sun or by the corner of the kitchen fire, washing her face and cleaning her paws. She enters into the thing with a complete understanding that cleanliness makes her a more welcome fireside companion, as well as a healthier cat and a more self-respecting member of society. A bird delights in its morning bath more ostentatiously than in its breakfast. I have seen horses at the seashore who reveled in a "dip" far more than any human ever did. A dog will not enter your presence if there is any soil upon his person which his own limited ingenuity, can remove, and the most beatific experience of a pampered poodle is its perfumed bath and careful shampoo.

Now, take the case of humans. There is not a day of my life that business dealings do not force me into companionship with people who are both un-

wholesome and repulsive by reason of lack of personal cleanliness. I ride with them, I walk by their side, I sit next to them. They dress well, their clothes are of expensive material and carefully made, but they bear about them an aroma of stale cuticle and closed pores. From week's end to week's end these men and women do no more than dip their hands in a little water and rub off their faces with inadequate wash cloths. If the natural smoke of Chicago settles down upon such portions of their anatomy as are exposed, they dab it off with hard water and cheap soap, or they counteract it with filthy powder rags. They go for weeks at a time without a change of underwear, to save laundry bills, and they sleep in the same flannels that they wear by day.

A good thorough bath is as unknown to them as God's grace to a lost soul, and for my part I would rather encounter a thug with a club. You can dodge a club, but you can't escape an odor. Ride for an hour in one of our cars, either cable, horse, or steam; could anything be worse, without it was a stock transit? And yet all these unwashed and unwholesome people pride themselves, and often most justly, of being good citizens, well educated, and circumspect. They would resent the idea of being classed outside the circle of "gentlemen and ladies." They never sneeze in your presence without begging pardon, nor commit any breach of the proprieties without the keenest anguish of remorse for the misdeed. Their crime against society, then, is not an active one. It is merely the result of a neglected education. Their parents believed in making them obedient, no doubt, and polite, and well behaved. They had them taught to dance and play the piano and speak French, but they forgot to teach them cleanliness.

The poor and uncared for we expect to take as we find them, and by means of prayer, faith, and good works raise them to higher levels. But what shall be done for the folks who ought to know enough of the laws of hygiene and beauty to keep clean, but who in fact know as little as the totally ignorant and the very poor? When I get my millions, then, I shall erect 1000 bath-houses right here in Chicago, and I shall legislate laws that shall make cleanliness compulsory. Women shall find it more profitable to go to the bath-house than to the club, and men shall find more attraction in the physical laundry than in the saloon. There shall be no possible entrée for the careless keeper of the beautiful body into either saloon, street car, or public assemblage of any sort. He shall be shunned like a leper, and when his case is pronounced hopeless, there shall be a modern

Molakai fitted up for his habitation, that he may trouble the olfactories of the sons and daughters of earth no more forever.

Another thing that I shall do with my money will be to prosecute cruel teamsters by means of its powerful potency. The policeman who stands at the corner of Lake street and Fifth avenue tells me that since occupying that post he has lost the little faith he ever had in man's boasted humanity.

Another thing I will do with my money will be to provide for the patient, uncomplaining poor.

When I get my money, I shall establish homes for the poor, not charity halls nor houses of correction, but sweet, pure homes, where happiness and plenty shall join hands, and peace and rest shall sing together like mated birds.—“*Amber*,” in *Chicago Herald*.

VENTILATION FOR THE SICK ROOM.—In a recent lecture before the Post-Graduate Training School for Nurses, Dr. James K. Crook gave some excellent practical hints in regard to the ventilation of the sick room, from which we quote the following paragraphs:—

“Do not be afraid of giving an abundance of fresh air. It has been well said that sick persons in bed rarely take cold. A temperature ranging from 60° to 70° F. (an average of 65°) should be maintained as nearly as possible. No sick room should be without a small weather thermometer on the wall in a part of the room which represents about the average temperature. If the room is not supplied with an artificial system of ventilators (and these are seldom to be trusted), raise one of the windows a little from the bottom, to admit fresh air, and pull one of them down from the top, to allow of the escape of the vitiated warm air. Do not be afraid of night air; all the atmosphere is night air after dark; and it is far better to have it pure from the outside, than to depend upon the impure air of the chamber. Do not rely upon ventilation from a hall or corridor, as the air there may be as injurious as that of the sick room itself. If the weather is cold, a little fire may be kindled in the grate, as this is the safest method of heating. Do not have a stove in the sick room if it can be avoided, as this method of supplying heat is especially pernicious.

“It is unwise to keep unnecessary lights in the room. It has been demonstrated that one gas flame requires eleven gallons of oxygen per minute, or as much as is consumed by eleven men. It is well to exclude unnecessary people from the room, as be-

sides vitiating the atmosphere, they are liable to gossip and exhaust the patient, and to prejudice his case in various ways.

“Be always attentive and ready to give instant attention to your patient. Sick persons are liable to be cross and irritable, and cannot stand long delays. Shift his position in bed whenever he desires it, unless some special cause should interdict this. Occasional moving promotes the patient's comfort, and prevents the formation of bed-sores. Look out for his pillows also, and don't have them too high or too far back. It is generally advisable to consult the patient's own wishes about this matter.”

A LEGEND ABOUT CHOLERA.—Here is an Eastern legend that is timely:—

One day the angel of death visited a country in Asia. The king of the country asked him what plague he brought under his sable wings.

“The cholera,” answered the messenger.

“And how many victims will the plague claim?”

“Six thousand.”

Cholera raged throughout the king's domains. Twenty-five thousand people died.

Some time after, the king saw the angel of death again.

“You did not keep your word,” he said; “you promised me the cholera would take but six thousand of my subjects. I have lost twenty-five thousand.”

“I did keep my word,” answered the somber enemy. “Cholera killed but six thousand in your kingdom.”

“And the other 19,000, of what did they die?”

“Of fear.”—*New York World*.

THERE IS POISON IN THE CAN.—There is hardly a question that the inspection of food products, authorized by the the State for the conservation of the public health, should be so extended as to include what are commercially known as “canned goods.” Many cases of poisoning are known to have resulted from the consumption of meats, fruits, and vegetables put up in tin cans. The poison was at first attributed in large part to the action of food acids upon the lead used in the manufacture of an inferior quality of tin. As a result, there has been greater care on the part of canning factories to obtain tin plate of proper quality; but the solder necessarily used always contains lead, and the danger of lead poisoning, though modified, still remains.

More careful investigation of the causes of sickness from eating tinned foods has led to the conviction that lead poisoning is not the only or the chief factor in causing sickness. Ptomaines exist in all meats and fish; useful and harmless during life, after death they excrete an alkaloid poison. This process is the beginning of putrefaction, and cannot be detected by taste or smell; but this alkaloid poison is doubtless the cause of sickness and death. The usual method of putting up food in a tin is to fill and solder it, and afterward subject it to heat until steam issues from a pin-hole puncture in the top of the can. This small opening is then carefully closed. If the contents should be heated to the boiling point, no danger could ensue from bacteria, as the contents would thereby be sterilized.

The poisonous canned goods are those which, from carelessness, remain unsterilized by destructive heat. The best way to avoid the danger of poisoning from canned food is, of course, not to use it. All acid fruits and vegetables should be put up in glass, never in tin cans. The first cost of glass is greater, and the loss from breakage and difficulty of safe transportation is another disadvantage; but safety is assured.

Purchasers of tinned goods should never buy cans that are bulged out. This is a sure sign of danger.

From what has been said on this subject it will be seen that inspection is needed, and that it should begin at the beginning—at the factories where canned goods are prepared for the market.—*Philadelphia Record*.

FEAR OF CHOLERA.—It is pitiful that there is so much fear abroad about cholera. Housekeepers generally are in a very unhappy frame of mind, and are asking what they shall do. In the first place, refuse to admit the fear, and if it has taken possession

of you, drive it out. People who are 'anxious and afraid are more likely than others to catch cholera or any other disease. You see we are pretty sure to catch whatever we stretch out our arms to receive. A little practice in this game—and most of us have had a great deal—will enable us to catch most anything on the fly, *a la* base ball.

Of course the woman who sits down in a dirty house, with a wet, dirty cellar, foul and ill-smelling sink-drains, etc., etc., and says, “I am not going to worry about cholera,” is a fool. She is n't a fool because she does n't worry, but because she does not take the necessary practical and orderly precautions against dirt. Darkness is something to be banished—even a cellar should let in some light—and the less light, the more necessity for care in keeping it clean.—*Eleanor Kirk*.

LEMONS VS. CHOLERA.—The imperial health officer of Berlin has issued an announcement to the effect that oranges and lemons are both fatal to the cholera bacillus. Placed in contact with the cut surface of the fruit, the bacteria survive but a few hours. They remain active for some time longer on the uninjured rind of the fruit, but even then they die within twenty-four hours. The destructive property as regards the cholera bacteria is supposed to be due to the large amount of acids contained in those fruits. In consequence of this quality, the health officer considers it unnecessary to place any restriction on the transit and sale of these fruits, even if it should be ascertained that they come from places where cholera is prevalent at the time. Not a single instance was noted in which cholera was disseminated by either oranges or lemons.—*New Orleans Picayune*.

FISH DIET.—An exchange says: “It is pitiable to see a man like Dr. Talmage giving a whole sermon on the value of fish as a brain producing food, after the best scientists of the day have condemned the idea as fallacious. If fish food produces brain, how is it that the Exquimaux, who live almost entirely on fish, have the poorest brain development of any race on earth; while the Buddhists, who eat no fish or flesh, are noted for their fine development of brain, with which the missionaries are often confessedly unable to cope?”

The doctor must eat more fish. A western fellow once wrote to Artemas Ward, asking how much fish he should eat daily to nourish his brain. The wag replied, “A small whale would be about suited to your needs.” Fishy brains are not by any means of the highest order.

A PLEA FOR VEGETARIANISM.—In a recent number of an English journal, the *Woman's Herald*, Miss Edith Ward makes an earnest plea for vegetarianism, in which she says: "Could mothers of the people once realize how baneful is the effect on the moral nature of their young people of the liberal flesh dietary which they not only allow but encourage, under the mistaken idea of its superior strengthening qualities, they would shrink in horror from the course they are now pursuing. To what extent the brutality, the prostitution, and the drunkenness which disgrace our streets and sadden our homes are due to the stimulating influences of carnivorous habits, is a problem which may well trouble the wisest heads among us; but that such stimulation *is* a terribly prolific cause of the crimes that appall us, there can be no doubt, and a brighter day will assuredly dawn for humanity when we return to the simple, primitive food of our race, for which alone our digestive economy is designed." "The one thing needful is that each woman who presumes to direct a household should take a rational and intelligent interest in the whole question of food; and having satisfied herself of the *raison d'être* of the system, steadily set herself to learn the preparation of dishes about which there is nothing repulsive or degrading, but only a field of interesting, useful, pleasant work, giving her the opportunity for the display of as much refinement, taste, and skill as in the arrangement of her drawing room or the decoration of the church."

A THOUGHT FOR POSTERITY.—It is good politics to look ahead. This day has a percentage of poverty, villainy, and imbecility staggeringly greater than had the youth of the nation. Left to itself, tomorrow will outdo even this day in low grades of human beings. We must either check the low grades and push the high grades, or the nation halts halfway to the top. We study and legislate to grow good calves; let us do as much for the children; else as bad becomes worse, and rats breed faster than lions, the rat holes in the Republic will grow. Hence, if this Republic is to reach the top, she must dictate the quality of her future citizens,—cut off the multiplying of ignorance, iniquity, and deformity.

Teach the physically unfortunate that the national physique is one guarantee of national endurance; that the physique of the nation is that of the people; and thus public welfare outweighs private enterprise, and demands that constitutional invalids, inebriates, and the grossly mal-formed—victims of diseases which spoil the human body—shall not become the parents of disease in the body politic. Make

fifty years the deadline beyond which man may not wed less than fifty years. Require of every candidate for marriage a medical certificate of constitutional soundness. Wholly bar unmitigated ignorance from wedlock as a criminal offense against the State; and as to chronic workers of iniquity, let the severest chastisement forbid them to multiply workers of iniquity.

The commonwealth forbids marriage to the insane—let it also forbid offspring to the insanity of crime, yea, nurse herself into greatness by declining to nurse drunkenness in swaddling bands, vagrants in pantalettes, and cut-throats in roundabouts,—young ones who will not inhale the oxygen of our free schools. Education works wonders where it can be made to work at all, but it helps wonderfully to begin back and say what you will educate. Friends, posterity has rights, and the politician who loves to-morrow as to-day will guard them, and make his time the mother of better times by forbidding the vile, the pauper, the ignorant, the criminal, the demented, the born cripple, to project their hindering kind into the future of the nation.—*James Clement Ambrose.*

NIGHT GROWTH.—It is a curious fact that night is the time which nature utilizes for growth. Plants grow much more in the night than in the daytime, as can be proved any time by measurement. Measure a vine at night, then measure it again in the morning and the next night, and it will be found that the night growth is two or three times that accomplished during the day. During the day the plant is very busy gathering nourishment from various sources; and during the night this raw material is assimilated into the plant life.

The same fact is true of the animal creation. Children grow more rapidly during the night. In the daytime, while the child is awake and active, the system is kept busy disposing of the wastes consequent on this activity; but during sleep the system is free to extend its operations beyond the mere replacing of worn-out particles; hence the rapid growth.

This is why so many invalids need so much rest and sleep. The system has been taxed for years beyond its ability to repair the tissues, and hence the organism has become worn and disabled from the accumulation of waste products, and disease has resulted. With the proper conditions restored, and a season of perfect rest, nature will reassert herself, clearing up the clogged and dirty tissues, and restoring the organs to their normal condition,



THE BICYCLE FOR INVALID WOMEN.

THE bicycle as a means of physical exercise, fills a place which has never been filled by any other exercise-device or apparatus. It is true, a well-equipped gymnasium affords every appliance that can possibly be required for the development of every muscle or set of muscles in the body; nevertheless, it requires so large an amount of moral courage to work steadily in a gymnasium so many minutes a day, or so many hours a week, week after week, month after month, and year after year, if one would secure the good results obtained by systematic exercises, that a comparatively small number of persons can be induced to avail themselves of this means of physical grace. The permanence of the bicycle as an exercise-machine is largely due to the fact that instead of being a dead, inert thing, like a "horse" or a horizontal bar, it is a thing of life and beauty. It is something that must be managed and controlled; a thing that has just enough disposition to mischief, and just sufficient uncertainty as to what it is going to do next, to render it a perpetual source of interest and a joy forever when one has become thoroughly acquainted with its disposition, and learned how to humor its eccentricities, in other words, has acquired the art of managing this somewhat willful but wonderfully versatile machine. It is this necessity for the exercise of skill, judgment, good sense, and tact in the management of a wheel which renders it so fascinating an exercise. To the same fact must be attributed also some of the most important physiological effects derived from bicycle riding.

