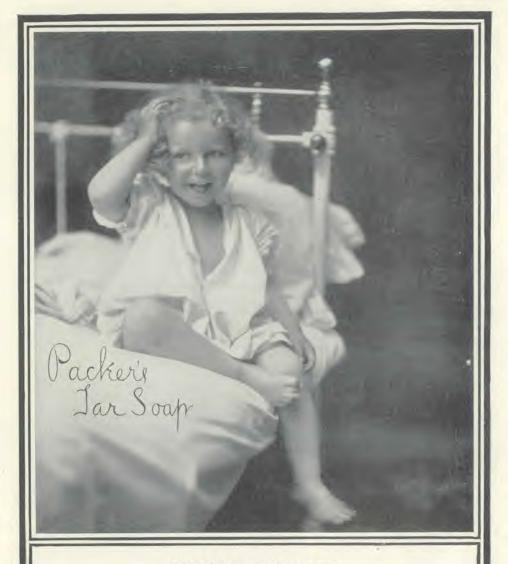
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THE HOME OF AN ORIOLE.

GOOD HEALTH

A Journal of Hygiene.

VOL. XXXV.

MAY, 1900.

No. 5.

THE HOUSE OF THE FUTURE.

BY J. H. KELLOGG, M. D.

HE house, at present, is ordinarily constructed very much with reference to external appearances. There was never a time in the world's history when one could see in any town such a variety in the construction and the style of buildings as now. This is true of most civilized countries, but in savage lands you will find the houses built after the manner of different tribes. A savage tribe is known by the style of its habitation as well as by its mode of dressing the hair. Travelers can recognize different tribes by their dwellings just as they recognize birds by the peculiar construction of their nests. But among human beings of civilized countries, especially our own, there exists a state of chaos with regard to the style of domicile.

The next century, I think, will change all this. The change will not be immediate and radical, but if we sight along the lines of present progress, we can see some very definite and decided improvements.

In building the house of the future, the all-absorbing thought will not be to make it more striking and showy than the house across the street. I imagine that the buildings of the future will be constructed more with reference to general symmetry, and to uniformity and harmony with other houses. When a man builds, he will look

at his neighbors' houses, at all the houses along the street, and consider what sort of building will make the whole neighborhood look better, rather than what sort will outshine the others.

City houses are now built with a most incongruous combination of forms and colors; but if men would build their houses with a view to making them complement and set off one another, the artistic effect of the whole would be much heightened, and even the selfish desire of personal gratification would be better satisfied, because most men look upon the outside of other people's houses more often than upon their own.

The interior of the house of the future will be studied more than it is now, not only with reference to convenience, but also with reference to health. Health is destined to be the all-absorbing thought thirty or forty years hence. races are deteriorating at so rapid a pace that there must be a change to save them from extinction. The reading and thinking classes are coming to consider this matter. It is receiving more and more attention in our own country and in other countries. In France the degeneracy is so great that the birth-rate is less than the death-rate. In the United States, according to a recent census, the birth-rate is falling off greatly. As General Walker

put it, there are two or three million babies lacking, and medical journals are discussing the question, Where are those two or three million babies? At the same time there is a very great increase of insanity. Within the last thirty years, among the native population of this country there has been an increase of more than one hundred and fifty per cent.

So this question of health is coming to the front, and in the future it will take its place as a determining consideration in the construction of houses.

What will the future house be made of?

— Probably not of wood. Our forests will have been devastated, and it will cost more to build a house of wood than of glass or aluminum. In my opinion, no better material for a house can be found than glass.

One of the greatest objections to our houses to-day is that the walls are opaque and keep out the light. The house of the future, I think, will be transparent. Light is necessary to health. never intended that we should spend any time, except at night, in darkness. Light is necessary for the support of activity. It is surprising to see how most animal life becomes inactive in the dark. Notice, for example, the starfish lying in the water, putting out its arms and slowly moving and contracting. But if a cloud passes over the sun, the little creature at once folds its arms and becomes quiet. As soon as the cloud passes off the sun, the starfish becomes active again.

The same principle applies to plants. When the sunlight disappears, the plants fold their leaves, and their branches droop. Many sensitive plants drop their leaves. Flowers shut up. Some plants are so sensitive to light that they begin to open their leaves at the first indication of dawn, a long time before sunrise.

Our bodies are much more sensitive to this occult force of nature than plants or

other lower orders of being, for in man are found the very highest types of organization, the most fully developed cells and tissues. Wealthy people who live in costly houses and surround themselves with luxuries live chiefly in the It seems as if the light were purposely excluded from the most expensive The sun must be kept out because it might fade the carpets, or cause streaks on the hangings. Therefore in these luxurious dungeons, as we might call them, we find pale faces and lusterless eyes. But in the dwellings of the future, provision will be made for the abundant entrance of sunlight. portance will be recognized.

Do you say that we can not live in glass houses? that there would be too much light? I would answer that by the use of screens, draperies, and awnings, both the necessary protection from the summer sun and the desired privacy can be secured, while at the same time we can have all the light we wish.

Another advantage in this kind of house is that the walls will be non-conductors. A glass wall a foot thick would be so poor a conductor of heat or cold that any change which might take place in the outside atmosphere would not be recognized inside. Cold walls are a constant source of discomfort and disease. One sits down by the outer wall of a brick house in this century, and feels as if a current of air were blowing on his neck. He looks around, but finds no opening; still, he feels the draft. In the majority of cases, it is not a wind from the outside that he feels; but as the air in the room is heated, it rises and spreads out, and when it strikes the wall, it is chilled and falls; it is this constant falling of the air upon the neck that gives rise to the sensation of a wind blowing.

This motion of the air can be determined by floating a feather in the room; when it approaches the outer wall, it falls. So also with a thistledown; near the outer wall it descends, while in the central part of the room it rises again.

People often take cold because they sit near cold walls; but the house of the future will be so constructed as to avoid this danger. If not made of glass, it will at least dispense with solid brick or stone The conservative house of the future will have a frame to begin with; this frame will be covered outside by two layers of paper and then sheeted up; next will be a layer of blotting-paper and another sheeting; it will then be lathed and plastered inside, and bricked up outside, the brick being laid about an inch from the frame, and the space between being filled in tight with mortar. By this means we shall have a much more healthful structure than one with an ordinary brick wall.

But a glass house—the radical house—will involve no such fussy arrangement. We shall have the solid wall, and at the same time a transparent house, one that the light can shine all through, even into the closets.

The house of the future, being constructed with reference to health, will provide, the very first thing, for a proper supply of fresh air. Most houses at the present time are so built as to be as nearly air tight as possible. A New York physician has figured it out that enough oxygen can be contained in a room of common size to supply a number of persons twentyfour hours. He says that one breathes twenty cubic inches of oxygen at each inspiration, or one fifth of a cubic foot of air, and he calculates that a 10 x 10 bedroom would contain air enough to last ten persons twenty-four hours. But the trouble is not with the air we breathe, but with the impurities produced and thrown off by our bodies. We need an abundance of air to wash away, so to speak, these impurities, which form a very subtle poison. Each person should breathe at least three cubic feet of air at an inspiration. Thus if one breathes twenty times a minute, he spoils sixty cubic feet of air in one minute. In sixteen minutes he has spoiled nearly a thousand cubic feet. Thus we see that the air in that 10 x 10 bedroom would really last one person only sixteen minutes.

This shows the importance of an abundant and constant supply of pure air in the house. The house should be so constructed that the air will come in automatically. If a North American Indian or a South American monkey were shut up in one of our present houses, he would die of consumption in six months. It is hard to find a house to-day that has a proper supply of pure air.

Another question of interest is: How will the future house be heated? Some of our present dwellings are very curiously heated. A common stove, it seems to me, is a monstrous affair. A room heated by a stove is not ventilated, for the stove simply heats the same air over and over until it becomes stifling.

If you have one of the modern fuel-saving furnaces, you will notice that the air comes in from the front hall, passes through the parlor and into the back part of the house, then again into the cooler rooms, down into the furnace, back into the parlor, and so on, in a circle. furnace men say that this arrangement saves fuel, and that is true, but it also compels you to breathe the same air over and over, instead of bringing in fresh, pure Such an arrangement will not be tolerated fifty years hence. The old-fashioned fireplace with its roaring logs was better than this, so far as fresh air is concerned, although the breezy log cabin that contained it could hardly be recommended from the standpoint of health, for the reason that the currents of air coming in between the logs were certain to induce colds.

I have seen churches supplied with "all the latest conveniences" for ventilating, the apparatus consisting of a hot-air register over a coil, and a ventilating register three or four feet away. The foul air went up through this coil, and kept rotating and rotating, around and around. The whole heating apparatus was arranged in that way for a church accommodating fifteen hundred people. In one church the only place I found where fresh air could come in was a small opening under the front steps. The air entered here, and went up through the basement into the audience room; there was enough air from this opening to supply six persons.

In the century to come people will not tolerate this. They will demand fresh air. An audience will not listen to a preacher unless he speaks in a well-ventilated building. People will no more think of going into a room and breathing over and over air which has been already breathed over and over than they would now think of washing their hands in water that had been previously soiled by the ablutions of others. And yet there would certainly be more propriety and far less harm in washing the body in water soiled by previous washings than in breathing air that has been soiled in other people's lungs. If one could only see the condition of air after it has been in the lungs, he would understand the danger; but as it is, he swallows such air without the least compunction.

It is probable that in the future electricity will be used as a means of heating. By converting water-power into electrical power, and then converting electricity into heat, it will be possible to get an economical and convenient means of heating out of water. With electrical heating apparatus we shall have the advantage of radiation. There have been some ex-

periments made in the use of electricity, and this force has been found to be an exceedingly valuable source of radiant heat. Radiant heat has a penetrating power; it will penetrate many substances which are non-conductors. Radiant heat will pass through glass without heating the glass, although glass will not carry heat by conduction. I am not certain but we shall eventually find this the most effective way of applying heat.

There will be no cellars in the house of the future. There will be light and wellventilated basements, but no cellars by which the ground air or the gases of the soil or the atmosphere can find an entrance into the house. The kitchen of this house will be at the top instead of the bottom of the building. Even now it is the custom in some of the most recently constructed hotels to have the kitchen on the top floor. By this means all the kitchen odors are taken up to a safe place. The kitchens of to-day are nothing more or less than natural distilleries. The steam of boiling food, the steam from the wash boiler filled with soiled clothes, the steam from the teakettle, is constantly saturating the air with moisture. This air goes up stairs, and deposits dampness upon the window panes, the furniture, the bedclothes, the walls. The odors of the kitchen are carried along with it. The basis of these odors is organic matter. If some of the moisture which has been deposited upon one of the windows is collected and put in a vial, it will throw off offensive odors. It is really a poisonous substance, and carries an unwholesome atmosphere. Therefore, in the ideal house of the future, the kitchen and laundry will be on the top floor.

There will be no carpets in the twentieth-century house. Fewer than twenty-five years from now they will be turned over to the ragman. Carpets will then be found in none but out-of-the-way places.

Even now they are altogether discarded from the finest houses. Instead of carpets, there will be mats and rugs that can

be easily taken out and cleaned, and the floors will be so smoothly polished that the least bit of dust will appear at once.

THE HOMES OF BIRDS.

BY MARY HENRY ROSSITER.

ture of the wren. Birds, not being gifted with the mind of man, have to depend upon instinct in planning their dwellings. They neither ape nor outvie their neighbors, but construct their domiciles solely to meet the needs of their domestic life.

Could anything be more beautiful, more graceful, more healthful, than the home of the oriole shown in our frontispiece? It was built in the fragrant shelter of a pear tree, many feet from the ground, in the pure, sweet air. It was made of grass, soft, comfortable, flexible, but offering no attractions to The whole top germs. of this house is a window. open to the sunshine and the breezes of heaven.

Who could not sing if his every-day surroundings were as natural and peaceful as these?

Our "artistic residence" is the home of the least tit, a denizen of the country bordering on the Pacific Ocean. I show you this, because in the opinion of the well-known ornithologist, Thomas G. Gentry, "few nests, if any, surpass it in

HE robin never attempts to build a beauty and comfort." He says: "In finer nest than the sparrow. The form, texture, and finish it is a perfect goldfinch does not imitate the architec- model of architectural design and skill.



AN ARTISTIC RESIDENCE.

When we consider its size, the durability and smoothness of its outside periphery, and the coziness of its interior, we are lost in wonder and admiration. In view of the size of this nest, it does not seem possible that such diminutive specimens of bird life could have the enterprise and courage to enter into such a gigantic project, and the patience and perseverance to carry it to completion. When we contemplate this wonderful work of art, we know not whether to admire most the indefatigable industry of the builders, or their cunning workmanship."

A bird's home, then, may be a model

of architectural as well as hygienic construction. As we learn from the trees and the flowers, lessons of natural and harmonious dress, so may we learn from the birds, of charming and sanitary homes.

AN EMPTY NEST.

NEVER a sign in this empty nest
Of the love that mated, the love that sung;
The birds are flown to the east and west,
And the husk of their homestead has no tongue
To tell of the sweet still summer eves,
Of the sweeter, merrier summer days:
Only a nest in the falling leaves,
And silence here in the wood's dark maze.

But I hold in my hand the dainty thing,
Woven of feather and fluff and reed.
Once 't was the haven of breast and wing,
And the shelter of callow and helpless need.
It tells of a passionate gladness gone;
It dumbly whispers that love is best;
That never a night but has had a dawn—
And I drop a kiss in the empty nest.
—Margaret E. Sangster.

FAMILIAR FORMS OF MENTAL DISEASES.

BY DAVID PAULSON, M. D.

T is a sad commentary upon the boasted I social progress of this century that it is found necessary to confine one hundred thousand men behind prison bars in order to insure public safety, and on the other hand, that we have a similar army, but twice as great, confined in our various insane asylums. The number of mental patients in the United States, if ranged in single file, allowing three feet to each, would form a procession one hundred and thirteen miles long; and while there may be more or less stagnation in ordinary lines of trade, our prisons and asylums are doing a rushing business. There are no signs hung out indicating that they have vacant rooms to let. During the last few years insanity has increased tremendously; therefore it is well for all to familiarize themselves with some of the common forms of this malady, and to try to discover, if possible, some of the causes that produce it, as well as some of the various remedies which may be utilized to prevent it.

Somehow or somewhere in the public mind there is lurking a superstition that leads the average mortal to consider a mental patient with a sort of half-concealed horror, as if it were not as natural for a man's brain to become ill as for his liver to become torpid, or for him to have indigestion of the stomach, or even rheumatism in the muscles. The same causes are just as likely to produce one condition as the other. Which disease the unfortunate patient must endure will depend largely upon what and where is the weakest spot in his organism.

There was a time when all disease was regarded as a sort of entity or personality which could be driven out of the invalid much as a disturbing cat is chased from a room. Fortunately, these barbarous notions have largely disappeared for ordinary diseases, although even now we sometimes hear an anxious mother inquiring of the doctor how long it will take before a fever will "leave the patient," whether the measles can be "driven in"

or "driven out." But, unfortunately, the same progress has not been made in men-

Dispondent y a construct to the state of the

of the insane.

tal diseases, and so it is only within the last few years that anything like an attempt has been made to treat in a rational manner the multitude of patients who are suffering from various brain disorders.

Insane asylums formerly, instead of being hospitals for the scientific care of sick patients, were simply a place where they were herded together very much like so many animals, and too often treated as if they no longer belonged to the human race. Be it said, however, to the credit of modern medical progress,

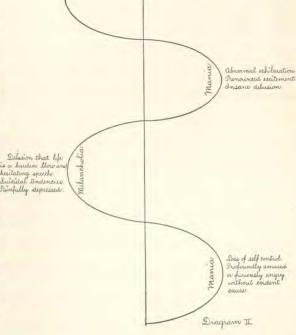
that this condition has to a great extent become merely a matter of history, although there is yet an infinite amount of room for improvement in the rational and scientific care

If the average neurasthenic or typhoid fever case were treated in as irrational a manner as mental patients have been treated, until very recently, it is not likely that statistics would show many recoveries; while fully seventy-five per cent of the more common haritating speech, forms of mental disease can be Junfully depressed readily cured in periods of time varying from a few weeks to a few months. Those who are thus restored are no more liable to relapse than a patient who has recovered from an attack of indigestion. Either case will be sure to have a relapse if there is the

same violation of physical laws whereby the disorder was brought on in the first instance.

The human mind, even in its most normal condition, vibrates to a certain extent (see Diagram I). Who is there that does not have "blue days," who at other times does not feel especially jovial and buoyant? The ever-changing moods of the human mind are better illustrated by a wavy line than by an absolutely rigid and straight one.

Allow these vibrations to become enormously exaggerated under the abnormal irritating stimulus of waste products produced in the human system, excessive amounts of poison taken in from without in the form of alcohol, tobacco, Thanksgiving and Christmas dinners, and there is readily produced a diseased condition of the mind (see Diagram II). If it is the upward curve that is thus increased, there results pronounced exhilaration, an almost lightning-like activity of the mind bordering upon the witty, abundance of jokes and jests, partially bright and partially



simple and foolish; perhaps almost without a moment's warning a tendency to pronounced anger and violent outbursts of temper, with a disposition to destroy some person or some property. patient's mind is flooded with a multitude of schemes and problems that he is trying to work out. Perhaps he is too busy to eat; he can not sleep because he has too many things on hand. He may constantly pace the floor with vigor and determination; and becomes entirely out of patience with the nurse or attendant if he does not readily indorse all his abnormal propositions. This is a brief picture of acute mania, which is one of the most common forms of insanity.

If, however, the vibrations happen to descend abnormally low, we have in this patient almost the opposite condition to the one just described. He presents great depression; he labors under deep discouragement; the face exhibits the most painful aspect; the patient thinks that he is unworthy to live; or perhaps that he is guilty of committing the unpardonable sin. If he is asked a question, instead of flashing back an answer with lightning-like rapidity, as is usual in the case of the previous patient, the response comes

slowly and hesitatingly, as if articulation caused pain. The tongue is coated, digestion is slow, and it seems as if the brakes were put on every activity of the body. The patient, instead of trying to destroy others, in the majority of cases contemplates suicide, and this point always has to be taken into consideration in the management of such cases. This form of insanity is designated as simple melancholia.

These are the two most common varieties of insanity, and, fortunately, are the most curable. In most cases it is necessary for the good of the patient, as well as for that of his family, to remove him to an asylum, as the care and attention he will receive there will be superior to that which can be secured at home,—and it is a fortunate circumstance that such institutions exist.

But a far more fortunate circumstance is that it is not necessary to have insanity; it is reasonable to conclude that every case that can be cured in the right way could much more readily have been prevented by the adoption of correct principles before the disease occurred. We will consider in the next article the subject of prevention of insanity.

THE FELLOWSHIP OF NATURE.

BY ARTHUR HENRY.

MY best friends have been an apple tree, an oak, a meadow, a garden, the southern slope of a hill, a summit. My soul has called aloud to many, but these have made answer.

Friendship is possible only when there is no reserve. There may be no human heart that you may enter without knocking, but have you no friendly tree in all the forest,—no tree that has become a living thing, ready to offer at all times a

free and loving communion? If there is none, you have no familiar haunt in the forest. Is there no summit where you may stand, and strong in its strength and patience, look with confidence across the world? If not, it is because you avoid the lonely hills.

In my first burst of childish passion I threw my arms about the gnarled apple tree that had been my daily shelter, and cried, "I love you!" Then I grew older,

and forgot my soul and the love that knows no sorrow, in a multitude of passions and desires. I was in trouble when I first put my hand on the oak. I felt its steadfastness. I heard it say, "Why are you not content to be and to grow? Are we not all creatures in an infinite universe of love?" And I heard all the leaves of the forest murmur, "It is enough to be and to grow."

I visit my southern slope early in the spring, when the sun is upon it. There I greet the anemones after their long sleep, and send my last farewell to the departing winter that has strengthened us. When I attained my freedom and found companions in solitudes, I discovered a friend in the summit.

Whatever we learn to know reveals an individuality. Our sympathy increases with association until the familiar object speaks in a voice of its own. It is this that gives the old home its tenderness, its comfort, its companionships. Has not every flower and shrub of our garden ears that hear and lips that speak? Is not the old rocker a member of the family,—the friend full of loving communion to the dear old body to whom it belongs? We form these relations with familiar objects unconsciously. It is the unheeded outgoing of the soul to its kin.

With knowledge there comes a freer intercourse. Wisdom brings us into perfect accord with all our surroundings. The wise man can never be lonely or alone. He finds his relations wherever he goes, and recognizes them at a glance. The man who walks through the world unconscious of the fellowship of his surroundings, passes like a shadow. Visible things may be bought and denied, but the invisible are free. All the beauty of the earth is mine, though others may hold the deeds. I may stand beside your meadow brook and hear the voice of my love. There is no law or custom, no chance of

market or of chancery, that can take from me my brothers of the field or wood.

In the spring I needed thirty thousand alternanthera. It was only six weeks from planting, and I had but a few hundred little bushes in four-inch pots. I took a knife and pan from the potting bench, and went directly to where they were basking in a warm corner beneath the glass. As I told them the news, I could hear the cheerful, vigorous life within them make reply. We went to work. I filled my pan with cuttings, and it was not long before eight thousand of these bright little creatures of our love were standing in sturdy rows in the moist sand, sheltered from sun and draught. Outside, the hotbeds were prepared. The sublayer of heat-giving manure was renewed and covered lightly with good soil. I took the parent plants, stripped of their first brood, and placed them beneath the sash. They felt the warmth about them. I heard their song continued without a discord, and comfortable in the knowledge of their comfort, I left them there to grow. Within two weeks I had another little family of eight thousand presented to me. By this time the first brood were sending their white roots into the cool sand. Before the end of the six weeks I had my required number of plants for the city beds. Most of the thirty thousand I put into place with my own hands. I wished to know for myself that they would be snug, and I loved their cheerful companionship.

It was the last of May, and the sun fell hot upon us. Now and then one of the little voices near me grew weak, the leaves began to droop, and the faint sigh for water spread around me. What a delight it was to give those generous, faithful fellow-workers of mine the cooling shower! When I knelt again among them, every voice was busy, clear, and strong. And how they grew! All sum-

mer I made my bow to them. My bread was sweet, knowing as I did that in earning it I had brought into life thirty thousand little beings and made them comfortable. Whenever I passed that way, I entered into a world peopled with my kindred.

In the fall I tucked fifteen thousand bulbs of tulips, hyacinths, and daffodils into boxes filled with the food they love, and put them into a pit eight inches deep. I covered them with four inches of soil, and left them to wait for spring. What a full delight attended my labor! Whenever I looked their way, I could see them beneath the loose soil, in long rows, close enough for company, but not too close for free development, and I was content in knowing how carefully I had prepared their surroundings.

When the rain fell, and my city acquaintances complained of the long drizzle, I remembered my thirsty bulbs, felt again our relationship with the rain, and, smiling into the mist, I lifted my face in friendly salutation. By rain and sun I sent them daily greetings. I sometimes spoke of them to our friend, the wind.

Then the frost came. The rain ceased, and the sun was hid. I saw the covering above my friends grow hard and cold, and for a time I was distressed. One winter morning, when I knew the frost would go no deeper, I took my spade and chopped an opening through the frozen earth until the bulbs appeared. What a change had come! They were no longer helpless little castaways, to be tossed here and there, to fall perhaps from some care-

less hand and left to rot forgotten among They were all at home. the rubbish. From each had come a fine white tip full of life and beauty, tender, fair, and strong. They were waiting now. The icy earth enfolded them and held them still. The song of life was low within them, but it was sweet. They did not question this delay. It was all love to them. When frost should have departed, they would arise from his benumbing embrace, and come forth to meet the sun. I covered them over, and acknowledged with new joy our kinship with the frost, the clouds, the chill winds of winter, and there was no longer any desolation for me.

Knowledge in the recognition of kinship and happiness comes to us when we live in harmony with our relations. The man who strips the earth of a forest, does no harm to the earth: he but clears the way for another growth. But though he has the power to dispose of a forest; though he transforms it into palaces; though through him a city is reared, he has received no more from his possessions than he who holds a single leaf in his hand, and knows it for a friend. The mightiest temple in its day of beauty or evening of decay can teach us nothing but our own relation to it. Its voice is the voice, its story is the story, of the stone by the wayside, the tree where it stands, the lime, the ore, and the unwashed nugget of the mine. Only when we have entered into this fellowship shall we know the pleasures of work. Only then shall we of a truth live in the homes or worship in the temples that we build.

