

KNEE-DEEP IN JUNE.





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Editorial Chat.

Educated Mothers.-All this talk about College women not marrying is a mistake, says the President of the American National Federation of Women's Clubs. Not only do the women graduates of college marry, according to this authority, but they have larger families than their uneducated sisters, and their children have a "higher average of intellectual development." There is nothing difficult to believe in these statements. Education of the right kind certainly should not disqualify a woman for marriage and domestic cares any more than it disgualifies a man for his chosen career. On the contrary, it should make for greater efficiency. There can be no doubt that ignorance of the principles underlying health and the proper care of the body, lies at the foundation of a very large share of the high infant mortality which is such a sad feature of the present time. Let us by all means have educated mothers, but let their education be vital and practical; let it take hold of real life. and fit for the highest service.

Where the Fewest Infants Die.—The infantile mortality in Norway is lower than in any other country, the average being eighty-six per thousand in rural districts, and 130 in the towns, with a general average of ninety-five per 1,000. Probably the chief cause of Norway's exceptionally low rate is that there is no rise in the mortality rate in summer.

Cancer Research in Germany. —A number of distinguished German physicians have, according to the *British Medical Journal*, formed a committee at Karlsruhe for the purpose of discovering means of combating the increase of cancer.

The Need of Improved School Buildings.—Sir Aston Webb, R.A., speaking at the Conference on School Hygiene, said that the great desiderata for school buildings were "Sun on all the rooms and free circulation of air round all the buildings. Schools should no longer be built round a cloistered quadrangle, and the æsthetic surroundings, which have somuch to do with health and happiness, ought not to be overlooked."

The City Beautiful.-The New York City Improvement Commission, which was appointed by the Mayor about a year ago, has recently reported a schemeof improvements involving an expenditure of £50,000,000 in the next ten years. The changes are in the interests of beauty and health. It is encouraging to note the increased efforts that are being put forth by the municipal authorities in most of the world's large cities, to improve them from a sanitary standpoint, and also to make them more beautiful to the eye. The. good that can be accomplished in this way is almost immeasurable.

Health a Comparative Thing. -Dr. Percy Warner, in a recent address entitled "After Twenty Years," delivered before his medical colleagues, says some good things about disease and its treatment. 'Health," he tells us, "is a comparative thing-there are various degrees of it; a great many people go through life, especially the latter half of it, with something that is not far removed from disease always with them. Very few of us wear out like the 'one-horse chaise,' all over alike; there is a little too much friction here or there which produces the inevitable result, and many people either inherit or acquire something that will always be for them a 'thorn in the flesh'-something that makes their life more or less that of an invalid, but does not necessarily tend to shorten it."

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A Doctor's Confessions.-" It is wrong," he continues, "to be too mechanical in our methods of treating disease, for what with one person may be disease may in another be a state of health. I am sure that I have often done the patient more harm than good by the drugs I have given him. [Italics ours.] It is not always easy to see this, for the effects of the drugs are often masked by the symptoms of the disease. I think I used to give too much alcohol in typhoid : I am sure I have given both too much alcohol and too much food in pneumonia. I am not sure that I have not hastened the end of some old people by being too anxious about the regularity of their hearts. And in the treatment of pain how much easier it is sometimes to administer a sedative than to abstain from giving relief in that way !"

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The Mystery of Pain.—Pain the doctor thinks is "more or less of a mystery." There is a good side to it, and the medical practitioner does well to try and see this good side and learn what he can from it before proceeding blindly to abolish it by

the administration of drugs. Furthermore, there are two kinds of pain-"the objective and the subjective; the one, as it were, starting from below, the other from above." Dr. Warner evidently thinks there is a pretty strong infusion of the subjective variety in most cases of illness. "I rememember," he says, "that in one of my own illnesses I had what I thought was pretty severe pain, and was probably making more fuss about it than was needful; the nurse came along and said, 'Are you sure that the pain is as bad as you seem to think ?' I thought her rather unsympathetic, but the suggestion was certainly good, it made me consider the matter, and the pain soon became quite bearable instead of occupying all my attention."

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Food for Thought.—There is food for thought in these dispassionate reflections of an experienced practitioner. Why are physicians generally so prone to proceed blindly to abolish the pain rather than investigate the causes of the disease? Is it not because the patient is over-anxious to have this matter receive first attention ? And does he not very often stand in the way of his own recovery by concentrating his attention on the drugs to be taken rather than the removal of the causes which have brought on the disease ? The doctor's remarks on the subjective character of pain are likewise very much to the point. The whole address, in fact, is along these lines, and indicates in a striking way the strong common sense and broad outlook that bid fair to become characteristic of our leading medical men.

THE address is a welcome sign of a more rational system of medical treatment. Too often medical men have made the great mistake of treating one or more symptoms, when much more would have been accomplished if the general health of the patient as a whole had received attention.

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CHRONIC INTESTINAL CATARRH.

BY GEORGE THOMASON, M.D.

THIS very common condition, catarrh of the intestine, in the majority of cases, is the result of some abnormal and frequently repeated irritation of the lining membrane of the intestine. Without doubt the most common of all causes of this condition is to be found in the free and promiscuous use of stimulants and condiments of various sorts. Pepper and mustard, even when applied to the skin, will cause redness and burning and a blister. The lining membrane of the intestine is much more sensitive and delicate than the skin, and becomes inflamed with even a very dilute solution of these irritating substances.

The glands which are always found present in the intestine, and which in health serve useful purposes, are by these irritants stimulated to pour out an excess of mucus simply as a protection to the intestinal membrane. From frequent repetitions of these irritations the glands become accustomed to pouring out an excessive amount of their secretion, so that ultimately they habitually secrete an abnormal amount of mucus even though no stimulation be present. Thus a catarrhal condition becomes fully established, and shreds and masses of mucus are discharged from the bowel.

Anything which leads to a sluggish movement of blood in the intestines favours catarrh of the bowel. Hardening of the liver, by the free use of alcohol or irritating condiments, prevents the free access of blood to the liver thus damming the blood back in the intestinal area. Constipation also retards the circulation in the veins of the bowel, thus contributing to the production of catarrh. The habitual use of laxatives and purgatives is irritating to the bowel, and thus predisposes to catarrh of this organ.

An inactive skin, that is a diminished quantity or sluggish movement of the blood in the skin, allows of a concentration of blood in the intestinal area and is a very potent factor in producing intestinal catarrh. Constriction of the waist by tight clothing or by belts, through impeding the circulation in the bowel, is a very common cause of this affection.