This is especially true in relation to the bicycle as a means of exercise for women. The woman who goes out for a half-mile walk as a "constitutional,"

comes back fagged and exhausted, and with a back-ache which persuades her that however beneficial exercise may be to other people, it is not the thing for her. The same woman would return from the exertion of an hour's shopping, so worn out with loitering about the counters of dry-goods stores and milliners' shops, as to feel the need of half a day's rest in bed. In neither instance has the amount of exercise been sufficient to induce any great degree of mental and physical exhaustion. The fault is in the conditions under which the exercise is taken, and especially in the fact that the mental and nerve conditions are not such as are favorable to recuperation. Exercise is something more than mere mechanical movement. This is at least true of healthful or health restoring exercise. Brain, nerves, and muscles co-operate in a most marvelous manner in the muscular movement. Every movement of a voluntary muscle begins in the brain in the shape of a nerve impulse which travels outward toward the muscle along the nerve trunks, and on reaching the muscle, induces a sort of vital explosion, one of the results of which is muscular movement. In the intricate recesses of the tissues, other results, such as heat production, the generation of electricity, the production of various organic poisons, and various other vital chemical and physical changes, accompany the muscular action, and go to make up the sum total of the effects of exercise. Changes also take place in the brain and nerves, as the result of their participation in the physiological processes, of which the muscular movement is only a part, although it is the chief visible result.

In view of this fact, it is evident that, in order that the greatest benefit should be derived from the

exercise, the conditions should be such that the brain and nerves, as well as the muscles, can act in a normal and healthful manner. The man who goes out for a five-mile tramp for health's sake, and during his walk begrudges each moment that he is compelled to spend in such an unenjoyable way, heartily wishing himself back in his office, returns to his desk fatigued in mind and body, rather than invigorated. The woman who painfully drags herself through a half-mile walk over a stone pavement, each step upon the hard stones jarring a sensitive spine, each breath a sigh of relief that the sofa or comfortable easy chair is so much nearer, can truthfully testify that walking is not to her a means of either health or strength.

The bicycle so absorbs the interest of the rider in its manipulation that the backaches, sideaches, home-cares, business worries, everything morbid and everything depressing, is for the moment forgotten. It affords, in this respect, the same sort of oblivion from troubles which the business man too often seeks in the gaming table, the intoxicating cup, or the nerve-benumbing pipe or cigar, and which the fashionable woman finds in the theater and the teapot, but fortunately without any of the evil after-effects inseparably connected with these brain-intoxicating and nerve-obtunding pleasures.

Mounted on wheels which practice has rendered so subservient to the will that they have been almost incorporated into the body, instantly obeying the behests of the will through the medium of the arms, legs, and trunk, almost as implicitly as a hand or a foot; now skimming over a level surface with half the speed of a locomotive, then tugging up a hill, puffing like an engine, the chest swelling with every breath, taking in great lungfuls of life-giving oxygen, the heart bounding vigorously to keep pace with the lungs and muscles; looking out ahead for obstacles in the way; now and then casting a quick glance behind to assure one's self against possible danger in the rear, or to find reason for complacency in the distance which one's companions have been left behind; every instant on the alert; making a wide sweep around a sand bed or a mud-puddle, or deftly turning aside an inch or two for a cobble stone; slowing up for a rough place; bracing one's self to jump a ditch; gracefully or ungracefully bowing, to shoot under an overhanging bough; coasting down a hill-side, or springing off unceremoniously to avoid a disastrous collision,—no place remains for carking care. Aches, pains, backs, limbs, stomachs, nerves, ambitions, misfortunes, jealousies, fears, are all left behind, as the bicycle rolls speedily on, all noise and

jar abolished by the pneumatic tire and the pneumatic cushion. One is forever being transported into a new sphere. He feels a sort of kinship with the birds, and looks down with sympathy and commiseration upon the poor mortals trudging along the way-side on foot or jolting in a carriage. One who has never learned to ride a bicycle has missed a phase of human experience which no one but the bicyclist or the balloonist or parachutist can appreciate.

This abstraction from all morbid and depressing influences and circumstances, and complete absorption in the pure physical delight of rapid movement accompanied by comparatively small exertion, and affording an opportunity for short intervals of rest if desired, without interrupting the progression, is one of the secrets of the great good derived and derivable from bicycle riding. The bicycle is a mind-cure doctor of the first order, and can boast more cures through its influence upon the mind and nerves than can the most famous metaphysical healers or "Christian Scientists."

As an exercise machine, the bicycle holds first rank because of its ability to secure to every part of the body a due proportion of exercise. The largest amount of work, is of course, required of the leg muscles. These are the largest and strongest muscles of the body, and the muscles which are most constantly in active use. The neglect of the proper exercise of the leg muscles is one of the causes of the notorious little health of women in this country.

Walking is constantly prescribed by physicians, as one of the means of curing some of the worst of chronic ailments to which women are so subject. Nevertheless, few women are cured by this means, for the reason that the majority of women find themselves unable to carry out the prescription without in so doing experiencing so much distress and discomfort that the possible good effects of the exercise are thereby quite neutralized, and consequently at least nine out of ten of those who undertake to find a cure by this means, become discouraged and adopt the view that the remedy is worse than the disease. Not so with bicycle riding. By this mode of exercise the legs are relieved of the burden of carrying the body about, and in such a manner that the whole weight of the body must rest in alternation upon each single limb; the weight of the trunk (of the whole body, in fact) is supported upon an easy and comfortable seat, while the limbs execute the slow and easy movements whereby the machine is propelled. At the same time the arm muscles are exercised in co-operating with the legs and trunk in guiding the machine, while the trunk muscles are kept constantly

active in executing balancing movements whereby the equilibrium is maintained. Thus the entire muscular system is brought into efficient but gentle activity without strain upon parts that are weak or sensitive.

Weakness of the muscles of the trunk and abdomen is the foundation cause of a large share of the ailments from which women suffer, such as prolapse of the stomach and bowels, and other internal organs. The bicycle affords a means, *par excellence*, of developing these muscles, and securing an erect and graceful carriage, as well as a correction of the evils resulting from constricting bands, corsets, and heavy skirts.

It is but fair to state that the writer's encomiums upon the bicycle as a means of exercise for women are not based upon theoretical grounds, but upon actual experience. For nearly twenty years I have

been engaged in the practice of medicine, and during that time many thousands of invalid women have been under my care for the treatment of disorders peculiar to their sex, and I have endeavored to bring to bear upon the treatment of these cases the appropriate means and methods presented by all the principal systems of physical training employed in this country, in England, France, Germany, and Sweden, including the famous Swedish gymnastics; and while I continue to make constant use of calisthenics, gymnastic apparatus, Swedish gymnastics, etc., I do not hesitate to say that I have seen more immediate and remarkable curative results from bicycle riding than from any other system, or from any combination of systems of exercise. I cannot better emphasize the truth of what I have said upon this subject, than by citing a few actual cases, which will be presented next month.

(To be continued.)

BETTER THAN ANOTHER PARLOR.

BY HELEN L. MANNING.

"WHAT is your plan for keeping up physical culture after you leave the Sanitarium?" I asked of a sensible lady in middle life, who had been spending some months in an effort to regain her health.

"Well, I'll tell you," she replied. "We are just about to build an addition to our house, and my plan before coming here was to furnish the first-floor rooms as double parlors. Not that I needed new parlors particularly, for I have a very pretty one now, and I knew my husband would oppose it; but I was determined to have my way. Since I have become awakened on the subject of physical culture, and realize its importance to every relation in life, I am going home to carry out an entirely different scheme. Instead of double parlors, I am going to have the two rooms thrown into one, and fitted up as a home gymnasium. I know it will be a great benefit to me, but I care more for it on account of my six children. I shall encourage them to invite their schoolmates to join with them whenever they please, and I will see what can be done in this way to build up strong bodies and at the same time keep my children contented at home. I will endeavor to be young with them, instead of being the sickly, self-centered invalid that I have been for the past two years."

"What mechanical aids will you introduce, or do you think that free gymnastics are sufficient?"

"If I felt competent to teach free gymnastics properly, perhaps they, with marching, would be suf-

ficient. As it is, I shall have wooden dumb bells, Indian clubs, and wands,—they cost very little,—and besides these, I'll get a few of the most useful wall machines. By the way, we have an old piano which will serve admirably to furnish march music, and one of my daughters plays accurately. The whole expense of fitting up the gymnasium will not be near what I should have squandered on furnishings for parlors, which I really did not need, except to rival my neighbors."

"Surely," I said in reply, "if you succeed in being young with your children, in giving them symmetrical physical culture, and at the same time cementing their hearts to you and to their home in bonds of closest sympathy and mutual interest, it will be worth more than all the new parlors in the world. I wish you every success, and hope that your neighbors will observe and then strive to emulate your example."

Are there not all over the land, thousands and thousands of stuffy, darkened, unventilated, and little-used parlors which could, with profit to the physical and moral nature of every member of these home circles, be turned into gymnasiums and play rooms? The "company" parlor is never enjoyed by the guests who with due awe and solemnity are occasionally taken over its threshold; it is a great expense and a constant care; the furniture goes out of fashion or becomes moth-eaten; and after all,

what real satisfaction and comfort does it afford to any one? In contrast to this, a home gymnasium need not be expensive, and certainly will pay big dividends on the investment, in home comfort and enjoyment, in keeping the children safe and contented at home, and last but not least, in assuring a strong physical development and equipment for the

burdens and responsibilities of life. If this were done, the family doctor would find his occupation largely gone, and the melancholy dyspeptic and nervous invalid would be unheard of. Then out with the somber, stately, useless parlor, and in with the sunshiny, well-ventilated, useful home gymnasium!

A SENSIBLE CRITICISM.—The Venus de Medici has so long been pointed at as a type of feminine physical beauty, that it seems almost sacrilege to call in question the correctness of the judgment of those artists who have so long and so eloquently expatiated upon the æsthetic beauties of this ancient marble statue, which was exhumed at Tivoli on the site of Hadrian's villa, a little more than two hundred years ago. But, according to a recent writer, there have, within late years, "been skeptics daring enough to class this with the Apollo Belvedere as a sample of ancient art that has been 'monstrously overestimated,' and now comes no less an authority than Holman Hunt to assure us that the Venus de Medici, to use a popular phrase, 'won't do.' A little anecdote attaching to this expression of opinion is quoted by the *London Daily News*: Some years ago, at the house of Sir Richard Owen, the great naturalist, Mr. Hunt, met that professor of sanitary science, the late Sir Edwin Chadwick, who began a conversation thus:—

"As a Commissioner of Health I must profess myself altogether opposed to the artistic theory of beauty. There is the Venus de Medici, which you artists regard as the perfect type of the female form. I should require that a typical statue with such pretensions should bear evidence of perfect power of life, with steady prospect of health, and signs of mental vigor; but she has neither. Her chest is narrow, indicating unrobust lungs; her limbs are without evidence of due training of the muscles; her shoulders are not well braced up, and her cranium, and her face, too, are deficient in all traits of intellect. She would be a miserable mistress of a house and a contemptible mother.' But the listener assured the sage critic that he had made a most artistic criticism of the statue, and that his auditor would join in every word as to his standard of requirements.

"Mr. Hunt was aware, he said, that he was talking heresy to the mass of persons who accepted the traditional jargon of the cognoscenti on trust, but in his opinion 'the work belongs to a decadence of Roman virtue and vitality, and its merit lies alone in

the rendering of a voluptuous being without mind or soul.' If no authorities of equal weight will stand forth in defence of this marble lady, it is to be feared that the famous Venus de Medici will soon be ranked among imposters. The strange part of the matter is that it has taken 213 years to find her out."

We entirely agree with the above criticism. Although we have frequently referred to the waist of the Venus de Medici as a model for modern women, we have never been able to recommend the statue as in any other respect a model to be imitated by the women of the present age. The Venus de Milo is a very different type, and evidently intended to represent a very different character.

MODERN LACK OF SYMMETRY.—The newspapers were recently very much interested in the discussion of the question as to who should pose for the Montana silver statue. There was much rivalry among the beauties of Montana for this coveted honor, but it seems that not a woman could be found in the whole State of Montana whose figure was considered sufficiently symmetrical to meet the demands of the artist. Mr. J. M. Hill, of New York, an art critic of no mean ability, remarked in the course of the discussion, that the only means by which a really perfect form could be secured was by making a composite statue. This plan, which is like Gilbert's recipe for a heavy dragoon, has been followed by all modern artists of eminence. Canova, for example, studied sixty different women for his statue of Venus.

Another artist asserts that a perfectly symmetrical woman cannot be found in any single modern nation, but that one must go back to the ancient nations also.

This lack of symmetry, so noticeable among civilized women, is not so universal among savage women who live under reasonably natural conditions. The women of civilized nations have for many centuries been subjected to the deteriorating influences of harmful fashions and an artificial mode of life, and it is no wonder that the effects of these health-and-beauty-destroying influences have become painfully apparent.



Home-Culture

CHILD-TRAINING.

[A lecture delivered before the Missionary Mothers' Class, by J. H. Kellogg, M. D.]

(Continued.)

UNFORTUNATELY, the training of children is generally looked upon as menial work. Any girl ten or fifteen years old, who will be kind to the child, is thought to be good enough for a nurse-girl. "Baby-tending" is usually considered the worst kind of drudgery. I have heard mothers complain many times that they have to spend most of their time in taking off and putting on baby clothes, washing faces, etc., and they think that their life is pretty much thrown away, because they have little time to do anything else. Such mothers have not the smallest conception of the value of their opportunities.

It is not an uncommon thing to see mothers who live in luxury, surrounded with every advantage that wealth can give them, giving their time to entertaining company in their drawing-rooms and meeting their social engagements, while the children are sent off to the nursery under the care of some girl who speaks a foreign language, and who perhaps is a regular despot. The nurse-girl has control of the child; the mother sees it only enough to know that it is clean, and that its clothes are properly adjusted. She sees to it that the child has enough to eat and drink, and that it has it at the proper time. I have seen such children out on the street with the hired nurse-girl, who, with a hard face, was trundling the children along, all bundled up in silks and satins in an elegant little chariot, but looking doleful and sad, as if they had nothing to make them happy. The children were being "taken out for their health," but the whole thing was done in a mechanical way in which there was no enjoyment for the child, and little profit.

Mothers who turn their children out in that way have no just appreciation of their opportunities. Children cannot be properly taken care of in a mechanical way. The mind of the child might properly

be compared to a home garden. Go into such a garden, and see the skillful gardener at work among the flowers. When a plant is weak and leaning over toward the window because it has not enough light, he turns it around where it can get more light. When he sees that a plant has too much water, he gives it less; when it has not enough, he gives it a good bath. When he sees, by its appearance, that a plant has not sufficient air and sunlight, he gives it extra care, admitting air and sunshine and bathing its leaves, branches, and trunk. Pretty soon you will see the result of this careful gardening. The weakly plants begin to catch up with the more robust ones. By and by, as the result of this careful training, we see buds, and then blossoms on the plant.

This illustrates the careful training of childhood. Here is a little infant plant, which the mother may watch as it grows up. If she trains and watches it carefully, by and by she will see physical and intellectual buds shooting out; she will see various faculties dawning and developing, in which she will be interested. Let her put into that child's mind a thought to-day, and then watch it. By and by she will see the result. Perhaps the child does not say anything when the thought is given; it does not know what to say. But that thought is a picture which the mother has imprinted on its brain, and that picture will remain there, and the child will revolve it over and over. Thus the mother can from day to day form the mind of her child. She can do the same thing with the mind of the child that the painter does on the canvas; she can put the right ideal into the mind; she can paint upon the fabric of its brain just such an ideal as she wishes her child to imitate. The mother can do it, and the teacher can do it, and that is what the nursemaid ought to do. But the

mother who turns her child over to the nursemaid, misses the most important opportunity of moulding the mind of her child. She misses it, because in infancy the mind is a blank, or comparatively so; no seed has been sown. There is but the soil and the tendency to grow some kinds of seeds more thriftily than others. All the seed that goes into the child's mind is yet to be sown there, and the mother, nurse, or teacher—the one who has the care of the child—can put into that child's mind, can sow in that soil, any kind of seed that she pleases. Now that is a most blessed opportunity; for after three, four, or five years have passed, and the child's mind is full of the most uncanny and noxious weeds, the rest of its life must be spent in uprooting those plants, the evil seed of which has been sown during its earliest years. So the first four or five years are the most important part of the child's life.