THE PEBBLES' LESSON.

How smooth the sea-beach pebbles are!
But, do you know,
The ocean worked a hundred years
To make them so.

And once I saw a little girl
Sit down and cry
Because she could n't cure a fault
With one small "try"!

RED BETTY, OR THE SLAUGHTER OF THE DUMB INNOCENTS.

BY MRS. L. D. AVERY-STUTTLE.

CHAPTER III.

(Copyright, 1899.)

THEN," said Red Betty, "an airy appearing fellow, with a dark coat, and white spots on his wings and with a beautiful voice, came forward and perched on a grapevine which hung over my head. This seemed to be a signal for all the others to stop talking. At least they kept very quiet while the little fellow made his speech:—

er, whom they called Bob O'Link, 'that we who belong to the bird creation might at least be free from fear of man's destroying us to satisfy the demands of his voracious appetite. The very fact that we are so small might reasonably be supposed sufficient to excuse us, to say nothing of our voices, which people admit are very beautiful, and without which the groves and fields would seem dead and barren.'

"Then the speaker drew a long breath, and sighed gently," said Red Betty, "and a mourning dove which was perched near him uttered a sad cry, and tried nervously to hide herself under the deeper shade of the grapevine.

"'Surely,' I remarked," continued Red Betty, who was growing very earnest in her story, "'surely it can not be that human beings ever do so cruel a thing as to crush little birds like you between their dreadful teeth.'

"', O, yes, indeed they do,' replied Bob O'Link, sadly, 'in fact, they are much more cruel to our family than are wolves and bears; who are quite content to allow us to occupy the same forest with them.'

"At this I was more surprised than ever in my life," exclaimed Red Betty.

"Though I do not wish to cast any reproach upon you, lady, who have been so kind to me, I must confess that I began to feel, besides fear, a certain contempt and loathing for the race to which it is surely your misfortune to belong."

Here methought my wonderful companion ceased speaking for a while, for she seemed very weary, and I again brought her a cooling drink from a spring near by, and entreated that she rest herself for a little while before continuing her history. This she very gladly consented to do, and I sat down once more by her side, and in the silence which followed, gave myself up to painful memories and bitter reverie.

I thought of the many times when I myself had partaken, with keen relish, of that much-vaunted delicacy, the "reedbird of the Carolinas." I remembered with a shudder the delicate flavor which the tender flesh of the poor little feathered martyr imparted to the toast with which I had gorged myself— I! a tender-hearted woman! alas, that I must confess it!

In imagination I could hear the sweet tones of Bob O'Link reproaching me for my cruelty; and hundreds of clamoring voices in which I recognized the tones of the robin, the cedar bird, the shore lark, and even the dear little bluebird, charged me with satisfying my voracious appetite upon their tender flesh.

"Surely," I protested in an aggrieved tone to Red Betty, "surely neither my people nor I have ever eaten the flesh of the dear little Bob O'Link, robin, or bluebird. We sometimes have eaten the greedy reedbird, but never—"

Red Betty interrupted me: "Pardon

me, kind lady, do you not know that Bob O'Link and the reedbird are the same? and because of their scarcity the market men substitute the bodies of other song-birds in their place? I can not wonder that you seem horrified," sighed my strange companion, noticing my pale countenance.

I felt that I had been conversing with a superior being, even though she was accounted by my egotistical race nothing but a brute. I acknowledged in my humiliation and shame that Red Betty deserved a higher position in the scale of creation than I. She had certainly never defiled her mouth with the carcass of the slain, or satisfied an abnormal appetite upon the dead bodies of her victims. I acknowledged with a sigh of deep humiliation that my place in the scale of creation was beside my carnivorous brothers,the lions and tigers and hyenas and wolves, and, yes, harpies and vampires,-from whose bloody beaks drip clots of crimson gore. The horrible truth dawned upon me that I was no less than a kind of monster - a vampire - a harpy! My body was seized with trembling, and darkness came before my eyes. Cold drops stood upon my brow, and with a cry of shame and horror I awoke.

My husband was bending over me, with an expression of alarm upon his face.

"Why, my dear, what can have so disturbed your slumbers?" he asked, "though really, it is quite time you were waking. See, it is getting late in the afternoon."

I immediately rose from the bed, and seating myself by the open window, I saw that the sun lacked but an hour or two of setting. I asked my husband to come and sit by my side while I related my strange dream to him.

Scarcely had I begun when our attention was attracted by a low, mournful sound in the street, together with the noise as of some one striking heavy blows with a whip. We both stood staring out at the window. There in the street lay a poor red cow. She must at some time have been a magnificent animal, but she was evidently very old, and was so weak and ill that she had fallen from sheer exhaustion, while the cruel owner was applying the heavy handle of his whip lustily to the poor bones and battered skin.

"O, that is Dick Ashton," exclaimed my kind-hearted husband with an indignant frown, "he told me to-day that he had bought a cow of the Widow Harmon. He said that the animal had been sick a long time, but that he got her for a trifle, and believed he could doctor her up a little, and feed her well for a few weeks till she was fat enough to sell for beef at a round profit. Ugh!" he exclaimed with a shudder, "I guess I'll be careful not to get beef hungry about the time he sends her to the butcher."

"Horrible! horrible! the cruel man! it is Red Betty! the Red Betty of my dream!" I exclaimed, and indeed had the animal not been so reduced in flesh I would have thought myself still dreaming.

"Why, my dear, what can make you act so strangely?" said my husband. "Do tell me your dream; it must have been very impressive. I fear you are feverish."

Then he seated himself by my side, and with his cool hand caressed my throbbing temples while I related my strange vision. When I had finished, I began sobbing, and I saw tears in my companion's mild eyes.

"O, how I long for the glorious time to come," I cried, "when the blessed promise shall be fulfilled: 'They shall not hurt nor destroy in all my holy mountain.' But if I could only have slept long enough to hear the end of Red Betty's history!" I cried.

"Never mind, perhaps she may finish the story to-night in your sleep. Come now," said he, rallying me, "cheer up and be your own self again. You will so n forget your vision. I hope, my dean you will not allow a foolish trifle to male you miserable."

"Ent I shall never be contented until you promise me, my husband, that there shall never a morsel of the dead body of any animal be brought again into this house for food. I can never forgive myself," I said, "for playing so cannibalistic a part as I have done all my life upon the bodies of our dumb brethren."

The promise was readily made, and I went about my household duties; but strive as I would, I could not banish from my memory the strange, calm, musical tones of poor Red Betty, as she confided to my dreaming ear her sad history.

We had company in the evening, and although I tried to entertain them in my old way, I felt sure that I appeared absent-minded and dull. My thoughts would wander to that morning visit to Red Betty by her forest neighbors in her hidden, leafy retreat, so that it was with a sigh of genuine relief that I closed the door upon our visitors, late in the evening, and sought my couch. At last, with the words of my husband—that perhaps I might be favored with the continuation and sequel of my dream—ringing in my ears, I fell asleep.

At once I seemed to be walking rapidly toward the quiet, grassy inclosure where I had left Red Betty. I must be very near it now, for here was the large yard

crowded with the same jostling, surging mass of cattle, their white horns twisting and writhing in the air, now tossing with impatience, and again quivering like an army of white serpents. Here was the same spring from which I had dipped my pail to give drink to my weary companion. Yonder stood the huge grav building where I knew, unless rescued in some manner, Red Betty must meet her terrible death, with the hundreds of other poor victims waiting in the inclosure. I shuddered as I thought of it, and walked hurriedly along. I wondered if she would be waiting for me. Yes, there she stood; she had risen from the ground where I had left her lying, and was standing beside the empty pail. She was anxiously watching her companions in the yard, and I saw that she was trembling from fear and exhaustion.

Methought I called to her, and she at once turned her large, mournful eyes upon me, and I was much gratified to see an expression of courage and pleasure take the place of terror and distress.

"Well, Betty, I was obliged to leave you for a little while, but I am back again, you see. I hope you feel strong enough to continue the story of your eventful life," I said, beckoning her to lie again beside me on the grass, while I seated myself on a light tripod which I had brought with me.

(To be continued.)

SWEATING.

BY DAVID PAULSON, M. D.

GOD'S original plan for man, after sin entered the world, was that he should work hard enough to cause him to sweat. Man, however, has sought out many inventions, and a most pernicious one is the determination to get through

this world without working hard enough to induce perspiration. But a human being instinctively feels the necessity for perspiring, and so it has come to pass that Turkish bathrooms without number, and endless contrivances substituting the same to be utilized in the home, have been established, and man imagines that he is getting as much good from sweating this way as he would if he induced perspiration by substantial labor; but experiments have demonstrated the fact that nature can not be outwitted so readily.

The sweat induced merely by applying heat to the skin contains but a small percentage of waste matter as compared to that which is eliminated during vigorous exercise. The obese person who flatters himself that he can sweat away his flesh instead of honestly working it off, will find sooner or later that his theory is a delusion and a snare.

However, it must be admitted that there are some beneficial results obtained by vigorous hot treatments in certain forms of disease, and in this way the individual may do penance for what he neglected to do in the right way during health. But, as a general principle, hot treatments are weakening and enervating, while short, cold treatments are tonic in their nature. Hot treatments feel pleasant while they

are being taken; but too often they leave a listless, all-gone feeling when they are discontinued. It requires moral courage to take a cold spray or sponge, but the beneficent after results remain with the individual all day long.

The man who forges some one's name upon a note is generally a legitimate product of the idea that there is a better way of getting through the world than by working. The average tramp found camping on the axle of the freight car is a degenerate type of humanity, resulting from identically the same philosophy. "Abundance of idleness" was one of the reasons for the overthrow of Sodom, and it lies at the foundation of the moral and physical decay of thousands of individuals to-day.

The proper remedy is to imbue a man with the thought that an hour's work with an ax in his hand at the woodpile in the back yard is worth more to him, morally and physically, than the same length of time spent on a marble slab in a Turkish bathroom.

WATER TREATMENT FOR TYPHOID FEVER.

BY A. G. HENRY, M. D.

T is doubtful if in the whole long list of human ailments more has been written upon any single disease, than upon typhoid fever. Nearly every writer has some special hobby to bring to the front, which he wishes to exploit as being a specific for the malady. This may be in the form of a comparatively new drug, or an old drug rearranged, and given in some special manner; or it may be some particular line of diet that is to effect a cure ; or some antiseptic endowed with sufficient superhuman intelligence to seek out and destroy within the body the entity or entities which are working such havoc with the habitat of the ego.

But it is not upon any of the abovementioned methods of treatment that we would enlarge. They generally lead to the same goal - ten to twenty per cent mortality. We all know with what dread and uncertainty this disease has been and still is looked upon by both laymen and physicians, and it is not strange that this is so. With a past history, with food and much drugging, of a mortality of from twenty-five to forty per cent; and with a present history of from ten to twenty per cent, with food and less drugging, it is not to be wondered at that people are terror stricken at the mention of typhoid fever. The weeks of high

temperature, rapid pulse, tense abdomen, with uncontrollable bowel movements and steady delirium, make a picture that, to put it mildly, is eminently unattractive.

All these symptoms can be greatly modified and shortened, and some of them practically eliminated from the case by a purely water treatment. If properly managed, the fever will have reached its height and begun to decline by the fourth or fifth day. The pulse will have become stronger and less frequent, and by the close of the first week whatever bowel symptoms may have arisen will either have disappeared entirely, or become so much better as to cause no further uneasiness. The patient will be sleeping well, will be free from pain, and comfortable in mind as well as body. Not more than one case in twenty will develop delirium, and this one case will be a mild, harmless type of delusion generally experienced upon first awakening.

The correct management of a case of typhoid fever is about as follows: The patient should be put to bed, if not already there, in a large or fair-sized sunny room, into which an abundance of fresh outside air can be admitted at first-None but the regular attendants should enter the sick-room until the patient is convalescent. The writer always tells the patient the nature of his illness and that he will probably be in bed three or four weeks, but that he will feel much better within a few days, and that he will most certainly recover. He is not to keep track of his pulse, is not to be told how his temperature varies from day to day, nor is he to be informed of any of the doings of family, friends, or the outside world. Of course the physician and the nurse should assure him from time to time that he is doing well, or getting better, as the case warrants.

The patient should be clothed in a single garment of cotton or linen. He may

be covered as lightly as he wishes, the only precaution necessary being that the feet and hands are kept warm. The bed linen and nightshirt should be changed daily. Once in from every three to six or eight hours the patient should be bathed, the frequency of the baths depending upon the height of the fever. The spine should receive particular attention, the sponge or cloth wet with moderately cold water being passed up and down a number of times at each bath. The temperature of the general bath may range from 70° to 95°, to meet the inclinations of the invalid. During the height of the fever from three to four ounces of water should be given every hour.

When the evening temperature falls to about 100° and the morning temperature to no more than 99°, and if with the receding of the fever the bowel trouble is controlled and the tongue has become clean, food can profitably be given. The patient need not be fed solid food until he is decidedly hungry; a good test of this is afforded when he relishes a piece of stale bread or dry toast without butter. Food should be given but three times daily, at intervals of from six to eight hours, and very sparingly at first, the quantity being gradually increased as the fever dies away.

With this treatment the writer has not lost a case of typhoid fever in something more than eleven years, having treated during that time about two hundred cases. The use of an exclusive water diet for one, two, or more weeks is not unique or original with the writer. Others have followed it with similar results, notably Dr. Charles E. Page, of Boston (Medical Record, Feb. 24, 1894), and Dr. A. Monae Lesser, of New York City (Medical Record, Oct. 19, 1895).

[The editor prefers a diet of fruits or fruit juices in connection with water drinking, in all febrile diseases.]

THE SKELETON IN THE CLOSET.

BY MRS. E. E. KELLOGG.

It is said that every home has its skeleton; perhaps not such a gruesome assemblage of human bones as the poor woman in the old tale was compelled to keep hanging in her closet, but something concealed from public gaze, which mars the happiness or impairs the physical, mental, or moral health of its inmates. The closet is the proverbial hiding place for this disagreeable object, and from a sanitary point of view, there are few closets in modern houses which might not with advantage be searched for something of this character.

Those little living atoms, the invisible bacteria which so often endanger the health of the household, find in the closets and clutter places of the house a most desirable lodging place. In most homes there are to be found two kinds of closets, - those large enough to be entered, and those built in small recesses accessible only from a door occupying a part of one side. Both kinds are usually arranged to fill the spaces not available for other purposes, and are generally dark and unventilated, so that with other conditions supplied, they form excellent breeding places for germs as well as moths and other undesirable tenants.

The original purpose of most closets is the keeping of wearing apparel and the storage of articles not in constant demand. In many instances, however, their use far exceeds their legitimate end, and the reality as seen is a picture of general confusion,—shelves piled with boxes, bundles, bottles, papers, and all sorts of odds and ends; hooks with a double or triple layer of garments; while on the floor, boots, shoes, slippers, and rubbers lie about promiscuously, the place seemingly having become a "catch all" for anything found lying loosely about in other rooms which

required to be put elsewhere. If only things clean and wholesome were stored in the closets, one need be less concerned about the matter, but too often soiled aprons, dresses, and other garments are mixed among the mass of clothing hanging upon the hooks or accumulated in a heap on the floor in one corner, waiting for the weekly washing. All garments during wear necessarily absorb more or less of the effete matter constantly given off by the body. This they retain in a greater or less degree, according to the fabric and its texture, until cleansed by washing or by some other method. Left in this soiled condition, they become a source of pollution to the air of the place in which they are kept; particularly so if it is a small, unventilated closet.

Not only may clothing become a source of air contamination through having been worn, but also from its retention of the dust with which it comes in contact. This is not difficult to realize when we consider that dust is a compound of nearly every conceivable thing that falls upon the ground and is trodden under the foot of man or beast, - fragments of wood, of plants, foods, wool, feathers, hairs, mucus from the nose and the mouth of man and animals; indeed, every possible sort of offensive matter, not a little of which comes from infected sources, mingled with the fine earth. This dust, in dry form or mixed with water as mud, adhering to uncleaned foot wear and clinging to the clothing, is brought into our dwellings. The long skirts worn at the present day, sweeping the floors and even the streets, raise clouds of dust, which settle upon the hose and undergarments, or find lodgment within the folds and between the linings of the dress, or cling tenaciously to its fabric. A dust-laden garment is a

dangerous as well as an untidy thing. The closet in which such are kept is likely to be a veritable nest of germs, which adhere to the dust atoms, to be sent whirling and dancing into the air of adjoining rooms every time the door is opened, or a movement of any sort sets them in motion. The larger rooms of the dwelling may be kept free from every appearance of dirt, but if there be "bottled up" dust and germs in the closets, there is an ever-present, possible source of disease and death in the household.

It is cleanliness in the little things that makes up the sum of healthfulness in a home.

Storing places are a necessity in every well-ordered household, but all such should be light, that the dust may be easily seen and removed. If possible, they should be lighted by a window through which at some time during each day the sun's disinfecting rays may shine freely. The ideal clothes closet should be not less than two and a half feet in width, and of greater proportionate length, and provided with some means for the entrance of both air and sunlight. All clothing of wool or other rough-surfaced fabrics should be well shaken out of doors and brushed free from dust before being hung in the closet. All foot wear should likewise be carefully wiped and cleaned. Pockets of linen or other washable material, which can be hung on the closet door, form a convenience for keeping shoes and rubbers, and are in a measure a preventive against their being put away in an untidy condition; for while some may carelessly thrust their foot wear, besmeared with mud, on the floor in the dark corner of the wardrobe, there are few who would venture to put soiled shoes in a cloth receptacle, and even if they did, the dirt falling off would collect in the bottom of the pockets, which could be taken down and emptied with little or no contamination to the other contents of the closet. Such pockets should be frequently washed.

All articles to be stored on shelves should be sorted, classified, and protected from dust by being put in closely covered boxes of wood or pasteboard. Rather large sized boxes are preferable, several small ones being, if necessary, placed within a larger one, so that the spaces for the collection of dust may be as few as possible. From the surface of such large packages the dust can with little trouble be removed each day with a slightly dampened cloth, and if, as should be when the closet is one in common use, the dust is also daily wiped from the floor, there will be needed only an occasional cleaning and dusting of the contents of the boxes.

Clothing out of season should be cleaned, wrapped, and put away in some place secure from dust until needed.

At least once each month all garments kept in the closet should be given a thorough airing out of doors. A good way to do this is to pin them firmly to the clothesline on a fair day when there is a good breeze stirring. If the closet is a dark, unventilated one, it is well at the same time to turn its entire contents "out of doors," so to speak, and clean and air the room. "O, but," says some one, "it requires too much time to pay so much attention to the closets." True, but it is far easier in the end to keep the skeleton (disease) out by sanitary painstaking than to rout it out when it has gained a foothold. But it need not mean so much trouble, after all, if the things stored are reduced to some form in which they can be easily kept clean and in order. Let nothing be stored without a purpose. Cast-off clothing suitable for further use should at once be given away to those in need. Garments too much worn for this should be ripped up, and all good and clean portions rolled together, put away in boxes or drawers for mending, cleaning, or other purposes, and the remainder disposed of to the ragman.

Boots, shoes, rubbers unfit for further use, should be promptly burned or otherwise disposed of, and not left to mold and breed germs. Allow no rubbish of any sort to accumulate, and do not get into the habit of pushing things into the closet to get them out of the way where, out of sight, they will likewise be out of mind.

For the soiled linen a separate closet should be provided unconnected with any sleeping- or living-room. A long, narrow room near the laundry, with light on one side and good ventilation, is the most desirable for this purpose.

As a recompense for the care thus given the closet and its contents, the clothing will be likely to wear longer and keep in better appearance, the health of the household will be more secure, and the atmosphere of the house purer, and untainted by the stale smells which accompany old and soiled clothing; neither will frequently aired garments in a well-kept closet be likely to be infested with moths. These household pests do not thrive in the light. It is the darkness and the fact that the contents of a closet are left undisturbed for a long period that gives them an opportunity to do their mischief.

As this is the season of the year when moths begin their depredations, it may not be amiss to study in this connection the habits of these insect pests. There are said to be three distinct species of house moths in this country, all laying pale yellow eggs on the stuffs which they attack, and bearing a close resemblance during their larva and pupa states, but differing slightly in the moth state. As moths, they begin to appear in May, and are occasionally seen flitting about during the entire summer. They choose the least conspicuous portions of a garment as the place to deposit their eggs, which,

if left undisturbed, hatch into white, softbodied larvæ, each of which begins at once to form for itself, out of the substance upon which it has settled, a habitation of some sort,— a case, a gallery, or a cocoon. Here it lives, during the entire summer, if undisturbed, destroying the material of the garment for food or for the enlargement of its nest, reaching its full growth toward winter, when with its house upon its back, it crawls into the most secluded place it can find, - dark corners, cracks in the floor, or crevices in the wall, and remains torpid during the cold season. The changes from larva to pupa and from pupa to moth occur in the spring. Knowing its habits, one can readily see that preventive measures lie along the way of cleanliness and sanitary care. Sunlight destroys the eggs of the moth, and since these are deposited during the spring months, special care is needed that the contents of closets likely to be infested by these pests be exposed to strong sunlight for some hours, several times during May and June.

As moths show a decided preference for soiled garments, the first step toward insuring the safety of winter clothing to be packed away during the summer is a thorough and careful cleaning with exposure to sunlight. For the safe keeping of garments, nothing is better than the pasteboard boxes used by tailors to deliver suits, which, after being filled, should have a strip of paper so pasted around the joining of the cover and box as to leave no crack, since the moth miller always makes its entrance through some aperture, never gnawing a hole for the Bags of seersucker stitched with the French or double seam, clean paper flour sacks, or any receptacle which can be so closed as to leave no possible entrance for the moth miller, are quite as serviceable as the famed cedar chests for the preservation of clothing.

The various so-called moth preventives, such as camphor, lavender, tobacco, etc., are of little value. Their only virtue consists in being slightly repellant to the moth millers, but they have no effect whatever upon the eggs or larvæ.

If clothing is put away clean and absolutely free from moth eggs and perfectly protected from moth millers, nothing further is needed. To make sure there are no moth eggs, which are so small (not larger than a pin head) they are not easily seen, it is wise to clean and sun the garments, then tie them securely in paper bags, and leave in some place undisturbed for a week, then open the bag, and for three successive days carefully examine the garments. If no signs of moths are found, the garments may be safely stored for the season.

For rooms and garments badly infested with moths, the most effectual remedy for destroying the insect in every stage is the free use of benzine applied as a spray with a hand atomizer to all floor and wall crevices and all creases and folds of garments. The greatest caution must, however, be observed in its use, as it is a very inflammable substance. It should not be used in a room where there is a fire or a lamp, and no light should be brought into the room until a thorough airing has dissipated all odor of the benzine. Other remedies are often recommended, as fumigation with sulphur or camphor, but all have some drawback, and any one who has had experience with these pests will be ready to admit that in the case of this, as all other evils, prevention is easier than cure.

To the other closets of the house,— the linen closet, the broom closets, the tuckaway places under the stairs, or in the attic or basement, the mop and pail closets of the kitchen,— the principles already stated apply with equal force. These small places where it is possible to put things out of sight require the greatest of care and cleanliness that they do not become harbors for dust, dirt, mold, or decomposing organic matter of any sort, and thus of germs and disease.

WASTEFUL DAINTINESS.

BY H. FRANCES PARMELEE.

A T a table loaded with good things we heard a mother say to her little son, "It does n't look nice. I don't think you will like it." The little child had already ordered quite a variety of dishes, tasting them and putting them aside, making the table and dishes look very untidy, and was ordering dish after dish only to discard them. When a new dish was brought on, he would taste it in the most epicurean manner, and then say in a despairing tone, "I don't like it." His likes and dislikes had already become his master.

The little child was evidently not in good health, and probably, with his habits of eating, never would be. He was certainly being brought up to acquire a most fastidious appetite, and to discard wholesome food if it did not happen to suit his notion. Can we think how serious such a habit must be to the well-being of the child? Do mothers realize what they are doing when they allow and teach their children to be wasteful? This child was being taught to be selfish and thoughtless, thinking that any amount of food was at his disposal, when millions of children are suffering and dying of want in India, thousands are without sustenance in Turkey, and all over the world, and even in our own country, people are dying for the want of food.

The brotherhood of the human race has become too marked in these last days for us to ignore our brother's suffering, whether he is at our own door or thousands of miles away, and to waste what he needs.