The average amount of blood in the human body is about ten pints. Nature intends that all this blood should constantly be on the move and equally distributed throughout the body. The skin alone is capable of containing from a third to a half of the entire blood of the body, and, with an active condition of the blood vessels of the skin, it is not possible to have congestion of blood in any other part of the body.

It is evident, therefore, that in the treatment of intestinal catarrh an active skin circulation is of primary importance, in fact it is not possible to have any form of catarrh with a healthy, active skin. There are no more efficient means of promoting skin activity than sunbaths and the application of cold water to the body. Great emphasis may well be laid upon these two measures. Being so efficient, simple and readily obtainable, they afford a sure means of relieving the sufferer from a distressing and often quite exhausting condition.

In taking the sunbath, as much as possible of the body should be exposed directly to the sun's rays and for as long a time as the patient may not suffer inconvenience in the way of headache or blisters. The head should be carefully protected by a sunshade or covered with a cold, wet towel, or both. The duration of the exposure may gradually be lengthened, beginning with five minutes and daily increasing the time a few minutes until the bath is continued one or two hours. To avoid the danger of burning the skin a light covering of butter-muslin, or some equally light, pervious material, may be thrown over the body for the first two or three days during the bath. At the conclusion of the sunbath a plunge in cold water, or a shower, a cold pour, or a similar cold water application should be taken, followed by vigorous friction with a coarse towel until the skin is thoroughly dried. This will leave the skin well filled with blood. The daily repetition of these procedures will gradually and permanently increase the activity of the skin, and thus directly accomplish the desired results in relieving the internal congestion.

It is quite unnecessary to add that all irritating substances must be eliminated from the diet, such as pepper, mustard, spices, vinegar, an excessive amount of salt, and alcohol in any form. The food should be thoroughly masticated as well, thus avoiding the possibility of irritation from coarse particles of food.

Outdoor exercise is also important, as activity of the muscles promotes more free circulation of blood, thus contributing toward a favourable result in this class of cases. Both walking and cycling may be recommended for most of these patients.



TREE MELONS.

Tropical?Fruit.

NATURE is very lavish in the large variety and great abundance of fruit provided for the use of man. Even in temperate climates we have a generous selection of toothsome, tempting fruit. But it is in the tropics that we see the greatest profusion both in quality and quantity.

In a recent number of the American Good Health, Rev. Walter A. Evans tells about the large variety of luscious fruit which can be obtained in tropical countries. Speaking of Cuban fruit, he writes:

"Oranges, a farthing each! Pineapples, such as you never saw here, appetising and peptonising, at $2\frac{1}{2}d$, each. The cheapness adds to their flavour! Bananas of many flavours and varieties, two kinds especially like the ambrosia which the Greek gods fed upon: viz., mansanas and datils, scarcely ever seen elsewhere. Plantains, a large species of banana, fourteen inches long and nine inches around, which are sliced and fried in butter. The writer bought a string of fine mansanas, with one hundred and five delicious bananas for $6\frac{3}{4}$ d.! It is cheaper to eat there than to starve! And the food value of one acre of bananas, according to Humboldt and other eminent authors, is one hundred and sixtysix times as great as one acre of wheat. Here also are nisperos, chimetos, mameas, -like jelly inside, sweet and nourishing,and limes,-all picked in winter or early spring. And melons! The writer has seen muskmelons, in late winter in Havana, as big as the prize pumpkin at an Illinois county-fair, of delicious flavour. Besides, there is a variety that grows on trees. Some American gardeners near Havana market watermelons in New York in February that bring a dollar and a half each, and weigh thirty or forty pounds apiece. Besides, here are also beans of many and strange varieties, some of them when cooked almost as large as plums, and, somehow, better than any bean ever eaten elsewhere. Yams, the tropic potato,

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which grow to weigh ten to twelve pounds, and though of a slightly different flavour are better than our finest potato. Fresh, sweet potatoes, too, all winter. Cocoanuts, green and ripe, shayotees, Spanish tomatoes, and Bermuda onions just out of the ground, do not exhaust the list of dainties for tickling the palate of the vegetarian epicure, while they help to make him robusto. Among such a variety one can simply eat, drink, and be merry for a while, and return home the better for it."



SABINAL BAY, COLUMBIA, CUBA.

THE WASTE AND REPAIR OF THE BODY.

(Concluded.)

BY ALEXANDER BRYCE, M.D., PH.D., CAMB.

As has been already explained the metabolism of the tissues takes place through the blood stream carrying the nutrition to and from the cells. The intensity of the metabolism depends on (1) the activity of the cells, the more active the tissue is the more blood will go to it, and the more rapid will be the combustion. During sleep metabolism diminishes in all the organs, excepting perhaps the nervous system, which is so alert throughout the day looking after the wants of the body that it is only at night that it can look after its own. Hence the great exhaustion which is so apt to come after sleepless nights, especially if work be carried on at the same time. Darkness likewise diminishes metabolism, while light increases it. Hence it is less in winter and greater in summer.

(2) The composition of the blood. Thus if the blood be highly concentrated the tissues will be dried by the fluid-passing from them into the blood, whereas if it is very watery the contrary process will take place, and the tissue cells will be flooded with fluid. Hence in the former case the body becomes dry and ill-favoured, and in the latter plump and well-favoured. If again the blood be too little in quantity or contain chemicals which interfere with the absorption of the oxygen from the air, the combustion processes must be lessened.

It is important that (3) a sufficiently high blood pressure be maintained, and for this reason the heart must be strong and capable.

And perhaps the most important factor of all is (4) the influence of the nervous system. It is well to remember that there are two kinds of nerves which influence the nutrition changes of the body, first what are called vaso-motor nerves, which control the blood supply to the tissues, and which are of two classes, those which dilate and those which contract the capillaries. A good example of the former is to be seen in blushing, of the latter in pallor. The second kind of nerve is called atrophic nerve, which has a distinct control over the cells of the tissues themselves, and when these are paralysed the tissues immediately atrophy.