Then we may safely say, it seems to me, that the reason for looking upon the care of children as menial, is that it is not understood. And because it is not understood, this important work is done improperly. Proper training is doing for the child plantlet what the skillful gardener does in rescuing the wild plant from the woods, bringing it under the best influences, and caring for it and training it and transforming it into a beautiful flower, as has been done, for instance, in converting the wild cranberry into the beautiful "snowball." If instead of this, the child is placed under the control of a careless hired servant, the mind of the child is left to drift, drift, drift. Instead of being encouraged and developed, it is dwarfed and stunted.

The young mind is full of curiosity. It does not know anything at first, but it wants to know. It is like the little plant which puts out one shoot, then another, and another. Now suppose the gardener picks off the little bud; it grows another in another place, and the gardener picks that off. If this proc-

(To be continued.)

ess is continued, the plant will be dwarfed and deformed. This illustrates the treatment of many a little child who begins to inquire the reason for this and that. The child wants to know the reason of things, and when one question is answered, he asks another. Answer that, he has still another one to ask. For the child's mind is empty at the start—it does not know anything; that is the reason why it must ask so many questions. It is just like an empty vessel that needs to be filled. But if you say to him, "Don't ask me so many questions; I do n't want to be bothered with you," what is the result? It cuts off the child's investigations in that direction. So he starts off in another direction, and by and by he asks you another question, and his investigations are checked again. In this way these little buds that might have been splendid branches, bearing a wealth of beautiful blossoms, are nipped in the bud, and, mentally, that child becomes a dwarfed child; it is just driven in upon itself.

It is this repression that makes the change in the faces of children. When a child is two or three years old, it is pretty, sweet, and *bright*. But when a child has been treated as I have mentioned, that bright look has disappeared by the time he is six or seven years old. Two thirds of the children, when they reach that age, become stolid and blank in their looks. They are not so interesting and spontaneous as they used to be. They are no longer making those new and startling comparisons that were a continual source of surprise and pleasure to the parents. The child has lost his spontaneity. Why?—Because it has all been crushed out of him; the child has been dwarfed and stunted. He has been treated in the same manner as if the gardener had been around among the plants and picked off all the little buds that were just shooting out. This sort of training of the child is what results in so many dwarfed, one-sided brains.

A FAMILY NIGHT.—Make home the happiest place in the world for your children. You can, by taking a little of your time and planning for their pleasure, make home so attractive that your children will have no desire to seek entertainment outside, unless on some special occasion, and even then I should arrange to accompany them, and enter into their joys as one of them. Mothers, and I would include the fathers too, we do not realize the importance of becoming companions to our children—making ourselves agreeable. Who in this life has a greater

claim on our time and attention than our children? And what is of great moment, it will keep our hearts younger and happier; and best of all, we are making our children happy. When they have grown to manhood and womanhood, and the duties of life have called them away from the home of their youth, oft-times will their hearts grow warm in the hallowed memories of childhood's happy days, at home with father and mother; and how much it will help them to make the new home also a little paradise for their own children!—*Setl.*

SLOYD WITHIN A CIRCLE.— NO. 5.

BY MRS. M. F. STEARNS.

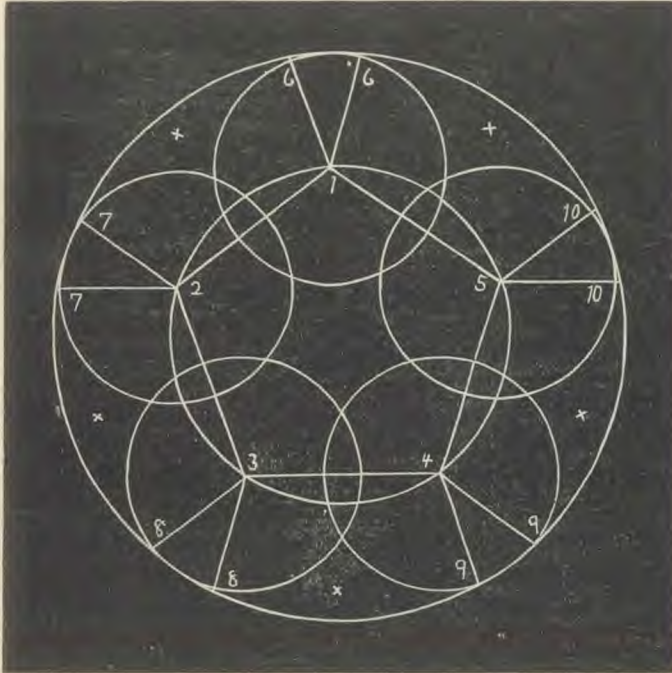


FIG. 13.—MODEL NO. 7. WORKING DRAWING.

We are continually hearing about the "self-made" men and women of the day, and as a "self-made" man or woman is usually a "well-made" one, it is of interest to note why this is the case, so that we may apply the principle at present, and help the "rising generation" to make themselves. The boys and girls that have to educate themselves are those that have to work with their hands. They are early thrown on their own responsibility. They have to think for themselves, as well as to work for themselves; and so brain and hand become independent, originality of thought naturally follows, and the inventive faculties are called into play.

The marked inventive ability of Americans is doubtless due to the early circumstances of necessity, that surround American children. Yankee ingenuity is proverbial, and a natural result of the national independent spirit. The more this principle of independence is applied in education, the better, and it is *the* principle of all Sloyd work. No machine teaching is permissible in Sloyd. The child that draws a line and

then asks the teacher if it is right, should be given to understand that *that* is for him to find out. He can look for himself and see if it is like the original; and if he does make mistakes, he will not be as likely to make them again if he finds them out for himself, and makes his own corrections.

When a new model is given, no more explanation should be made than is necessary. The finished model should be shown, and then let him imagine how it would look spread out as a working drawing, and make his own drawing accordingly. This will soon lead him to originate designs, and form in him a most valuable habit of working out his own problems in life. "Something attempted" with him will always mean "something done."

Much of the present educating resembles the stuffing of the Strasburg geese. The teachers work and prepare the dainty essential repast; the children have simply to open their intellectual mouths and swallow it, till one trembles lest the result be as abnormal in one case as the other. The goose that picks up his own

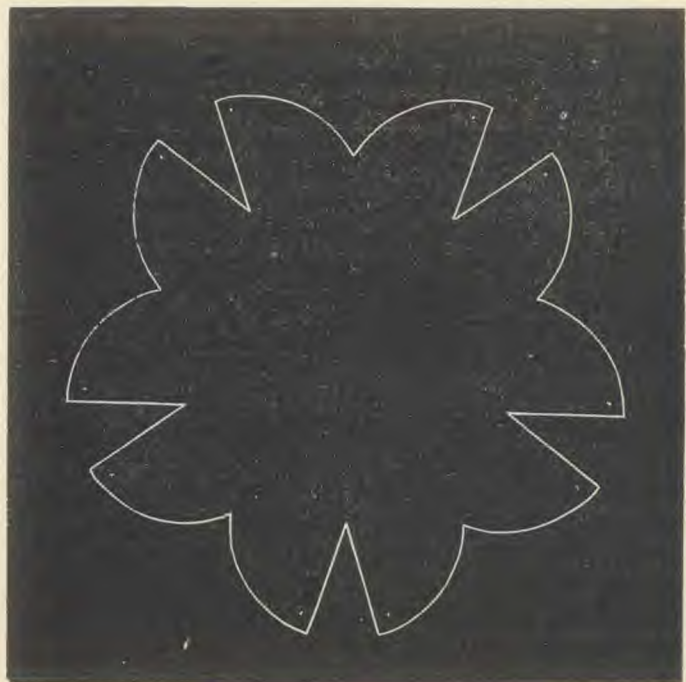


FIG. 14. CARD RECEIVER. READY TO TIE.

dinner is certainly a healthier, happier goose than the stuffed one.

Nature's methods are usually the safest. She provides her children with food, but they must search for it, for half the educating lies in the searching. The "hid treasures" are only to be found by the diligent seeker, and such seeking brings a sure reward.

Our Sloyd work this month contains the practice with circles.

A convenient receiver for cards can be formed in the ever fruitful twelve-inch circle by drawing within

it a smaller circle 7 inches in diameter, then spreading the compasses 4 inches. Lay off this circle into five equal parts, then placing the rule so that it will cut points 1 and 3, draw lines from these points to the outer circle. Proceed in the same manner with points 3 and 5, 5 and 2, 1 and 4, and 2 and 4. Then using each of the points 1, 2, 3, 4, and 5 for centers, take the radius two and one half inches, and describe five small circles. Cut out the crossed portions. Tie the model with coarse silk or narrow ribbon on the corresponding numbers, and the dainty little card receiver is complete.

CHILDREN'S QUESTIONS.

BY MARY A. STEWARD.

DID you ever consider the influence that may be exerted upon a child by the answers given to its sincere questions? As all teachers admit, the mind in childhood is more impressible than at any other time of life, and the ideas acquired then are retained the longest. Do we think of this when the hasty answer is returned to the young questioner, "Oh! don't bother me, I'm busy; go off and play"? Too busy to train that fast-developing intellect which God has placed under your care, and which may some day move the world? O mother! lay not off thy burden of motherhood so lightly. Think you not that God will require the talent he has committed to your keeping, and require it with usury?

When once the spirit of inquiry is aroused in a child, it demands satisfaction; and if that cannot be obtained where he first and most naturally seeks for it, do you think he will be content to remain in ignorance? No! he will find it somewhere, perhaps learning that which is not true, perhaps finding it in connection with other influences which are poison to his mind.

The moral faculties are the last to develop, and they are the most subtle to deal with. Woe to mother and son, father and daughter, if they be neglected in the tender years.

How many times we hear the mother's voice, "Eddie, you must not do that; it is wicked!" Are you sure the little fellow knows what "wicked" means? You say, "He understands it is breaking

the commandments." But sometimes it is hard to see how some particular thing he has been chided for doing is breaking the commandments. Do you ever stop to tell him just how and why it is wicked?

Perhaps he is reading a story of wild adventure, and you insist that he must stop, and never read such a book again. But does he realize how its poison will put a fever of excitement into his very blood that may sometime drive him to the limit of desperation? Perhaps he is playing marbles, and another boy proposes "playing for keeps." You call him and forbid his playing so. But he says, "Why, mamma, what hurt is it?" "It is like gambling," you answer, but your boy knows nothing about gambling, and is as much in the dark about its sinfulness as ever.

Why not explain to him the principle underlying them both, and show him the sinfulness of violating that? Then your boy would have a foundation from which to reason out many a vexed question as he grows older. Teach him to think for himself. Give him sound doctrine, and then let him have a chance to reason out his own course as much as possible.

If as much time were spent in storing the mind with gems of worth, principles of truth, as a foundation to a strong, healthy character, as is often spent in preparation and thought for the external appearance, the next generation would not be the mental dwarfs too many of them now promise to be.

Six new diseases, we are told, have come into existence with the styles of dress which require the wearing of multitudinous and heavy skirts. Indeed, I wonder there are not sixty. No doctrine but the

doctrine of "the survival of the fittest" will touch the problem. We are of tougher stuff than our brothers, or we should have sunk in our shackles long ago.—*Elizabeth Stuart Phelps Ward.*

"SOME DAY."

I HAD an old mammy, who, when things went wrong,
Would look up cheerily and say,
'Now, nebbber min', honey; jes lebe 'em alone;
Dey is sure to come right some day!"

When the rain down-poured while the sky overhead
Wore its dingiest mantle of gray,
'T was, "Honey, doan' min'er little bit ere cloud,
The sun am boun'ter shine some day!"

As the years went by, and the dreams of my youth,
Repining, I'd see slip away,
'Now chile," she would say, "worry mitey poor he'p;
As you fin' for yo' self some day!"

When trouble came and grief, and the whole earth seemed
Enveloped in doubt and dismay,
'T was, "My chile, jest abide for de Mas'er's time;
He show you de wherefore some day!"

When the messenger came, and her white soul fled
From its poor black body of clay,
She whispered, "Honey, hold to de Mas'er's hand,
He lead you to heaben some day."

And I think this world were a far better place
If we all would adopt mammy's way;
And look from a present of harrowing ills,
To the good that is coming "some day."

— *Adelaide Preston.*

AMUSEMENT FOR CHILDREN.— Much amusement is afforded to small children by running a stick through an orange and putting it into the neck of a wine bottle; then a face is cut out from the peel of the orange, more or less funny, according to the skill of the maker. From a piece of brown paper a cloak and hood are improvised, and behold! a yellow-faced, little bottle-bodied woman.

"Do away, Dod; do away! Do n't bodder me now," a small boy was overheard saying, as he besieged an apple tree.

And then he threw another stick. That one failed to bring down an apple. As he raised his hand and took aim again, he said:—

"Do away, I say! Tan't 'oo wait a minute?" His mother called him to her and said:—

"Baby, to whom were you talking?"

"Dod," he replied in the most matter-of-fact tone.

"God?" said the shocked mother. "Why, my child, where was he?"

"He was whispering to me."

"What did he say?"

"He said, 'Baby! baby! do n't frow stones; 'oo will hit the poor little birdies.'"

The mother had nothing to say. Faith and conscience were taking care of the little soul, and teaching their lessons better than it was possible for her to do.— *ScL.*

A WELCOME GUEST.

WHEN baby comes! The earth will smile,
And with her springtime arts beguile
The sleepy blossoms from their rest,
And truant song-birds to their nest,
To greet my guest.

When baby comes! Now fades from mind
All thought of self. The world grows kind,
Old wounds are healed, old wrongs forgot,
Sorrow and pain remembered not;
Life holds no blot.

When baby comes! Methinks I see
The winsome face that is to be,
And old-time doubts and haunting fears
Are lost in dreams of happier years,
Smiles follow tears.

When baby comes! God, make me good,
And rich in grace of motherhood;
Make white this woman's soul of mine,
And meet for this great gift of thine,
In that glad time. — *Ladies' Home Journal.*

THE secret of being pure in heart is to choose and retain pure thoughts. Ah, if bewildered humanity only knew this! if it only knew that the way out of its tangle of vice and error was just to get hold of one pure, good thought, and cling to it until another came to it by attraction, and then cling to that, until evil thoughts were displaced and temptations vanished, because the soul has climbed above them! — *ScL.*

A LAUGH is worth a hundred groans in any market.— *Lamb.*

A NEW CRUELTY IN FASHION.— The slaughter of birds to adorn the wedding apparel of modern fashionables has recently been re-enforced, as a cruelty, by the slaughter of that most innocent of creatures, the gentle lambkin. The latest mode for linings of the collars and cuffs of capes, coats, and jackets, is of "unborn Astrachan lamb-skins." The cruelty involved in procuring the necessary material for these decorations renders the worldly creatures who wear them all the more eager to adopt this new-fangled fashionable cruelty.

VEGETABLE SALADS.

THE term *salad* is often applied to various unhealthful mixtures of food material, but this fact does not necessitate that all salads must be of this character.