Imagine, too, the trials, through a pampered appetite, that must come to this child when grown to manhood. He will know nothing of self-control, which is the fountain head of vigorous, useful manhood.

Suppose that wars continue, and that the boy becomes a soldier; what actual suffering and misery must come to him in the hardships of army life. A pampered appetite means an uncontrollable appetite, of course, and that child having been taught simply that his own likes and dislikes are to govern him, that the everlasting "I" is to be pleased, will have no sort of stamina should the temptation to drink come.

Are not the ranks of drunkards recruited from just such children as this? Do mothers stop to think what they are doing? what it really means? If the child is to be taught that because an article of food does not "look nice" to a dainty and fastidious eye, he may discard it, would it not be well to teach him also that it is not dainty or decent, but absolutely vulgar, to taste and scatter his food until the dishes and table are in an unsightly mess?

We are sorry for the future wife of a child brought up with such habits. Should she be unsuccessful, or should there be poverty or scarcity of means in his family, there would be dissatisfaction and an unhappy home, than which there is nothing in this world nearer purgatory. The greater harm, however, is being done the child himself, not only physically, for he rejects the plain, wholesome food that he needs to grow on, but morally, by allowing him to please his every whim, and thus preventing his ever gaining strength of character or self-control in any degree.

Mothers, think it over, and see if fastidiousness and waste do not truly lead to this.

NEW SOUPS AND SOUP GARNISHES.

BY EVORA BUCKNUM.



WHILE progressive doctors teach, and many of those who have suffered from indigestion know by experience, that a diet of dry, crisp, nutty-flavored foods is a panacea for nearly all forms of dyspepsia, there seems to be something so satisfying about the dish of soup that

it still holds its own, in spite of the protests of the medical man (and woman) and amid the ever-varying customs of fashionable life.

It seems to be equally acceptable whether served from the nicked bowl of "hotel china," in which it comes at the penny lunch counter, to our unfortunate brother who tramps, or

from the golden soup plate of the millionaire.

I offer you this month some of our latest developments in soup balls and garnishes, with a dozen new recipes for the use of that delightful soup stock of the Sanitas Nut Food Company.

The rice timbales are to be served, one in the center of each plate of soup, as shown in the picture.

The flavorings may be varied according to the soup. Plain rice is more suitable for highly seasoned soups, like the nut French, or soup with fine herbs, and is very pretty, as well as suitable in flavor, in the green of the nut and pease soup.

The rice and stock timbales with a garnish of one large or three small parsley leaves in the top are pleasing to the eye, in the red of the nut French soup, and with the seasoning given in this recipe

are equally palatable in the nut and lemon juice broth or nut bouillon.

Thyme, marjoram, or savory may be substituted for the sage, or the onion may be omitted, or all flavorings may be left out, and salt only used, according to the flavoring of the soup.

A trifle of grated lemon rind in the timbales is exceedingly pleasant with some soups, especially the nut and lemon juice, using the larger quantity of lemon juice given.

The cream balls are, as their name indicates, creamy inside. Any one of them, except the sticks, may be served in each plate of soup.

The sticks are intended to be laid in a lettuce leaf, on a dainty tray, as seen at the left of the soup plate in the illustration.

The savory balls are used with the plainer soups, and *vice versa*, or if both soups and balls are highly seasoned, use contrasting flavors; for instance, the balls with lemon rind, in nut French soup.

The egg balls should be used with care, as they destroy the flavors of many soups.

In my opinion, they, poached eggs, and hard-boiled yolks of eggs are suitable for cream soups only, and not for all of even these.

The fact that all of these balls can be made up and kept in a cool place

for some time before baking, is in their favor.

The timbales may be left in the molds, in the ice box, and warmed when desired for use, by being placed in a pan of hot water.

The little imported tin timbale molds, about two inches deep, one and three-fourths inches across the bottom, and two and one-eighth inches at the top, a cut of which is given at the head of the article, were used for these.

In that same cut you will see a set of spoons for measuring, respectively, one half, one fourth, and one teaspoonful. They are a great convenience, and especially useful for the small quantities of herbs given in some of the soups.



The "cups" I use are those found most generally in the house-furnishing stores, measuring both thirds and fourths, which are supposed to be half-pint cups, but which really hold a great deal more, three and one-fourth cupfuls equaling a quart.

In all my recipes, the measurements for both teaspoonfuls and tablespoonfuls for everything are rounded; that is, just as much above the top of the spoon, as below it, in the bowl. That seems to me less confusing than to measure some things one way and some another. It is necessary to remember, too, that there is a great difference in the saltness of salt. So the measurement for that will have to be governed by the quality used.

Of all the accompaniments to soups, croutons (crusts of bread) are, perhaps, the most desirable, as well as the most practical, for general use. They are made by cutting slices of bread, not too fresh, into any desired shapes, drying slowly at first, in a warm oven, then gradually increasing the heat until they are a delicate cream color. They should never become brown, for if they do they will spoil the flavor of even the richest soup. They combine better with some soups if dried only, though they are not so far advanced in the process of digestion. The illustration offers a few suggestions as to forms.

Small pieces of bread are used to the best advantage by cutting into cubes, but for special purposes, round pieces of different sizes, diamonds, crescents, fingerlength strips, or other forms may be made.

I have sometimes taken bread ground through the universal food cutter, with the coarsest cutter, sifted out the fine crumbs for breaded dishes, and prepared the coarse ones in the oven, as for other croutons. They are very nice, for variety.

None of the croutons, however, are suitable for very delicately flavored soups, such as cream of corn or cream of rice. For these, there is nothing equal to the dainty cream or nut-shortened sticks, or the delightful little soup crackers, of the Sanitarium Health Food Company.

Granose and granola are both desirable for some soups. I can think of nothing more appetizing than the crisp half of a toasted granose biscuit with a plate of bean soup, and for fruit soups nothing can fill its place.

Nut meats, added when the soup is served, make a pleasing and wholesome variation offering special inducements to mastication.

For all of the following soups, the stock and part of the liquid are beaten together, with a revolving egg beater, until smooth, when the remainder of the liquid may be added.

Where tomato is mentioned, strained, stewed tomato, of ordinary consistency, is intended. If it should be unusually thin, a little more will be required, and a little less if it is thicker.



The herbs for the soups that are to be strained are loosely tied in a piece of cheese-cloth or thin muslin, so that the flavor will come out into the soup as we occasionally press the sack with a spoon.

The bay leaves are thrown in without any preparation.

The stalks of celery are crushed or broken.

Onions are sliced, except when they are chopped and left in the soup, and carrots are grated.

For directions for browned flour No. 3, see "Art in Cookery," in the February Good Health. If large quantities of soup are made, a longer time than is given in the recipes will be required for heating the combined ingredients.

The ripe (black) olives can be bought at all first-class groceries in the larger cities. To prepare them for the soup, cut them open carefully, on one side, lengthwise, and remove the stone. Then slice them in rather thin slices, beginning at the end. That will leave most of the pieces in rings.

Arrowroot, for thickening, is much finer in flavor than cornstarch, and costs but little more, because less is required.

Do not use flour for the olive soup.

After blending stock and water for nut and rice soup, heat to boiling. Add the rice, onion, sage, and salt, and boil rapidly until the rice is tender, from fifteen to twenty minutes. It will be necessary to add from one to two cups of water after the rice is cooked, to make the soup of the proper consistency.

One young man said, "I liked that rice soup. It made me think of the chicken soup my mother used to make with rice." And another, "Do you mean to tell me there is n't any chicken in this?" "Well, where did you get your extract of chicken?"

Cook the barley, in the salted stock, in a double boiler, as for porridge, for from three to five hours. At the last, add the necessary water and the sticks of celery. Simmer or steep for fifteen or twenty minutes, not longer. Remove the celery, and serve. Some think this would pass for mutton broth.

For both the fruit soups, cook the currants and seeded raisins together until the skins are tender and the water is all boiled away. Then for the cream fruit soup, put all the ingredients together, and simmer for half an hour. Add water, if necessary to leave creamy. Heat to boiling, and serve. The heating of all the ingredients together for the half hour, or longer, is necessary to the success of the soup. If lemon juice is used, it should be added just before serving.

For the grape-juice soup, combine all the ingredients (after the raisins and currants are cooked) except the grape juice. Heat to boiling, then add the grape juice, let all come just to the boiling point, and serve immediately.

Toasted granose biscuit or finger croutons are especially suitable to serve with fruit soups.

The nut and lemon-juice broth is delightful with either one or two teaspoonfuls of lemon juice. The latter gives quite a tart taste.

The herbs, for the nut soup with fine

having the advantage of being free from the poisonous acid.

Okra is a valuable addition to some soups. When using it, take about one fourth less water for the soup, and add from one fourth to one half of a pint can to each pint of soup. Heat carefully, and serve at once.

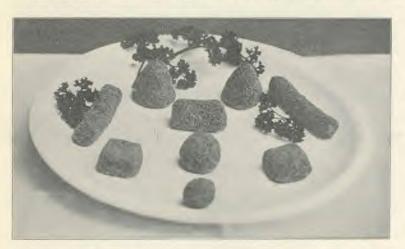
Cook some of the small Italian pastes (you can be sure that they are Italian

> only by buying them of the Italian dealer himself), vermicelli, soprafini, ditalini, acini di pepe, or others, in boiling salted water, until tender (from ten to fifteen minutes), drain, and add for variety to suitable soups, in the

proportion of one ounce to three-fourths or one quart of soup.

It is with pleasure that I bring to the readers of Good Health the practical knowledge of a preparation which will enable those who are reaching out after the things which lead to a purer and better life, and who have desired so to do, to discard from their tables the flesh-meat soups.

In our first efforts to find a substitute for this refuse matter, this sewage of the ox, the sheep, and the fowl, we turned to milk and cream, but this we saw, not willingly at first, resulted in an increase of headaches, biliousness, and dullness of mind wherever this "reform" was carried out. Now, however, with nuts as a base for our soups, we have something satisfying, nutritious, and free from destructive properties.



herbs, are first mixed together dry, then with a little of the blended stock, before adding to the whole. Heat all together, to the boiling point, simmer for fifteen or twenty minutes, and serve. This is no ordinary soup.

Prepare lentils and peas according to directions for Swiss lentil soup in the February Good Health, and add to them their respective quantities of blended stock and water, with flavorings and salt, and heat from twenty minutes to half an hour before serving.

Tie the onions, for the nut and lentil soup, loosely in a piece of netting, put into the soup before the last heating, and remove when ready to serve.

The brown onion flavor takes the place of the onion fried in butter or other oil, which is used so much, in some lines of cookery, for flavoring soups and gravies,

RICE TIMBALES.

1/3 cup rice.

I cup water.

1/2 teaspoonful salt.

1/2 teaspoonful nut oil if desired.

Soak rice in water for half an hour, add salt (and oil), stir well, and steam, without stirring, three fourths of an hour to one hour. Press into oiled molds. Set in a pan of hot water, covered, for twenty minutes or longer. This will make nine inch-deep timbales.

RICE AND STOCK TIMBALES.

of a pound can of nut soup stock.

I cup water.

1/3 cup rice.

I teaspoonful chopped onion.

1/2 teaspoonful sage.

5% to 34 teaspoonful salt.

Blend stock with water, heat to boiling, add the other ingredients, and cook in double boiler or steamer. Mold as for rice timbales (nine one-inch deep).

CREAM SOUP BALLS.

t large tablespoonful nut oil.

1/2 cup pastry flour.

r cup boiling water.

3/8 teaspoonful salt.

4 tablespoonfuls finely sliced celery.

2 teaspoonfuls chopped parsley.

(The parsley may be omitted.)

Heat the oil in a frying pan until hot, but not brown. Add half of the flour, and rub to a paste, then add the boiling water gradually, stirring until smooth. Stir in the remainder of the flour dry. When the sauce is smooth and creamy and well cooked, remove from the fire, cool a little, and stir in the celery, parsley, and salt. (The mixture will be very stiff.) Stand in a cool place until perfectly cold, then shape into balls one and one-fourth to one and one-half inches in diameter, or cones one and one-half inches at the base, or cubes of one and one-fourth inches, or sticks three and one-half to four inches in length by three fourths of an inch in diameter. (See chop tray of samples.) Roll in fine zwieback or cracker crumbs, then in beaten egg (add salt and a tablespoonful of water to each egg), then in crumbs again. Place on oiled tins a short distance apart, and set in a cool place until ten or fifteen minutes before serving, when they should be put into a quick oven, and baked until a delicate brown and cracked a little. Serve immediately. If baked too long or too slowly, they will not keep their shape. This makes twelve to fourteen balls. One half an egg, beaten, may be added when the celery is, but the balls are more creamy without it.

Variation No. 1.— Use 2 tablespoonfuls of small pieces of hickory or other nut meats instead of the celery.

Variation No. 2.— Use 2 tablespoonfuls of black walnut meal (made by rubbing meats through a fine colander with a potato masher) for flavoring, or the same quantity of Sanitas nut meal and a little onion.

Variation No. 3.— Use 1/4 to 3/8 teaspoonful grated lemon rind, instead of other flavorings.

Variation No. 4.— Use chopped protose, with sage and onion, in place of the celery.

PROTOSE FORCE MEAT BALLS.

5 oz. protose, chopped fine and light.

I teaspoonful chopped onion.

2 teaspoonfuls chopped parsley.

1 teaspoonful marjoram.

A very little salt, as protose is already salted.

Mix all together, add a little beaten, salted egg or yolk of egg, to bind. Shape the same as cream balls. Roll in 20 per cent gluten or flour or zwieback crumbs. Bake like cream balls just before serving. (10 balls.)

PROTOSE AND GLUTEN BALLS.

Protose prepared as for force meat balls, ¼ teaspoonful grated lemon rind, in place of other flavorings.

2 teaspoonfuls 20 per cent gluten.

16 teaspoonful salt.

Bind with salted whole egg or yolk, roll in gluten, and bake. (10 balls.)

EGG BALLS.

4 eggs.

White of 1 egg, unbeaten.

3 or 4 leaves of parsley, chopped if desired.

¼ teaspoonful salt.

Boil the eggs 15 to 20 minutes, cool, press the whites through wire strainer with the thumb, as in the illustration, and rub the yolks to a paste with a wooden spoon. Mix lightly with this the salt and parsley and white of egg. Make into 8 or 10 balls. Roll in gluten or crumbs. Keep cool, and bake when ready to serve, like other balls. Slices of Brazil nuts or pieces of other nut meats may be placed in the center of the balls.

NUT FRENCH SOUP.

¼ of a pound can of nut soup stock.

2 cups tomato.

б cups water.

1/2 tablespoonful browned flour No. 3.

1/2 a large onion.

11/2 medium sized bay leaves.

¼ teaspoonful sage.

3/8 teaspoonful thyme.

21/2 teaspoonfuls salt.

Simmer one-half hour to one hour, strain, reheat. Serve in bouillon cups or soup plates.

NUT AND RICE SOUP.

¼ of a pound can of nut soup stock.

8 cups water.

21/2 tablespoonfuls rice.

3/3 teaspoonful chopped onion.

1/8 - 1/4 teaspoonful sage.

21/2 teaspoonfuls salt.

THE F. F. V. SOUP.

14 of a pound can of nut soup stock.

8 cups water.

I large bay leaf.

1/2 large onion.

4 tablespoonfuls grated carrot.

I very small head of celery.

2-21/2 teaspoonfuls salt.

Simmer all together one half to three fourths of an hour, strain, reheat, and serve in soup plates.

NUT AND BARLEY SOUP.

1/4 of a pound can of nut soup stock.

8 cups water.

21/2 tablespoonfuls coarse pearled barley.

2 small sticks of celery.

21/2-3 teaspoonfuls salt.

NUT AND RIPE OLIVE SOUP.

 $\frac{1}{4}$ of a pound can of nut soup stock. 6-6 $\frac{1}{2}$ cups water.

2-2½ dozen ripe olives, cooked for fifteen minutes in three-fourths cup water.

4-5 teaspoonfuls arrowroot (or 2 tablespoonfuls cornstarch) blended with cold water.

2-21/2 teaspoonfuls salt.

NUT CREAM FRUIT SOUP.

14 of a pound can of nut soup stock.

3 cups water.

6 figs washed and cut fine with shears.

2 large tablespoonfuls seeded raisins.

2 large tablespoonfuls currants.

1/2 teaspoonful salt.

34 teaspoonful of lemon juice if desired.

NUT AND GRAPE-JUICE FRUIT SOUP.

1/4 of a pound can of nut soup stock.

4 cups water.

2 cups undiluted Concord grape juice.

8 tablespoonfuls seeded raisins.

8 tablespoonfuls currants.

4 tablespoonfuls citron, shredded.

NUT AND LEMON-JUICE BROTH.

1/4 of a pound can of nut soup stock.

4 cups water.

Heat to boiling, remove from fire, and add 1-2 teaspoonfuls lemon juice, and

11/2 to 2 teaspoonfuls salt.

NUT SOUP WITH FINE HERBS,

14 of a pound can of nut soup stock.

4 cups water.

1/8 teaspoonful sage.

1/4 teaspoonful thyme.

is teaspoonful mint.

1 1/2 - 2 teaspoonfuls salt.

NUT AND LENTIL SOUP.

½ cup of lentils, before cooking (about 1¼ after).

1/8 of a pound can of nut soup stock.

3-31/2 cups water.

2 very small onions.

1-14 teaspoonfuls salt.

For a different soup, add ½ teaspoonful of lemon juice.

NUT AND PEASE SOUP.

1/2 cup dried green peas (about 1 1/4 cooked).

1/4 of a pound can of nut soup stock,

3 cups water.

1 teaspoonful mint (or three or four fresh leaves.)

1-14 teaspoonfuls salt.

NUT BOUILLON.

% of a pound can of nut soup stock.
2 cups water.
4 tablespoonfuls brown onion flavor.
% cup tomato (or % if, very thin).
Water to make 2½ to 3 pts.
2-2½ teaspoonfuls salt.
Simmer one half hour to one hour.
Serve in cups.

BROWN ONION FLAVOR.

2 medium-sized onions, sliced thin 2 tablespoonfuls browned flour No. 3. Blend the flour with the water. Add the onion, and cover well with boiling water. Simmer, adding water when necessary, until the onion is dissolved. Rub through a wire strainer. The mixture should now be thin enough to pour from a spoon readily, or of about the consistency of rather thick cream. This flavor can be kept for several days in a



THE FATHER IN THE HOME.

"I HAVE no theories of fatherhood to present, only a radiant memory," Henry Turner Baily declares in the Kindergarten Review, and then describes the memory.

"I remember a tall man with a full black beard, clear, light blue eyes, a high, white forehead with a flourish of dark hair above it. He wore a tight-fitting suit of overall cloth, and Russian imperial boots of grain leather which came above the knees. I can see him now, walking to his mill with a quick, long stride, or standing before a turning lathe with a snowstorm of shavings powdering him from head to foot.

"This was the man whom mother was always glad to see. This was the man who never came into the house without stopping to put his arm about her and kiss her and whisper something in her ear. This was the man who drew me between his knees before breakfast, and called me 'Little Sonny' and 'Hen-o-ree-O-Nic-o-las,' and patted a jig upon my back. He rode me upon his shoulder, sat me upon his knee, and practiced me on the sounds of the alphabet until I never mispronounced,

and took me upon the front seat by his side whenever he drove anywhere. This was the man who sang bass in church, and who sat in the twilight Sunday evening, and played a mellow-toned flute of ebony with machinery of German silver.

"I was afraid of him, just a little; because he was so tall and strong, and because everybody and all the animals I knew minded whatever he said. I used to think mother was afraid of him, too, because she used to blush when he came near her. And then once when I was busy playing and said, 'Wait a minute' twice, when mother asked me to put away my things and go to bed, he looked at me and said 'Henry!' in such a way that I never forgot it. I imagine it was the memory of such a look that made my brother Fred once ask mother to punish him for some disobedience rather than tell father about it; or perhaps it might have been Fred's recollection of a punishment which I received for lying. 'Is it possible my first boy will tell a lie to his mother?' my father had asked, with a piercing look straight through me. He

talked with me calmly, kindly, but to his sorrow I persisted in my lies, defying him and everybody else to make me say anything I did not please to say. 'Then I shall have to punish you,' he said, and reached for a maple shoot which I had been using upon my wooden horse. I have never forgotten that whipping,- the thrill of it which took my breath away, the pain of it which surprised me beyond measure, the wonder that father's face could be so calm through it all. He shut himself into his bedroom afterward and prayed to God with tears that his boy might never tell a lie again. I discovered that day the heinousness of sin.

"Not long after, when father was away, I was throwing stones near a shoe shop in the village, and broke a pane of glass. Somebody told mother. She called me in and said, 'You know what your father told you about throwing stones in the street?' Yes, I knew. 'When he comes home, tell him at once what you have done, that you are sorry, and that you will never do so again.' O, the agony of that afternoon! What would father say? What wouldn't he do! He would kill me. Ah, how little I knew him! When at last he came, and I had managed to sob out my poor story, his keen eyes softened with tears, he wrapped his strong arms about my shrinking little body, and lifted me tenderly into his lap. He told me that he would forgive me, that he was happy to know that I had told the truth, that he would pay a man to set the glass; and then his voice failed him, and he kissed me upon the forehead. The memory of that kiss will go with me as a benediction forever. I knew that day the joy of a pardoned sinner.

"How I admired that man! When I awoke of a spring morning, I could hear him whistling while he spaded the garden. He hived bees, and managed ugly horses; he could mow and milk, and run the

machinery in the mill. He could make the most wonderful things with a jack-knife—toads that could hop, jumping-jacks, willow whistles, darts, bows and arrows, windmills. When the new church was built in the village, he sawed the shingles, turned the rosettes, carved the ornaments with his own hand, made the great clock dials, and set up the clock.

"Then came illness. The dust of the mill was too much for his lungs. The puffing engine, the humming planer, the great crying and singing saw which ate its way through oak logs, the buzzing lathe, the clucking shingle jointer, were all sold and carried away. Father built a shoe shop, and set up the new machinery. Business was rushing. He was often away to Boston and New York and Philadelphia, and had wondrous stories to tell of locomotives and steamboats and elevators, of which we boys never tired.

"When I was about seven years old, father took me to Boston by way of the white steamer from Hingham. It was just after the great fire. I remember the heaps of red-hot ashes, the queer, distorted shapes of iron, the weird ruins of granite walls, and the soldiers with tall hats and glittering regalia standing guard. It was a gala day for me, but a day of thick darkness for him. The fire had ruined his business. The creditors came to the factory in the country, examined the machinery, looked through our house, walked over the little homestead, and went away.

"Again everything was sold. With hired money, father built a little cottage from plans which he drew himself, and into it we went. There were four of us boys then, all as vigorous and as hungry as healthy country boys alone can be. We must be fed. He opened a repair shop in the village. It was our delight. There were a buzz saw, a jig saw, a car-

penter's bench, a hand forge with rotary blower, a turning lathe, together with all sorts of big tools for repairing machinery, and all sorts of little tools for repairing clocks and watches.

"But business was slack. It was a hard winter. Day after day no work came to the shop. But what good times we had at home! Father played horse with us. We rode upon his back as he crawled about the floor on his hands and knees. He told funny stories. He taught us how to make little trellises for house plants, and how to saw wall brackets from thin wood, which, later, we sold from door to door in a neighboring village, and so earned our first money. We had enough to eat, such as it was,- the simplest and often coarsest of fare, - but mealtimes were always jolly. Father was the light and joy of the house.

"But every day there was a time when we missed him. I wondered about it at first; but once or twice I found him in a room alone with a Bible before him, and once I found him upon his knees. I have that Bible now; and when I turn to the twenty-third psalm, and find the pages soiled and worn, or to the last chapters in John's Gospel and his Epistles, and find the leaves loose and brown and spotted as with tears, I know the secret of those silent hours, and I know also the secret of that perpetual joy which like a fountain of living water overflowed upon us all in prosperity or adversity, morning, noon and night, every day of his life.

"He never made us boys a promise which he did not keep; never deceived us; when he wished us to obey him, never spoke more than once; and never required the formation of an intellectual or moral habit which he did not himself exemplify. And yet he was not harsh or unkind, or even inconsiderate in dealing with us. We were taught by example a reverence for sacred things, a respect for age, and a thoughtful courtesy toward women.