We have thus entered as minutely as is possible under the circumstances into a description of the phenomena of metabolism, and it will now be seen that it is simply an account of the waste and repair of the tissues. Perhaps the best concrete example that can be given to bring home to the mind the actual state of affairs is to compare the tissues to a brick wall, each cell having its analogue in a brick, and the . spaces filled with mortar being comparable to the capillaries. After a few years' wear it will be noted that a brick here and there is so worn out that to preserve the integrity of the wall it has to be replaced, and again in a few years the same process takes place, until in course of time the whole wall may thus come to be renewed in its entirety. Now if you can imagine a similar process taking place in the cells of the tissues, only instead of isolated cells being worn out, all the cells are similarly affected, and instead of the replacement taking place after the lapse of years, there is no actual replacing at all, but a daily repair of the damage to each cell, so that in health the tissue never looks patchy but is always homogeneous, then you have a fair idea of what is going on in the body each day. You can also understand that when the daily waste is a little more than the powers are able to repair that before long exhaustion takes place, and a breakdown is imminent. Fortunately, our functions are able to cope with a good deal more than is just able to make up for the wear and tear. so that in natural conditions such a breakdown is seldom brought about, but in the unnatural life of a city the conditions are quite different, and it is not to be wondered at that one meets with so many cases of nervous exhaustion, or so-called neurasthenia. Not that these cases are always due to actual loss of nerve force so much as to a poisoning of the nerve cells themselves, but no doubt both factors are in operation. It also explains how, in cases of breakdown, the tonic which the public is everlastingly demanding is absolutely useless, and how a complete renovation of the whole body is necessary. In other words

that there is no royal road to cure, eventhough there may be short cuts which bring it about more rapidly. We can alsosee more clearly now that the explanation of chronic ill-health is simply diminished metabolism, no matter which theory of causation we may accept. For there are no less than three theories advanced.

The first has reference to the cells themselves, and is practically what I have been expounding, a diminished combustion and an increase of the waste products, so that the cell is hampered in its action.

The second has reference to the nervous system, and consists in an actual loss of nerve force or vitality, thus robbing the tissues of its life-giving and controlling mechanism.

The third has reference to the blood and blood vessels, and is usually called the uric acid theory. It professes to teach that all the troubles flesh is heir to are due to an accumulation of uric acid in the system, which in its efforts to pass out of the body blocks up the small capillaries sothat the cells are starved, and combustion or metabolism cannot take place. Doubtless no one theory is an absolute explanation, and most probably all three are in operation, and little interest would be attached to any of them were it not for the fact that the uric acid theory professes. to offer a royal road to the cure of nearly all diseases. As a matter of fact it plainly states that we swallow all our diseases in. the shape of our food, and that certain well known and universally used articles. of diet contain substances called Purins. and Xanthins, which on being ingested become converted into uric acid or allied substances, and thus poison our systems.

Uric acid in itself cannot be held to be a poison, because it is manufactured in every cell of the body and thrown off in the waste matter of the body, chiefly by the urine. This uric acid is called endogenous, and evidently each human being can deal with all that he or she personally

manufactures. The uric acid, however, which is introduced from without, is called exogenous, and when added to that produced within the body makes it impossible for the whole quantity to be excreted, and so a certain portion is daily stored up in the liver and elsewhere. This not only clogs the organs in which it is stored, but ultimately, in its effort to pass out of the body, clogs up the capillaries, and so interferes with the metabolism of the tissue cells. Thus, whether the diminished metabolism originates in the cells or in the nerves, or in the way I have first described the ultimate result is the same. Now this is a very serious indictment, because no one would willingly swallow anything that is likely to produce disease, and the following foods contain Purins and Xanthins in more or less considerable quantities :-Tea, coffee, cocoa, meat soups, beef teas, meat extracts, fish, flesh, fowl, eggs, peas, beans, lentils, peanuts, and indeed the husks of all nuts, asparagus, mushrooms, oatmeal and brown bread.

When we consider that practically all the nourishing food eaten by the ordinary individual is contained in the above, it at first seems almost incredible that the statement can be true. For we can all point to people of a ripe old age who have lived on just such foods all their lives, and who have had by no means a bad time. Besides, the most nourishing of the foods that are depended on by the vegetarian or fruitarian are included, and indeed all the pulses, e.g., peas, beans, and lentils, contain twice the quantity of uric acid that meat does. On the face of it, therefore, it would appear that there must be some mistake, and vet no book that has ever emanated from the press is more convincing than that which deals with this great subject, "Uric Acid in the Causation of Disease," by Dr. Alexander Haig.

It is quite true that the theory cannot be proved to a demonstration by scientific experts, but practically and clinically it is an absolute certainty. To an enthusiast on the subject who can persuade his patient to adopt such an unattractive diet, there is hardly a day that he does not receive corroborative evidence as to its truth. Cases of asthma which are absolutely untouched by any other means are readily cured by such a diet. Headache is impossible where it is practised. Obscure skin diseases, chronic nasal catarrh, rheumatism, all quickly disappear under such a diet. A good digestion seems to be a sine qua non to its adoption, and I have noted that where such does not exist, cures cannot be safely prophesied. I have also found that after a cure has been brought about few patients are willing to live on such an unattractive diet. It is a medical diet-a therapeutical, and one which should never be adopted except under the advice of the family physician. Its defect is its great monotony, and I have never known more than two people have enough courage to continue it for more than a year or two at the outside. It is, however, absolutely certain that there are many people who cannot live with any degree of comfort unless they approximate as closely as possible to just such a dietary. It would appear that, whatever the explanation be, the fuel must be accommodated to the furnace. Every now and again we meet with a furnace which will burn up with freedom whatever combustible be put upon it. This is comparable with the open-air worker who can eat whatever is set before him. It is more common however, to meet with the fire which occasionally smokes, and requires a little more attention paid to its fuel and its stoking, but which, on the whole, is a fairly serviceable fireplace. Just such is the city worker who, by an occasional holiday to increase his metabolism, and by the practice of a little self abnegation, e.g., ceasing to smoke tobacco, drink tea and alcohol, and confining his animal food to one meal a day, can live moderately well. Such an one might live safely on a diet of fruit,

nuts, and cereals and pulses, even although they contain a fair amount of Purins and Xanthins, because the adoption of such a diet is a guarantee that excesses of any kind will not be committed. But there is still a third kind of furnace which, with all the coaxing in the world, refuses to burn well until special means have been adopted to bring about that consummation, e.g., in one case a gas fire will be required, in another special fuel will be burned. This is precisely what happens to vast numbers of people, both in town and country, whose metabolism is defective, and who, either from ignorance or self-will, insist on living on the ordinary diet. At first, and it may be all the time, they are quite able to digest the unsuitable foods, but they are not able to burn them up in their bodies, and then disease arises; in some nasal catarrh, in others headache, again in others insomnia, rheumatism, gout, asthma, and many other maladies.