The simple leaf and vegetable salads, when prepared of wholesome ingredients, are not only dainty relishes, grateful to the taste and pleasing to the eye, but are valuable adjuncts to a hygienic dietary. Their nutritive value is not high, but their fluid and mineral constituents serve an excellent purpose in the vital economy. For the dressing of many salads both an oil and an acid element are considered essential. Whipped cream or pure olive oil is well suited for this purpose, and for the acid nothing can be superior to lemon juice. Says a prominent *chef* of the culinary art: "Lemon juice is the most delicately perfumed acid that nature has ever given to the cook. To my mind any manufactured vinegar is too strong for a fine, uncooked salad." Modern science has discovered that the eels of vinegar sometimes take up their abode in the alimentary canal as parasites, and become a source of irritation to the digestive organs.

Vegetables and leaves for use as salads need to be of the freshest, crispest, and most tender. Those that have been specially cultivated for the purpose are best. Tough, stringy leaves are unsuitable.

In the preparation of lettuce salads, the leaves should be carefully sorted, all bruised and tough leaves being discarded. It is a good plan to cut the head of lettuce into four quarters, beginning at the base; then remove the larger leaves one by one until the heart is reached, carefully wash each leaf in very cold or ice-water, and thoroughly drain the whole. A spherical wire draining basket is most desirable for this purpose. If oil is to be used in the dressing, the leaves should be as dry as possible, even wiped by pressing between the folds of a clean, dry towel, if necessary. Cabbage used for salad should be young, tender, crisp, and juicy. It should also be carefully examined and washed, then chopped quite fine with as little handling as possible.

For the mixing of the salad no utensils are superior to the salad knife and fork of boxwood. The bowl in which it is to be mixed should be sufficiently

roomy, offering, at least, one and a half times more volume than will be needed by the salad, in order that there may be plenty of room for turning. It is always best not to season a salad until just a few minutes before it is needed, since most salads deteriorate greatly by standing.

Lettuce Salad.—Carefully wash and drain the leaves as directed above, and if not ready to use at once, set on ice or on the cellar bottom to keep crisp and cool. Do not cut the leaves. Use whole or tear into convenient pieces with a silver fork. Serve with a dressing prepared of equal quantities of lemon juice, sugar, and ice-water, or with a dressing of cream and sugar, in the proportion of three or four tablespoonfuls of thin cream to a teaspoonful of sugar. This dressing may be prepared, and after the sugar is dissolved, a very little lemon juice (just enough to thicken the cream, but not to curdle it) may be added, if desired.

Beet Salad.—Either cold boiled or baked beets, chopped quite fine, but not minced, make a nice salad when served with a dressing of lemon juice and whipped cream, and salt if desired.

Beet Salad No. 2.—Chop equal parts of boiled beets and fresh young cabbage. Mix thoroughly, add salt to taste, a few tablespoonfuls of sugar, and cover with diluted lemon juice. Equal quantities of cold boiled beets and cold boiled potatoes, chopped fine, thoroughly mixed, and served with a dressing of lemon juice and whipped cream, make a palatable salad. Care should be taken in the preparation of these and the preceding salad, not to chop the vegetables so fine as to admit of their being eaten without mastication.

Cabbage Salad.—Take one pint of finely chopped cabbage; pour over it a dressing made of three tablespoonfuls of lemon juice, two tablespoonfuls of sugar, and a half cup of whipped cream, thoroughly beaten together in the order named; or serve with sugar and diluted lemon juice.

A CORRESPONDENT of the *Confectioners' Journal* says that banana juice makes a first-class indelible ink. The juice from bananas thoroughly decayed is a bright, clear carmine.

Husband — "How about the new cook? can she make a good many fancy dishes?"

Wife — "I hope she can, but so far she has only succeeded in breaking a great many."

GOOD HEALTH

J. H. KELLOGG, M. D., EDITOR.
BATTLE CREEK, MICHIGAN.

IS CANCER HEREDITARY?

IN the light of recent investigations of this question, I think I may say with certainty that cancer is not hereditary. This question of heredity is a very interesting one in relation to any disease, but especially so in relation to such diseases as cancer, tuberculosis, and insanity, three diseases which carry off a considerable number of people every year, and which are perhaps more dreaded than almost any others. If a person has cancer, he expects to die; if a doctor pronounces him tuberculous, he expects to die; if he has insanity in his family, he is afraid he is going to be insane himself; so these three diseases are a great dread to human beings.

Formerly, if a doctor was called to a person suffering with one of these diseases, he would ask, "What did your father die of? What did your mother die of? What hereditary tendencies are there in your family?" but at the present time physicians do not pay so much attention to these questions, because it is thought that cancer and consumption are caught rather than inherited. As a matter of fact, consumption is not usually inherited; probably there are very few cases on record of hereditary consumption. There have been cases in which the child of a tuberculous mother was born tuberculous, but such cases are exceedingly rare; the most that can be said about it is that a person inherits a tendency to these diseases,—a tendency to cancer, a tendency to consumption, or a tendency to insanity.

Cancer is believed by bacteriologists to be a germ disease, although it is not positively known what germ produces it. It is found that cancer can be transmitted by inoculation. Two eminent physicians were recently arrested and imprisoned by the German authorities for inoculating with cancer a patient who was already afflicted with the same disease, so that he had half a dozen cancers instead of one. A French physician has announced before the French

Academy the results of some very remarkable experiments in the same direction, having taken a patient who was suffering from a disease by which he would have died after a while, and inoculating him with cancer from another patient, so that the poor fellow died of cancer instead of dying of his legitimate disease.

These, and many other experiments, show that cancer is an infectious disease, and I have no doubt that if a person has cancer, he has caught it from some one else; that the germs of cancer have somehow been communicated to him. And so of consumption of the lungs, or any other part of the body; it did not come by chance, but it came by catching, the same as smallpox, measles, or any other contagious disease. It is not at all likely that cancer or consumption ever originate spontaneously. A person cannot have consumption without having received consumption germs; a person cannot have cancer without being inoculated by cancer germs.

But what is a hereditary tendency to cancer? It is simply an inability to resist cancer germs. In accordance with the theory of germ diseases, most germ diseases are protective. If a man has had smallpox, he is not so likely to have it again; if a person has had measles, he is not very liable to have it again; the injection into the system of the poison of consumption has a tendency to protect from the disease. If a guinea-pig is inoculated with the poison produced by consumption germs, and the injections are repeated, in a little while that guinea-pig will be proof against consumption, and it cannot be given to him. So consumption is a protective disease, the same as smallpox. Guinea-pigs are the most susceptible to consumption of all animals; and if they can be protected from that disease by inoculation, the same as we are protected from smallpox, it seems as though human beings at some time,

when the right process is discovered, might in like manner be protected against consumption and cancer.

Now if this be true, why ought not heredity to protect us from these diseases, rather than render us more liable to them? In other words, if a father or mother has consumption, why should not the children be less liable to it than the parent? It would seem to be in harmony with this theory that heredity should be protective; but we have, as yet, no evidence except what I have given you, upon this question. I do not know but this theory of heredity which has so long prevailed, may be reversed at some time, so that when a man has a long line of ancestors who have died of consumption, he may feel himself very fortunate in consequence of that theory — that a disease is protective against itself.

But here is an element of error which we must not forget, and that is in not noting the fact that the children of consumptive parents are usually born before their parents contract the disease; so that when these children have consumption, it is not a disease which they have inherited, and consequently they do not profit by the experience of their parents with consumption as a protective disease.

For example, here is a young man of twenty; his father died of consumption when he was ten years old. When that child was born, his father did not have consumption at all, consequently he is not protected by his father's consumption. But what conditions have we? This father was a man with small lungs, or he lived a sedentary life, and in consequence of this and the bad air which he has breathed, his chest capacity became small, and his lungs diseased, because they were never completely filled with air. So while he was in that condition, his child would naturally inherit the same morbid conditions which the father had acquired artificially, and the child would have still smaller lungs. The larger the lungs, the greater the ability to resist consumption, because of the large capacity to breathe pure air, and a larger number of cells to resist germs. The child whose lungs are small, and who has small ability to breathe, is likely to contract consumption, so that instead of inheriting consumption itself, he has inherited rather an inability to defend himself against consumption.

The same thing is true of cancer; the conditions of the system are inherited which render some people more liable to this disease than others. In some cases, cancer may be contracted by smoking, but it is not every man that smokes that has smokers' cancer, because not every one has inherited those conditions of the body which render him liable to smokers'

cancer. General Grant had smokers' cancer, and "our Fritz," as the Germans call him, quite probably died of the same disease. Thousands of men are dying of it. There are probably one hundred men to one woman who die of cancer of the lips and mouth; so there is no doubt that smoking has something to do with cancer of the lips and mouth. Smokers are more liable to contract cancer by reason of the conditions brought about by the pipe and cigar, and the poison connected with them. The poison produces a morbid condition of those parts, and the cells of the body have less ability to defend themselves against cancer germs than they ought to have. Women doubtless come in contact with cancer germs just as men do, but they do not have cancer of the lips; they have cancer in other parts of the body, and from causes similar to the irritation of the pipe, that which produces cancer of the lips in men.

There are some people who go through their whole lives with a cloud hanging over them, for fear they are going to die of consumption, cancer, or insanity, because they find something of that kind in their heredity. Very often they find that their father, mother, grandfather, or grandmother has had one of these diseases, and they are sure they are going to have the same disease. I will give you an illustration which may help those who are troubled in this way:—

A lady came into my office at one time, and with a look of terror said, "Doctor, I'm afraid I am going to be insane." "Why so?" I asked. "Why," said she, "I had an aunt who was insane, and my mother tells me that my grandmother had an aunt who was insane, and I am sure I am going insane — it's in the family." "Well now," I said, "let us see whether it is in your side of the family or not. You do not have the whole family in your constitution; you have only a part of it. Now let us see whether insanity belongs to your part of the family or not. You say your aunt was insane, and your mother's mother had an aunt who was insane. Now was this aunt your father's sister, or your mother's sister?" "Oh, she was my mother's sister." "Then your insanity is all on your mother's side?" "Yes, sir." "Well, whom do you look like, your father or your mother?" "My father." "I see you have blue eyes; did your mother have blue eyes?" "No, she had brown eyes; my father had blue eyes; he was a blonde." "And you are a blonde?" "Yes, sir." "And you say you do n't look like your mother?" "No, sir." "You need not have any fears, then, because you do not take after your mother, you take

after your father, who was on the healthy side of your family, do n't you see?" "Yes, sir." Her face brightened up right away, and she left my office happy.

This is an important point to be considered in heredity. There are two sides of a family, two lines of heredity,—a line on the father's side, and a line on the mother's side. If you take after your mother, you need have no fears of inheriting any' disease on your father's side of the family, because your physical make-up is not copied from that side. The same principle holds good if you take after your father. This is a point, as I have said, which should be considered in reference to heredity.

How much does heredity mean? If a man's father was insane, how much does that mean to *him*? We should not take the broad fact that his father was insane, and conclude from that alone that he must sometime be insane too. We must consider the conditions under which the father became insane. Did he become insane without any apparent cause? Did his mind gradually begin to fail without any apparent cause when he was in the vigor of manhood? or was his insanity simply the result of the gradual decay of old age, when he was seventy-five or eighty years old, and when his body was falling into decay? It may be that his brain gave out before his stomach and liver did; in that case he might have had what is called senile insanity,—insanity from decay of the brain incident to old age. This is not to be considered at all upon the question as to whether you are going to be insane. If one is not going to be insane until he gets to be seventy-five, eighty, or a hundred years old, most of us would be willing to submit to that, if we are healthy up to that time; because, in that case, we could make provision for such a remote result of old age.

Suppose the father's insanity was the result of some acute illness, in which there was inflammation or some morbid process, as an abscess in the brain by which the brain was physically injured; that does not mean that you are going to be insane, any more than your father's having fever as the result of an abscess means fever. There was simply an abscess at the brain, degeneracy of the brain followed, and the man was insane.

But if that insanity was the result of overwork or speculation, causing excessive nerve-tension, and his brain gave way under the conditions under which other men's brains do not give way, then that is a thing to be considered.

Such a condition may be illustrated by a steam boiler. The utility of the boiler is due to the

fact that the water is converted into steam, and the steam, being confined, exerts a consequent pressure, and there follows an increasing energy from the increasing pressure of the steam. The strength of one of these stationary boilers is usually about 200 pounds. The strength of the boiler that drives the steamboat—one of those great screw propellers on the ocean—is about 500 pounds. Some boilers have a thickness of shell of over five eighths of an inch, others have a shell an inch thick, almost as stout as a cannon, and will resist a tremendous pressure. Now here is a boiler which is constructed for a 200 pound pressure, and to run, we will say a stationary engine—to run a threshing-machine, perhaps. Such an engine ought to be able to resist a pressure of 200 pounds. We will suppose that every spot in that boiler is able to resist a pressure of 200 pounds, except one little spot, which is weak, or in which the rivets have not been put in properly, and that weak spot is able to resist only 100 pounds pressure. Now the whole strength of that boiler is simply one hundred pounds, because, if the pressure gets above 100 pounds, the boiler will burst at that weak spot.

That is the situation of the man who has a tendency to insanity; his brain is as good as anybody's brain up to a certain point, we will call it a 100 pound pressure, but if the pressure goes above that point, something will give way. If he keeps the pressure below 100 pounds, his brain will maintain its normal condition; but he must not let the pressure get above that point, for if he does, his brain will give out, and he may go to a lunatic asylum. So this steam boiler is as good for a hundred pounds as any boiler, but when the pressure gets above that point, then comes the danger.

The man who has a tendency to insanity must be careful that he does not allow himself to become greatly excited. Such a man must keep out of speculations; he must not have anything to do with them. He must devote himself to such pursuits as will require him to be quiet, and will not subject him to excitement and irritability; he must live a quiet and placid life. If he will keep his nerve pressure down, he has just as good a chance to live a sane, healthy life as any other man, only he must keep below the hundred pounds, for that is all the brain tension he can stand. The same thing is true of any other hereditary tendency. If a man will only take proper precautions against any such tendency, he may, by a careful course of training, even build himself up and make himself strong where he was weak.

WHEN SHOULD FRUIT BE EATEN?—It is customary to take fruit first at breakfast and last at dinner, but I see no physiological reason for this. Viewed from a physiological standpoint, fruit should always be taken first at a meal, because it contains certain savory juices which physiologists term "peptogens." A peptogen is a substance which stimulates the production of gastric juice by the stomach. Thus the secretion of gastric juice is excited by the juices of fruits; hence fruit is a valuable peptogen. This is really one of the greatest values of fruits.

Fruit possesses a comparatively small amount of nutritive material. The grape has considerable nutriment, and so also has the cherry. But the peach, blackberry, strawberry, raspberry, etc., have very small nutritive values. Wheat flour contains eighty-five per cent of nutriment, while the currant has only one seventeenth as much. Even the most nourishing fruits, the grape and the cherry, have comparatively little nutritive value. But in these fruits we have substances which stimulate the gastric juice, and so prepare the way for the digestion of other foods. This being the case, one may readily see one reason why the proper time for taking fruits is at the beginning of a meal.

Another reason is that they are appetizing; they stimulate the appetite as well as the digestion.

There is still another reason why fruits should be eaten at the beginning of a meal: as a rule, they are very palatable. Luscious fruits are certainly very tempting to the appetite; and after one has eaten as much as he ought, if he still has tempting fruit before him, he is likely to eat it, and thus take more food than he needs. After one has taken as much food as his stomach will hold and digest, if he then adds fruit or any other palatable food, he is likely to take too much, and hamper the stomach in its work.