"On Sunday afternoons he read aloud the Bible stories until we knew the old book almost by heart. Winter evenings he read to us such books as 'Goodrich's History of the World,' Dr. Kane's 'Explorations in the Arctic,' and Abbott's 'History of the Civil War.' When we began to read for ourselves, he knew what we read. Because of his thoughtfulness in those days I have never read a useless or vicious book.

"Another invaluable lesson taught by example was industry. We were to do with our might whatever our hands could find to do, simply because it was right to work that way. Moreover, we were to be generous in our living. We were to help—to help each other and to help God save the world. Therefore we must give of our time, our talents, our money, to assist in every good work. In the darkest days, one tenth of the scanty earnings was set aside as consecrated money, and given away as occasion served. No one ever pleaded a worthy cause in vain.

"From my earliest recollection of him to the sad day of his death I never heard a cross or unkind word or saw an angry or impatient look pass between him and the woman he loved, the sweet mother of the seven children who now rise up and call him blessed.

"'With beams December planets dart,
His cold eye truth and conduct scanned;
July was in his sunny heart,
October in his liberal hand.'''

THE secret of success is concentration; wherever there has been a great life or a great work, that has gone before. Taste everything a little, look at everything a

little; but live for one thing. Anything is possible to a man who knows his end, and moves straight for it, and for it alone.

— Olive Schreiner.

METHODS OF HOUSEWORK.

BY ANNA CLIFF WHITE.

WORK is the normal state of man.
God conferred a blessing upon



Adam when upon his eviction from Eden he gave the command, "In the sweat of thy face shalt thou eat bread." Work alleviates manv ills. It isnot work which breaks downthe health of

housekeepers, overtaxes business men, and orphans children; it is the way in which the work is done.

Good management is the keynote to a well-ordered home. The question of what work is really needful and then the best method by which to do it for the saving of time and labor, should be duly considered by every housekeeper.

Overwork is not so much the result of lack of time and rush of daily tasks as it is of a want of system in the worker. The average housekeeper would be surprised to know how many unnecessary steps she takes in the simple matter of laying the table. She brings on two or three articles

at a time, and travels from dining-room to pantry, and pantry to kitchen, and kitchen to cellar and storeroom, in an endless routine which makes meal getting a bugbear.

How much better with the help of a small hand tray to carry all the dishes in two or three trips, and to use the same plan in bringing different articles of food from their respective places.

The old motto of "a place for everything and everything in its place," never loses its importance. It is a household text, careful compliance with the requirements of which saves time, patience, temper, and energy.

In the kitchen always have two small cupboards or sets of shelves. In one, place your brick-board and scouring utensils. Have one small box in which to keep the rags for scouring silver, tinware, etc., and a second in which the powder itself may be placed. Upon this shelf may be kept sapolio, pearline, washing-soda, brick-dust, and scrubbing soaps. On the shelf below or above, keep the scrubbing-brush, a small whisk-broom, a hand dust-pan for cleaning the sink, a vegetable-brush, a small brush for cleaning the corrugated surfaces of the dishes, and your lamp-cleaner.

Beneath these shelves drive a row of nails, upon which may be hung the dish mop, the dusting cloths, the window rags, a chamois skin, and lamp cloths.

In the second cupboard keep blackingbrushes, stove polish, boot polish, pipe varnish, hinge oil, and the numerous black and mussy things which even the tidiest housekeeper dreads having around.

If you do not wish to have a third cupboard in your kitchen, use part of this second as a receptacle for the various



state of affairs in some kitchens after the preparation of the dinner. A round of visits to this part of our homes while the different families are busy in the diningroom would be interesting and in some cases very profitable.

Mrs. A has never learned the art of systematic housekeeping. She spent her girlhood in school, and her maidenhood in society. An indulgent mother imposed but few home tasks, and did not insist upon their performance. Consequently, Mrs. A can concoct a

bottles of sweet oil, turpentine, arnica, camphor, and glycerin which are so useful and necessary in every home.

Have clean calico curtains to hide the contents of these shelves, and they will be an ornament rather than a disgrace to your kitchen.

You will also require a shelf for the lamps. One can buy oilcloth of very pretty designs and of any width required, with a fancy pinked edge, for covering these shelves and mantle pieces.

Do not let your kitchen become cluttered. Terrific confusion is the only phrase applicable to the



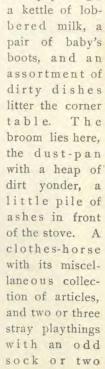
delicious salad or a toothsome cake, she can make her home look quaint, cozy, and homelike, she is a charming hostess, presiding over an evening's gathering perfectly, and entertaining callers gracefully. If absolutely necessary, it is possible for her to cook an ordinary every-day meal. But the fundamental principles of

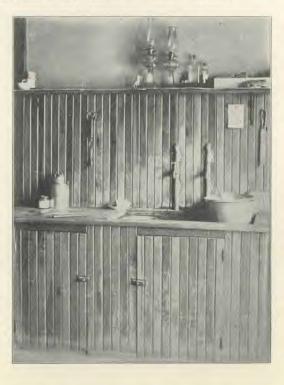
domestic economy are unknown to her. The need of system in every-day work and

of good management in details has never been a part of her education. Consequently Mrs. A's kitchen presents a sight when the midday meal is prepared and on the table. Part of her breakfast utensils are piled in the sink, for she was in haste totry a new cake recipe, and thought it would be a good plan to do it immediately



er, a cut loaf of bread, a sun bonnet, an old newspaper, two or three paper bags,





after breakfast, while baby was asleep. Cups, plates, pans, and kettles used during the morning are heaped promiscuously on the sink extension. A pan of parings and scrapings occupies a seat of honor on one of the kitchen chairs. A half can of tomatoes, a saucer of egg yolks, a dish of cold potatoes, a napkin snatched up in

haste as a hold-

belonging to Master Harry complete this scene of distraction, all because one girl was not taught system in her work, and the advantage of picking up things and constantly putting them in their place.

Have no fear about appearing lazy in your work. If you have nuts to crack, apples or

potatoes to pare, dishes to wipe, knives to polish, or cake to mix, sit down to the task.

Cover your kitchen table and sink with linoleum and your pantry shelves with paper. Have plenty of rugs and mats or a long linen walk across the floor. Do not overindulge in fancy quilts, handsome



table-covers, ruffled pillow-shams, and finely worked sofa cushions; but use the precious time thus spent in resting the physical and improving the mental nature. Drop down for an hour's quiet rest with a book, or take a pleasant walk about your garden, or have a kindly chat with

y our neighbor. Remember that you owe a spiritual, moral, and social duty to yourself and your family which is far above the outdoing of your neighbors in prim and immaculate house-keeping.

In the next place, don't worry about your work two or three days or even a season ahead. Sufficient unto the day is the work thereof, and



counting the number of preserves and pickles to be put up next fall, and planning the fall sewing while you are engaged in spring housecleaning or doing a large ironing neither improves the performance of present duties nor hastens and lightens the coming task.

Sweeping and dusting form a large part of housekeeping. Sweeping-day in a

great many households has linked hands with washingday, and is proverbially feared by men and dreaded by women. But as it is only the rich or the correspondingly poor who can afford bare floors. sweepingday has become one of life's necessary evils.



Blessed is thought the woman who can call in help and leave the house to the mercy of a charwoman, but woeful sometimes is the consequence, for it is safe to say that only one woman out of four knows how to sweep a room easily and well.

Begin with the idea in your mind to raise as little dust as possible. Open the windows and shut the furnace registers. Take up all loose rugs, and after shaking well out doors, roll them up and lay aside. Wipe off with a damp cloth the chairs and any small furniture, and move these from the room. Shake the curtains

and all heavy draperies, and pin up the folds. Wipe the picture frames and the cornices. After cleaning with a damp cloth, cover all the heavy furniture, bookcases, mantels, etc., with sheets. With a long-handled wall brush or with a cloth tied over an ordinary broom, brush well the walls and ceilings, looking closely after the cobwebs. Pick up any stray

threads, wisps of paper, and straws which may be on the carpet, for you can sweep a carpet half in pieces trying to get these up with a broom. Now you are ready to sweep.

Have a large pail of thin warm suds ready, and into this dip your broom, beat-

ing it quite dry before using. Always sweep from the sides of the room toward the center, following the thread of the carpet as much as possible. When all through, allow ten or fifteen minutes for the dust to settle, and then with a pail of warm ammonia water and a soft cloth wipe first the windows and then the woodwork. Remove the covers carefully from the furniture, straighten the pictures, shake down the curtains and drapes, and replace the bric-à-brac and furniture.

If the carpets are dull or stained and spotted, wipe them with a flannel dipped in ammonia suds. Sometimes it is a good plan to sweep them with coarse dry salt to destroy insects. For green carpets, steeped tea leaves, not too moist, are very effectual as a rejuvenator. It is not conducive to health to carry on an animated conversation while sweeping, nor is it hygienic to leave the hair uncovered.

Have glass jars for holding grains, beans, rice, sugar, spices, and the many things which are generally kept in bags or tin cans. You can look into your nicely arranged cupboard, and at one glance select the article needed, thus saving a hurried search and a dozen spills among a lot of paper sacks with no distinguishing features and which are a constant temptation to the midnight mouse.

Save paper sacks for use in the kitchen. Instead of having a pail for the scrapings, use a sack. The pail must be cleaned and scalded, and is unwholesome and unsightly; the paper bag can be set beside the stove, takes up very little room, and after the work is done, can be thrown into the refuse barrel or burned.

Keep the baby's clothes in a daintily covered box which may be used as a low bedroom seat.

If your room is large enough, have a long, wide window box to hold your dress skirts laid out full length.

If the silver becomes dull or stained, lay it, after washing, in a pan of hot borax water. Let it boil for two or three minutes, rinse in clear hot water, and wipe with a clean soft cloth. This method saves scouring the silver so often, and does not wear it nearly so much.

A REFRESHING DRINK AND A SWEETMEAT FOR SPRING.

BY EVORA BUCKNUM.

DURING the interim between winter and summer fruits, the following beverage will be found especially grateful:—

Wash sweet California prunes, and put them to cooking in a generous quantity of boiling water. After they have come to the boiling point, allow them to simmer for three or four hours, then let them stand, for two or three hours longer, where they will cool and the juice become richer.

Strain and add water to make one and one-half pints of juice to each pound of prunes. Add a teaspoonful of lemon juice for each half pint, and you will have a pleasant drink, and one which many can take who can not use grape juice uninterruptedly. The lemon juice, be-

sides giving an agreeable tartness to the drink, lessens the liability to fermentation, by destroying the germs in the stomach.

Now, stone the prunes and rub them through a fine colander. (The skins of all fruits are a great cause of flatulence.) Spread them about an inch thick on well-oiled granite plates, and set them where they will dry. When partially dried, loosen them from the plates with a broad knife or spatula, turn, and dry until they are just right to masticate easily, but not hard. Roll into strips about an inch in diameter, and cut into three-or four-inch lengths.

After you have tasted these, you will be sorry you did not know about them before. Try them with undiluted nut butter and with nut meats.

THE CRIMES OF ALCOHOL.

The quiet man when alcoholized becomes animated and energetic; the lively nature, dull and morose; the inoffensive spirit is made brutal; the loving and tender mother grows hateful and harsh to her children; purity is transformed into licentiousness; fraud and deceit take the place of the soul of honor; the truthful man becomes a liar; he who has had a strict regard for the rights and property of his fellow man is now a thief; crime in varied forms walks abroad in the shoes of the citizen who was upright and law abiding; the former respecter of life as a sacred trust commits murder and suicide.-J. W. Grosvenor, M. D., in the Quarterly Tournal of Inebriety.

The prisons of France are inhabited in a great part by descendants of inebriates and degenerates. A total abstainer among criminals is an exception to the rule. While every alcoholic is not a criminal, this is due to accident and the care of friends; for alcohol paralyzes the cerebral functions and annihilates the will; then the field is open to anger, impulsiveness, and bad instincts.— Laurent.

Alcoholism is one of the most potent causes of race degeneration. Crime, which is the most powerful factor of alcoholism, never leaves the family or individual their primitive integrity.— Dr. Folk, in "Criminal France."

We must not forget to speak of the offspring of the inebriate. His inheritance is a sad one; a tendency to the disease of the parents is, indeed, as strong as, if not stronger than, that of consumption, cancer, or gout. — Dr. Willard Parker.

An important factor in the cause of crime is intemperance. Fully fifty per cent of the criminals arrested in Chicago are inebriates, and the police reports of New York show about the same proporti on. — Dr. D. R. Brower, Chicago.

The law of inebriate inheritance is as true as the law of gravitation. In over three thousand cases of chronic alcoholism, I have found one half with an inebriate ancestry.—Kerr.

From fifteen to twenty per cent of all cases of mental disease may be put down to alcohol as a cause, wholly or in part.— Clauston.

FOOD AND DRINK.

DURING the meeting of the American Medical Association held at Columbus, Ohio, last June, Elmer Lee, M. D., a well-known writer on dietetics, presented to the section on Physiology and Dietetics a paper with the above title, from which we take the following selections, as they uphold in the most forcible manner the principles which this magazine has so long been advocating:—

"The larger part of the activities of man are spent in search of nutriment. In his diligence nothing escapes his attention, in either the animal or the vegetable kingdom. A ceaseless and relentless hand is laid on almost every living or growing thing to provide material to appease and satisfy the human appetite. Nothing great or small, of either real or fancied value as nutriment, is missed by man,

determined to have all there is to eat and drink.

"The animal cell has not changed in any particular during the period of its existence, and the requirements for growth and repair remain as ever the same. Even with the vast modifications since the advent of steam and electricity, primitive and simple limitations at this time govern a considerable proportion of the human family in its food supply. There are whole races of men of sturdy and enduring structure subsisting on one or more natural products of the ground to the exclusion of variety or flesh. The work and patience of the rice-eating Oriental outrivals the endurance of such as think strength depends on much variety and a mixed diet. Meat eaters are not able to boast of advantages that do not also attend those whose food is a vegetable diet. In the selection of edible material, taste and means to purchase it play a most important part.

"The habit of a varied and mixed meal of victuals thrice each day is widely taught in the homes of all classes in this and other advanced countries. There are few who stop to think whether it is useful or harmful. Sickness is nearly or quite universal among civilized nations, and less in degree among lower grades of mankind, and even quite rare in some primitive races.

"Eating to excess, of whatever nature of food, if frequently repeated, leads to certain unpleasant consequences. But from a failure to associate cause and its effect, it is much more than probable that much sickness and many premature deaths are directly due to the fatal error of crowding the body with more food than is safe. It is a nice point to determine as to the exact relation between the bodily need and its supply, i. e., not to under-or overestimate the vital capacity under different conditions. Few, indeed, have knowl-

edge to that required degree, and it naturally follows that the many are paying a penalty in sickness and suffering for their mistakes.

"The profession, except here and there, fails to appreciate that disease is principally self-induced through the misuses of the stomach. It would be far more helpful to the patients if greater attention were given to dietetics. Conditions of health or its absence are affected by bodily habits, and daily mistakes at breakfast, luncheon, and dinner outbalance in the long run the tendency of physiological restitution. Let it then be clearly spoken as my experience in a practice of nearly twenty years, that pathology is a condition closely allied with the sad misfortunes of feeding the body in excess of its needs, and beyond the capacity of its powers of elimination.

"Carbonic acid gas is a directly resulting waste product, and is deadly to cell
protoplasm if retained in the system too
long. It is reasonable to assert that it
is overmuch rather than too little food
which is responsible for human pain and
bad stomachs. . . . Any diet may be
healthful that is natural, i. e., not artificial, if properly proportioned to the
bodily requirements. . . . It is a great
mistake to eat too much, and it leads to
frequent fatal complications.

"There is no precise weight of food suitable to all persons, as each is an independent consumer, and with necessities peculiarly his own. With few exceptions, every class of society abuses the pleasure of appetite, and therein lies the chiefest explanation of the origin of bodily and mental disease. The solids, liquids, and gases within are augmented in vigor or degeneration in direct relation to the appropriateness or the inappropriateness of the food supply. It is the refuse within the organism which, remaining in touch with the vital fluids and tissues for

too long a space of time, is turned into the toxins. This toxic matter, fluid, solid, or gaseous, kept too long in contact with vital tissues and nerves, induces a series of unnatural sensations. Bodily sensations, when disagreeable or painful, are the symptoms of disease. True medicine or science applies itself at this moment in rightly directed measures that stop further toxic production, and at the same time also hastens a removal of such toxin as is already formed. If symptoms are wisely and promptly overcome in a truly scientific manner, little harm results to the organism, and a valuable lesson may have been learned by both physician and patient. Much pitiable blundering often passes for scientific treatment that is called 'regular,' but to the disparagement of the worth of capable medical science.

"Two meals of food each day are safer than three, even if the quantity taken be the same. The early morning hours are accompanied with the least stomachic and intestinal resources for a satisfactory digestion. Waiting till noon or nearly the middle of the day for the first meal has, in practice, yielded benefits to the patients placed on that plan. Good results are also obtainable by making the first meal of fruit or some plain food, followed by a hearty luncheon. It is my wish especially to emphasize this fact, learned in years of practice; viz., it is not so important what is eaten, as it is when and how much. Seasoning of food encourages overeating; the same is the rational objection to sauces and vinegars and all sorts of dressings. The needs of the stomach are easily satisfied, but the artificial appetite created by the cooks and tradesmen, who have everything conceivable to tickle the palate, is hard to satisfy. In the attempt to give it what it craves, sickness, pain, and death are sometimes the logical conclusions. It takes much experience and discrimination

on the part of physicians to save patients from overindulgence. It is pleasant to gratify the natural demands of a healthy organism, but moderation is needful at all times to keep in check tendencies that grow unawares into self-injury.

"An ocean of water, and not a drop to drink,' is now and then one of the most pitiable of human sufferings. Could all the dwellings in any large city be open to view, there would be a sight of wholesale anguish, for nearly every house has its quota of sick and dying. Yet, strange as it may seem, but few are aware that a cool drink of water has virtues superior to any and all saving agencies. There are everywhere attempts made to cheat human nature of its just heritage. There is no substitute for plain water for the animal economy. Anything added to pure water must be regarded as an adulterant. Some such mixtures are slightly injurious, while the largest number comprise positively deadly ingredients. Water drinkers . . . are seldom sick, and are the longest lived, other conditions being equal. . . .

"Men everywhere are trying to find how to keep well and live happily and long, but continually miss the essentials. Few people take an adequate amount of water to meet the daily wants of the system. A very large number are actually falling behind in health for the lack of a little more pure water to cool and refresh the overheated blood. Water is frequently repudiated by men and women, wholly unmindful that it has advantages for them beyond price. There are no known contraindications to water as a drink, and the quantity may be whatever the stomach and intestines are able to absorb. . . .

"It is possible to keep well for a certain length of time without attention to physiology or dietetics, but it is a mistake which comes in for compound interest in the end."

SERENITY IN CHILDHOOD.

It is painfully common to hear children tell about being "nervous" before they can speak plainly, and to see mothers themselves encourage the abnormality by speaking about the excitability and nervousness of their little ones in their presence. The pernicious practice of teasing and tickling children is far too common, as if a child were a mere plaything for the amusement of its elders. Crying, too, is often needlessly provoked or prolonged. Whether it is caused by disappointment, temper, or an injury, a fit of crying should be checked in one way or another as speedily as possible; and the mother will do well who studies wise methods of doing this.

I remember seeing a little girl come in from the street sobbing and crying because she had fallen and hurt her head. The mother soothed her for a moment in her arms, and then told her that something very nice had just come for her, and asked if she remembered what she had been wishing for for a month. Interest and anticipation were aroused, and the current of thought changed from an unhappy to a happy channel, and thus the injury was wholly forgotten, and no further inconvenience noted. A mother less wise might have coddled the child until the little bump became a very vivid picture on the little girl's mind, and the pain correspondingly prolonged, while seeds of fear would have been planted to grow by further occasion.

Children are frequently injured in health by the time, place, and manner of reproof. To rehearse a misdeed at the table, in the presence of others, or at bedtime, is an outrage against better nature and the best interests of a child. Pains should be taken to cultivate a happy mealtime, that food may be taken slowly and with good cheer and fellow-

ship. To disturb the mind by arousing any unpleasant emotion is to interfere seriously with digestion and assimilation; and then ordinarily the innocent food, swallowed in sullenness or between sobs, will be blamed for the pain and disorder which follow. The German salutation, "Lustige mahlzeit" ("I wish you a happy mealtime"), has sound philosophy behind it.

To reprove in the presence of others is to do violence to every law of courtesy and fairness. A child's sense of justice and right is usually very keen. He warmly appreciates delicate consideration and respect for his rights and feelings, and correspondingly resents the opposite course. And so, O parents, if your children trespass against you, tell them their faults privately and kindly, and you will have gained their love, obedience, and respect in increasing degree; for they will almost invariably hear you under such circumstances. Let your touch upon your children's lives be always harmonious and loving, and your reward will be great, and their gain will be immeasurable.

It may be a permissible form of punishment to send a child to bed in the daytime, but it surely is not right to send a child to bed at night in disgrace, rebellious, and unreconciled to parental authority. A good mother, whom the writer knows, says that she never punishes her children near bedtime. It does no harm, and is often wise, to put some time between the committal of an error and the day of judgment. Discernment will be clearer on both sides, and matters are more likely to be held in their true relationship. The hour of retiring should be serene and peaceful, full of love for the little home world, and with holy confidence and trust in the Father of all. whose truest name is Love.

The object of training is not to bend the will of the child to blind, unquestioning obedience to parental rule, however wise and loving it may be, but to teach him to love righteousness and the Author of it with all his mind and all his strength. To insure this desirable end, it is the part of wisdom to make the higher way appear lovely and attractive, as it is in truth, and he should be taught that it is an easy thing to walk with God, conscious of divine guidance and protection, and that hardships and trials lie along the path of one who seeks to follow his own blind, selfish, undisciplined will.

It is hardly necessary to add that a serene childhood can be secured only in a home where love, peace, and serenity are the guiding stars of the parents and others who make up the family life. If nervousness, irritability, temper, and excitement are prevalent; if anxiety, worry, and fear are allowed to put their sharp fangs into the lives of the elders, then it is impossible that the children

shall not suffer from the effects of this impure, unwholesome mental atmosphere. A child's mentality is almost wholly governed by that of its older associates, and hence there is but one way to shield the children, but one way to give them enduring health of body and of soul. Moreover, it is only the serene soul that can be clothed upon with a really healthy body. A vast truth is set forth in these few words. Let us ponder it well, and make it a governing principle in our "What we all want," said Charles Kingsley, "is inward rest - rest of heart and brain; the calm, strong, self-contained, self-denying character, which needs no stimulants, for it has no fits of depression; which needs no narcotics, for it has no fits of excitement; which needs no ascetic restraint, for it is strong enough to use God's gifts without abusing them; the character, in a word, which is truly temperate, not in drink and food merely, but in all desires, thoughts, and actions." - Helen L. Manning.

TABLE TALK.

When the symptoms of worry begin to manifest themselves, when your mind gets to dwelling upon some one troubling matter with feverish insistence, when you find yourself depressed or irritable or overstrung or full of foreboding, then go into your room and lock the door. This is the prescription of a contributor to the Piccadilly Magazine. "For the first application of this prescription you must be absolutely alone and in silence. After a while you may be able to make these conditions for yourself anywhere, by the complete withdrawal of your mind, even in the midst of a crowd; but at first you must be quite alone. Loosen your garments completely; lie down in the most restful position you can assume; avoid

raising the head too high, thus cramping the neck and impeding circulation. Now close your eyes for a few minutes, and raising the arms let them fall and lie loosely and naturally above your head. Lie thus for a minute or two, and then begin to take deep, long breaths, as deeply as possible, exhaling quietly and naturally. Keep this up for five minutes, until you are sensible of a real relaxation and refreshment of the body. You will then be in physical condition to take up the mental work which you need to do."

A drunken Swede brought a novel plea into a Chicago police court lately. He claimed that he had not been drinking, but eating, and as evidence, placed a small, half-filled bottle of "food" before

the justice. He was asked what he meant by bringing whisky into the court.

"That is not whisky," said the prisoner. "That is food. I submit that you can not send me to the Bridewell for eating too much. Professor Atwater, of Wesleyan University, told the educational conference that whisky is food. He says you can not deny food value to whisky, and that it is oxidized just like bread and meat. When I read that, I got hungry, and went out for a couple of slices of whisky and a piece of brandy."

"He had eaten a quart or two before I picked him up," said the policeman.