Now it is quite certain that for this class



Fig. 1.

of patient a special diet is necessary, and the simpler the better. Some are able to rid themselves of their ailment by simply giving up tea, coffee, cocoa, and meat soups. Others require to give up these and to fight shy of animal food. Still others must give up all the foods I have mentioned above as being barred in a uric acid free diet so-called. But no one diet is likely to suit all of them, because each man is a law to himself, and the old adage is still true that what is one man's food is another man's poison. Whatever be the nature of the diet, however, it is surely a mistake to refuse to utilise other means of promoting a cure.

But that is just what the author of this system does, because he insists that the wrong diet is the sole cause of the diminished metabolism, and the correction of the diet is all . that is necessary to bring about a cure. He cannot be unaware that there are valuable means of stimulating metabolism at our command. He must be afraid that they may be substituted for the rigorous diet which he advocates, and to emphasise this fact he depreciates the use of other means. I have already pointed out, however, that the diet is most nutritious, and it appears to me that a little latitude can justly be allowed in the diet if some of the means just mentioned were used as supplementary.

The exclusion of Purins and Xanthins from the diet is almost impossible in the vegetarian as well as in the animal regime, although much more easily in the former than in the latter. It is just there that the great value of a special institution or sanitarium where expert attention is given to the diet comes in; the ordinary hydropathic with its five meals a day, four of them containing tea or coffee, and three of them containing animal food, sometimes of more than one kind, has proved a failure in the treatment of disease, however pleasant it may be as a place of residence. It is therefore satisfactory to note that this country is following the lead of America in establishing sanitariums where special attention is not only given to diet, but where the latest means for the stimulation of metabolism can be obtained.



Fig. 2.

Swedish Gymnastics.

BY J. W. HOPKINS.

FOR practical purposes we may define *Balance Movements* as those which "cultivate equilibrium in ordinary positions, and correct the general posture." They also produce an easy, graceful management of the body, teaching one to hold it erect; and by carrying the weight of the body mostly on the balls of the feet accustom him to a light, elastic step.

The primary exercises taken in a standing position, are heel-elevation, kneeflexion, leg-elevation, and walking on tiptoe. Heel-elevation, a simple but valuable exercise, is taken with the hands on the hips (wing-stand) first. The heels are lifted quickly from the floor, so that one

stands as high as possible on tiptoe-Then they are slowly lowered without allowing the weight of the body to sway backward.

To increase the vigour of the exercise, the movements are taken in yard, rest (Fig. 1), and stretch-standing positions. If taken in yard position (arms extended sideways, palms turned upward), arm-elevation and breathing may accompany the heel-elevation, making it a good respiratory movement. Or the balance may be made more difficult by having the feet in stridestand, walk-stand, or close-standing positions. Taken in reach-close-stand (arms extended forward, feet close from heel to toes), arm-and-heel-elevation make quite a difficult balance movement, and may also be used as a respiratory movement.

Arm-elevation forward, upward, and leg-elevation backward is shown in Figure 2. This is a respiratory exercise, and also corrects the position of the shoulders. But before the movement is taken with arm work, it should be mastered in wing, yard, and rest positions. Then arm stretching sideways, or upward from a bent position of the arms (Fig. 3), or arm elevation sideways or forward upward is taken with the leg-elevation.



Fig. 3.

In the fall-out position (Fig. 3), the foot is moved three times its own length either outward, sideways, or forward. The knee of the moving leg is bent to a right angle, the other leg is straight, and a straight line is maintained from the backward heel to the head. Both feet are flat on the floor, and the shoulders are as at first.

This movement, after it is learned, will be taken with arm-flinging sideways as follows: Have the arms extended forward: then with the fall-out fling the arms sideways, and as the foot is replaced, move the arms forward again. Or take bend-fallout-stand (Fig. 3), and slowly stretch the arms sideways or upwards.

An excellent exercise, which will help one to carry the chest forward and the hips back, is marching on the toes. This is best taken in rest-stand, with the elbows pressed well back. Sideways marching on the toes is as good, and has the advantage of developing the side muscles of the waist. Balance movements, practised as a part of the day's exercise, will continually strengthen the muscles which hold the body erect, and will finally make of them a perfect support, insuring good carriage.

GOD'S GREAT OUT-DOORS.

BY DAVID PAULSON, M.D.

THE poet tells us that the groves were God's first temples. From a health standpoint they were far superior to our magnificent modern edifices where the worshippers come in contact with countless germs lurking in the upholstered seats, and in the dust-laden carpets, and their minds are stupefied by being compelled to inhale the poisons that are constantly exhaled from the lungs of others, be they sick or well. Avoid House Air.

In the United States the city population has gradually increased until they now outnumber those who live in the country, and that means that about half of the people of the nation are breathing in a house climate night and day. This is one cause for the alarming increase of disease.

Tuberculosis is a house plague. The best proof for the correctness of this statement is the fact that when a tubercular patient in the reasonably early stages of the disease moves out of his house, and lives in a tent out of doors night and day, in a few months' time he generally recovers his health.

Fresh Air, Nature's Panacea.

It is not the fresh air in the lungs that cures the patient, but it is the pure air which gets into the blood. This oxygen-charged blood then repairs the diseased lungs; but anyone can see that it is equally efficacious in curing the dyspeptic stomach, the weak nerves, the worn-out brain, or the debilitated heart, and that is precisely the result that we are beginning to see. Prominent nerve specialists have already called attention to the fact that one of the most successful methods of treating nervous prostration is the modern plan for treating the tubercular patient.

Dr. Bishop, of New York, an eminent authority on heart disorders, has recently stated that in most cases the heart is really no worse off than is the man. The weak and debilitated heart means in reality a weak and debilitated body, and he suggests that one of the best methods of cure is to treat them along the same lines that prove successful in the cure of the consumptive. Dr. Northrup on Second-Hand Breaths.

Dr. Northrup, one the leading specialists in children's diseases in the United States, has recently reported remarkable success in the treatment of pneumonia by avoiding, as he calls it, giving the patient "secondhand breaths." He opens all the windows and doors to the sick room, so that the air that the patient breathes is as pure as that out of doors.

It is astonishing to note the splendid improvement in the appetite when a tubercular patient is put out of doors. The

same would be true of many a wretched dyspeptic who does not have tuberculosis. Likewise many patients who have to be put to sleep every night with morphine or other drugs, which stupefy the liver, stomach and other organs just as much as they do the brain, would soon sleep like healthy children if they were only given a liberal introduction to God's great out-doors.