SIGHING.—A sigh is a slow inspiration accompanied by a peculiar movement of the muscles. There are two things which occasion sighs. The most common cause is want of breath. Every sixth or seventh breath is a little deeper than the rest. Let a man sit down and relax all his muscles, and his chest is so cramped that it has no chance to breathe. In a little while nature rebels against this restriction, and compels him to take a long breath. That breath ventilates the lungs by bringing in fresh air; then he collapses again, and again is compelled to take a deep breath. Notice the student bending over his books, busy with his lessons. By and by he straightens up, and does

what is considered by some a very unmannerly thing to do,—puts his hands back of his neck and stretches his arms back as far as he can. I think children should be encouraged to do that, instead of being taught that it is an ill-mannered thing to do. This is nature's antidote for a bad position,—bringing the shoulders back and the chest up. What a good teacher Nature is! If we would only observe what she teaches, we would be surprised to learn about the things we do automatically.

There is a saying that every sigh drives a nail into your coffin. There is no truth in that saying; it is the sigh that saves us. But when a person goes around with a long face, making unnecessary sighs (there are natural sighs and pathological sighs), such sighs help to prepare his coffin; for the man who is constantly looking downward, generally walks with his head down, his chest fallen in, and his whole position in an attitude of weakness. When a person takes this position, his stomach collapses and becomes dilated, the lungs are not inflated, the liver drops, and everything goes wrong, and all in consequence of his long face. If one has a bright face, he will hold himself up; but if he is heaving heavy sighs, he is inviting disease.

MUSCLE-FORMING FOOD.—The best muscle-forming food for everybody is fruit. This is the kind of food out of which the horse and the gorilla make their muscle. The gorilla is said to be the strongest animal on earth. He will take the barrel of a gun and bend it across his arm with perfect ease, or tie it into a knot in an instant. He can kill a hunter with a single blow of his fist. Two or three of them will leap on to the back of an elephant, and beat him to death with clubs. The gorilla lives on fruits. Sometimes he will steal into a cornfield, where they are roasting ears of corn, and carry off the corn when it is soft in the milk. He is also fond of melons.

It is interesting to watch gorillas when they are robbing an orchard. They form in a long line from the orchard out into the woods, some little distance apart, and send out sentinels to watch while the others steal the fruit. The one who gets up into the tree first will pick an apple and toss it to the next one, and he to the next one, and he to another one, just as firemen pass a pail of water from one to another. These animals live upon fruits, and I think this is the secret of their great strength. Then why should not man, the king of creation, the king of animals, live on an equally refined and elevated diet?



A UNIVERSAL ANTIDOTE.

It is quite impossible for any person not a professional chemist or a physician to keep in mind all the various specific antidotes recommended for use in poisoning by the different metallic and other poisons. The following formula is one which can be relied upon as an excellent antidote for arsenic, zinc, digitalis, morphia, strychnia, and, to some extent also, corrosive sublimate and other compounds of mercury : —

R.	Saturated solution of sulphate of iron	100 parts.
	Water.....	800 "
	Calcined magnesia.....	80 "
	Purified animal charcoal.....	40 "

The iron solution must be kept separate from the rest of the ingredients, and mixed with them when required for use, by placing in a bottle and shaking well together. It should be administered in doses of a wine-glass full at a time. It may be taken *ad libitum*.

Here is a convenient method of preparing and keeping the remedy: Place in a pint bottle 4 ounces of powdered copperas chemically pure. Add 6 ounces of water. Cork tightly and label "Iron Solution." Place in another bottle capable of holding two quarts, 5 ounces of calcined magnesia, 2½ ounces of purified animal charcoal or bone-black, and 3 pints of water. Shake well, cork, and label "Magnesia Solution." When the mixture is needed for use, pour all the liquid in the bottle containing the iron solution into the bottle containing the magnesia solution. Shake the latter for a moment, and administer at once ¼ to ½ a glassful. The dose may be repeated two or three times.

While the antidote is being prepared, an emetic may be administered. A good remedy, which is always at hand, is common salt, a tablespoonful to a

glassful of tepid water. An equal quantity of ground mustard is still more effective, or a third of a teaspoonful of powdered ipecac in the same quantity of water. If vomiting does not occur immediately, repeat the dose, drink a large quantity of warm water, and tickle the throat with the finger or a feather. Too much time should not be lost in making efforts to induce the patient to vomit. Make him swallow the antidote as soon as it is prepared, whether he has vomited or not, and continue the efforts to induce vomiting. Artificial respiration, the application of heat to the surface of the body, sponging the spine alternately with hot and cold water, and rubbing of the surface of the body, and, in some cases, the application of electricity, are essential aids to recovering a person from the effects of a poison. Washing the stomach with a stomach tube, is of course more effective than an emetic. Or, a quantity of water should be poured into the tube and allowed to pass out. The stomach in the meantime should be agitated by manipulation with the hand, or by retching or coughing movements executed by the patient.

Acids.—Acids which have been swallowed should be neutralized as quickly as possible by an alkali of some sort. In the absence of anything better, soap suds will do. Lime-water, chalk-water, some plaster from the wall, or a teaspoonful of ashes mixed with a glass of water, may be used for this purpose. Oils, as castor oil, olive oil, and even linseed oil, or melted butter, should also be swallowed. These antidotes must, of course, be applied very quickly, or they will have no value, since the acid will very quickly expend itself upon the mucous membrane. Lime-water is the best antidote for oxalic acid. White of egg, or a whole egg, is also valuable. Milk or thin

gruel or starch paste is also valuable. Anything which will protect the mucous membrane and dilute the poison may be used. Vomiting should be induced as quickly as possible, as even the antidotes which have been swallowed should not be left in the stomach.

Alkalies.—Caustic potash, caustic soda, lye, ammonia, etc., require, as an antidote, vegetable acids, such as lime, almond, or orange juice, vinegar well diluted, or sour cider. Eggs, milk, gruels, olive or almond oil, are also valuable. Aconite, alcohol,

opium, morphia, atropia, and all other narcotic poisons require the application of stimulants over the heart, such as a mustard poultice, or hot fomentations, and hot and cold applications to the spine. In cases of poisoning by opium and alcohol, the patient should be kept moving.

Corrosive sublimate requires white of egg. Phosphorus especially requires avoidance of oils and fats, in which it is an exception to all other poisons. Chemical antidotes are less to be relied upon than emetics and the treatment above suggested.

REMOVAL OF ENLARGED TONSILS.—The popular notion that children are likely to be injured by the removal of enlarged tonsils is entirely without foundation. The writer has removed perhaps a bushel of tonsils, and has never once seen an injurious effect from the operation. On the other hand, great injury frequently results from the retention of these diseased tonsils. Healthy tonsils are useful. A diseased tonsil is filled with small bags which harbor microbes and thus incur the development of various forms of sore throat and particularly of diphtheria, a malady not infrequently fatal. It has been shown that children suffering from enlarged tonsils are much more likely to take diphtheria, and the first cases of diphtheria are quite likely to occur in children who have enlarged tonsils. The operation should not be done after the child has been exposed, however, nor within several weeks after recovering from the disease after the child has suffered from diphtheria.

CRAMP.—Cramp is a nervous disease, due to some trouble of the nerve centers. If it is a general cramp of the whole limb, it is due to a disease of the spine, and should be analyzed by a physician. A cramp is best relieved by seizing the cramping muscle and compressing it with the hands. It may seem that the remedy is worse than the disease, but it will stop the cramping. A leather strap worn around the limb is a convenient remedy. When the cramping begins, buckle the strap as tightly as possible, and there will be no further trouble.

CANKER SORES IN THE MOUTH.—These annoying little sores are caused by an excess of hydrochloric acid in the stomach. Another symptom which goes with this one, is a red tongue, and there may also be extreme soreness in the stomach after eating. This condition is more common than is generally supposed, and persons suffering in this way often attempt to cure the disease by taking all sorts of remedies,

such as pepsin, "Microbe Killer," etc. These remedies are all deleterious, because there is already too much acid in the stomach, and they only add to the quantity. So the patient who takes them is made worse. Sometimes acid fruits are recommended for such patients, but they do harm instead of good.

Persons suffering with an excess of acid in the stomach, of which canker sores are always a symptom, should avoid everything that has acid in it, and should use only such foods as are alkaline. Alkalies neutralize the acid, and if continued long enough, the morbid condition will be permanently cured.

The excessive use of animal food is one potent cause of this condition. It stimulates the stomach in the production of gastric juice and hydrochloric acid, and thus an excessive quantity is produced.

A USE FOR GUM.—A medical writer has discovered, at last, a valuable use for gum, from the fact that it relieves the dryness of the mouth, which is one of the most constant and annoying accompaniments of fever, by maintaining activity of the salivary glands. It is claimed that it also prevents the formation of abscesses in the glands, by maintaining a healthy activity.

WET FEET AND COLDS.—Dr. Brown-Sequard recommends the following as the best way to overcome susceptibility to taking cold from getting the feet wet:—

Dip the feet in cold water, and let them remain there a few seconds. The next morning dip them in again, letting them remain in a few seconds longer; the next morning keep them in a little longer yet, and continue this till you can leave them in half an hour without taking cold. In this way a person can become accustomed to the cold water, and he will not take cold from this cause. But the "hardening" must be done carefully.

ANSWERS TO CORRESPONDENTS.

OATMEAL.—A lady in Indiana inquires if oatmeal is a good article of diet for one who is not naturally robust, eaten perhaps almost exclusively for breakfast every morning.

Ans.—This is one of the most digestible of foods, and a wholesome food for a steady diet.

HORSFORD'S ACID PHOSPHATE.—J. W. G., of California, wishes to know the analysis of Horsford's Acid Phosphate, and its effect on the system.

Ans.—Horsford's Acid Phosphate is one that claims to be a solution of acid phosphate of lime and other bases. It is not an herb food, as is claimed for it, but it may possibly be an aid to digestion in certain cases.

NUTRITION IN VEGETABLES.—H. S., of Indiana, asks why it is that man cannot live on vegetables, and so obtain all the elements necessary for his existence, the same as horses and cows do.

Ans.—Man is by nature adapted to a fruit and grain diet, not to a diet of herbs. A cow can live on grass because she is herbivorous. Man requires fruits and grains because he is frugivorous.

NEURALGIA.—A. B., Mich., asks for a remedy for neuralgia in the head. The patient is also suffering from the *grippe*.

Ans.—Neuralgia is merely a symptom of some diseased condition. Temporary relief may usually be afforded by means of heat, either by the use of flannel cloths wrung out of hot water, or a hot water bottle or a sandbag. The real cause of neuralgia is often to be found in some digestive disorder.

PEANUTS—CANNED FRUIT—SALMON.—D. F., of Illinois, asks the following questions: "1. Are raw peanuts as wholesome as when baked? 2. Are fruits or vegetables put up in tin cans wholesome? 3. Is canned salmon more wholesome than salt fish?"

Ans.—Peanuts are not easily digested when eaten raw. They are more palatable, and much more wholesome, when cooked. It is as absurd to eat peanuts raw as it is to eat peas or beans raw. Peanuts belong to the same class of vegetable products as peas and beans. When baked, peanuts are much less wholesome and less digestible than if thoroughly cooked. They are very palatable if they are cooked in the same way in which peas and beans are cooked, but require longer cooking. At least twelve hours is

required to cook them thoroughly, and develop their agreeable flavor.

2. Canned fruits and vegetables are wholesome if the canning process is done with sufficient care.

3. No. Canned fish and condiments of all sorts are liable to dangerous contaminations with germs, from insufficient sterilization. In connection with the canning process, a form of decomposition not recognizable by the odor is often present in canned meats, particularly in canned salmon. Such food has not infrequently produced fatal results.

COTTON FOR BEDCLOTHING—WHAT TO PUT UNDER CARPETS—SUGAR FOR CHILDREN.—Mrs. G. W. N., Kan., sends us the following queries: "1. If cotton is objectionable in comfortables for beds, what would you recommend? 2. What mattress would you recommend? 3. What is best to put under carpets? 4. Would you let children eat much sugar?" The last question is asked in behalf of her little daughter, who is naturally of a happy disposition, but of late has been cross and fretful, and the mother fears she has worms. Her cheeks are frequently bright red.

Ans.—1. Wool is preferable to cotton, either as material for quilts or comfortables, or in the form of woolen blankets, which are preferable.

2. For cold weather, a wool mattress. For hot weather, a cotton or hair mattress. Never feathers.

3. A floor. Carpets ought to be discarded; mats should take their place. They should be taken out and shaken daily, or at least several times a week.

4. No.

BURNING AND TINGLING SENSATION IN THE ARM.—A. H., of Wis., would be glad of some advice in regard to a disease affecting his right arm. For about two years he has experienced a burning, tingling sensation, which began in the hand, and has gradually extended up the arm to the shoulder and side of face and neck. He has spent some time and money with a specialist on nervous diseases, but to no purpose. There is no severe pain accompanying the affection, but the part suffers from cold, and the skin in cracked and dry.

Ans.—Sponge the arm alternately with hot and cold water for twenty minutes daily; then rub for fifteen minutes with oil. The general health may be improved by daily tepid sponge baths, and, of course, friction of the skin, and wholesome nutritious diet and abundance of out-of-door exercise.

IS SALT NECESSARY FOR HEALTH?—S. D. P., Minn., asks if the use of salt is absolutely necessary to the maintenance of health in both man and beast. Absolute proof is called for on the subject.

Ans.—No. The absolute proof is to be found in the fact that for centuries human beings have lived, in the interior of Africa, long and vigorous lives without ever tasting salt. Carnivorous animals never make use of salt. Even the antelope and the cattle on the plains of Wyoming and other Western States and Territories, live well without salt.

PILES—ENLARGED TONSILS.—Mrs. M. M. W., of Nebraska, would be glad, 1. Of a remedy for piles in which there is not much soreness, but swelling, and for another case of piles in which there is soreness and itching, with hard lumps and sometimes bleeding. 2. Would you advise having enlarged tonsils cut out?

Ans.—1. Bathe the parts with distilled extract of witch hazel, or an application of an ointment consisting of 1 part fluid extract of hamamelis or hydrastis, and 3 parts of vaseline.

2. Large tonsils ought to be removed. Excision is the best means of removal.

WHAT TO EAT AND DRINK.—B. T., Ark., would like to know just what a man ought to eat and drink in a warm climate, who is desirous of having good health.

Ans.—Eat wholesome food, consisting chiefly of fruits and grains with wholesome vegetables and a moderate allowance of milk. Take pains to have all the food sterilized, unless it is known to be thoroughly aseptic. Avoid eating the rinds of fruit, or foods which have been exposed to air or dust for any length of time. Drink boiled water. Eat no milk which has not been sterilized.

NERVOUS PROSTRATION—BANANAS—COLD TO THE HEAD DURING FOMENTATION.—Mrs. L. W. L., of Michigan, makes the following inquiries:—

“1. What proportion of Gluten Biscuit No. 2 should be eaten in connection with other Sanitarium foods, for a lady confined to her bed with nervous prostration and loss of blood, and who is troubled with acid dyspepsia and constipation?”

“2. What fruits can be safely used in this case?”

“3. Are bananas astringent, and would they be safe to use in this case?”

“4. What treatment is most beneficial for a weak back?”

“5. Should cold water always be applied to the

head when giving fomentations to the spine or any part of the body?”

Ans.—1. One or two ounces of Gluten Biscuit No. 2 at each meal would be a very fair proportion. I would advise for this lady “B. Gluten Biscuit No. 2,” which is especially adapted for cases of constipation.

2. Cooked sub-acid fruits eaten without sugar.

3. Bananas are not astringent. Some persons cannot eat raw bananas. This patient might be able to eat bananas, or banana flour in the form of a gruel.