The justice adopted the food theory, and discharged the prisoner.

Dr. Gruby, a physician of Paris, says the Vegetarian Magazine, was famous for his efforts to protect animals from cruelty. He went beyond those who are humane simply to fourfooted creatures; he was logical enough to include insects in his mercy. He was, however, a little nervous, and when one day, in his parlor, a big blue fly buzzed uninterruptedly on a window pane, the doctor's patience became a little worn, and he called his man-"Do me the kindness," said servant. the doctor, "to open the window and carefully put that fly outside." "But, sir," said the servant, who thought of the drenching the room might get through an open casement, "it is raining hard outside." The doctor thought of the fly, and not of his cushions. "Oh, is it?" he exclaimed. "Then please put the little creature in the waiting-room, and let him stay there till the weather is fair."

The well-known dietetic authority, Dr. Lahman, thinks the South African war is a dietetic experiment on a large scale, and that it is applying certain inexorable laws of nature. He observes: "We have read that not only among Lord Methuen's troops on the Modder River,

but also among the Boers, and even among the English prisoners in Pretoria, the scurvy has broken out. Plenty of meat and flour is on hand, but no fruit or vegetables. That the prisoners in Pretoria, who are allowed any amount of exercise, should be affected, seems incredible. As soon as we learn that they are kept on a diet of meat and bread, we no longer wonder at it. The Boers have fruit and vegetables of their own growing, which contain certain mineral salts indispensable to human life. The mineral salts neutralize acids in the blood, which would otherwise soon cause mortification. The Boers also make a certain kind of tea of different herbs, which they generally have with them in the field, and which is rich in those mineral salts."

Our Dumb Animals quotes a letter from the Honolulu correspondent of the San Francisco Examiner, in which it is said: "If any private individual were to treat one horse as the United States government is treating thousands, he would be thrown into prison or otherwise severely dealt with. These animals are transported seven thousand miles (an unheardof journey for horses), thrown about in storms, with no rest for many days, kept days and nights in intense heat on lower decks, to meet the horrors of battle after they land. Where are the consciences of those who are responsible for these miseries to men and animals? or have they become shriveled to nothingness in the fire of a merciless and unprincipled ambition?"

Our French neighbors, says an English journal, have at last fathomed the secret of their continuous decline in population. It is due solely, so asserts M. Decroix, president of the Anti-tobacco League, to the immense consumption of "bad tobacco." During last year France consumed no less than £15,720,000 worth

of strong "Capo-ral," or nearly half a million pounds worth more than in-the preceding year.

Poisoned by chicken salad headed the following item in a Chicago paper the other day: "After partaking of a dinner prepared by the Woman's Home Missionary Society of Trinity Methodist Episcopal church last night, nearly one hundred and fifty people were taken ill, and for several hours every doctor in the city was engaged in administering to their relief. Chicken salad, it was found, was the cause, the chicken probably having had cholera. A number are still in a critical condition, and several will probably die as a result."

A Ceylon correspondent of Humanity writes that journal that great cruelty is inflicted upon tortoises in obtaining their shells for the market. The shells are first oiled, then a fire is held upon them until they become loosened, when they are stripped off. The tortured animal is then allowed to go in its raw and unprotected condition. In the course of a few months it grows another shell, when the same process is gone through with again. "It is truly," says the correspondent, "a diabolical business."

Surgeon-General Sternberg, in reporting the condition of the United States army, states that the number of victims of fevers of various kinds during the year 1898-'99 far exceeded the number lost from other causes.

The heart of a vegetarian, according to Our Fellow Creatures, beats on an average of fifty-eight times a minute; that of the fevered meat eater, seventy-five. This represents a difference of twenty thousand beats in twenty-four hours.

Ingersoll, like Thoreau, was of the opinion that "it is a part of the destiny of the human race, in its gradual improvement, to leave off eating animals." In a letter to a friend he once said: "Probably the time will come when man will be civilized enough not to kill and eat his fellow creatures. We have at least made some advance — we have stopped eating each other, and the next step may, in the far future, be taken. . . . I must admit that the eating of meat, when I think about it, is shocking, and that I am somewhat ashamed to look into the peaceful and trustful eyes of cattle."

A poor family is spoken of by a writer in Trained Motherhood. They were "kept, like Trotty, forever moving on, with never a place to call their own on God's earth. But at last a legacy came to them, a quaint old house into which they settled with unutterable delight. In speaking of it, the mother sweetly said, "We have always had a home, but never had a house to put it in before."

The celebrated chess expert, Dr. William Steinitz, was lately sent to an insane asylum in New York City. His overworked brain, trained in one specialty alone, refused longer to endure the strain.

THE CHILD AND THE FIRST SPRING FLOWER.

One day, in the early spring so fair,
A blue-eyed boy, with golden hair,
Came close to his mother, whispering low,
"Oh! think what I've just found out in the snow!
I scraped the snow, so soft and light,
And there I found a flower so white;
But, mamma," said the sweet voice now
(Five summers had lightly touched that brow),

"I did not pick the flower, you know,
But, kissing it, left it there to grow."

* * * * * *

There is help for all in the child's pure thought.'
Let us dig and search for the truth so fair,
Not trample or spurn with ruthless air,
But love and cherish with tenderest care.

- Selected.

AT WOMAN'S DOOR.

A CONTRACT was recently made by New York milliners with hunters at Milford, Del., for the skins of twenty thousand birds, at from ten to fifty cents each. The contract calls for meadow larks, bluebirds, red wing blackbirds, crow blackbirds, English sparrows, and baby owls. Stated in the plainest language, this contract involves the commission of a crime of a cruel kind, —a crime made possible under the laws of Delaware, but none the less a crime, and none the less disgraceful to the State that its laws make such a crime possible.

The Chicago Tribune has this to say upon the subject:—

"Such a wholesale slaughter of bird life as that contemplated by this contract is a murder of the innocents and a robbery of the State. It sets a premium upon cruelty, and as these birds are of the insect-destroying class, it robs the farmers of protection supplied to them by nature. It also robs all the people of one of the most charming accessories of nature. It is, therefore, a crime against society tolerated by the laws of Delaware.

"The aggravating feature of this wholesale slaughter is that it is to be committed to gratify female vanity, human selfishness, and human greed. The women who will wear the plumage of these thousands of birds will not have committed murder themselves, but they are responsible for it. If they should refuse to adorn themselves with the feathers, the lives of the birds would be spared. They make the demand, and the milliners gratify it by blindly following the edicts of fashion mongers. The latter plan the slaughter. The milliners agree to purchase the plumage because they know the women will consent to wear it. Fashion blunts all kindly feeling, and shows no mercy. Birds are not only killed outright, but

birds and other animals are tortured in order to secure their feathers and skins for female adornment.

"Female fashions are rapidly depopulating the bird world. The song-birds are specially noted for their beautiful plumage, and are rapidly disappearing, and now the bird murderers are beginning their destructive work in other directions. The sea birds, and especially the gulls, are vanishing from the Atlantic coast, thousands of them having been slaughtered every year to supply the demand for female adornment and to gratify female vanity. If the various States do not soon enact laws, with heavy penalties attached, forbidding the destruction of birds, bird life will soon become extinct."

The barbarous contract of the New York milliners aroused the Delaware au-The Game Protective Associathorities. tion of the State at once put detectives on the track of the hunters. Witmer Stone, of Philadelphia, president of the American Ornithological Union, consulted with the governor of Delaware, who expressed his determination to assist both associations in the protection of the birds. A delegation from the Farmers' Produce Association also waited on the governor, and protested against the wholesale slaughter of birds which are beneficial in protecting the growing crops. To this delegation the governor expressed the same determination, and announced that he would speedily issue a proclamation forbidding the shooting.

"The authorities of every State," says the *Tribune*, "should take prompt and vigorous action to preserve the birds, or it will soon be too late. On the New Jersey coast pot-hunters in steam launches, with machine-guns, follow the flocks of ducks, geese, and brants, and by pouring into them continuous volleys of shot all

day, and even by moonlight, are killing them by thousands. In Delaware Bay, which has long been a famous hunting ground, the extermination of water fowl by these deadly machine-guns will soon be effected if the law which prohibits the killing of birds or any other game with guns other than those held at arm's length is not enforced. There is not a State in the Union in which the laws upon this subject are rigidly enforced.

"The bill which Senator Hoar has introduced, stopping all commercial traffic in the skins of birds, is not too sweeping a measure. It should be passed, for it provides protection that can be provided in no surer way. When dealing in birds' feathers and skins is made an offense, incurring a heavy penalty, there will be no temptation to shoot the birds, as they will be unsalable.

"Even the unprogressive Chinese government has set us an example of our duty to preserve the birds, not merely as a matter of sentiment, though this is a strong reason, but also upon economical grounds. Minister Conger has informed the State Department that, at the request of the diplomatic corps in Pekin, that government has prohibited the exportation of pheasant skins. These birds were being ruthlessly slaughtered to meet the demand for their plumage in the European market."

In the same connection a Boston paper contains the statement of what a Baltimore woman and her companions lately saw at Wood's Hole. Numerous tern were discovered flapping and tumbling about, and were even picked up and examined, from whose bodies one or both wings had been torn away, and the birds left alive in that condition. In some cases other birds had evidently fed them. These stolen wings went, of course, to "decorate" the millinery of those fashionable and tenderhearted ladies whom we see every day with the bodies, or fragments of bodies. of murdered creatures perched upon their heads.

INSTINCTIVE VEGETARIANISM.

My mother was convinced, and on this head I have retained her conviction, that to kill animals in order to draw nourishment from their flesh and blood is one of the most deplorable and shameful infirmities of the human constitution; that it is one of those curses pronounced upon man, whether by his fall at some unknown period, or by the hardening effects of his own perversity. She thought, and I think with her, that this hardening of the heart with regard to the gentlest animals, - our companions, our aids, our brothers in labor and even in affection, here below, - this sight of palpitating flesh is made to brutalize and to render ferocious the instincts of the heart. She thought, and I think also, that this nourishment, much

more succulent and stimulating in appearance, contains within it irritating principles, which taint the blood and abridge the days of man.

She quoted in support of these ideas respecting abstinence, the innumerable gentle and pious populations of India, who forbid the use of all that bears life; the strong and healthy races of shepherd nations, and even the laborious people of our plains, who do the most labor, who live the most innocent and lengthened lives, and yet who do not eat meat ten times during their existence. She never permitted me to eat flesh until the time when I was thrown into the pell-mell life of a college. To take away my wish for it, if I had such, she did not employ rea-

soning, but she took advantage of instinct, which reasons better with us than logic.

I had a lamb which a peasant of Milly had given me, and which I had reared to follow me everywhere, like the most affectionate and faithful of dogs. We loved each other with that early passion which children and young animals cherish naturally for each other. One day the cook maid said to my mother in my presence: " Madam, the lamb is fat, and the butcher has come for it. Shall I give it to him?" I screamed out; I threw myself on the lamb: I asked what the butcher wanted to do with it, and who was this butcher. The cook replied that he was a man who killed lambs, sheep, little calves, and handsome cows for money. I could not believe it. I begged and prayed to my mother, and easily obtained the life of my friend. Some days after, my mother, when going to the town, brought me with her, and took me, as if by chance, into the court of a butcher's establishment. There I saw men with naked and bloody arms, who were felling an ox: others were cutting the throats of calves and sheep, and were quartering their still palpitating limbs. Rivulets of blood smoked here and there upon the pavement. A deep sensation of pity mingled with horror took possession of me. I implored her to pass on quickly. The idea of the horrible and disgusting scenes, the necessary preliminaries to those dishes of meat which I saw served upon the table, gave me a disgust for animal food and a horror of butchers. Although the necessity of conforming to the constitution of the society in which we live has since then induced me to eat everything that the world eats, I have retained a repugnance, founded on reason, for cooked flesh, and I have always found it difficult not to look on the profession of a butcher as something approaching to that of an executioner.

I lived, therefore, to the age of twelve, solely upon bread, milk, vegetables, and fruit. My health was not the less robust nor my growth the less rapid, and perhaps it is to this regimen that I owed that pure outline of features, that exquisite sensibility to impressions, and that gentle serenity of disposition and character, which I retained until that period.

— From Lamartine's "Memoirs of My Youth."

A Bird's Trouble.

A children's paper prints the following pathetic story, which suggests how children, babies, and sick people as well as our little brothers of the air may often suffer without being able to help themselves. A pet canary is talking:—

"I have only one fault to find with my little mistress. I have plenty of fresh bright seeds, put in for me every day, or I should soon lose my appetite, and now and then a bit of apple or lettuce. She cleans my cage every day, — I am so thankful for that; for dirt makes a dainty bird like myself very unhappy, — and puts in fresh water and gravel for me.

She always sets me in a warm place to bathe, too; and better than all these, she loves me, and often turns her bright face up to praise me for my song.

"But there is one thing I long to tell her about,—how I wish I could speak in her language,—and that is the air. All the heat and foul air in the room come crowding up here where I hang, and it is terrible. The other evening mistress had a number of boy and girl friends in to spend the evening. There were so many of them that the air was suffocating. I gasped and grew dizzy, and had hard work to keep from falling from my perch. If you will believe me, when the last guest

had departed, she shut the door, and left me in that terrible atmosphere to suffer all night long. My little mate, who used to hang and sing just over yonder, was dead next morning at the bottom of her cage. How I managed to live through the night and until my cage was taken down the next morning, I never knew; but I suffered enough to break my mistress's little heart had she known anything about it. As it was, I could not sing, and felt weak and faint for many a weary day. If some one would only tell her to cover my cage a moment, so that I should not feel the draught too much, and open some doors and windows, so that the bad air would be driven out, just before she leaves me for the night. Her Aunt Katy did that once; and when she took the cloth from the cage, after the doors were shut, O, how the fresh air revived me, and what a sweet sleep I had that night!

"Perhaps some day my bright little mistress will think of this. I hope she will. I would tell her if I could speak her language."

Dewey's Formidable Enemy.

The following editorial from the Chicago Tribune, considering the secular source, is encouraging to friends of dietetic reform:—

duty it will be to entertain Admiral Dewey in Chicago next May, should not fail to sound a solemn warning in the Admiral's unhappy experience at Savannah. A deadly combination of salad and 'artillery punch' laid the doughty Admiral low in the first round, and the public reception planned for him had to be abandoned. The moral is obvious. If the Chicago entertainers do not wish to send the naval hero to the hospital with indigestion on the first day of the May festival, they should guard him from the dangers of

seductive salads and rapid-fire punches of all kinds at any cost. They should drop from their program all compulsory dining and wining features, if they want the Admiral to fulfill his part in the festivities.

"Spanish guns had no terrors for the hero of Manila Bay, yet it is a recorded fact that on the historical May-day morning of 1898, he was suffering severely from an attack of indigestion, brought on by some trifle like a cup of coffee taken at an unwonted hour. By sheer force of will he was able to ignore his indisposition on the eve of battle, but the same state of affairs at Savannah forced his speedy retirement from the luncheon table. The necessary antidote in the shape of a hostile Spanish fleet was wanting. Unless the Chicago committee can arrange to have such a fleet in the inner harbor, they should take no risks, but should allow the Admiral to choose his own diet and time of dining. If necessary, it might be well to throw about him some of the dietary safeguards enjoyed by Sancho Panza as governor of Barataria.

"It is nothing to the discredit of Admiral Dewey that he should show the white flag and lay down his knife and fork in the presence of indigestion. This dread enemy of the race has been more than a match for the greatest warriors of history. Napoleon is said to have lost the battle of Leipsic because of an internal disaffection of this kind. Dewey gained his battle in spite of it, but the old enemy still pursues him, as it does a large proportion of the human race. From the days of infant colic to the adult dallyings with lobster and Welsh rabbit, we are all more or less liable to mortal pangs of this sort. The few exceptions like John Fiske, the historian, simply serve to prove the rule. Admiral Dewey is not one of these exceptions, and the plans for his entertainment in Chicago should be made with that fact always in view. First, foremost,

and especially, let lobster salad and 'artillery punch' be stricken off the bill of fare."

Rules for Consumptives.

The following rules to be observed by those afflicted with consumption are given in the *Sanitary Bulletin*, and should be most faithfully observed:—

"No consumptive should expectorate upon sidewalks, the floors of rooms, public halls, railway cars, or other vehicles, or in any other place where the sputa, when dried, will be a source of dan-Cuspidors in hotels and other public places, and in rooms occupied by consumptives, should always contain a little water, or better still, a disinfecting solution. For such solution, one part of carbolic acid crystals to about five parts of water may be used, or one part corrosive sublimate to one thousand parts of water. The latter solution is odorless, and for that reason is in some instances preferable. Both solutions are poisonous taken internally.

"At home, expectorate into a cup kept for that purpose, in which there is a disinfecting solution, and boil the cup frequently.

"Never expectorate into a pocket handkerchief or cloth which will be allowed to dry. Immerse handkerchiefs in boiling water before storing with the soiled linen.

"For use upon the streets or when away from home, thin Japanese napkins may be provided. After using, they should be folded, and burned at the first opportunity.

"Do not spit where domestic animals can have access to this matter. Cattle and fowls are susceptible, and become in turn sources of infection. In fact, do not spit at all where sputum can not be destroyed before it can dry.

"Do not spit on streets, and never swallow the sputum.

"No tuberculous person should kiss any one on the mouth.

"Tuberculous patients should be smooth shaved. It is impossible to keep the beard clean and free from infection.

"The tuberculous must always sleep alone.

"All bedclothing should be changed often, every day when the case is far advanced (no puffs or comforters should be used on the bed), and should be at once immersed in boiling water for four or five minutes.

"Have separate table utensils, and have them scalded as soon as used.

"A tuberculous mother must not nurse her baby, nor kiss it on the mouth; and in preparing its food, must use special care.

"Tuberculous persons should not engage in occupations where they are compelled to handle food products, as in bakeries, etc.

"Be careful not to infect sleepingberths when traveling."

Cigarettes Debarred.

Chief Willis L. Moore, of the Weather Bureau, has issued an order prohibiting employees of the service from using cigarettes during hours of duty, and warning them that those who smoke cigarettes at all will be mentioned in the confidential reports made to him by the heads of the several offices and departments. He says in explanation of this action:—

"The order was issued after careful and thorough consideration and investigation of the evils resulting from cigarette smoking. It will stand. In this service we are compelled to maintain a strict discipline, and I am satisfied that cigarette smoking does not and will not contribute to this end. Some of our men who were regarded as the most reliable and competent became careless and lax. I sent inspectors to investigate, and in almost

every case it was found that this state of affairs was directly attributable to excessive cigarette smoking. Men who use them appear to become deadened to the fact that neglect of duty means reproval, suspension, or dismissal. In a word, these investigations convinced me that cigarette smokers are not to be trusted with important work."

How Animals Bear Pain.

One of the most pathetic things is the manner in which the animal kingdom endures suffering. Take horses, for instance, in battle. After the first shock of a wound they make no sound. They bear the pain with a mute, wondering endurance, and if at night you hear a wild groan from the battlefield, it comes from their loneliness, their loss of that human companionship which seems absolutely indispensable to the comfort of all domesticated animals.

The dog will carry a broken leg for days wistfully but uncomplainingly. The cat, struck with stick or stone, or caught in some trap from which it gnaws its way to freedom, crawls to some secret place and bears in silence, pain which we could not endure.

Sheep and cattle will meet the thrust of the butcher's knife without a sound, and even common poultry endure intense agony without complaint. The dove, shot unto death, flies to some far-off bough, and as it dies, the silence is unbroken, save by the patter of its own lifeblood on the leaves.

The deer that has been wounded speeds to some thick brake, and in pitiful submission waits for death. The eagle, struck in mid air, fights to the last against the fatal summons. There is no moan or sound of pain, and the defiant look never fades from its eyes until the lids close over them never to uncover again. — Temperance Caterer.

One Way to Keep Young.

She was as fresh in color as a girl, her hair without a touch of gray, her face without a wrinkle, and she felt, I am sure, as she certainly looked, far younger than I. So I asked her, finally:—

"How do you keep so fresh and young with all your great family?"

She looked at me a moment, and then laughed her merry little laugh. "You see," she said, "I haf my von little naps."

"Your what?" I asked, puzzled to understand her.

"My von little naps," she repeated.

"But tell me, I do not understand," I said.

"Vy, so," she said, in her pretty broken English. "Aboud twelf o'clock, or maybe von, or maybe two, as you like it besser, I takes de baby, vichever iss de baby, and I goes to de room and takes my naps."

"But if the baby won't sleep at that time?" I objected.

She shrugged her shoulders. "Oh, he sleep all right."

"But there are so many things to do while the baby sleeps," I went on.

"I vill haf my naps," was her smiling answer.

"But," I urged, "supposing something happens to the other children while you and the baby are asleep?"

Then she did stare at me.

"There could not noting happen to dose children vorse dan I not get my von little naps," she said indignantly.

I gave it up. This closed the argument.

—Clarissa Sergeant, in Harper's Bazaer.

Virtue and Beefsteak.

I remember how proudly a missioner, who was opposed to monastic asceticism, said to me, "Our Christianity does not consist of fasting and privations, but of beefsteaks. Generally Christianity and virtue go with the beefsteak."

During the long darkness, in the absence of any guide, pagan or Christian, many savage and immoral ideas have taken root, especially in the lower region, where the first step of the moral life must be taken. Thus in the question of diet, so many immoral ideas have permeated our modern life that it is difficult for us to realize the insolence and the folly of the assertion, in our day, of the affinity of Christianity and virtue and the beefsteak. We are not horrified by this affirmation, because we look without seeing, and hear without understanding. . . . There are no smells, however disagreeable they may be, to which man can not become accustomed. There are no sounds, however discordant, which the ear can not learn to tolerate. There are no villainies which custom will not teach us to regard with indifference. Thus it is that things pass without remark which at once strike a man not accustomed to them .- Tolstoy.

An Insidious Enemy of the Home.

The man who cries the loudest does not necessarily do the most harm, nor are the evils the most destructive which are the most plainly evident. It is hidden vices, the deeds of darkness, that do the most to wreck human lives. In one of our well-known dailies there appeared recently an illustrated article showing how a prominent entertainer, Yvette Guilbert, was compelled to have one of her kidneys removed on account of tight lacing. Thousands of women suffer from pains in the back which are nothing more than the outcry of these important internal organs against the terrible pressure that ultimately destroys all health and with it all happiness. We quote the following from the World: -

"A woman went into one of the large

stores on Sixth Avenue Friday last, and came out with a broken rib and without corsets. She was sent to her home in Central Park West, and she asked that her name be kept secret. When the woman entered the corset department of the store, she said she wanted a snug-fitting pair of corsets. In the dressing-room the corsets were adjusted, and with one vigorous pull at the laces something snapped. The woman sank fainting into a chair. A physician, after an examination, said a rib had been detached."— Physical Culture.

Milk in Glass Jars and Bottles.

The custom adopted by many of our best dairymen, of delivering their milk in glass jars or bottles, is criticised by *Pediatrics* as follows:—

"In many towns a large percentage of milk is served in glass jars and bottles, a plan which we acknowledge possesses in some respects advantages to both dairyman and families supplied. However, there exists a most serious objection to this method: while convenience and facility of access are its only recommendations, these are altogether outweighed by the inevitable and terrible risk of the susceptibility of milk as a medium for the transmission of infection. Milk is a common article of food for invalids and convalescents: therefore, when these bottles are taken into the sick-room and there contaminated with the germs of disease, if not boiled or thoroughly sterilized, they become the means of spreading the mischief indefinitely. Many obscure cases doubtless have originated in this To properly sterilize bottles manner. involves a serious loss from breakage, and it is almost safe to assume that glass bottles are seldom placed in water of sufficiently high temperature to destroy disease germs. The temptation also presents itself to milk peddlers to refill

bottles on their wagons. The harm done through such action is incalculable."

The Care of the Eyes.

On arising in the morning, the eyes should be bathed gently in cold water twenty "passes" are said to be decidedly strengthening. While using them closely, they should be rested at intervals of an hour or two, for the strain of constant reading or sewing is like that of extending the arms at a certain height immovable. Imagine the taxing of the eyes, which can not complain save after years of irreparable neglect. When dust settles in the eyes, warm water will soothe them of any inflammation; rose-water is extremely refreshing, but it should be bought in small quantities, as it keeps but a short time. Five cents' worth will give a daily bath for several weeks. leaves and alum-water were the eye tonics which our grandfathers used; but in these modern days of absolutely hygienic and antiseptic simplicity, water, especially in a distilled form, is considered powerful enough. - Harper's Bazar.