In Stettin, Germany, nearly one-half of the children die the first year; while in truth could be told, we should be amazed at the number of tombstones upon which could be truthfully written, "Died from the plague of house-air," "Killed by bedroom climate," "Gradually smothered to death in a tenement flat."

The Secret of Refreshing Sleep.

Those who are afraid of catching cold, at night if they should open wide their windows can wrap up their heads just as they do when they go out driving on a

Japan, where the children are born and reared in houses that are almost as open as wicker baskets they are rarely sick at all.

Bed-Room Contamination.

Why should we be so careful to get pure food for our stomachs and yet be so absolutely careless about getting good air for our lungs? If we should see someone contaminate our drinking water one-half as

much as the average bedroom air is contaminated, the thought of swallowing it would make us sick at our stomachs; but a man that is sixty years old has breathed bedroom climate for about twenty years, and that is the real cause of many of the troubles of which he is probably complaining.

We cannot all move out-doors, but we can bring a great deal more of out-doors *in-doors*. To have fresh air in our houses during the cold season will require more fuel, but it will come back to us in what we shall save in funeral expenses. If the



THE FRESH-AIR CURE.

cold winter day. Those who will do this will find in the majority of instances, instead of waking up in the morning with an unpleasant taste in their mouths, a stuffy sensation in their lungs, and a feeling in their heads as though they had recited mental arithmetic all night, they will awaken refreshed, thankful that they are alive to enjoy one more day.

"Oh, to be out in the great, free wood,

- Away from the hurry, away from the care,
- Where the boughs of the trees weave a giant hood,

To cover the world when the world is bare."

THE PREVENTION AND TREATMENT OF TYPHOID FEVER.

BY ALFRED B. OLSEN, M.D.

THE recent epidemic of typhoid fever in the north of England gives special interest to the disease at this time. Fortunately the fever is not nearly as common as it was a few years ago. This is due to a better understanding of its nature and causation, and to more effective sanitation. Still, there are altogether too many victims, for typhoid fever is a germ disease, and strict cleanliness ought to stamp it out.

What Is Enteric?

Typhoid, also frequently known as enteric (Greek for intestinal), fever is an acute, infectious disease due to a germ which invades the alimentary canal and lymph glands, causing inflammation, which leads to ulceration, and even perforation in severe cases. The spleen is also involved. The fever is accompanied by loss of appetite, lassitude, headaches, pain in the back and limbs, looseness of the bowels, tenderness and swelling of the abdomen. A characteristic rose-coloured rash usually develops on the abdomen. The temperature rises from 102 degrees to 106 degrees Fahrenheit, and the fever is continuous with daily remissions of two or three degrees.

The Exciting Causes.

The direct or exciting causes of enteric fever is found in a special germ, the bacillus of Eberth. This germ gains entrance to the body through either food or drink. It is found in discharges and excreta of the patient.

Animal flesh has been known to carry the disease. Milk has also been the vehicle of infection. But contaminated water is without doubt the most common source of typhoid fever.

Rigid Cleanliness Is Absolutely Necessary.

Sanitation means scientific cleanliness, and this is essential in order to prevent

enteric. All the excretions of a typhoid fever patient should be immediately disinfected, and then disposed of in such a way that they cannot possibly contaminate the water supply or any-One pound of chloride of thing else. lime to four gallons of water makes a good disinfectant. One quart of this solution should be added to the stool promptly. All bedclothing and personal linen should be boiled, and never sent to the laundry. The dishes and tableware of all kinds coming from the sick room should be placed in boiling water. The room should be constantly well ventilated. and the walls and floor cleansed with carbolic or bichloride of mercury solution.

Preventive Measures.

Make sure that your water supply is pure and free from germs. If at all doubtful, boil before using it. See that your milk is pure. It is not sufficient to know that the cows are healthy. Too often there is carelessness in cleaning the milk cans and churns, and the water used for this purpose may be a source of infection. The dairies and cowsheds too require inspection.

The drains and sewers of your house may need attention. Defective traps fill your house with sewer gas, and so bring disease.

Fortify Your Body Against Disease.

Above all it is necessary to build up the general health and strengthen the natural defences of the body, so that invasion of disease may be resisted. Healthy tissues and strong, active organs possess great power in warding off disease. Pure blood forms one of the most important defences of the body. Robust, glowing health is the best safeguard a person can have. A sound stomach producing healthy gastric juice is able to destroy germs and render them harmless,

How To Treat the Patient.

Put the patient to bed at once, and give him absolute rest. This will necessitate the use of a bed-pan. To reduce the temperature and relieve the patient, sponge the body with tepid or cold water, and dry gently. Only a small part of the body need be exposed at one time. The cooling pack, prolonged tepid bath, or Brand bath

Don't Give Stimulants.

The common resort to alcoholic stimulants in typhoid is a great mistake. It is a fallacy to think that brandy or some similar liquor is necessary. The temporary stimulus and exhilaration is more than overbalanced by the depression that follows, unless the stimulant is given continuously in larger doses, and such a course would



This should! consist of plain fruit juices or sterilised milk during; the first few days. Laterbarley and gluten gruels, milk custards, fruit. purées,. ground rice. gruels, and pudding may be taken. During convalescencegreat precaution must be



THE BRAND BATH.

are also excellent means of controlling the temperature.

Cold compresses may be applied to the abdomen or chest, and a cooling enema given.

Give a large water enema after each motion of the bowels.

To relieve pain in the back apply a fomentation. If in the lower limbs give a hot leg pack. A cold compress will usually relieve the headache. It is necessary to wet the hair and change the compress before it gets warm. Let the patient have as much cold water to drink as he desires. taken to avoid solid food that might irritate the weakened intestinal walls, and lead to a relapse or even to perforation. The quantity of food must be restricted, and this is often difficult because the patient islikely to have a ravenous appetite.

Always secure the attendance of a physician, for the fever, however mild at first, may develop serious symptoms at any time and lead to a fatal result. Careful nursing is of the greatest importance, and if this is carried out properly, drug medication will be unnecessary. Remember that convalescence is necessarily slow.



SUMMER SALADS.

HINTS ON SUMMER DIET AND COOKERY.

THE thing of first importance in summer cookery is not to over do it. The appetite is naturally less keen in warm weather than in the cold season of the year, and this is as it should be, since the system does not require so large an amount of food. Do not, then, try to spur the appetite by sauces or delicacies, but furnish simple, wholesome meals, cooked with exquisite care. See that the materials used are of good quality, and cook them in such a way as to preserve and bring out to the best advantage their natural flavours.

That Tired Feeling.