4. The treatment required depends upon the nature of the weakness. Exercise will cure the majority of weak backs. In some instances, a prolapsed stomach or a displacement of some pelvic organ is the cause of weakness, in which case special measures must be adopted.

5. Whether or not cold water should be applied to the head, depends upon the effect of the application. If the head is heated and the cheeks flushed, then the hair should be moistened, or a wet cloth applied over the forehead.

DRINKING WATER EXPOSED TO IMPURE AIR.—A. H. T. inquires, “Does drinking water become unfit for use by being exposed to impure air?”

Ans.—When water is exposed to the air, it is exposed to the germs which are in the air, and becomes more or less contaminated; but it does not to any great extent absorb the germs and impurities in the air, and therefore does not become, to any great degree, a source of purification of the air, as many persons imagine. However, the water becomes contaminated by exposure to the air, but the contamination is not so great as to produce any serious consequences. If the water be boiled, it will be entirely harmless.

REMOVAL OF SUPERFLUOUS HAIR.—Mrs. C. A. B., Mass., inquires if the powder spoken of in the November ('92) GOOD HEALTH for the removal of superfluous hair will increase the growth after using. Wishes also to know of the process in which the electric needle is used.

Ans.—1. The use of depilatory powders does not decrease the growth of hair. 2. The only radical method of destroying hairs is to pass a current of electricity through the root of the hair by means of a needle electrode passed into the hair-follicle. The operation may be made almost painless by the employment of cocaine as a local anæsthetic. It is, however, very tedious when the number of hairs to be removed is very large.

RELIEF DEPARTMENT.

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

1. Young orphan children.
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.

The following list contains the names and addresses of persons who have kindly consented to act as agents for us in this work, and who have been duly authorized to do so. Facts communicated to any of our local agents in person will be duly forwarded to us.

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, 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.]

AGENTS OF THE MEDICAL MISSIONARY AND BENEVOLENT ASSOCIATION.

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Hatch, J. A., Watrousville.
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Stringer, Mrs. Carrie, Lapeer.
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Terrell, John T., Byron Center.
Thompson, J. H., Quincy.
Trotman, John, Traverse City.
Tyler, D. S., N. Muskegon.
Westfall, L. T., South, Allen.
Westphal, Mrs. G. C., Brighton.
Wheeler, F. A., Sherman.
Young, S., 218 N. Main St., Ionia.

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Hoover, Eld. H. L., Quinn City.
Hoover, H. T., Memphis.
Hoover, T. A., Nevada.
Moore, J. Scott, Henderson.
Rice, F. J., Box 289, Appleton City.
Santee, C., Carthage.
Sellarck, T. J., Fredericktown.
Tovey, W. B., 1411 E. 16th St., Kansas City.
Willis, H. K., Pleasant Hill.

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Wilkins, Mrs. V. C., York.
Weikert, Annie L., Stockville.
Winterton, S. A., Seward.
Wilson, Amelia, 618 N. 15th St., Nebraska City.
Walker, Nettie A., North Loup.

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Farnsworth, Elgen G., Washington.

NEW YORK.

Baldwin, H. Frank, Alden.
Bowe, E. A., Batavia.
Caton, W. C., Jeddo.
Cobb, A. C., South Russell.
Dobbins, James, Jamestown.
Eaton, W. C., Jeddo.
Evans, David, Black Creek.
Gleason, Alex., 1201 Niagara St., Buffalo.
Hicks, F. H., Salamanca.
Jones, Ellen E., Frankfort.
Lindsay, C. W., Coomer Sta.
Pratt, Chas. N., Keene Center, Essex Co.
Raymond, J. W., Wheeler.

Raymond, N. S., Wheeler.
Simkin, Wm., Wellsville.
Taylor, C. O., Norfolk.
Thurston, S., 214 Winsor St., Jamestown.
Treadwell, Wm., Pennellville.
Tuttle, A. E., 11 Mechanic St., Watertown.
Tyrel, M. S., North Creek.
Van Duzer, A. F., 65 Henry Ave., Newburg.
Weston, Orom, Pierrepoint.
Whitford, Irving, Adams Center.
Willson, J. V., 317 W. Bloomfield St., Rome.

OHIO.

Peterson, John, Box 25, Astoria.

Van Horn, E. J., 74 Kinsman St., Cleveland.

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Bunch, J. C., Cognille.
Burden, Warren J., Montavilla.
Hurlburt, E. D., St. Johns.
Johnson, C., Marquam.

Logan, L. A., Elk City.
Morrison, Isaac, Talent.
Tabor, E. C., 163 Winter St., Salem.
Wait, V. O., Albany.
Will, J. Wm., Corvallis.

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Barron, Wm., Montrose.
Bowersox, A. S., New Columbia.
Butzer, J. L., Spartansburg.
Hine, C. O., Shunk, Sullivan Co.
Kagarise, J. S., Salemville, Bedford Co.
Matteson, Mrs. A. J., Mill Village.
Mulhollen, Louise, Flemington.
Owen, C. H., North Warren.

Parker, J. M., Mexico.
Rowe, Mrs. L. A., Titusville.
Spencer, Anthony, Canton.
Voorhees, L. W., Shinglehouse.
Ward, O. H., Lundys Lane.
Williams, I. N., Corydon.
Williamson, C. H., Washington.
Zeidler, W. H., 23rd Ward, Pittsburg.

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Dingman, Darwin, So. Bolton.

Hammond, Mrs. J. H., So. Stukely.
Rickard, H. E., Fitch Bay.

RHODE ISLAND.

Stillman, E. A., 91 Main St., Westerly.

Stone, Mrs. S. D., Apponaug.
Sweet, Clark L., Slocumville.

WASHINGTON.

Barber, O. W., Carrollton.
Barrett, T. H., Box 113, Wilkeson.
Boardman, A. D., Sumner.

Nellis, S. W., 309 Poplar St., Seattle.
Wolfkill, W. S., Colby.

WEST VIRGINIA.

Babcock, Mrs. Mina, Newark.
Bowen, Mrs. G. L., Newburg.

Johnson, Mrs. Maria, Carrier 5,
Parkersburg.

WYOMING.

Worth, Mrs. Prudie, Buffalo.

Angleberger, G. W., Cheyenne.

PERMANENT HOMES FOR CHILDREN.—There are thousands of childless homes in the United States, where one or more children would be a blessing. It is the purpose of this department to find these homes, and also to find the little ones to fill them. There are thousands of such little ones within the territory in which this journal circulates, and we shall be glad to know about them, and to be instrumental in finding homes for them. The following persons are ready to receive children:—

Geo. W. Page, Arkansas.
Mrs. Emma L. Stanley, Colorado.
David Ferguson and wife, Illinois.
L. G. Hiatt, "
Mrs. Calista Gesler, Indiana. "
Flo O. Hudleson, "
Mrs. E. Rodgers, "
W. G. Frame, Iowa.
James Hackett, Kansas.
Mr. Laman, "
Mrs. Amy Hallock, Michigan.
Mrs. Kate Carlisle, "
Mrs. Mary Pickell, "
N. H. Hammond, "
Elmer E. Brink, "
Ellen C. Jessup, "
Mrs. R. Pewers, "
Mrs. Cary Fish, "
Mrs. Wm. Kirk, "
F. H. Bosturck, "
L. M. Lawton, "
Norman Beal, "
L. Strickland, "
E. B. Adgate, "
D. J. Marvin, "
Mrs. Mosher, "
Miss Corgan, "
Mr. Rooney, "
Wm. Allen, "
Mr. Wilkin, "
A. B. Rice, "
Mrs. W. H. Parker, Minnesota.
Mrs. Scott Snyder, "
Mrs. R. E. Crane, "
J. C. Kraushaar, "
Hans F. Nelson, "
Miss Rose Lull, "

Lois Mathews, Minnesota.
Dr. J. G. Stair, Missouri.
Mrs. E. A. Rose, North Dakota.
Mrs. M. J. Post, "
W. R. Balsor, "
Mrs. P. S. Thompson, Nebraska.
Mrs. W. F. Jenkins, "
Mrs. M. I. Miner, "
Henry Shoephelt, "
A. Jones, "
Mrs. Elmira Dana, New York.
Mrs. Brooks, "
Mrs. M. J. Modill, Ontario.
Mrs. Lydia Strope, Ohio.
Maggie Potter, Pennsylvania.
Ezra Backus, "
Mr. Hough, "
Mrs. Geo. R. Sanderson, S. Dakota.
Mrs. M. A. Hanson, "
Mary A. Johnston, "
Martin B. Gibson, "
Ida C. Rockwell, "
C. A. Kenison, "
A. F. Leonard, "
John Leonard, "
Mrs. G. J. Link, "
R. S. Royce, "
J. B. Fassett, "
Mattie Rullaford, Washington.
Wm. Stewart, "
H. M. Chesebro, Wisconsin.
Stephen Roese, "
N. B. Carter, "
Mrs. T. L. Morton, Virginia.
T. E. Bowen, West Virginia.
Mrs. J. A. Holbrook, Texas.

TEMPORARY HOMES.—It is often necessary to find temporary homes for children, while waiting for permanent homes. We are glad to announce that the following persons have volunteered to take such needy ones in case of emergency. We shall be glad to add to the list. All correspondence should be conducted through this office.

Mrs. E. L. Mc Cormick, Michigan.
Mrs. A. M. Osborn, "
Mrs. Anna Haysmer, "
J. Staines, "
John Wallace, "
N. A. Slife, "
D. D. Montgomery, "
Chester Hastings, "

Anthony Snyder, Michigan.
Henry Snyder, "
F. D. Snyder, "
Wm. Kirk, "
E. Van Essen, "
Dr. J. D. Dennis, "
Mrs. Prudie Worth, Wyoming.
James Dobbin, New York.

TWO BOYS WHO NEED A TEMPORARY HOME (Nos. 106 AND 107).—A widowed mother, living in Michigan, asks for homes for her two boys, Carlos, aged 12,

and Willie, aged 9. They are strong, healthy boys, but are living where they have no school privileges. The mother has her aged parents to care for, and is willing to clothe her boys, but is very anxious for them to be where they can have religious training and the advantages of school.

A FRIENDLESS BOY (No. 108).—A little boy, in Pennsylvania, about 8 years old, needs a home where he can have good Christian care and love. Left an orphan, he has no one in the wide world to look out for him, and is at present in the care of the town authorities, who have secured for him board and lodging, but not a *home*.

TURNED ADRIFT (No. 109).—Another little boy, in Michigan, aged 14, is left without a home because his stepfather refuses to support him. The one who writes of him says, "He is a very nice little fellow, with a good education for his years, and of good morals." Will not some one be willing to have their home made brighter by his presence?

TWO LITTLE SISTERS (Nos. 110 AND 111), in Pennsylvania, the older fifteen, are in need of a home or homes where they can be trained and educated for usefulness. The mother is a widow in needy circumstances, and will part with the girls rather than see them come up amid surroundings which may prove their ruin. They are bright, intelligent girls.

A LITTLE BOY (No. 112), eleven years of age, living in the State of New York, is in need of a home. He is a bright, active boy, healthy, with a light skin, and dark hair, dark, keen eyes, and an open, free countenance.

A HOME WANTED FOR A BABY GIRL (No. 113).—A little girl seventeen months old, in Massachusetts, is in need of a home. She is a smart, active, healthy child, with blue eyes, light brown hair, and good features. The aged couple with whom she is now living, are unable to keep her longer, but the description they give of her is enough to make one long to see the little lady.

A FARMER BOY (No. 114).—A boy living in Michigan, by the name of Hiram, and fourteen years old, wants a home on some farm, where he can have the care of horses and cattle and other stock, this being his particular delight. He is a strong, healthy, thick-set boy, with light complexion, and blue eyes. He has the reputation of being truthful.

LITERARY NOTICES.

THE May number of *Jenness Miller Illustrated Monthly* devotes considerable space to short stories. Countess Annie de Montaigne has an elaborate article on "The Rose Gardens of the World." "Happiness in Childhood," "Under our Evening Lamp," "Latest Fashions," "Woman's Future," by Lady Florence Dixie. "Jennie Lind's First Music Lesson," "How Woman may be Wanted," and "Girls of Yesterday and To-day," are some of the other attractive features. Useful articles of genuine value are given as premiums to new subscribers. Sample copy, 10 cents. Price, \$1 a year; published by Jenness Miller Co., 927 Broadway, N. Y. City.

THE *Philanthropist*, edited by A. M. Powell, published in New York, is one of the best journals that comes to our table. Its "purposes are the promotion of social purity, the public protection of the young, the suppression of vice, and the prevention of its regulation by the State," in all of which purposes GOOD HEALTH heartily sympathizes, and adds its own influence so far as possible. The journal is published monthly, every number containing some vigorous blows against immorality and vice, and good works in favor of various reforms.

Lippincott's Magazine for May, 1893.—The admirers of Rosa Nouchette Carey will be gratified to learn that the complete novel in the May number of *Lippincott's* is from her facile and well-tried pen. Its title is "Mrs. Romney." The third in the series of *Lippincott's* Notable Stories, "A Pastel," by Cornelia Kane Rathbone, is a delicate and touching sketch of wasted loyalty and disappointed hope. It is illustrated throughout. James Cox furnishes a full and glowing account of "New St. Louis," illustrated with cuts of a dozen of the huge buildings which have lately risen in that thriving and progressive city. John Bunting traces the origin and history of "The Society of the Cincinnati," with the violent objections which were raised in its early days against its supposed aristocratic character and dangerous tendency. This article also is illustrated. Mrs. Gertrude Atherton supplies a short but appreciative account of the American sculptress Kühne Beveridge, with a cut of her most notable work, "The Sprinter." Professor L. M. Haupt has a brief article on "Colonel Pope and Good Roads." M.

Crofton, in "Men of the Day," gives sketches of William Morris the poet, Archbishop Satolli, and Secretary of War Lamont. The poetry of the number is by Louise Chandler Moulton, Dora Read Goodale, Charlotte Pendleton, and Arthur D. F. Randolph.

"SCENES FROM EVERY LAND."—A collection of over 500 fine photographic views, designed to take the place of an extended tour of the globe, and embracing the most beautiful, interesting, and striking scenes that divert the traveler abroad, the whole forming a photographic panorama of the world; with an introduction by Gen. Lew Wallace, and descriptions of the different scenes by Edward Everett Hale, D. D.; Washington Gladden, D. D.; Russell Conwell, D. D.; Hamilton W. Mabie, LL. B., Lit. D.; S. F. Scovel, D. D., LL. D.; C. H. Payne, D. C., LL. D.; Hon. Wm. C. P. Breckinridge; Hon. Henry Watterson, J. H. W. Stuckenburg, D. D., of Berlin, Germany, and other talented writers; edited by Thomas Lowell Knox. Springfield, Ohio: Mast, Crowell, and Kirkpatrick.

As all the illustrations are made from actual photographs, they possess the charm of accuracy; a photograph tells no lies. The descriptions are charmingly written, and contain a surprising amount of information. The system of indexing used renders the information relative to any city, country, building, or scene readily accessible, thus making it a valuable work of reference. It contains many fine photographs of famous paintings and statuary in the art galleries of London, Paris, Florence, Rome, Dresden, and other great cities. The publishers have cause for congratulation in the fact that considerable space is devoted to American scenery, there being too much of a tendency on the part of publishers generally to illustrate other lands to the neglect of our own.

The typography and presswork are excellent, and the character of the views selected shows careful, painstaking work and nice discrimination. Evidently the world has been ransacked for the beautiful in nature and art, and as one turns the pages of this book, he becomes lost in the contemplation of famous castles, hoary cathedrals, historic ruins, charming mountain, lake, and river views, and a thousand and one other strange, fascinating, and instructive objects that give variety to terrestrial scenery.