Petting the Children.

"But would n't I have the youngest child petted a little?" says one. "It seems so natural, some way." Oh, yes, I would, a great deal. I believe in petting, not only of the youngest, but of all the flock. I know a home where the mother says sometimes to the children, "Shall we give this big sweet peach to Charlie because he is our youngest and our darling?" She never, never makes this remark in the wise Charlie's presence; then, when all have agreed that the darling shall have the big, ripe peach, it is given after this manner: "Charlie, there is only one peach in the basket that is soft enough and ripe enough to be good to eat, and the children have all agreed that they want you to have it, because you are their darling. Now what do you want mother to do with it?" And that mother has so trained her baby, not yet quite two, that she is sadly disappointed if he does not order that the peach shall be cut into six big pieces, one for each, and two for mamma. You think he is a wonderful baby? Not at all; he simply has a sweet, wise mother.

Oh! there are ways to do it, if the mothers will but recognize their responsibilities, and study to be to the children all that God meant they should be.

— Pansy, in Trained Motherhood.

Repairing Mother.

A nap after dinner is worth two hours of sleep in the morning to mother. Mothers, more than most people, wear out if they are not repaired, and it is the duty of the family to see that repairs go on before the dear tenement falters. So many people paint the house and have the homes cleaned and repapered and the furniture retouched, who never think of repairing the mother. Think of it, to let a mother wear out for want of a little repair. Why, she is costly and rare, and altogether good to have around, is n't she? — Elizabeth Grinnell.

The Emperor's Tongue.

The Chinese physicians who are called to see the emperor find themselves in a difficult position. Even the most celebrated are not allowed to ask questions of the royal patient, but must form their diagnosis from descriptions of his symptoms. As one of them wisely observed, "It is difficult to look at a patient's tongue when his exalted rank compels you to keep your eyes fixed rigidly on the floor."

It is hard to be wise on an empty stomach. — George Eliot.

EDITORIAL.

THE FOOD OF THE STRONG.

STRENGTH is the result of the proper digestion of wholesome food. We get strength for our work not from the quantity of food we eat, but from what we digest. Some persons eat a large quantity, and yet are weak, because their food is not properly digested. Others take a small quantity and yet are strong, because they digest the food. It is what a man digests that develops him.

In selecting foods having the highest nutritive value, two things should be considered, - the nutritive value of the material and its suitability to develop the body, and its digestibility. For example, take the grains and leguminous seeds; they have a nutritive value varying from 84 per cent and a small fraction to 85 and a small fraction, giving an average nutritive value of 85 per cent. Rice is the most nourishing of them all (87 per cent). Lean mutton has a nutritive value of 28 per cent; lean beef, 28. "But," you say, "I am surprised to learn that lean beef has a nutritive value of only 28 per cent. Is it possible that a pound of bread has a higher nutritive value than a pound of beef?" - That is what chemical analysis tells us, and chemical analysis is the best test in the matter.

The egg has almost as much nutritive value as beefsteak; but in oatmeal and rice we have a nutritive value three times as great; in other words, a pound of rice, a pound of cornmeal, a pound of ryemeal, a pound of beans, or a pound of lentils, is worth three pounds of beef; or, in fact, is equal in value to three pounds of any other sort of meat. If we take fish, the value of these articles is four times as great,—a pound of rice being worth four pounds of fish.

The same is true of the nutritive value of peas and beans.

Dr. Hall, in fitting out the Polaris expedition to the North Pole, took with him foods having the highest nutritive value (that was one of the things to which he gave the greatest study), foods which in the smallest bulk afforded the largest amount of nutriment. When the men had reached a temperature of 40° below zero (at the highest point that had been reached), they were obliged to abandon their sledges for a while, and travel on foot, carrying their food upon their backs. So it was necessary for them to have the most highly concentrated food. I was interested in the account of the things which Dr. Hall put in his knapsack for this occasion. One day he sat down on a glacier to eat his dinner, with the temperature many degrees below zero, and with a terrific hurricane blowing, and of what do you suppose that dinner was composed? - Simply graham crackers. Why? - Because in those graham crackers there was more strength, more muscle-making and more nerve-making elements, than in anything else he could eat.

We have in wheat the best assortment of nutritive elements in any food. It requires for nourishment one part albuminous elements to about seven parts carbonaceous elements. This is the right proportion. We can not live on albumin alone; a person would starve to death on the white of eggs. We have in wheat flour 10.8 per cent albuminous element and 52.6 per cent carbonaceous element, - almost one part albuminous to nearly seven parts carbonaceous, which is about right. In rice we have a little excess of carbonaceous element, but we can get along with that by eating more food containing elements which make adipose tissue.

It is clear, then, that if one is to eat for strength, basing his eating upon the nutritive value of foods, he must choose grains and leguminous seeds. He will find in them the greatest nutritive value, These results agree with what we find in nature and in the world at large. The strong and the hard-working people of the world are not "beef eaters." But you may say that the English are beef eaters. It is the peasants, however, who are the hard-working people of England, and they do not eat beef, as a rule. It is the English lord who eats "the roast beef of old England;" but the man who does the hard work and raises beef for others to eat, does not eat much meat,

I took pains to look into this matter a few years ago while in England. I went into the Black Country, where I saw women and children making brick. The women would carry great loads of it, and I saw a boy, ten or fourteen years old, with a mass of clay on his head. I watched him while at work, and saw the little fellow go up to the clay bed, plunge his hand into it, get a handful and throw it up to the wall, where it would stick. Then he would dive into the clay bed again and get another handful of clay and throw it up against the wall, and it would stick there. He kept doing this until there was a great mass of clay on the wall, sticking out into the air. He then made a hole through it with his fist, ran his arm into the hole, and pulled the entire mass on his head and walked off with it. When he had put it down, I asked him how much it would weigh. "It's almost as large as you are," said I. "Lift it and see," said he. I lifted it, and it proved to be a good load. Then I put it on the scales, and it weighed exactly one hundred and fourteen pounds. That boy did not get a taste of meat oftener than once a week.

The peasantry of England can not afford to eat beef. Why?—When a man has to work hard a whole week to earn twenty shillings, and has a wife and half a dozen children to support, and has to pay twenty-five cents a pound for beefsteak, while he can get peas and beans for three cents a pound, and oatmeal at the same rate, and each pound of either of these foods is worth three pounds of beef (thus making a pound of oatmeal worth seventy-five cents), he can not afford to eat meat. On Sundays they have a soup bone or something of that sort

for dinner, but that is all the meat they get during the week. So it is not the working people, even in beef-eating England, that eat meat.

When I was in Italy, I took a diligence and went out into the country, where I found the peasants living in their native way. One day I went from Naples into the country, and found an obscure place on the border of a lake. I took lunch with a little family living there, and found it very easy to make a hygienic meal. The food of the family was composed of beans, brown bread, eggs, macaroni, and a little fruit. That is what the people live on altogether, except occasionally a little fish.

Let us look at the other phase of this subject, - the digestibility of food. Articles of food may be exceedingly nourishing, yet at the same time have very little food value. The nutritive value of pork, for instance, is 61 per cent, but this does not necessarily represent the food value of pork, because we must consider not only the nutritive value of an article of food, but also its digestibility, in order to arrive at its true food value; and pork is very hard of digestion. It requires five hours and fifteen minutes for stomach digestion alone. Now let us take rice as a fair sample of grain foods. Its nutritive value is 87 per cent, and the time required for digestion is one hour, - great nutritive value, and quick digestion, - a rare combination, just what is needed for high food value. There is a great deal of difference between one hour and five hours and fifteen minutes. Here is an article of food having a much higher nutritive value than pork, and yet it digests in an hour, and then leaves the stomach; it passes into the small intestines, is digested and absorbed, and goes immediately into the muscles, tissues, nerves, and blood, where it can be useful. But pork is left sticking by the rib, up in the stomach, undergoing indigestion rather than digestion. Again, take roast duck, which requires four hours and thirty minutes for digestion, and yet has a nutritive value of only 26 per cent. Four hours are required for the digestion of lean beef. There is a difference of threehours in the time of the digestion of these articles,— articles having a nutritive value of only one third that of rice, and yet requiring three times as long for digestion.

The oyster has a nutritive value so small that it is hardly worth speaking of, only 14 per cent, and yet it requires three hours and thirty minutes for digestion,— three times as long as is required for rice.

Rice is so easily digested that it is ordinarily termed "light diet," and yet this light diet is, after all, the most strengthening. So-called hearty food is simply food that is hard to digest.

There is another fact which we must take into consideration in this direction, and that is the rapid increase of the human race, which is so great that the time must soon come when, as a rule, man must eat such food as he can get most easily and with the least expense. At the present rate at which the world is becoming populated, it will not be many centuries, perhaps not one century, before the great pasture lands of the West will all be occupied, and the pasture lands of other countries will be occupied for other purposes. At present England can not begin to produce beef enough for Englishmen to eat. It is raised in Canada, Ireland, and on our Western plains. England is even now drawing upon all the world for beef for its inhabitants. When America is populated as England is, where is England going to get her beef? When North and South America cease to export beef, what are our English beef eaters going to do? The time will come to America, just as it has come to England, if the population continues to increase, when we shall have no beef to export. What will England do when other countries keep their beef at home for their own inhabitants to eat? By and by each of these countries will come to the same condition as that of England and China. China can not export any beef. Japan does not export any beef. These densely populated Asiatic countries can not export food; they can not raise this kind of food, for they have no room for it.

M. de Lesseps, the successful constructor of the Suez Canal, and the unsuccessful projector of the Panama Canal, observed that the laborers upon the Suez Canal were vegetarians; they lived almost wholly upon barley bread. He observed that they could do hard work, and work which laborers who lived on meat could not do. He was thus led to look into the question, and the consequence was that he became a vegetarian. He published an article some time ago upon the subject, in which he stated how much land was necessary to produce a pound of corn at second hand; that is, in the form of beef. He found that it required forty times as much land to produce corn in the secondhand form of beef as it does to support the man who lives on food at first hand. Very likely this estimate is somewhat exaggerated, but there is a good deal in it. consequence is that when a country becomes densely populated, it will be necessary that the people of that country be largely vegetarians. I am quite confident that the bill of fare fifty years from now will be largely composed of fruits, grains, and nuts, and that meat will appear in a very small way indeed.

A Sick House.

A patient once called my attention to a peculiar spot on the ceiling of her parlor. She said: "Doctor, I wish you would prescribe for this brown spot on the ceiling. It turns all kinds of colors—yellow, green, brown, sometimes almost black. What is the matter with it? I have papered over it two or three times, but the color comes through the paper, and keeps spreading."

I looked at it a moment, and then asked the lady to get her Bible and read the prescription given by Moses for a diseased house,—for leprosy.

"Why," she said, "you don't mean to say that my house is diseased — that there is leprosy in it?"

"Yes," I said, "I do. The plague has broken out in your house," and I looked serious about it, as if it were a very solemn matter; and so it was, for her daughter was sick, her son had been sick, and all the members of her family were more or less affected.

I asked the lady to read a little farther and see what was prescribed for such a house, which she did, to find the prescription that the walls should be scraped, and that if the house did not get well then, it should be torn down.

A great many houses are sick because of the distilling process that is constantly going on in kitchen and laundry. The vapors are carried about the house and deposited on the walls. The plaster absorbs these vapors, that contain decomposable matter which affords an abundance of food for germs.

In the time of Moses, if a house was infected, it was treated in the most radical manner. If an outbreak of leprosy appeared on the wall, the people had to move out, the plastering was torn off, and the rubbish was all taken away. It was not thrown into a neighbor's back yard or emptied into the street or hauled off and dumped into a vacant lot; but it was taken entirely out of the city, and put where it could not infect any other house. Then the house was closed. People did not make haste to whitewash over the infected spot and then move in again. They did not put on fresh paper to cover it up, and then deceive themselves into thinking it was all right. They shut the house and left it alone. If after a specified time the leprosy-mold had broken out again on the wall, showing evidences that the infection was deep down, then the whole house was destroyed, and the bricks were all carried away, By this means houses were kept free from mold and germs. A house in such a condition that germs will readily develop in it is not fit to live in.

The Terrors of Tuberculosis.

A recent paper by Dr. Brush, on the "Prevention and Modern Treatment of Tuberculosis," published in the Brooklyn Medical Journal, presents some extraordinary statistics, and emphasizes anew the magnitude and mortality of this dread disease. It is stated, for instance, that "every consumptive patient expectorates between thirty and forty million tubercle bacilli daily, and that in the city of New York alone there are no fewer than fifteen thousand persons suffering

from this disease; i. e., that between 450,000,-000,000 and 600,000,000,000 bacilli are disseminated every twenty-four hours." The writer proceeds to state that the word " disseminate" is used advisedly, since the experiments of Flugge and Goldie amply demonstrate this result of coughing. Indeed, the latter, by personal experiment, proved the truth of the assertion. Having washed his mouth with a culture of bacillus prodigiosus, he coughed twelve times. Prepared plates were exposed in different parts of the room at the end of five, ten, and fifteen minutes each, and all the plates showed varying numbers of colonies, proving very conclusively that a single act of coughing might so infect a room in every part that cultures could be produced from the air. The editor adds that "if all patients were as prolific in bacillus expectoration as was one of Dr. Nutall's, quoted by Dr. Brush, whose sputum contained four billion, or one hundred times the highest we have supposed, the degree of dissemination would be correspondingly augmented. Minimize the danger of exposure to this source of infection as we may, it is in any event appalling."

Dr. Brush calls especial attention to infection by food, particularly milk and meat, claiming on high authority that seventy-five per cent of the milk supply in New York City showed evidences of tuberculous infection. It is little wonder that the number of deaths from tuberculosis should reach eight thousand annually. The doctor strongly advocates the establishment of sanitoria for the treatment of incipient tubercular disease. Altogether, the paper is noteworthy, and should enlist the attention of the medical profession as being an admirable résumé of this most vital question.

A Medical Testimony in Favor of Vegetarianism.

One of our valued English exchanges, the Vegetarian Messenger, published some months ago the following interesting testimony in favor of the influence of a vegetarian dietary in health and development:—

"A merchant aged thirty-one, living in

Damascus, applied for a life insurance policy. The company decided that as he was a vegetarian, they would require the testimony of two doctors, instead of the usual single evidence, in proof of his fitness to share the benefits of insurance. Herr Schenck gladly consented to the requirements, and submitted himself to the strict examination of the two physicians. The report ran thus: 'Well-built physique, muscles like iron. The general state of nutrition is excellent since the adoption of the vegetarian diet. The body is sufficiently fat, strong, and wellnourished. Posture is erect and firm; the movements are free; the color of the skin fresh, ruddy; general appearance, healthy; the color of the mucous membrane, red. The organs of sense are in splendid condition. The chest is well developed, broad, and arched. The condition of the applicant is in every respect perfect. . . . His habits act very beneficially upon his condition and Now, what are these habits? Herr Schenck is a fruitarian, and believes what he calls 'kitchen-vegetarianism' to be a mistake. Man should eat the fruits ripened in the rays of the sun, and eat them direct from that source. The doctors who conducted the examination were educated in different schools, Paris and Vienna, and were both utterly astounded at what honesty compelled them to say. But the apothecary in whose shop the interview took place was staunch. 'I assure you,' he said, 'you have made a mistake; man. can not live without flesh food."

The Chair.

The chair bears an important relation to health, because many people sit in chairs for hours at a time. The average chair of today is well calculated to produce deformity. The straight-backed chairs of our grandfathers,—chairs that obliged their occupants to sit straight, that made them uncomfortable until they had taken a proper position,—were far better.

One should never allow himself to fall into a completely relaxed position, either standing or sitting, but only when lying down. Upon muscular tone depends not only the correct carriage of the body,-the correct adjustment of bones and skeleton, - but the correct position of the internal organs as well. There are very few persons who have not some deformity caused by relaxed sitting or standing. The muscles are intended to act as stays and guides to hold the skeleton in proper poise, to keep the whole body in position. If we sit so that our bodies are completely relaxed, then we keep them in a deformed state for hours at a time; this abnormal attitude results in our growing out of shape. Hence, instead of luxurious, soft, reclining, upholstered seats, we should use those of simple construction with straight backs. One or two "easy" chairs for grandmother or an invalid may be needed, but all the rest should be constructed upon the simplest principles and with reference to health.

All the chairs of a house should not be of the same height. It is just as important that a chair be of the right height for the person who is to occupy it, as that a crutch or a cane should be of the right length. It is as important that chairs be of the right shape as that clothes be made to fit the wearer. A chair is of the right height for a person when his hips touch the back of the chair while his feet come squarely to the floor. When the seat of the chair is too wide, the middle of the thigh strikes the seat, the calf of the leg strikes the lower rounds, and the hips are about an inch from the back of the chair. If one sits forward to rest his feet upon the floor, he holds himself at an angle, his chest drooping, so that he becomes flat chested, and the internal organs are crowded out of place. Hence the question of chairs is important, and should be studied from the standpoint of hygiene.

To Soften Hard Water.

Very hard water is objectionable not only on account of its injury to health, but on account of the great inconvenience and expense which it involves through the waste of soap and the increased labor in using it for washing. There are several means of rendering water soft, or nearly so, based upon the fact that lime and magnesia are insoluble in water unless it contains an excess of carbonic acid. Hard water may be softened by adding soap until the lime and magnesia are neutralized, and then as much more as is needed for washing; but this is an expensive and troublesome mode. A better way is boiling for half an hour. This expels the carbonic acid, and causes the lime to settle in a chalky deposit on the containing vessel.

It is this which occasions the troublesome incrustations in steam boilers and the chalky deposits in teakettles in which hard water is used. A more commonly employed method is the use of washing soda. The cheapest and best method, when large quantities of water are to be used, is to employ quicklime. For tolerably hard water, add one gallon of freshly made limewater to twenty gallons of the hard water, and allow it to settle from twelve to twenty-four hours. A few experiments in testing the water after the addition of the limewater will suffice to determine the amount to be added to any particular water to secure the best results.

It should be remarked that the hardness due to the presence of gypsum or sulphate of lime in the water can not be remedied by the method last described. The only remedy is the use of washing soda or carbonate of soda or distillation. A water which produces a chalky deposit in the teakettle will be benefited by the lime process.

The Bill of Fare and the Doctor.

French physicians, it is said, used to embrace the cooks. They did this as if to say, "You are my best friend. If it were not for you, I should have no occupation."

One of these physicians, after having practiced medicine for ten or fifteen years, had occasion to be absent from the country a while, and as he was going away he called upon the cook of a certain nobleman, and said to him, "I owe to you all that I am worth. I have made most of my fortune in your master's family, and here is a present for you;" and he made him a present of fifty guineas, in return for his good services to him

in furnishing him with patients. So you see there is a very close relation between the bill of tare and the doctor. Bad diet will produce bad blood, and bad blood makes a bad stomach; again, a bad stomach makes bad blood, and bad blood makes bad nerves, and bad nerves affect every organ of the body. Bad blood makes bad tissue of every sort, and so more and more disorder enters the whole economy of the body, and disorder reigns everywhere in the system.

House Plants in Sleeping-rooms.

The supposition that house plants are injurious in chambers and sick-rooms is a popular error. It is commonly believed that plants draw the vitality of the patient, or poison the atmosphere in some way. This is wholly a mistake, if we except a few of the more strongly scented plants, which emit a somewhat poisonous odor, or one which might in some cases be unpleasant to a nervous patient. Plants can not draw vitality from animals; indeed, they are the one great means which makes human life possible, for if they did not purify the air, all animals would quickly perish.

Plants inhale carbon dioxide during the day, and exhale oxygen. During the night they inhale carbon dioxide the same as in the daytime, but exhale a part of it again, along with the oxygen. They purify the air, then, more during the day, but less during the night.

Night Air.

A general prejudice, much of which is unfounded, exists in the world against night air. There is only one kind of air in the night, and that is night air. The air in the house is night air as much as is that out of doors. All the air we breathe comes from the outside. If the windows and doors are shut, it crowds through the chinks and cracks. It matters very little, then, whether we breathe night air indoors or out of doors, except that in the latter case it is rather purer. In many localities night air is purer than day air.

ANSWERS TO CORRESPONDENTS.

Foods.—Mrs. J. B. M., Michigan: "1. Are beans and peas classed as vegetables or grains? 2. Can they be eaten with fruit? 3. Will a long-continued use of improperly cooked foods injure the health of one with good digestion? 4. Will fruits, grains, and nuts sustain one perfectly without vegetables? 5. Should tomatoes be eaten with fruit or vegetables? 6. Is it possible to discard butter and flesh-meats with impunity, and not substitute nut products? 7. Can one eat dairy butter without injury? 8. Are small quantities of milk and sugar detrimental to health?"

Ans .- I. Fruits.

- 2. Yes, if deprived of their skins.
- 3. Most certainly.
- 4. Admirably.
- 5. Tomatoes are a fruit.
- Milk, cream, or eggs may be used as a substitute for flesh meats and butter, but nuts are much more wholesome as a substitute.
- 7. Dairy butter is by no means an entirely wholesome article of food. Being a separated fat, it is not easy of digestion, and always contains germs in great quantities.
- 8. Cane-sugar is often productive of indigestion. When milk and sugar are taken together, the evils are intensified. The less one uses of either, the better for perfect health.

Trichinæ—Impure Water—Meat Eating—Beans—Peas—Gluten—Complexion.—
"A" is troubled about the following questions: "I.
Can one take trichinæ from eating ordinary crackers shortened with lard? 2. What would you do if you were offered a glass of muddy or otherwise impure water? 3. What is it that rises in the skum of beans? 4. Is it hurful to eat it? 5. Which is the more nutritious—green or yellow peas? 6. How do you account for one's being able to digest peas and not beans? 7. Would you recommend the eating of gluten dry? 8. What causes one's skin to turn dark brown with white spots, the brown working all over the surface, and the white spots gradually replacing the brown until the complexion is clear? This is frequently repeated."

Ans .- I. No.

- 2. Decline to swallow it, most certainly.
- 3. Coagulated albumen.
- 4. No.
- 5. They are practically equal.
- Peas are generally somewhat more easily digested than beans.
 - 7. Yes.
- 8. General constitutional disorder. The liver is commonly disturbed, also the digestion. Out-of-door life, a neutral bath at bedtime for one hour (92° to 95°), a cold friction bath every morning,

with a strict fruit, grain, and nut dietary, will be found helpful.

Olives — Pepper. — An old subscriber in California asks: "1. Can you give a brief history of the olive and its oil? 2. What is the remedial and nutritive value of the olive? 3. Please state your opinion of the use of cayenne pepper as an aid to digestion and good health. 4. What do you think of the argument that the Mexicans are long lived because they eat so much pepper?"

Ans.— I. In a future number of GOOD HEALTH we will give this subject proper attention.

- 2. The olive is a valuable and wholesome source of fat, when allowed to ripen. The ripe olive is brown in color, and when properly prepared, is wholesome and pleasant in flavor. When chewed, it forms a delicious creamy paste in the mouth. Unfortunately, the ripe olive is not yet to be found to any extent in Eastern markets. It is largely used in California, and is the only way in which the olive is eaten by the natives of Egypt, Greece, and other Oriental countries.
 - 3. It is exceedingly harmful.
- 4. The Mexicans are not long lived, and every one who eats pepper is injured by it, as the writer knows by personal observation. A very large proportion of the adult population of those portions of Mexico where the pepper is eaten freely are sufferers from chronic gastric catarrh. It is well known in Mexico that the use of pepper is wholly injurious.

Food Fried in Nut Fat.—L. A. F., Washington, asks if food is rendered indigestible by frying in fat obtained from nuts.

Ans, - Yes, the same as any other fat.

Literature on Fruit and Vegetables — Sulphur and Iron in Vegetables. — Mrs. L. L. L., Wisconsin, asks (1) if we have any book treating of fruits and vegetables; also (2) what vegetables have the most sulphur, and which the most iron.

Ans.— I. The book desired is yet to be written.

Most valuable information is to be found in the
back numbers of GOOD HEALTH.

2. Strawberries contain more iron than any other fruit in proportion to the amount of dry substance. The greatest amount of sulphur is to be found in foods containing the most albumin, as sulphur is one of the constituents of albumin.