Not only does the system require less food in the summer, but especially in oppressively warm weather, the digestive organs are in a somewhat relaxed condition, and not fit for extra work. Hence foods difficult of digestion are especially to be avoided at this season. Fried foods, rich pastries, and the like, undesirable at all times, should be absolutely tabooed when the thermometer climbs high in the shade. Remember that a tired stomach means a tired man or woman. Not a little of the weariness and ennui supposed to be the necessary accompaniment of a sultry day, may be owing to the prostrating effects of a more or less indigestible meal.

Simple Breakfast Dishes.

Bread and fruit should enter largely into

the ideal summer diet. Unleavened bread. in the form of nut rolls, or plain wholemeal biscuits that require careful chewing, may be especially recommended. Such foods are sweet and nutritious, and exceedingly easy of digestion. Ordinary bread, toasted throughout till it is perfectly crisp, is also an excellent article of food, forming a convenient base for many wholesome dishes. Thus a cup of rich milk heated and poured over a generous slice of such toast makes an appetising and sustaining breakfast dish. A poached egg may be added. Grape juice and other fruit juices may be heated and used in place of milk. In such cases of course the poached egg will not be needed.

Fruits Are Refreshing.

Fresh fruits are especially grateful in summer; but great care should be taken to avoid that which is unripe or decayed or otherwise unfit. A good deal of the popular prejudice against fruit is due to carelessness in this direction. Unfortunately much of the fruit sold is really not fit to eat. In the case of fruit and other food articles in general, it is better to cut down the quantity, and improve the quality. Probably most of our readers will find that by slow eating and thorough mastication the system will be perfectly maintained on a less quantity of food than has been taken.

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Fruit to be Carefully Cleansed.

Care in cleansing the fruit is hardly less important than its selection. There is great need of reform in the way fruit is handled by the dealers. Strawberries require different treatment from potatoes, but the average greengrocer hardly seems to realise the fact. Thorough washing, even at the risk of losing some of the rich juices, is absolutely essential. One never knows what sort of people may have picked the fruit, nor how great the quantity of germ-laden dust with which it has since been infected. Fortunately, practically all fruit juices are germicides. Microbes do not thrive in fruit. This makes these luscious delicacies from nature's storehouse especially valuable in the summer when bowel disorders, largely due to the action of germs, are most common. By all means then, let fruit have a large place in the summer diet, but see that it is good fruit.

Proteid Foods.

As a reliable proteid food which is already cooked and ready for use, protose doubtless takes first place. It may well be adopted in place of the more than questionable canned salmon, and other foods of that character. Served cold with jelly or a slice of lemon, or cooked with green vegetables, or broiled, it is equally appetising and satisfying. One great advantage that it possesses over other proteid foods is that it is already cooked. and so merely wants reheating. In making quick soups of a nutritious character the Digestive Lentil Flour will be found very convenient.

In general, then, spare kitchen labour by doing less cooking of the conventional kind, and spare stomach labour by making your diet extremely simple. On this plain regime you will be pretty sure to enjoy the summer, and get through a quantity of work with a comfort and ease that will surprise you. You will also suffer far less from the heat. **Savoury Rice and Poached Eggs.**—Make a steamed rice pudding in the usual way, using peanut milk instead of ordinary milk, and a pinch of salt (a little strained tomato can be added if desired). Serve the rice hot, cut in thick, even slices, placing a poached egg on the top of each plate of rice served. May be also served with a few spoonfuls of tomato sauce made with nut milk and strained tomato, if liked. This dish is very acceptable at any meal.

Digestive Lentil and Parsnip Soup.— Prepare two parsnips for stewing; cut up fine in cold water and cook till tender. Pass the water in which they are stewed and the parsnips through a sieve; add water (two quarts), and boil; in the meantime mix four tablespoonfuls of digestive lentil flour with cold water, and add the mixture to the soup. Cook all for one and one-half to two hours, slowly.

Berry Toast.—Bottled strawberries, gooseberries, and blackberries may be made into an excellent dressing for toast.

Turn a bottle of well-kept berries into a colander over a basin to separate the juice from the berries. Place the juice in an enamel saucepan, and heat to boiling. Thicken to the consistency of cream with cornflour rubbed smooth in a little water; a tablespoonful of flour to the pint of juice will be about the right proportion. Add the berries, and boil up just sufficiently to cook the flour and heat the berries; serve hot. If cream for moistening the zwieback is not obtainable, a little juice may be reserved without thickening, and heated in another dish to moisten the toast ; or if preferred, the fruit may be heated and poured over the dry zwieback without being thickened, or it may be rubbed through a colander, and then served as a dressing on slices of zwieback.

Lemon Sauce.—Heat to boiling in a double boiler a pint of water in which are two slices of lemon and stir into it a dessertspoonful of cornflour; cook four to five minutes, or until it thickens. Squeeze the juice from one large lemon, and mix it with two-thirds of a cup of sugar. Add this to the cornflour mixture, and allow the whole to boil up once, stirring constantly; then take from the fire. Leave in the double boiler, surrounded by hot water, for ten minutes.

Plain Rice Soup.—Wash and pick over four tablespoonfuls of rice, put it in a dish with a quart of water, and place in a moderate oven. When the water is all absorbed add a quart of rich milk, and salt if desired; turn into an enamel saucepan and boil ten minutes, or till the rice is done. Add a half cup of sweet cream, and serve. A slice of onion or stalk of celery can be boiled with the soup after putting in the saucepan and removed before serving if desired to flavour.

HOUSEHOLD REMEDIES.

BY MRS. EULALIA SISLEY-RICHARDS, M.D.

WHILE a medicine chest, in the ordinary acceptation of the term, should have no place in a Good Health nursery, there should be a receptacle where harmless remedies and sickroom necessities are kept in readiness for a time of need.

In cases of emergency or accident, who has not seen people rushing frantically about the house, searching for something which never had a place, or had long since been a stranger to it? The housewife who always has a place for everything, and everything in its place, is saved much anxiety in such a time as this, for she can place her hand at once upon anything she requires.

Many mothers may appreciate a few suggestions with reference to the home remedy chest.

It is always well to have a bottle of *pure olive oil* within reach. A little of this given by mouth will often relieve obstinate constipation in young infants or children, and it is safer to use than castor oil. One half to one teaspoonful would be the correct dose for an infant, and it might be given daily for a time unless it seems to disturb the stomach, which it very seldom does. A little olive oil may also be rubbed thoroughly into the skin after a bath in cold weather, as it often prevents catching cold.