PUBLISHERS' DEPARTMENT.

STATE SANITARY CONVENTION.—A State Sanitary Convention, the thirty-eighth in the series of conventions held under the auspices of the State Board of Health of Michigan, will convene April 27 at the Congregational church in Stanton, Mich. The Convention will last two days. The program for the Convention includes such practical and interesting subjects as "Alcohol in Health and Disease," "Diseases of Domestic Animals Communicated to Man," "Health and Disease," "School Sanitation," "Achievement of Sanitation Measured by Vital Statistics," and similar topics discussed by able and experienced physicians and sanitarians. These conventions have been the means of great good to every community in which they have been held, and have unquestionably been the means of saving hundreds and perhaps thousands of lives in this State since they were inaugurated. The Board of Health, through its able and efficient secretary, Dr. H. P. Baker, is able to make a most remarkable showing of good results from its work in the saving of human life. According to statistics which have been carefully compiled at the office of the board, nearly 11,000 human lives have been saved by the restriction of three diseases alone; namely, scarlet fever, smallpox, and typhoid fever, in the last five years. Such work ought to be more thoroughly appreciated than it is. Not the least of the good results likely to flow from sanitary conventions held in different parts of the State, is making the people acquainted with the value of its work.

* *

HIGHWAY IMPROVEMENTS.—Hon. Albert A. Pope, of Boston, Mass., is doing an excellent work for the country in agitating the question of highway improvements. Mr. Pope is a manufacturer of bicycles, and is probably the largest and most successful manufacturer of these vehicles in the world. Mr. Pope is, of course, interested in the improvement of roads, as such improvements will increase the number of bicycles in use; but he is not the only manufacturer of bicycles, neither are bicycles the only wheeled vehicles which require good roads to travel upon. A good road is as great a saving to the muscles of horses as to human muscles; indeed, the number of horses interested in good roads is vastly greater than the number of bicycle riders likely ever to be interested in this question, and it is not simply a question of sentiment, a mere saving of the feelings of the poor animals, who, under the sting of lash and goad, are at the present time wearily dragging heavy loads over almost impassable roads,—it is a question of the conservation or economy of energy. A horse has not an unlimited capacity to pull, and can draw over a good road at least three times as heavy a load as he can possibly pull over the sort of roads which are to be found in the majority of our country districts at certain seasons of the year. Mr. Pope has taken hold of this question in a broad-minded, liberal, and patriotic spirit, and we are glad to aid the good work he is doing by thus calling attention to it.

Mr. Pope will be glad to send literature relating to the subject to any one who will address him at Boston, Mass., P. O. Box "B."

* *

THE CHICAGO BRANCH SANITARIUM.—At the request of the Medical Missionary and Benevolent Association, who have charge of the establishment of a Medical Mission in Chicago, the managers of the Battle Creek Sanitarium have organized a Chicago branch of the Battle Creek Sanitarium. This institution will be open about May 15; the expectation was to open it May 1, but the backwardness of the season has given rise to various delays, which have hindered the work of preparation, so that it will

be impossible to have it open before the middle of May; this will doubtless be in good time, however, for the accommodation of the old patrons of the institution, as it has now become evident to the public, as it doubtless has been to the managers of the World's Fair for some weeks, that the Fair cannot possibly be in readiness for public inspection for some weeks after May 1. A portion of the grounds still remains to be graded and paved, and some of the principal buildings are yet unroofed.

Special circulars have been prepared, showing the location and price of each room, so that those wishing to visit the Fair can arrange for dates in accordance with their convenience. All letters respecting the institution should be addressed to the Sanitarium, Battle Creek, Mich. The address of the Chicago branch is 28 College Place. New and elegant bath and treatment rooms are being fitted up in the institution, and by June 1 at the latest it will be in full readiness for business.

* *

A HIGH CASTE BRAHMIN.—Swamee B. Nand, the son of the governor of Jodhpur, India, is newly arrived in Battle Creek, and has entered upon studies at the College. The 9th of April he gave a very interesting address in the Sanitarium upon "The Past History, Customs, and Religions of India." He is twenty-three years of age, and has been in America about three years. He graduated at the age of eighteen from the University of Calcutta, and then took two more degrees at an institution in Bombay. He came to this country to pursue advanced studies in mechanics in the University of Pennsylvania, but soon after his arrival became converted to Christianity. This cut him off from all revenue and prospects in his native land, and he had a pretty hard time until Col. Elliot F. Shepard found him out, and assumed a paternal interest in him, enabling him to continue his studies in the University of Pennsylvania, and also sending him to Yale. With true Brahmin instincts, he abhors the meat-eating customs of this country, and hearing that vegetarian principles were popular in Battle Creek, he came on here, and will remain for the present pursuing Bible studies. He expects to return to India as a Christian missionary in the near future.

* *

THE Sanitarium guests were recently given a delightful treat in a concert by the Orpheus Club, of Battle Creek, assisted by Miss Helen Cox, a fine soprano singer from Iowa City, Iowa, with Prof. Edwin Barnes as accompanist. The Club sang twelve numbers, and kindly responded to several encores. Miss Cox is visiting her father, Hon. J. L. Cox, who is a patient in the Sanitarium and a long-time friend of the institution. The Orpheus Club have long been favorites at the Sanitarium, and are warmly welcomed with every appearance.

* *

A NEW SANITARIUM IN THE NORTHWEST.—The Medical Missionary and Benevolent Association, the management of which co-operates with that of the Battle Creek Sanitarium, have determined to open a Sanitarium in the vicinity of Walla Walla, Wash., or Milton, Ore., in the near future. A business manager is already on the spot making arrangements, and a physician will be in readiness by the time other preparations are completed. The work will be commenced in the building formerly occupied by the Milton Academy, but the permanent location of the establishment, whether at Milton or Walla Walla, will be determined by the inducements offered. A good site, abundance of water, wholesome surroundings, and sufficient land for the purpose, are the requirements. There being no institution of this kind in the Northwest, it is believed that this projected enterprise

PUBLISHERS' DEPARTMENT.

will be successful from the start. Assurance of such success is already given by the considerable number of applications received from persons who wish to avail themselves of the advantages of such an institution at the earliest possible moment.

* *

MRS. C. C. LAKE AND MISS CELIA SMOCK, who have been engaged for the past few years in rescue work among erring girls and women of Chicago, have recently been guests of the Sanitarium, for the purpose of taking a little needed rest. They are both women of entire consecration to the Master's service, doing with loving fidelity a branch of work which is spurned by the many, and wonderful have been the results. The great need now is for consecrated money to be poured in, for this class of work must be of practical help, else it cannot be at all. Mrs. Lake gave a most earnest and stirring address to the Sanitarium guests and helpers, the evening of April 14.

WHERE TO LOCATE NEW FACTORIES.

THIS is the title of a 150-page pamphlet recently published by the Passenger Department of the Illinois Central Railroad, and should be read by every mechanic, capitalist, and manufacturer. It describes in detail the manufacturing advantages of the principal cities and towns on the line of the Southern Division of the Illinois Central, and the Louisville, New Orleans, and Texas Railroads, and indicates the character and amount of substantial aid each city or town is willing to contribute. It furnishes conclusive proof that the South possesses advantages for the establishment of every kind of factory, working wool, cotton, wood, or clay. For a free copy of this illustrated pamphlet, address C. C. Power, Foreign Representative, 58 Michigan Ave., Chicago, Ill.

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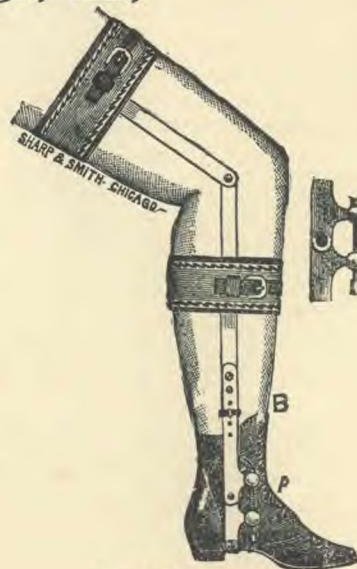
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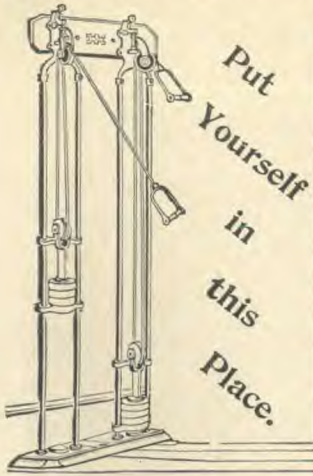
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THE SANITARIAN.

1873.—Twenty-First Year.—1893.

THE SANITARIAN is a monthly magazine devoted to the promotion of the art and science of sanitation, mentally and physically, in all their relations; by the investigation, presentation, and discussion of all subjects in this large domain, as related to personal and household hygiene, domicile soil and climate, food and drink, mental and physical culture, habit and exercise, occupation, vital statistics, sanitary organizations and laws,—in short, everything promotive of, or in conflict with, health, with the purpose of rendering sanitation a popular theme of study and universally practical.

THE SANITARIAN is filled with articles of scientific interest and practical value. It would be difficult to plan a better professional magazine than this, which is to the medical world what the *Scientific American* is to the artisan world. It deserves a greatly increased circulation.—*Baltimore Methodist*.

THE SANITARIAN is not only an interesting magazine to the specialist and the medical man, but it is of high value to thickly settled communities, to homes, to general readers, to city authorities—indeed, we would place the journal, for public good, in the hands of every adult, believing that misery and suffering would thereby be lessened and human happiness augmented by the knowledge the journal disseminates.—*Sacramento Record-Union*.

TERMS:

\$4.00 a year, in advance; 35 cents a number; sample copies, 20 cents—ten two-cent postage stamps.

The SANITARIAN is published as hitherto, in New York. THE AMERICAN NEWS COMPANY, General Agents. Newsdealers will get their supplies from them.

All correspondence and exchanges with the SANITARIAN, and all publications for review, should be addressed to the editor,—

Dr. A. N. BELL, Brooklyn, N. Y.

Science in the Kitchen.

By MRS. E. E. KELLOGG, A. M.,

Superintendent of the Sanitarium Experimental Kitchen and Cooking School, and of the Bay View Assembly Cooking School, Superintendent of Mothers' Meetings for the N. W. C. T. U., and Chairman of the World's Fair Committee on Food Supplies for Michigan.

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H. C. Bunner will furnish a series of six sketches, entitled "JERSEY STREET AND JERSEY LANE." Illustrated.

Robert Grant will relate the further experiences of Fred and Josephine in "A SEQUEL TO THE REFLECTIONS OF A MARRIED MAN." Illustrated.

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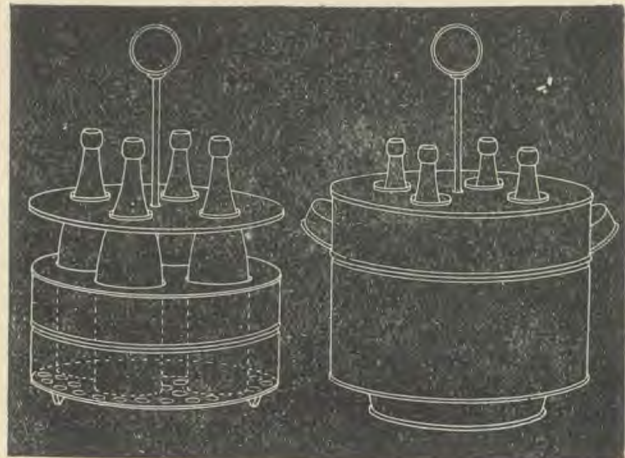
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The undersigned have for many years been engaged in the publication of books for the million, and several hundred thousand copies of their bound volumes are to be found scattered among the households of the United States and other English-speaking countries, although comparatively little effort has been made to push the sale of their publications. They are now organizing a vigorous campaign for the introduction of their various works in all parts of the United States, Canada, and the West Indies. **Liberal commissions are offered agents, splendid territory, and books, the selling qualities of which are not excelled by any subscription books offered by any publishing house in the world**, as will be seen by the following reports of work done within the last few weeks in different parts of the United States: —

John P. Neff, a college student less than twenty-one years of age, now at work in a Western State to earn money to pay his expenses during the next college year, has sold of the two works advertised on this page, books to the following amounts, for seven successive weeks consecutively: —

	First week (4½ days)	\$240		
Second week.....	\$244		Fifth week.....	\$440
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Fourth "	370			

This same agent sold \$180 worth of books in one day.

Another agent (C. C. Nicola) sold 65 books in one week; amount of sales, nearly \$300.

F. A. Shaver, an agent working in Wisconsin, took orders for over 200 books, and delivered nearly all of them, in three weeks.

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THE QUESTION OF FOOD.

MODERN physiological and bacteriological discoveries have given to the question of food and diet an importance in the minds of progressive practitioners which it did not possess a quarter of a century ago, although at a more remote period some advanced teachers, as, for example, Dr. Willard Parker, of New York, taught that *materia alimentaria* was of far greater consequence than *materia medica*. This assertion, then considered almost a heresy, is at the present time echoed by almost every teacher of therapeutics; and the interest in medical dietetics has given rise to a great variety of food products of varying merits, a vast number of which might be termed "dietetic nostrums." Of the so-called "health foods," which, under various names and guises, have been placed before the public, the majority, notwithstanding the high prices charged for them, have possessed few if any of the merits claimed for them, being made to sell rather than to supply the profession the means of meeting any therapeutic indication. This fact has been clearly shown by the analyses published by the *Scientific American* and other scientific journals.

Being charged with the duty of providing suitable dietetic preparations of a special character for a large hospital (the Battle Creek Sanitarium and Hospital), the undersigned, some years ago, made a careful investigation of all the so-called "health foods" manufactured and sold in this country. The result was the discovery of the fact already stated, that these goods were made chiefly to sell, and not to cure sick people, the only virtue possessed by many being the magic influence of the word "health" connected with their titles, which doubtless, in some instances, does efficient service as a "mind cure." Only a very few really valuable preparations were found. In certain lines in which special preparations were called for, an almost absolute void existed.

To meet the evident necessities for **GENUINE FOOD PRODUCTS**, prepared in such a manner as to require the least possible labor on the part of the digestive organs, and to meet the most common and important therapeutic indications, and at a price in proper proportion to first cost, so as to be **WITHIN THE REACH OF THE AVERAGE INVALID**, was the problem which presented itself for solution. To solve this problem, or to attempt to do so, the undersigned made a series of experiments which have been continued for nearly seventeen years, and with the result of producing a great number of improvements in medical dietetics and methods of meeting the dietetic wants of the invalid. The means at service for this work have been an **Experimental Kitchen**, under able management; a **Laboratory of Hygiene**, with a full outfit of chemical, bacteriological, and physiological appliances; and a **Large Hospital and Sanitarium**, feeding daily from 600 to 700 persons, including every possible phase of digestive and nutritive disease. Many products and combinations have been discovered and formulated, which were at first exceedingly promising, but which proved by experiment to be not possessed of permanent value. A few have stood the test of many years' experience and trial, under all conditions and in all climates, and their production has gradually increased from a few hundred pounds annually to hundreds of tons. The following are a few of the most important of these preparations:—

• • • GRANOLA. • • •

This is a farinaceous product, composed of a combination of the most easily digested grains, and containing the largest possible amount of all the elements of nutrition in the proportion needed for complete nutrition. The manner of preparation is such as to secure to a large extent the advantages of those changes naturally effected by the digestive process, and without the development of those side products which are possessed of a disagreeable flavor and more or less toxic properties which are produced by the various enzymes found in the digestive fluids.