Headache -- Sleep. -- A reader asks: "I. What causes severe continuous headache in a young lady of temperate habits, and who is appar-

ently well? There is a sore spot between the shoulders. Her face is flushed, and her disposition irritable. 2. Is it a bad habit to take a nap every afternoon? 3. Does it ever lead to chronic ailments?"

Ans.—1. The headache is doubtless due to some disorder of digestion affecting the solar plexus. Prolapse of the intestines due to constriction of the waist may be the cause.

2. The best time for a nap during the day is before dinner.

3. Sleeping immediately after dinner is a bad practice.

Diabetes.—Mrs. C. E., California, asks what the treatment is for diabetes.

Ans.—The cold friction bath every morning (see page 211, April No.), gentle out-of-door exercise daily; a diet free from sugar, and the avoidance of starchy foods, particularly moist starchy preparations, such as mushes. Zwieback and granose cakes may be eaten sparingly. Nuttolene and nuts in their natural state are especially indicated.

Diet for Bright's Disease.— J. G. W., Pennsylvania: "What foods would you advise for one troubled with Bright's disease and constipation? I need especially fat- and blood making foods."

Ans.—A diet of fruits, grains, and nuts. Meats must be avoided. Also tea and coffee and all indigestibles. Malted nuts, malt honey, granuts, granose, granola, etc., are especially to be commended.

Codfish — Cheese.—E. S., Illinois: "I. Is codfish healthful? 2. Is fresh cheese really fermented milk and unfit to use?"

Ans,— I. No; it is difficult of digestion, besides being the flesh of a dead animal.

 Yes; in cheese the milk is not only fermented, but decayed. This is why it is inhabited by maggots, or "skippers," cheese mites, and other scavengers.

Linen vs. Woolen Underwear.—O. S. K., Pennsylvania: "Do you think it advisable for one subject to quinsy and who has worn linen underwear for eighteen years, to wear woolen? I perspire very freely,"

Ans,—Linen underwear is preferable to woolen. The woolen underwear may be worn over the linen for warmth, if necessary.

Still — Peas.— L. A. S., Ohio: "I. Do you recommend any still for purifying water? 2. What is the food value of peas? 3. Are they difficult of digestion?"

Ans.—1. Any still which will distill will answer the purpose.

- 2. From twenty-eight to thirty-four per cent.
- 3. No.

Sweet Potatoes and Rheumatism.—R. W. A., Illinois: "For a long time, on reasonable grounds, I have believed that a sweet-potato diet in this northern climate tends to produce rheumatism. What is your opinion of the matter?"

Ans.—Anything which produces indigestion has a tendency to produce rheumatism. Sweet potatoes are a wholesome food, if well digested.

Artificial Teeth.—H. B., Kansas, asks what sort of teeth are best for toothless patients, to insure proper mastication.

Ans.—Any of the materials commonly used for artificial teeth are wholesome. Some are more durable than others. Granose can be well masticated, even by toothless persons,

Cancer.—J. J., South Dakota, says: "In the November (1897) number of GOOD HEALTH, you say that deficient vitality, owing to intermarriage and malnutrition, is a great predisposing cause of cancer. Please explain what is meant by 'deficient vitality, owing to intermarriage.'"

Ans, - The intermarriage of healthy and unhealthy persons, also the marriage of near relatives.

Roasting Nuts.—S. J. S., Dakota, "If nuts roasted in the ordinary way are indigestible, should they be roasted by steam or by fire? Should nuts change color in roasting?"

Ans,—Nuts may be cooked by long boiling. Roasting is highly injurious. If cooked at a temperature much above the boiling point, the color will slightly change. The slight change does not impair digestibility.

Sciatica.—W. N., Oregon, asks what treatment will cure sciatica in a woman sixty years old.

Ans.— Rest in bed; fomentations for half an hour twice daily, followed by a cold towel applied and covered warmly with oiled covering outside. Electricity and massage are also beneficial.

Indigestion — Fruit — Milk — Junket — Tomatoes — Bitters — Exercise. — M. H., New Zealand; "I. A young man of twenty is troubled with coated tongue and indigestion. He observes the health principles, supplying the health foods by vegetables, fruit, and zwieback. Will this diet effect a cure, or should he use health foods? 2. Is it better to put a little soda or a quantity of sugar in acid fruits for persons who dislike stewed acid fruits? 3. Is it injurious to swallow beeswax when eating honey? 4. Do cooked and raw fruits disagree when taken at the same meal? 5. Should milk or dishes made with milk be eaten with vegetables? 6. Is junket a healthful dish, provided the

milk is scalded? 7. Do you advise the health foods for a child of three, or what other diet would be healthful? 8. Is milk bad for such a child? 9. Is the tomato a fruit? and not to be eaten with vegetables? 10. Do you consider bitters wholesome or necessary to take? 11. Are two meals a day sufficient for a hard-working man? When should they be taken? 12. Is bicycling a healthful exercise when indulged in moderately? 13. Are the skins of plums, peaches, tomatoes, etc., harmful when cooked? 14. Do potato and milk pudding make a good dinner for a child of two years? 15. If the action of the tomato repeats itself several hours after eating it, does it indicate that it disagrees with one?"

Ans.-1. Avoid milk and use health foods, especially the predigested cereals.

- 2. It is better to mix sweet and sour fruits.
- 3. Yes, beeswax is indigestible.
- 4. No.
- Persons with dilated stomachs or hyperpepsia must avoid such combinations.
- 6. It is preferable to use raw milk in the ordinary form
- 7. The Battle Creek Sanitarium Health Foods are just the thing for such a child.
- Cow's milk is not the most wholesome food for a child.
- Yes. Combinations of fruits and vegetables are not unwholesome for persons with ordinarily good digestion.
- 10. So-called "bitters" are not permanently beneficial, and their use is wholly unnecessary.
- Yes. Eight and three are perhaps the best hours.
 - 12. Yes.
- 13. They are not especially harmful to persons with ordinarily good digestion, but persons who have dilated stomachs or gastric catarrh must avoid them.
- 14. Milk and potatoes are not the best food for a child.
 - 15. Yes.

Foods—Milk.—A reader asks: "1. Are tomatoes, asparagus, spinach, dates, pop-corn, and lemons wholesome? 2. Are young spring onions wholesome? 3. Is the clear juice of lemons harmful? 4. Is the sweet potato more wholesome than the Irish? 5. Is milk diluted with one-tenth part of water and heated to 212° more easily assimilated than pure milk? 6. Is Pasteurized milk constipating? 7. Are the crackers made by the Battle Creek Sanitarium constipating? 8. Why are nut oils poisonous?"

Ans,-1. Yes,

Onions are not a very wholesome vegetable, but if cooked long enough to remove the onion flavor, they may be rendered comparatively wholesome.

- 3. Pure lemon juice may be taken to excess.
- 4. No.
- 5. Yes.
- Milk is not in itself constipating, but being a food which is completely absorbed, it leaves no residue, hence produces a tendency to inactivity of the bowels.
 - 7. No.
 - 8. They are not, unless they become rancid.

Taking Cold—Inflamed Eyelids—Oil for Facial Massage.—"M," California, says that after a year's observance of health reform in every phase, she takes cold very easily. A sore spot in her throat, the result of diphtheria some years ago, may have some influence. I. Is there any remedy for colds in general and the sore throat in particular? 2. What should be done for inflamed eyelids, slightly granulated? 3. What oil is best for facial massage?

Ans.— I. Build up the resistance of the body by the cold friction bath taken daily, followed by oil rubbing, and by a dietary which will promote the development of fat and blood.

- Bathe the eyes in hot water for five minutes three times a day. A few drops of a saturated solution of boracic acid may be employed several times a day with advantage. Consult a good oculist.
 - 3. Any vegetable oil.

Gastritis.— J. I. S., Virginia: "Can atonic gastritis be cured? 2. What will relieve hyperacidity?"

Ans .- I. Yes.

2. The cause of the hyperacidity must be sought. If due to excess of hydrochloric acid, a little bicarbonate of soda may be used for temporary relief. If the cause of the excessive secretion is an irritation of the sympathetic nerves, it may be relieved by suitable measures, as the fomentation, or the moist abdominal bandage worn at night. It may be found necessary to cleanse the stomach by means of gastric lavage.

Peanuts.—F. E. P., Michigan, asks why we recommend stewed instead of roasted peanuts to make peanut butter.

Ans. — The process of roasting nuts renders them indigestible.

Weakness and Nervousness.—H. W., Illinois: "After exerting myself in any way, I am nervous, restless, and weak; sleep is fitful. The muscles from my spine to my heels feel as if they were stretched. What is the cause and cure?"

Ans.—This condition results from neurasthenia, and is most likely due to indigestion or autointoxication. Your case should be looked after by a competent physician.

Cigarettes - Morphine. - One who has smoked cigarettes for seven years finds his heart and lungs greatly affected. 1. Can they be restored to health? 2. Can one who has used morphine for ten years return to his normal condition again?

Ans .- I. Yes, probably. They can not be made as strong and sound as originally, but can be wonderfully improved.

2. Yes.

Curvature of the Spine .- Mrs. J. W. T., Michigan, asks how to treat her daughter, nineteen years old, for spinal curvature.

Ans. - A competent specialist must be consulted. The proper thing would be to place the patient in the Battle Creek Sanitarium or one of its branches for thorough training.

Pierce's Medical Discovery - Oatmeal -Bromose — Sulphur Smoke. — Mrs. E. A., Michigan: "I. Do you recommend Dr. Pierce's Golden Medical Discovery? 2. Will oatmeal cooked for four or five hours and eaten alone hurt a child ten months old? 3. Are peanuts cooked eight or ten hours and used as butter for a child of that age injurious? 4. How many bromose tablets should be given daily to such a child? 5. Is sulphur smoke injurious to the lungs?"

Ans .- 1. Most certainly not,

- 2. Such a diet will be likely to produce indigestion and dilatation of the stomach. Malted nuts, Sanitarium Infant Food, granose flakes, or bread toasted brown and ground fine, and made into a gruel, should be used instead.
 - 3. No, provided the peanuts are not roasted.
 - 4. Six to twelve.
 - 5. Yes.

Distilled Water - Stomach Trouble .- A. Y., Minnesota, asks, " 1. Is distilled water harmful? 2. Is soft water brought to the boiling-point better? 3. What causes a smarting sensation over the abdomen after dinner? There is gas in the bowels.

4. What should be the diet?"

Ans .- 1. No.

- 2. No, but it is just as good.
- 3. Irritability of the stomach, probably dilatation of the stomach and colon.
- 4. A dry dietary consisting of granuts, granose, granut, zwieback, and nut products, such as malted nuts, nuttolene, and fruits.

Nervous Dyspepsia.— J. R., New Jersey: "My trouble is nervous dyspepsia. My feet are always cold, the right one being colder than the left. 1. Please state the cause. 2. Which are best for a weak stomach - Turkish or Persian dates? 3. Do apples and oranges agree ? "

- Ans .- 1. The correspondent should give further information respecting his dietary. A detailed account of the articles eaten should be given. The use of milk is often responsible for a coated tongue when meat is discarded.
 - 2. The best dates are those from Tunis.
 - 3. Yes.

Osteopathy .- G. W. A., Indiana, asks what we think of osteopathy as taught and practiced at Kirksville, Mo.

Ans. - So-called osteopathy is a form of massage and manual Swedish movements, under another

Honey - Mineral Waters - Cold Feet -Ambrosia - Curvature of the Spine - Sugar of Milk - Olive-oil. - Mrs. E. H., California: "I. Is honey healthful? 2. Are mineral waters charged with carbonic acid gas injurious? 3. What will cure cold feet in a child of eight? 4. Does not hot vapor treatment for the throat and lungs render one susceptible to colds? 5. Is ambrosia good for a child of eight? 6. Are X-rays an absolute proof in supposed curvature of the spine? 7. Is sugar of milk injurious? 8. Is there any objection to using olive-oil? 9. When should it be taken ?'

- Ans,-1. It is on the whole more healthful than cane sugar, but is liable to contain substances which are more or less injurious, such as the volatile oils absorbed from flowers, which are usually more or less poisonous, germs, fragments of dust, and filth of various sorts with which the bees come in con-
- 2. The alkaline salts usually found present in mineral waters are generally dangerous when used for a long time. The carbonic acid gas is entirely wholesome.
- 3. Bathing with cold water and rubbing vigorously twice a day.
- 4. Yes, unless the system is fortified by daily cold bathing.
 - 5. Yes.
- 6. An examination of this sort is not necessary to discover the presence of curvature of the spine, but would certainly show any curvature if present.
- 7. Sugar of milk is a food, and is wholesome in moderate quantities.
- 8. Olive-oil, being an unemulsified fat, when taken into the stomach in the ordinary state is very likely to interfere with the digestion of albumins and starch.
- 9. Ripe olives are a wholesome food, but the use of olive-oil in its ordinary state is a practice to be condemned.

Distended Bowels.—M. G. M., Illinois: "1. Is a bloated feeling in the bowels a sign of irritation and congestion? 2. What effect do vegetable oils have on the stomach and bowels; for instance, olive-oil and linseed-oil? 3. Do you advise such preparations in case of stomach and bowel troubles? 4. Are all sweets digested in the bowels? 5. Will wearing a moist abdominal bandage cause a distended feeling in the bowels?"

Ans .- 1. Not necessarily.

- Olive oil is likely to disturb the digestion, and linseed-oil is still more objectionable.
- The writer does not find occasion to prescribe these remedies.
- The digestion of sugar is completed by the mucous membrane of the intestine during absorption.
 - 5. This effect is possible, but not usual.

Nut Foods — Cod-liver Oil.— F. A. C., North Dakota: "1. Please tell me how to prepare nut foods for table use. 2. Is cod-liver oil good to increase flesh?"

Ans.— 1. Cook the nuts the same as beans, but for a longer time. The skins should be first removed by blanching. The nuts may be blanched by drying, not roasting, then removing the skins by means of a proper blanching machine, or by means of rubbing in a coarse sack, then blowing out the skins or dropping the nuts from a height of a few feet when exposed out of doors to a good breeze. The use of roasted nuts should be avoided, as they are digested with difficulty, and are likely to produce various forms of indigestion.

2. Fat foods of all kinds tend to increase the store of fat in the body.

Teeth.—H. L. R., Washington, says that his little daughter, aged ten, has very poor teeth, and asks what diet will tend to preserve them.

Ans.—A diet consisting of fruits, grains, and nuts, especially dry foods, avoiding liquids. The most important thing is to improve the child's general health by building up its resistance. A daily cold bath followed by rubbing and a simple nutritious dietary are the measures of first importance.

Abdominal Bandage — Liver Patches.—
P. J. D., Wisconsin, asks: "I. How long, how wide, and of what material should the abdominal bandage be made? 2. How should it be applied for stomach and liver trouble? 3. Is the hot-water bag a good substitute for fomentations? Being a traveler, it is impossible for me to use the latter. I am a 'hypo.' 4. Can both bag and bandage be used every night to advantage? and how long will such treatment be required, with careful diet, to effect a cure? 5. My wife has large liver patches on her back. Please state a remedy."

- Ans.— t. Eight to twelve inches in width, long enough to go once and a half around the body; use linen toweling.
- 2. A fomentation should be applied over the stomach and liver, then a linen bandage wrung out of cold water. Over this a flannel bandage should be applied. The length of the flannel bandage should be sufficient to reach at least twice around the body. Its width should be two inches greater than that of the linen bandage. The linen bandage should overlap in front so as to bring two thicknesses over the stomach and liver. Woolen blanket material is better than ordinary flannel.
- The hot-water bag will answer the purpose in cases in which it is not necessary to apply the bandage over more than a small area.
- 4. Yes, It may be necessary to continue the treatment for several months. Such measures as the cold morning towel bath should be employed.
- 5. The moist abdominal bandage will be beneficial, also the daily cold bath. Possibly the patches may be due to a parasitic variety of skin disease. Should this cause be present, some germicidal ointment, as sulphur ointment, may be necessary.

Recipe for Preserving Fruit without Cooking or Sealing — Eczema — Cucumbers — Onions — Breathing. — Mrs. C. B., Texas: "I. A formula much recommended here for canning fruit without cooking or sealing, consists in smoking the fruit for one hour with a mixture of sulphur and pulverized charcoal. Is it safe? 2. What is the best treatment for eczema? 3. Are cucumbers fit to eat? 4. Are onions healthful? 5. Should one breathethrough the mouth when sleeping? If not, what will prevent it?"

- Ans.—I. This method can not be considered exactly dangerous, but it greatly deteriorates the flavor of the fruit, and unless the fruit is cooked for a sufficient length of time, when prepared for use, to drive off the sulphurous acid, it will prove more or less damaging. On the whole, the method is to be vigorously condemned.
- 2. The most important thing is to improve the general health, and especially the digestion. The stomach is usually dilated, and the system filled with poisonous substances as the result. Frequently the application of ointments, such as zinc ointment, is valuable in addition.
- 3. Cucumbers are not particularly unwholesome, if cooked, but have no nutritive value. A fresh, crisp cucumber is quite digestible, but if toughened by the addition of salt and vinegar, becomes very unwholesome.
- 4. The onion has little nutritive value, and is an irritating and on the whole an objectionable food.
 - 5. No. Covering the mouth is the only remedy.

LITERARY NOTICES.

Scribner's Magazine for April is beautiful with its brilliant colored cover and its wealth of illustrations. Miss Tarbell's article on "The Charm of Paris," and "Tommy and Grizel" are distinctive features for the lover of literature. Ernest Seton-Thompson describes the life and adventures of "The Kangaroo Rat," illustrating the article with his own effective sketches. H. J. Whigham's article on the battle of Magersfontein appears richly illustrated with photographs which were developed, printed, and engraved thousands of miles from the battlefield, Mr. Whigham will know nothing of his results until at some future day he picks up a copy of the magazine. He simply knows that he snapped a camera in the direction of the fighting, and inclosed the films in a tin box. Theodore Roosevelt describes the last campaigns of Cromwell,-those against the Irish and the Scotch. "From now until his death there never appeared in England a foe that it was necessary for him to meet in person," Governor Roosevelt's monograph will continue through two more numbers, and will have to do with the civic side of Cromwell's career.

The colored frontispiece of McClure's Magazine for April shows the site of Bethsaida on the Lake of Galilee. Other attractive colored illustrations are, "A Door Yard in Nazareth," and "A Village of the Shepherds near Bethlehem." This number of "The Life of the Master," by the Reverend John Watson, D. D., treats of "Jesus' Ministry at Capernaum,— His Rejection by Nazareth."

"In Front of the Stampede" is a powerful short story by Alvah Milton Kerr. "A Manufacturer of History," by Charles Warren, and "Within an Ace of the End of the World," by Robert Barr, are original and striking in quite different ways.

The Forum for April contains an article by Dr. William P. Munn, entitled "A Tuberculosis Quarantine not Practicable," in which we find the following:—

"When every sufferer from tuberculosis becomes convinced that his own expectoration is the medium through which infection is conveyed, and that he must so dispose of it that it can not dry and be blown about to be inhaled by others, the first important victory will have been won. And when the public fully comprehends that fact, and acts accordingly, it will realize that the consumptive who exercises this sanitary precaution is no longer a source of very great danger to his fellow man. Furthermore, when the public has reached that point, it will also be ready to insist upon the proper inspection of meat, milk, and dairy cattle, in order to prevent the communication of tuberculosis through infected food. The results of a successful propaganda upon these lines will be to diminish to a very great extent the number of cases of a disease which causes more deaths than any other."

"The present open-door policy for marriage in America can not exist much longer," writes Edward Bok in the April Ladies' Home Journal. "The question must be met, and it should be met squarely. Any discussion of divorce is untimely: it is futile at the moment. It is grappling with the question at the wrong end. Whether divorce is right or wrong; whether there should be divorce at all, and on what grounds a decree of divorce should be granted,-these are not the pressing questions of the hour. The whole matter of divorce does not begin to stand in such urgent need of discussion as does the question of the laws of marriage. When we adjust marriage as we should adjust it, then we can give our attention to divorce. And then we shall find that in adjusting the one we shall have come pretty close to the wisest and best adjustment of the other. The practical solution of both, in short, lies in the proper adjustment and rigid enforcement of laws which shall make marriage more difficult of accomplishment."

All who are interested in the training of boys and girls will find something to think about in the series of articles in **Werner's Magazine** on "Graded Physical Exercises," by Bertha Louise Colburn. The introduction, which appears in the April number, treats of the enfeebling tendency of modern school life, and the kind of physical training which will best counteract this tendency.

Mr. W. R. Moody, who has in his possession all of his father's papers, and is preparing a very complete life of the great preacher, has consented to write especially for the **Saturday Evening Post** a series of anecdotal papers on his father's life and work, profusely illustrated with hitherto unpublished photographs. The first of these papers, entitled "Moody as Boy and Business Man," appeared in the April 7 number.

PUBLISHERS' DEPARTMENT.

A WORD ABOUT FLOWER GROWING.

BY EBEN E, REXFORD.

Who was it that said, "Gardening is the most refining and elevating employment in which we can engage"? We forget the name of the man who said it, but the truth of what he said every one who has had any experience in flower growing must readily admit. Every flower is a preacher and a teacher. It preaches the sermon of beauty, and it teaches the lesson of nature, and its sermons and lessons are never dull and dry. It becomes a friend by whose companionship we are made better, because it can never be anything but pure and uplifting.

Martin Luther said that a flower in the window is strong enough to keep the devil outside, and in saying this he uttered a truth that we never fully understand until we have made friends of the flowers and learn their power for good. Henry Ward Beecher said, "Blessed be the person who really loves flowers, loves them for their own sakes, for their beauty, their associations, the joy they have given, and always will give. The flower-lovers are blessed of God."

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The woman who wears herself out over the affairs of the household may feel that she has no time to devote to flower growing. Often she feels that she has not strength for the task, but she will find in undertaking it that she can contrive to make time for it, and before long she will realize that health is growing with the plants she tends. The housed-up woman needs something to coax her out into the fresh air, and take her mind off the work and worry of her daily household duties. In noother way can she find such rest, such relief, such complete relaxation, as in gardening.

There is a pleasure in growing flowers that can not be explained in a way to be fully understood by those who have never attempted it. The fascination of it is not to be written down in words, for they are cold, colorless things for many purposes, and this is one of them. But there is a charm, a delight, in flower growing that is not far behind that which the creator of a beautiful poem feels. We do not create the flower, but we control, to a great degree, and assist in, its development. Those who become amateur gardeners soon find their greatest pleasure in a garden. In winter time they are

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always looking forward to the time when they can get out among "the green things growing" again, and the song of the first spring robin is welcomed by them more because of its prophecy of coming flowers than for its music.

"I seem to be holding my breath all winter," said a woman not long ago. "I only draw a full, free breath when I get into my garden. You would not wonder at my feeling so if you knew what that garden has been to me. It has made a new woman of me. It has been a sanitarium in which lost health was regained. I love it so well that I do not care for a trip to the seashore or the mountains; I prefer to stay among my flowers. We are such friends that I fancy they would pine for me if I were away. I know I should be homesick for them. Mere sentiment, you say? Ask other women who grow flowers what they think about it, and they will agree with me."

We are led to say these things about gardening as a restful, health-giving occupation because of the very liberal offer we are now making in connection with the publishers of *How to Grow Flowers*. Half a dozen choice ever-blooming roses are offered with a year's subscription to their magazine on terms set forth elsewhere in this issue. The liberality of this offer will be understood when a consultation of the florists' catalogues shows that the roses alone would cost more than plants, magazine, and our paper under this offer. Here is a grand chance for every woman who would like to engage in gardening.

Of all flowers the rose is most beautiful, most fragrant, in every way most delightful, and this offer makes it possible for one to have lovely roses from June to November. A woman will take more pleasure in giving to her friends a rose of her own growing than she would in giving them a dozen bought from the florist. This is one of the opportunities of a lifetime to begin gardening under most favorable conditions. And with the roses comes a magazine whose special mission it is to tell the lover of flowers how to grow them. Think of it! Twelve times a year it will come to you, and every number be redolent with the breath of the flowers it tells about.

The next best thing to having flowers of your own is to read about those of others, and with this pleasure is combined profit, if you read How to Grow Flowers, because everything in it is practical. It aims to tell the why's and wherefore's of plant growing, out and indoors, to give the A, B, C of it in such a manner that the beginner can receive benefit from it, as well as the amateur of some experience. Its contributors are men and women who have made a success of flower growing, and what

they tell you you can depend on. A year's subscription to it will be a liberal course in one of the best schools of gardening. You will find it delightful reading, for those who write about anything so delightful as flowers and their culture, could not write otherwise than delightfully.