Carron oil, being a mixture of equal quantities of linseed oil and lime water, is a most soothing remedy for burns. Bits of clean lint or soft linen cloths should be saturated with the oil and lightly bandaged over the burn.

Sodium bicarbonate is also very useful in the treatment of light burns. It should be freely dusted over the affected area and held in place with a soft cloth or bandage. Sodium bicarbonate (or baking soda) is also of service in relieving severe itching of the skin as in urticaria or hives. A strong solution should be used in sponging the skin.

A saturated solution of *boric acid* makes. a good wash for the eyes or for sore mouth. It is best to obtain the boric acid crystals, making up the solution when needed. To make a saturated solution, to a quantity of hot water add as much of the boric acid as will dissolve in the water. This solution is not irritating, and may be used with safety in the way mentioned.

Pure *vaseline* should certainly be in every home, as its uses are so numerous.

It is well also to have a good *cold cream* for use during the winter months when chapped lips and hands are so trouble-some.

A rubber hot water bottle is always a comfort in case of illness, while a syringe for giving rectal injections is really a necessity.

The combination fountain syringe is the best, but the usual bulb syringe will do very well in ordinary cases.

If ever there is serious illness in the family a bed-pan will be required and an invalid's drinking cup will be convenient, but these need not be provided until occasion demands.

Every mother should provide herself with and learn how to use a *fever thermometer*.

A few roller bandages should always be in readiness, for cut fingers and bruised toes often present themselves for attention at most unsuitable hours, when time can ill be spent in preparing bandages. A worn bed sheet or worn pillow cases can be utilised for this purpose, the cloth being torn lengthwise into strips and smoothly tacked together if not of sufficient length. Bandages for little fingers need be only one-half or one inch wide, and not so very long, but bandages for arms and legs should be one and one-half, two, or two and onehalf inches wide, and should be several yards long. These should be neatly rolled ready to apply.

A roll of absorbent cotton, while not absolutely necessary, is often useful, but not more so than pieces of old soft linen. The wise mother will wash and carefully put away worn handkerchiefs or linen serviettes as they are so convenient to use in dressing children's numerous wounds and bruises.

The *adhesive plaster*, employed by surgeons, is extremely useful in holding dressings over wounds which are awkward to bandage, as on the face or scalp. A roll of this sticking plaster may be obtained from the chemist for a few pence, and it is well to have it in the house ready for an emergency.

One who has once learned the value of hot fomentations for relief of painful inflammations, will feel that her remedy chest is by no means properly furnished unless it contains a pair of good fomentation cloths.

A partially worn bed blanket, if properly cut, will make two fomentation cloths, a roller chest pack, the covering for a moist abdominal compress, and one or two throat compresses, all of which have been mentioned in previous numbers of this magazine. First cut the blanket in two lengthwise. Then take one piece and again cut it in two crosswise. These large oblong pieces are the fomentation cloths. (Small, thin cloths are almost useless except for the face.)

Now take the remaining half of the blanket, and cut off a strip lengthwise about eight or ten inches wide and the full length of the blanket. This will do nicely to cover the cold chest compress. For an adult it may be necessary to cut a second strip half as long, sewing the two together to give sufficient length.

The cover for the abdominal compress should be cut twelve inches wide and the entire length of the blanket. Any remaining portions may be used for throat or joint compresses.

The Truth About Alcohol.

ALCOHOL may be described as a narcotic stimulant. It is a colourless, inflammable, volatile fluid with a strong characteristic odour and a burning taste. Further, alcohol is destruction to living matter, and is a protoplasmic poison. Since its effect upon all tissue is deleterious, even in small quantities, it may be truly regarded as a poison.

A Product of Decay.

The source of alcohol of itself points to its harmful effects. It is always a product of decay. Small micro-organisms known as *yeast cells* act upon sugar in such a way as to produce fermentation, and alcohol is one of the products formed. Thus it is in reality a waste product, and its presence soon becomes a hindrance to the growth and activity of the cells which produced it.

Alcohol may be prepared from either fruits, vegetables, or cereals. Fruit containing a larger percentage of sugar is preferable. The grape answers this condition very well, so it is not surprising that most wines are made from this fruit.

Of the cereals, rye is perhaps the one most commonly used. The grain is moistened and allowed to germinate so as to form sugar; then fermentation follows. It seems a great waste that so much valuable food, both cereal and fruit, should be used for making a harmful drink that has done, and to-day is doing, such a vast amount of evil.

Is Alcohol a Food?

To this question we answer emphatically, No. In the ordinary sense of the term food, as people understand and use it, alcohol is not a food. Under no conditions is alcohol capable of replacing or repairing tissue.

But someone will ask, is it not a fuel then? That it is possible to burn alcohol is well known to all. Indeed, it is very inflammable, and is useful as fuel in a great variety of ways. And it can be burned within the body as well as without in a spirit lamp. But ere it is burnt in the tissues it does a lot of damage.



THE WHITE LIFE FOR TWO: A LITTLE TALK WITH YOUNG MEN.

BY M. ELLSWORTH OLSEN.

UNFORTUNATELY for our social welfare the pernicious idea still survives that impurity, while intolerable in a woman, may yet be condoned in a man. Society does not close her doors on the young man who has "sowed his wild oats;" she has no black list of "fallen men" to correspond to her "fallen women." But society is no safe guide in such matters; her dictates are mere conventions of the time, often with no foundation in reason and justice.

Purity as taught by the Divine law, knows no difference of sex. Neither does natural law discriminate in favour of men as against women. Nature decrees that if a young man sows his wild oats, he shall reap a harvest in kind. Vice of any kind is never indulged in except at tremendous cost. How great is this cost does not immediately appear; nature has a way of extending a limited amount of credit; but she is a faultless book-keeper, and when the accounts are due, they are rigorously collected, even though it means forcing the poor debtor into

Physical Bankruptcy.

Unfortunately the world has a great many such men—young in years, but old in body, strangers to the freshness and joy of life that should be theirs, oppressed with lack of energy, listlessness, low vitality, the inability to do hard, painstaking work, and progressive weakening of the willpower. Wrecks they are of what they might have been, and all because of yielding to the clamours of unlawful desire.

It is sometimes suggested that health may demand the indulgence of passion; but this is not the case. Strict self-control and the living of an absolutely pure life is wholly beneficial, both physically and spiritually. While self-indulgence dissipates the energies and lessens the product of the life activity, self-denial has precisely the opposite effect; it enlarges the intellectual life, imparts strength of character, and fits for the highest service. The lower passions, brought into captivity to the intellectual and spiritual faculties, become elements of strength to the character, supplying vim and energy most needful in fighting the battles of life. Moreover the consciousness of having won the victory over one's self imparts a certain force and dignity to the character which makes it powerful in influencing others for good.