Granola is an exceedingly valuable and digestible product, much resembling in flavor and mode of preparation the renowned gofio, the staple food of the natives of the Canary Islands, which has attracted to that out-of-the-way place hundreds of invalids by its remarkable virtues as a curative agent in various forms of dyspepsia. Granola is just the thing for a patient who needs to gain in flesh. This food is put up in pound packages.

• • • WATER BISCUIT. • • •

The need of supplying certain classes of patients with the most nutritious foods in the simplest form, and at the same time without an excess of fluid, led to a series of experiments which resulted in the production of a biscuit as light, toothsome, and delicate in flavor as the most fastidious could desire, and without baking powder, yeast, or any other fermentative "raising substance." Any person who has in mind the tough, tooth-breaking water biscuit commonly known as sea biscuit, or hard tack, will be more than astonished to find an article possessed of all the virtues of a water biscuit, and also the palatable properties of an oyster cracker.

• • • GLUTEN. • • •

The necessity for a genuine and practical gluten preparation has long been appreciated by the medical profession. For a few years this want has been supplied in France by gluten biscuit containing from 40 to 50 per cent of gluten. These biscuits, while not very palatable, have been far superior to anything produced in this country, and at the same time have been all they were claimed to be, a real gluten biscuit; whereas the so-called "gluten breads" and other preparations of gluten

which have been sold under various names in this country, have been almost without exception most thoroughly fraudulent in character. This statement is well backed up by exposures made by the *Scientific American* and other authorities within the last few years.

A visit to Paris a few years ago gave us an opportunity to make a thorough investigation of the gluten preparations made in that country and their method of production, which has since been perfected by us, as the result of laborious experiments and researches. The following are our principal gluten preparations:—

1. **Pure gluten**, in the form of gluten biscuit, 72 to the pound, eatable and not unpalatable. The only successful attempt ever made in this or any other country to produce an absolutely pure gluten bread.
2. **60 per cent gluten**,—also in the form of biscuit, crisp and palatable.
3. **40 per cent gluten**,—a biscuit which any one could eat with relish, and just the thing for diabetic patients.
4. **25 per cent gluten**,—a really delicate, crisp, and toothsome product. It answers the requirements of all except the worst cases of diabetes, and is just the thing for atonic dyspeptics, neurasthenic and anæmic patients, subjects of Bright's disease, and all cases requiring a highly nitrogenous food. It is also excellent for use in cases of obesity. It is especially valuable in cases requiring intestinal asepsis.

These food products are now offered to the public, as they have been for many years made for and supplied to the great Medical and Surgical Sanitarium at Battle Creek, Michigan, the largest institution of the kind in the world, and are guaranteed to be exactly as represented.

We also manufacture many other valuable foods for invalids, of which we mention the following:—

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PRICES:

	Cts. per lb.			Cts. per lb.
Granola, in pound packages	12		Pure Gluten (Biscuit)	50
Granola, in bulk	10		60 % Gluten "	45
Water Biscuit, in pound packages, 20	20		40 % Gluten "	40
Water Biscuit, in bulk	15		25 % Gluten "	30

Any of the above preparations of gluten can be furnished at the same prices in the form of meal. In addition, we make regularly a gluten meal suited to those who require an increase of the nitrogenous element without special restriction of the farinaceous element, which contains a larger proportion of gluten than is found in any natural grain production. This is known as No. 3 gluten meal.

TESTIMONIALS.

"After a thorough investigation and trial of all the various health foods manufactured by other parties for the last seventeen years, myself and my colleagues have for years been prescribing and using exclusively in our practice in the Medical and Surgical Sanitarium, the special foods manufactured by the Sanitarium Food Co., these products being in our judgment superior to any others manufactured. I have made frequent chemical examinations of these products, and know them to be exactly as represented by the manufacturers.
J. H. KELLOGG, M. D.,
"Sup't of the Medical and Surgical Sanitarium, Battle Creek, Mich."

"I have personally tested your excellent food known as 'granola.' It is highly pleasing to the taste, easy of digestion, and the most nutritive cereal production with which I am acquainted.
DR. R. W. BULA,
"Indianapolis, Ind."

"We find the health food all that you claim for it, 'digestible and palatable.'
"W. A. WHIPPY, M. D., Goshen, Ind."

"Having tested the properties of your 'granola,' I can safely recommend it as an article of food for all classes of invalids, especially those troubled with indigestion and constipation.
R. DEPPELLER, M. D.,
"Fort Wayne, Ind."

"The 'granola' gave very satisfactory results. I think it will form a valuable adjunct to the limited number of suitable food preparations for invalids which are supplied to the profession.
W. R. BARTON, M. D.,
"Ypsilanti, Mich."

"I have used your 'granola' in my family for three years, and we like it so much that we cannot get along without it.
"A. S. STORKE, M. D., Oak Park, Ill."

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1893



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Chicago & Grand Trunk R.R.

Time Table, in Effect June 26, 1892.

GOING WEST.				STATIONS.		GOING EAST.			
pm	pm	am	pm			am	pm	pm	am
7.15	3.00	11.00	7.00	.....	Boston.....	7.00	8.00	9.25	.....
9.45	5.00	6.30	8.00	.....	New York.....	9.55	7.40	5.07	.....
12.10	6.20	6.25	1.00	.....	Buffalo.....	8.40	5.50	4.20	.....
1.35	7.45	8.00	2.45	.....	Niagara Falls.....	7.30	4.10	3.10	.....
8.30	.....	3.00	noon	.....	Boston.....	8.05	9.50	.....	.....
9.30	8.40	.....	.....	.....	Montreal.....	8.00	7.00	.....	.....
11.30	.....	1.00	.....	.....	Toronto.....	8.35	8.25	.....	.....
.....	.....	8.00	.....	.....	Detroit.....	9.25	7.45	9.25	.....
Day	B. G.	Lmtd	Pass	Exp.	Mall	Exp.	Lmtd	Exp.	Day
am	pm	pm	pm	.....	Dep.	Arr.	pm	am	am
8.50	3.45	12.22	8.40	.....	Port Huron.....	10.01	.....	12.10	.....
8.05	5.10	1.27	10.07	.....	Port Huron Tunnel.....	9.58	12.35	7.30	8.50
8.35	5.47	1.55	10.47	.....	Lapeer.....	8.15	11.20	6.15	7.35
.....	4.05	.....	8.00	.....	Flint.....	7.30	10.47	5.40	7.05
7.15	4.40	.....	8.25	.....	Detroit.....	9.25	.....	7.45	9.25
7.50	5.15	.....	9.00	.....	Bay City.....	8.37	.....	7.15	8.37
9.05	6.50	2.22	11.20	.....	Saginaw.....	8.00	.....	6.40	8.00
10.02	7.55	3.07	12.20	.....	Durand.....	6.50	10.20	5.03	6.35
10.29	8.30	3.34	12.52	.....	Lansing.....	5.10	9.30	4.00	5.40
11.15	9.25	4.15	1.50	.....	Charlotte.....	4.34	9.01	8.25	5.17
11.53	pm	.....	2.35	.....	BATTLE CREEK.....	3.40	8.20	2.40	4.30
12.40	.....	5.45	3.30	.....	Vicksburg.....	2.33	7.40	1.48	.....
1.20	.....	6.20	4.10	.....	Schoolcraft.....	1.29	6.58	12.45	8.07
2.45	.....	7.35	5.45	.....	Cassopolis.....	12.45	6.20	12.00	2.30
4.50	.....	9.30	8.00	.....	South Bend.....	11.10	5.00	10.30	1.20
.....	pm	am	Valparaiso.....	8.40	3.00	8.15	11.20
.....	pm	am	Chicago.....

Where no time is given, train does not stop.
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Corrected Nov. 20, 1892.

EAST.		† Day Express.	*N. Shore Limited.	*N. Y. Express.	*N. Fall & Buffalo Special.	† Night Express.	† Detroit Accom'n	*At'tonic Express
STATIONS.								
Chicago.....	am	9.00	pm	12.20	pm	8.10	pm	4.55
Michigan City.....				2.05	4.56	6.39	11.25	pm
Niles.....	pm	12.40		2.57	5.48	7.31	am	12.30
Kalamazoo.....				2.05	4.00	7.04	8.57	1.57
Battle Creek.....				2.45	4.30	7.47	9.28	2.35
Jackson.....				4.30	5.38	8.52	10.42	4.05
Ann Arbor.....				5.30	6.27	9.45	11.27	5.38
Detroit.....				6.45	7.25	10.45	am	12.30
Buffalo.....				am	3.00	am	6.25	7.35
Rochester.....					5.50	9.55	11.20	.....
Syracuse.....					7.50	pm	12.15	pm
New York.....				pm	8.45	8.50	.....	am
Boston.....					6.05	11.05	am	6.15
WEST.								
STATIONS.								
Boston.....				am	8.30	pm	2.00	pm
New York.....					10.30	4.30	6.00	pm
Syracuse.....				pm	7.30	11.35	am	2.10
Rochester.....					9.35	am	1.25	4.20
Buffalo.....					11.00	2.30	5.30	9.00
Detroit.....	am	8.20	am	7.30	9.05	pm	1.20	4.40
Ann Arbor.....				9.37	8.27	9.59	2.19	5.48
Jackson.....				11.35	9.35	10.58	3.17	7.15
Battle Creek.....	pm	1.18	10.43	pm	12.02	4.30	8.47	1.20
Kalamazoo.....				2.05	11.30	12.59	5.05	9.45
Niles.....				4.00	pm	12.40	1.48	5.17
Michigan City.....				5.20	2.00	2.45	7.20	5.35
Chicago.....				7.35	8.55	4.30	9.00	7.55

*Daily. †Daily except Sunday. ‡Except Saturday.
Accommodation Mail train goes East at 1.18 p. m. daily except Sunday.
Night Express goes West at 12.05 a. m. daily except Monday.
Trains on Battle Creek Division depart at 8.09 a. m. and 4.35 p. m., and arrive at 11.40 a. m. and 6.45 p. m. daily except Sunday.
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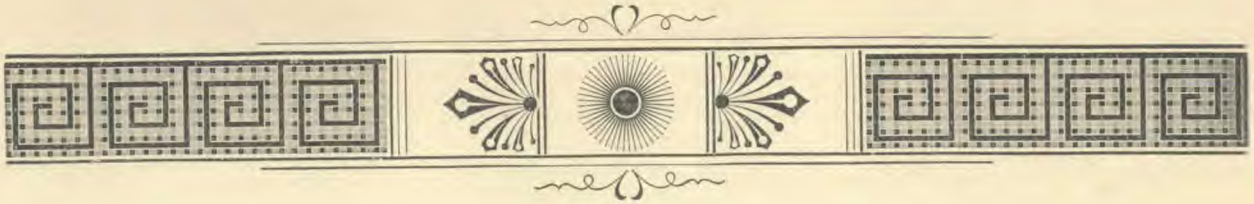
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J. H. KELLOGG, M. D., EDITOR.

EVERY NUMBER ILLUSTRATED.

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TRACTIONS
FOR 1893.**

There is probably no way in which the public are more grossly imposed upon than by the innumerable patent nostrums, worthless medical appliances, and fraudulent pretensions to discoveries, which are so widely advertised in the newspapers, and so generously patronized by the public. The managers of this journal propose, during the year 1893, to continue the special department for the—

EXPOSURE of MEDICAL FRAUDS and SECRET NOSTRUMS.

The public are continually being imposed upon in the most conspicuous manner, by charlatans and quacks of every description. New schemes for gulling the unwary are continually being concocted by those who devote themselves to this nefarious business. Within the last year GOOD HEALTH has had the pleasure of aiding materially, through its Detective Bureau, in breaking up the business of some of the worst of these charlatans. The same good work will be carried on during 1893.

THE HOME GYMNASIUM.

The great interest shown in this department during the last year, has encouraged the managers to plan liberally for it for the coming volume. This department will present, among other attractions for 1893, a series of articles on the Physical Training of Children, by the aid of which any mother will be able to secure for her children well developed and graceful figures. Articles showing how to correct various bodily deformities, such as round shoulders, flat chest, spinal curvature, etc., will appear in this department within the year. This department will be each month

PROFUSELY ILLUSTRATED,

And the instruction will be so practical that the exercises suggested can be carried out in any home.

••••• A DOCTOR'S CHATS WITH HIS PATIENTS, •••••

Is the name of a new department in which the readers of GOOD HEALTH will receive the benefit of Dr. Kellogg's racy talks to his patients at the Battle Creek Sanitarium, in answer to the regular Monday morning "question box," which always brings out a large lecture-room full of listeners. Any reader of GOOD HEALTH, also, may put in a question whenever he feels so inclined.



✽
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OSWALD,
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Well known to the reading public as a leading contributor to the *Popular Science Monthly*, and other leading magazines, and for the past year to the readers of GOOD HEALTH, will continue his interesting illustrated articles on "International Health Studies." It is unnecessary to assure our readers that Dr. Oswald is one of the most talented of American writers, and that his extensive travels and acute observations have given him a fund of material with which he cannot fail to interest and instruct, and often amuse, by his keenly-pointed wit.



GOOD HEALTH for 1893 will Contain the following Departments:

General Articles, Devoted to practical hygiene and popular medical papers.

The Home Gymnasium. This department will present, during the year, instruction which, if carefully followed, will in a few months give to any young man or woman a good figure, and a graceful and dignified bearing. Illustrations each month.

Home Culture. This department, under the charge of MRS. E. E. KELLOGG, A. M., is devoted to those interests of the home which relate especially to the mental, moral, and physical welfare of the younger members of the household. The following are some of the subjects which will be considered in this new department:—

Kindergarten methods for the home; manual training for children, adapted to the home; mothers in council; home government; new methods of dealing with child faults; character building; training of the faculties; the nursery; gymnastics for babies; and in addition, all the various interesting and practical subjects which have heretofore been considered in the departments devoted to Dress, Social Purity, and Household Science.

Editorial. The editor serves up, each month, a rich variety of hygienic tidbits, pithy, practical, and representing the latest scientific thought in this channel.

A Doctor's Chats with His Patients. This department will contain, each month, a racy discussion of live medical topics, new ideas in medical philosophy, simple remedies for disease, new theories of disease, etc.



TO NEW SUBSCRIBERS.

The publishers of GOOD HEALTH have no faith in the customary plan of offering cheap chromos or similar inducements to subscribers, but in the interest of popular medical education have decided to offer to every new subscriber a copy of—

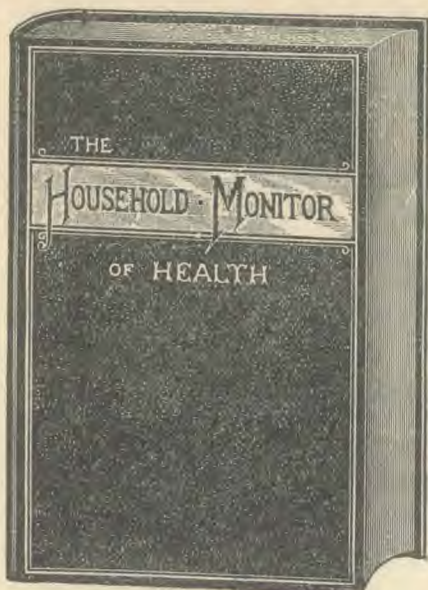
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