The liberality of this offer is unequaled. Do not let slip this opportunity to begin gardening with an outfit of the choicest roses, which will cost you nothing. The magazine is a standard one in its particular field, a success in every way, richly illustrated, well edited, practical, and comprehensive, and would be cheap at double the price asked for it.

Among the recent arrivals at the Sanitarium are the following:-

Sir Richard Cartwright, M. P., Ottawa, Canada; W. A. Dent, Professor of Science in Whitby Collegiate Institute, Ontario; H. D. Johnson, South Bend, Ind.; R. E. Long, Kansas City; F. E. Alexander, St. Louis; Mrs. W. Z. Thomson, Georgetown, Ky.; L. S. Dunham, Concord, Mich.; Mrs. Searle, wife of Judge Searle, St. Cloud, Minnesota; Mr. and Mrs. Klein, Fort Atkinson, Wis.; Chas. T. Page, Chicago; Dr. H. Nelson, Minneapolis.

BEGGING A PRIVILEGE.—An old farmer who was in the habit of eating what was set before him, asking no questions, dropped into a café for dinner. The waiter gave him the dinner card and explained that it was the list of dishes served for dinner that day. The old gentleman began at the top of the bill of fare and ordered each thing in turn until he had covered about one third of it. The prospect of what was still before him was overpowering, yet there were some things at the end that he wanted to try. Finally he called the waiter, and confidentially marking off the spaces on the card with his index finger, said, "Look here, I've et from thar to thar. Can I skip from thar to thar, and eat on to the bottom?"—Current Literature.

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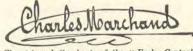
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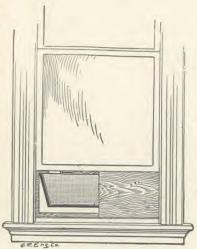
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COLDS, LA GRIPPE, PNEUMONIA, AND RHEUMATISM.

That is the reason our specially woven linen undergarment is universally recommended by physicians.

It will keep the skin in a sweet and clean condition, and free from all irri-

It will neither overheat nor chill.

The body will be uniformly warm.

Our booklet, free on application, will give other information on the use of hygienic undergarments.

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Deimel Linen-Mesh Co.,

491 Broadway, New York. Washington, D. C., 728 15th St., N. W. San Francisco, 11 Montgomery St.







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Che Beautiful, Sanitary, and Durable Wall Coating. Is Not Stuck on the Wall with Glue.

Alabastine is a cement that sets naturally, and is as lasting as the wall itself.

Costs no more to apply than the cheapest kalsomine or whitewash that spoils your walls.

Superior to wall paper, better than paint.

Ready for use by mixing with cold water.

Any one can apply it.

Write for circular and copy "Alabastine Era."

Alabastine Co., Grand Rapids, Mich.





Disease Lurks in Zinc-Lined Refrigerators.

Mc Cray Patent Porcelain Tile Lined Refrigerators

Are built to Order for Residences, Hotels, Hospitals, Sanitariums, etc.

ICED FROM PORCH.



STYLE NO. 331.

Built to Order for GEORGE SPENCER, Duluth, Minnesota

The ordinary Refrigerator is a foul affair, reeking with odors, dampness, and the poisonous oxide from corroding zinc. This must affect milk and food.

The Mc Cray Patent Sanitary System insures perfect circulation of pure, cold air in all departments, absolutely dry and never sweats, therefore perfectly hygienic. These refrigerators are used in hundreds of the finest homes, public and private institutions. Separate compartments for meats, milk, wine, vegetables, etc. Catalogues: No. 30 for hotels and public institutions; No. 35 for private residences; No. 50 for groceries and meat markets.

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Ohicago—182 W. Van Buren Street. Baltimore—11 W. Fayette Street. Washington—712 13th St., N. W. Boston—52 Commercial Street.

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MCCRAY

Refrigerator and Cold Storage Co.,
105 MILL STREET,
KENDALLVILLE, INDIANA.



Six Elegant Rose Plants



(ASSORTED COLORS

AND ONE YEAR'S SUBSCRIPTION TO-

"How to Grow Flowers," and "Good Health"

FOR ONLY \$1.00, THE SUBSCRIPTION PRICE OF GOOD HEALTH ALONE.

By special arrangements with the publishers of "How to Grow Flowers," the leading floral magazine of the country, we are enabled to offer a one year's subscription to that publication and a choice collection of six Rose Plants absolutely FREE to every person who sends us \$1.00 for a year's subscription to Good Health. These Rose Plants retail at ten cents each, and the florists sell millions of them at this price, while the ordinary price of "How to Grow Flowers" is 50c per year; hence, we are offering you \$2.10 for \$1.00. Remember that THE ROSE PLANTS WILL BE FORWARDED PREPAID.

This offer is limited, owing to the florists' trust now formed, which will cause an immediate advance in prices. However, we are pleased to say that through contracts made with leading greenhouses prior to the formation of the trust, this company will be in a position for a limited time to secure plants at the old prices. This enables us to make so exceptional an offer, and it should be taken advantage of at once. Roses will be shipped now, or later in the spring, subject to your instructions.

ADDRESS ____

GOOD HEALTH, Battle Creek, Mich.

If you are a subscriber, send us one new subscription, and we will send you the plants and "How to Grow Flowers."



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Are scientifically prepared with due regard to their chemical constituents, in a thoroughly equipped laboratory, so that there is no guesswork or rule of thumb about our methods, and as a result we have been able to come to the relief of the poor overworked American stomach with more than a score of predigested, toothsome food products, which make flesh, blood, and brawn, and do not overtax or clog the digestive organs.

We have received a great many letters from those who are using our Nut Foods, telling of the benefits they have received; and we append hereto a sample giving a plain, unvarnished state-

ment from an old man of 74 years :-

S. L. HALL.

MANUFACTURER OF
LUMBER and SHINGLES.

MILLS LOCATED AT MAPLEWOOD AND EUREN, WIS.

Farm and Mill Machinery,
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Gentlemm

I can an old man of 7% years and han suffered for 2 years from indigestion constipation to attendant consequences without any prospect of relief till I read your "that foods". I have taken them only a few days-mostly for dimens the per with the result that I already feel like a young man. I have every reason to believe that with proper care, and with the use of your foods, my spean, already past the limit, may be considerably lugther and life rendered pleasant and agreeast.

Wishing your much success financially as well as being actors to our oace believe med sincerely and gratefully the survey are survey and gratefully the survey and gratefully the survey and gratefully the survey and gratefully the survey are survey and survey and survey and survey are survey as a survey and survey are survey as a survey as a survey as a survey as a survey and survey are survey as a survey and survey are survey as a survey and survey are survey as a s

Limon Hall

Eight free samples and recipe book will be sent, postpaid, for 25 cents, to cover postage only.

SANITAS NUT FOOD CO., Ltd., Battle Creek, Mich.

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To Colorado, Wyoming, Utah, California, Oregon, and Puget Sound Points than any other line.

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Weak Lungs,

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Weak Bodies.

The Health Resorts of New Mexico and Arizona

are unrivaled. Pure, dry air, an equable temperature, the right altitude, constant sunshine.

Send for descriptive pamphlets issued by Santa Fé Route Passenger Department.

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across the continent, over the vast prairies and magnificent Rockies;

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across the vast Pacific, to Japan and China, the Philippines, Hawaiian Islands, Fiji, and Australia —our Empress steamships are the finest afloat—to

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CLOSE CONNECTIONS ARE MADE AT CINCIN-NATI FOR ALL SOUTHERN POINTS.

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Splendid equipment of Palace Sleeping Cars running through without change. Dining Car Service unsurpassed.

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Charleston,

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The famous old city will extend its broadest hospitality.

The Railroads announce low rates.

This convention by the seaside is going to be the greatest ever held.

One fare (plus \$2.00) round trip from all Northern points via Cincinnati and the—

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Full stop-over privileges, choice of routes, and the best service that is to be found anywhere. Tickets good till September 1, for the return journey.

Write for free literature concerning Charleston, and the way to get there, including literature descriptive of Chickamauga battlefield, Asheville, and the "Land of the Sky," etc. H. J. VAN DERMARK, N. E. P. A., 67 Woodward Ave., Detroit, Mich.

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Home Seeker
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Has a genial climate and the greatest variety of medicinal springs on the continent.

Has cheap and fertile lands, and the possibilities of production are almost fabulous.

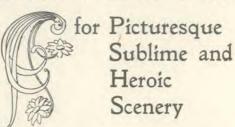
Has a great many delightful pleasure resorts.

Has business advantages superior to any other part of the nation, because the field is not crowded, competition is not so brisk, and there are greater opportunities for the development of new enterprises.

The entire Pacific territory is now experiencing a great industrial revival. Good openings for all classes.



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ROUND-TRIP TICKETS to Principal Pacific Coast Points that read going via any of the Southern Pacific Company's THREE ROUTES,

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and returning via the same or either of the others, are on sale at all important railway stations in the United States and Canada.

For California literature, maps, rates, and complete information, address-

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W. H. CONNOR, Com'l Agent, Chamber Commerce Bldg., Cincinnati, Ohio.
W. J. BERG, Trav. Pass. Agent, 220 Ellicott Square, Buffalo, N. Y.

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ICHIGAN

"The Niagara Falls Route."

Corrected Nov. 19, 1899.

	8	12	6	10	14	20	36
EAST	*Night Express	†Detr'it	tMail & Express	Bos. Sp.	*East'n Express	Acem.	# Atl'ti
Chicngo, Michigan City Wiles Michigan City Wiles Kalamazoo Battle Creek Marshall Albion Jackson Ann Arbor Palls View Bestle Creek Bestle Creek Bestle Creek Marshall Bestle Creek Bestle Cr	8.50 4.40 5.55	am 7.30 8.10 8.38 8.57 10.05	8.48 10,15 pm12,10 1,00 1.80 1.50 2.85 8.47	pm12.08 1.00 2.08 2.42 3.09 3.30 4.05 4.58 6.00 am12.20 3.13 5.15	6,52 7,28 7,51 8,11 8,50 9,48 10,45 am 5,02 5,17 5,30 6,14 9,50 11,50 pm 4,15 8,15 6,19	p=6.00 6.43 7.10 7.30 8,15	pm11.3 am 1.2 2.3 4.1 5.0 5.3 5.5 6.4 7.4 8.1 10.4 4.2 4.4 4.4 4.4 4.4 4.4 4.4 4.4 4.4 4
WEST	*Night Express	15 *NY Bo. & Ch.Sp	Mail &	5 % News Express	23 *W'st'n Hypress		37 *Pacifi Expres
Bosto. New York Syracuse Bochester Boufialo Boufialo Niagara Falls Falls View Detroit Ann Arbor Jackson Battle Greek Kalamazoe Niles Michigan City Chicago	9,43 11,15 am12,40 1,40	9,20 10,30 11,05 pm 12,22 1,20	9.40 11.05 pm 1. 25 .20 2,55 4.10	am 3.30 4.35 5.15	3.50	pm 4.35 5.45 7.30 9.98 10.00	am12.3 1.3 3.0

. Daily. † Daily except Sunday.

Trains on Battle Creek Division depart at 8.05 a. m. and 4.10 p. m., and arrive at 12.40 p. m. and 6.10 p. m. Daily except Sunday.

O. W. RUGGLES,

R. N. R. WHEELER.

General Pass. & Ticket Agent, Chicago.

Ticket Agent, Battle Creek.

The Cincinnati Northern Railroad Co.

TIME TABLE NO. 3.

IN EFFECT SEPT. 24, 1899.

Trains Pass Battle Creek as follows:

WEST-BOUND.

No. 21,	Mail and Express	6.58 P. M.
No. 23,	Accommodation	2.07 P. M.
No. 27,	Local Freight	8.25 A. M

EAST-BOUND.

No.	22,	Mail and Express	8.25 A. M
		Accommodation	
No	28,	Local Freight	5.30 р. м

Direct connections are made at Toledo with all roads diverging. Close connections for Detroit and Cincinnati.

J. L. READE,

Ticket Agt., Battle Creek.

E. R. SMITH, City Pass. Agt., 6 West Main St.

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In reading and seeking "Good Health," do not overlook Mexico, and the fact that the Flexican Central Ry. is not only the best but the most popular route through that country.

Passengers via this line avoid the annoyances incidental to transfer at the border, secure through Pullman Buffet Car Service, and more comfort than could possibly be the case otherwise.

Mexico is one of the very few combi-nation summer and winter resorts on

the continent.
Call on any Mexican Central Agent for further particulars, or address,

T. R. RYAN, General Agent, 236 S. Clark St., Chicago.

> W. D. MURDOCK. Ass't Gen'l Pass. Agent, MEXICO CITY, MEX.

Pullman Buffet Car Service.

E. W. Meddaugh and Henry B. Joy, Receivers.

Chicago & Grand Trunk R'y.

Trains arrive and leave Battle Creek.

Time Card in Effect Nov. 19, 1899.

WEST-BOUND FROM BATTLE CREEK.

No. 9, Mail and Express, to Chicago	12.15 P M.
No. 1, Chicago Express, to Chicago	9.00 A. M.
No. 3, Lehigh Valley Express, to Chicago	3.40 P. M.
No. 5, Pacific Exp., to Chicago, with sleeper	1. 0 A. M.
No. 75, Mixed, to South Bend	8,20 A, M.
Nos. 9 and 75, daily, except Sunday.	
Nos. 1, 3, and 5, daily.	

EAST-BOUND FROM BATTLE CREEK.

No. 8, Mail and Express, to Pt. Huron, East, and Detroit	3,45 P. M.
No. 4, Lehigh Express, to Pt. Huron and East.	8.27 P. M.
No. 6, Atlantic Express, to Pt. Huron, East,	0,01 2, 24,
and Detroit	2.25 A. M.
No. 2, Lehigh Express, to Saginaw, Bay City,	10000 221 330
Port Huron, and East	6.50 A. M.
No. 74, Mixed, to Durand (starts at Nichols	
yards)	7.15 A. M.
Nos. 8 and 74, daily, except Sunday.	
Nos. 4, 6, and 2, daily.	

A. S. PARKER, Ticket Agent,

BATTLE CREEK.

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PREFERENCES CONTRACTOR CONTRACTOR

AND THE LAND OF THE SKY.

2,600 feet elevation. Delightful climate. 300 days of sunshine per year. Finest hotel accommodations in the South. The world's greatest sanitarium and place for recreation.

A REDUCED RATE

is in effect from the North every day in the year, for round-trip tickets via the

OUEEN & CRESCENT ROUTE and SOUTHERN RY.

Through Pullman drawing-room sleepers from Cincinnati daily with direct connec-tion from Louisville.

W. C. RINEARSON, G. P. A., Queen and Crescent, Cincinnati.

WM. H. TAYLOE, A. G. P. A., Southern Ry., Louisville, Ky.

Printed matter and full information on application.



The Superior Quality of this Powder makes it one of the best for the treatment of -

Prickly Heat. Nettle-rash. Chafed Skin. etc., etc.

It is an excellent remedy for PER-SPIRING FEET and is especially adapted-

For Infants. "

Delightful After Shaving.

Price, post-paid, 25c per box.

Agents Wanted.

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EVERY DAY IN THE YEAR

A strictly first-class train, consisting of BUFFET-SMOKING AND LIBRARY CARS, PULLMAN DOUBLE DRAWING-ROOM SLEEPING CARS AND DINING CARS runs through between Chicago and

without change via the

CHICAGO, UNI

affording the quickest transit to San Francisco, the gateway to THE HAWAIIAN AND PHILIPPINE ISLANDS, CHINA AND JAPAN.

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127 THE ARCADE, 17 CAMPUS-MARTIUS, 601 CHESTNUT STREET. PHILADELPHIA. SOI MAIN STREET, No. 2 KING STREET, EAST, BUFFALO.

CINCINNATI PITTSBURG CLEVELAND. TORONTO, ONT.

ALL AGENTS SELL TICKETS VIA THE

WESTERN TUILLI

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New England Sanitarium

SOUTH LANGASTER, MASS.





A Thoroughly Modern Institution.

CONDUCTED in affiliation with the Battle Creek (Mich.) Sanitarium, and, like the latter institution, equipped with the apparatus and appliances necessary for the successful treatment of all chronic disorders by modern and rational methods.

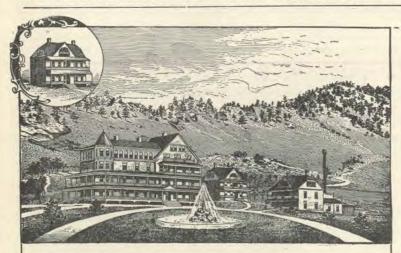
Admirably located, conveniently near to Boston, and readily accessible from New York and all the principal cities of New England.

An Ideal Place to Spend the Summer Months.

Among the advantages offered to invalids are Baths of Every Description, including the Electric-Light Bath, all forms of Massage and Electricity; Trained Nurses and Operators from the Battle Creek Sanitarium; Prescribed Dietaries, with Special Facilities for examination and treatment of Stomach Disorders.

Circulars and particulars gladly sent. Address -

C. C. NICOLA, M. D., Supt.



Baths of Every Description, Including the Electric-Light
Massage and Manual Swedish Movements.
Electricity in Every Form.
Medicated Air Rooms for the treatment of Diseases of the
Classified Dietary.
Caboratory of Hygiene for Bacteriological, Chemical, and Microscopical investigation.

THE COLORADO SANITARIUM, - Boulder, Colo.

Che Colorado Sanitarium



Twenty-nine miles northwest of the city of Denver is a well-equipped and well-regulated institution for the treatment of all chronic disorders. Buildings with all modern conveniences, including steamheating, electric lights, elevators, gymnasium.







Washing Machines

FREE!

SOMETHING THAT WILL MAKE HOUSEKEEPERS REJOICE

AND THAT WILL KEEP EVERYBODY GOOD NATURED

WASH

THE famous Cyclone Washer is a machine that washes; is devoid of all rubbing apparatus, and consequently does not wear out the clothes. The Cyclone is a rocking machine, and the flowing of the water from end to end causes it to rock with the greatest ease. It is made of galvanized iron, supported by a wooden frame. A lifting device has recently been added, which enables the water to be drawn into an ordinary pail or similar receptacle without inconvenience.

By special arrangements with the manufacturers of the "Cyclone Washer," we are able to furnish a limited number of their machines as follows:—

No. 1, family size, retail price, \$8.00. FREE for 10 Yearly Subscriptions to GOOD HEALTH.
No. 2, small laundry size, retail price, 12.00. ' 14 '' 14
No. 3, large laundry size, retail price, 18.00. ' 20 '' 11 '' 12 '' 11 ''

Full descriptive circulars of this Washer sent on request.

Machines will be shipped freight charges collect.

GOOD HEALTH PUBLISHING CO., Battle Creek, Mich.

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OPEN ALL THE YEAR

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SCENERY.

Overlooks the beautiful Napa Valley in its most charming section. Sixty acres of well-kept lawns, beautiful gardens and extensive groves of pine, live oak, and madrona.

CHARMING WALKS AND DRIVES

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A. 36 M.

EQUIPMENT.

The buildings consist of a main five-story structure, ten cottages, gymnasium, chapel, laboratories, natatorium, besides thirty tents. Well furnished and steam heated, complete scientific apparatus, electric calls, elevator. Every accompaniment of a wellconducted institution of its kind.

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SERVICE-

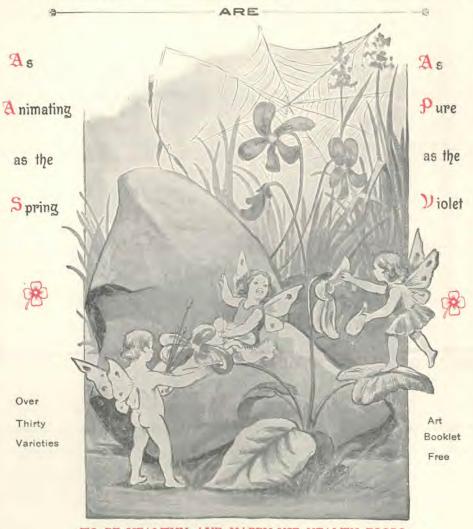
Four regular physicians, thirty trained nurses, forty assistants; skilled operators for application of massage, Swedish movements, and all kinds of electric and water treatment; classified dietaries. Infectious and offensive patients not received.

Address ST. HELENA SANITARIUM, St. Helena, Cal.

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Brainy People

Health Foods

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TO BE HEALTHY AND HAPPY USE HEALTH FOODS

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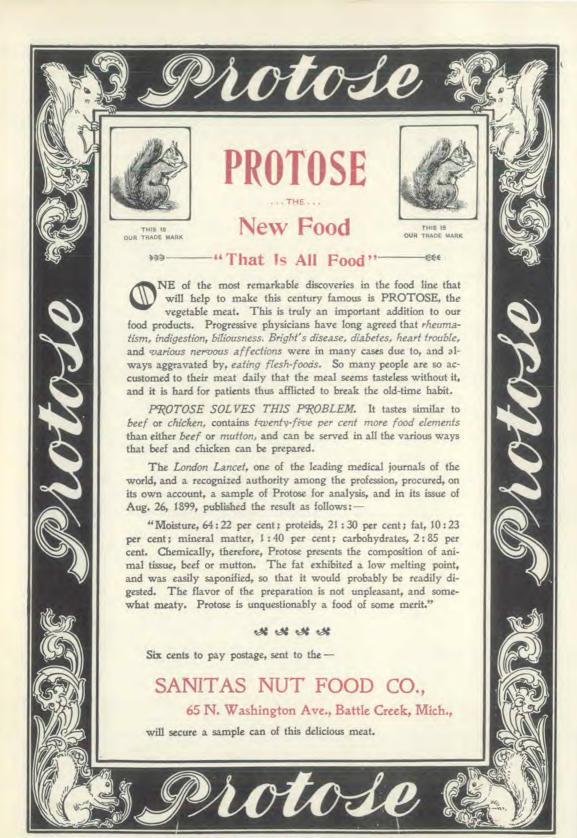
Manufactured by

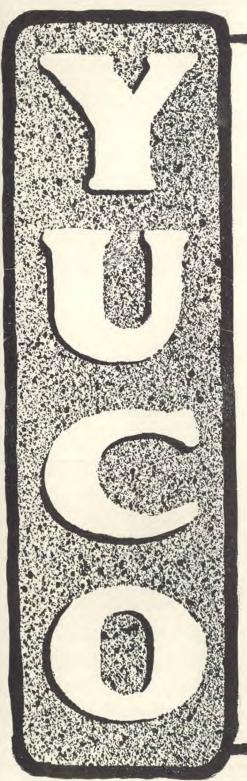
The Battle Creek Sanitarium Health Food Co.,

Battle Creek, - - - Mich.

Health Foods

Ready to Serve





Have you tried the New Wheat Food?

It's different from any other prepared cereal. Rich in all the health producing and retaining qualities of whole wheat. Sterilized and parched in an improved

scientific way.

This is
The New
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A delicious
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Ask your grocer for Yuco. If he does not keep it send us his name and we will write you where it can be purchased.

The recipe book which accompanies every package tells how to make a variety of new dishes from Yuco. Sold everywhere in 2 lb. packages.

WASHBURN, CROSBY CO., Minneapolis, Minn.

Makers of the famous Gold Medal Flour.



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Acknowledged to be the Oldest and Most Extensive Sanitarium Conducted on Rational Principles in the United States.

Dining-room with a Seating Capacity of 300.

Everything an invalid needs. Special dietaries prepared as directed. Baths of every description, including the electric-light bath. All conveniences of a first-class hotel. Incurable and offensive patients not received.

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Containing the following useful articles will be sent to new subscribers who request it:—

- I Package PEARLINE.
- 2 Packages QUAKER OATS.
- I Bar FAIRY SOAP.
- I Package ALLEN'S FOOT-EASE.
- I Large box TALCUM POWDER.
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THE articles listed are among the home necessities for daily use. Boxes will be furnished only to new subscribers to Good Health, and every application must be accompanied by the subscription price, \$1. If you were to purchase these articles, they would cost you more than \$1.50; thus you effect a saving in purchasing goods you must have, and also get a year's subscription to Good Health free.

No more than one box will be furnished to the same person. We will send by freight, or express, collect.

If you are already a subscriber, one new subscription will entitle you to the FAMILY BOX.

GOOD HEALTH, Battle Creek, Mich.