Helps to Pure Living.

"Granting that these things are so," one of my readers may ask, "how is a young man to overcome temptations that come with such power as well nigh to carry him off his feet?" This is no doubt a crucial question, but it can have only a very brief answer here. What the writer wishes especially to emphasise at this time, is that there is in reality but one standard for men and women, and every young man should set for himself the same high standard of personal purity as he sets up for his mother and his sisters. This is not prudishness, but

Simple Manliness,

It being not more than just that the young man who probably hopes some time to lead a fair young girl to the altar, should bethink himself of matching her maidenly purity with a manhood no less pure and spotless.

No doubt severe temptations will come to every man: but if the habits are natural. and the system is maintained in a state of healthy activity, they will not be nearly so difficult to meet. Attention should be given to the diet. Flesh meats, especially in such gross forms as pork, and rich, highly-seasoned foods in general, tend to inflame the passions. Alcoholic drinks, it need hardly be added, should be strictly eschewed; so should smoking, a healthdestroying habit, which can plead no excuse but the desire for self-indulgence. Tea and coffee are other narcotics which could be omitted to excellent advantage. The The body should be trained to

Hardness and Endurance.

Early rising, the morning cold bath, regular exercise out of doors, plenty of hard work, and a proper amount of wholesome recreation out in the open air, are among the essentials of a pure manner of life. Too much emphasis cannot be laid on being out of doors, if possible in touch with the natural beauties, which exert a subtle, healing influence upon the mind of man. Long walks with a pleasant companion, all kinds of healthy games, or some useful work in a garden, all tend to regulate the bodily functions, and impart harmony and health to the system.

The young man who would live on a high plane must set a guard about his thoughts. To this end questionable literature (and this includes a very large class of contemporary publications) must be strictly tabooed. An impure companion must be shunned as a deadly enemy. On the other hand, a lonely life is not to be recommended. By all means associate freely with pure-minded, earnest, cultured people of both sexes.

Avoid Mental Stagnation.

Be alive to your finger-tips, and keep yourself busy either with work or recreation.

Finally do not disdain the help and support of the religious life. There is no such safeguard against impurity and everything low and unworthy as a life consciously dedicated to the service of God and one's fellow men. Nothing gives a man such an uplift as a high and noble purpose in living. In fact, when the life is rightly motived, purity in thought, word, and action follows as a natural result.

"Resolve."

To keep my health ! To do my work ! To live! To see to it I grow, and gain and give ! Never to look behind me for an hour ! To wait in weakness, and to walk in power : But always fronting onward to the light, Always and always facing toward the right. Robbed, starved, defeated, fallen, wide astrav-On, with what strength I have ! Back to the way ! -Charlotte Perkins Stetson



Weak Eyes.—L.B.: "My eyes have a very unpleasant feeling in the morning as if a scum were over them. There are spots before them which are noticeable by others, and they feel very full and tight. What do you advise?"

Ans.—Consult a physician in reference to your eyes and he will give you the proper treatment. Sometimes bathing them with alternate hot and cold water will give relief.

Diet for Dyspepsia.—G.M.: "I have always been subject to bilious attacks, which keep getting worse, and my food seems to turn acid in the stomach and scalds me. What diet would you recommend?"

Ans.—For breakfast have toasted wheat flakes, hot and crisp, with stewed or fresh fruit, brown bread and butter, and a soft poached egg; for dinner have gluten porridge, plain, well cooked rice, two or three tablets of bromose or a couple of ounces of nuttolene (broiled), and brown bread and butter. Have only two meals a day with an interval of six or seven hours Chew the food well, and do not take more than you can digest. You would do well to have a course of tonic treatment at a health institution such as the Leicester Sanitarium.

Appendicitis.—D.E.: "A friend of mine is suffering from what appears to be appendicitis. Is it possible to cure this disease without undergoing an operation? What counsel would you give?"

Ans.—Yes, it is often possible by rational treatment and simple hydropathic remedies, as well as attention to diet, to bring about a cure without resorting to the knife. We would recommend a course of tonic treatment at the Leicester Sanitarium, 82 Regent Road. For home treatment, we would suggest fomentations to the abdomen, followed by a cold sponge. The diet should be plain and simple, and consist of easily digested food. The patient should be rather abstemious. Keep the bowels open, using enemata if necessary. It is necessary to call in a physician.

Eczema in a Baby.—M.S.W.: "1. What treatment do you advise for eczema on the body and legs of a baby three months old? 2. Do you advise outward applications and, if so, what do you consider the best? 3. What soap do you recommend?"

Ans.—1. Avoid the use of ordinary water, using in its place oatmeal or bran water. Take special pains to dry the skin after bathing. Great care should be exercised to keep the child clean. 2. Yes, if there is manifest irritation, and if the disease is at all severe. To allay the former a thick lather of McClinton's Soap applied to the affected parts often affords relief. Salicylic acid, tar, and zinc ointment are often useful for external application. 3. McClinton's.

Inflamed Glands.—A.D.: "Two weeks ago my boy had a fall while at school, striking the back of his neck. This has produced a large swelling which the doctor thinks is due to an inflamed gland. He thinks that an abcess has formed, and that the gland should be opened. I am, however, opposed to such treatment. What would you recommend?"

Ans.—We are convinced that your doctor is quite right in proposing to open the swelling. Such treatment usually brings immediate comfort to the patient and hastens recovery. We believe you would do well to let your doctor treat it as he thinks necessary.

To Get a Good Complexion.—T.: "Can you tell me if taking cream every morning would give me a good complexion? What would you advise?"

Ans.—There is no objection to taking cream with your porridge, providing it is pure. Taking fruit freely, both fresh and stewed; chewing your food well; avoiding tea, coffee, condiments, pastries, pickles, and all rich and greasy foods; getting out of doors in the fresh air, and going in for a course of physical culture, and thus building up the general health, are the best means of acquiring a good complexion. Use soft water and a mild soap for your toilet. **Anæmia Pills.**—H.W.: ''1. How can I improve the quality and increase the quantity of my blood? 2. Can you recommend me a book on diet? 3. What would be the effect of taking some female anæmia pills (I am a male twenty-five years of age)?''

Ans.—1. Go in for a vigorous course of physical culture and adopt a liberal diet, consisting of fruit, nuts, dextrinised breads, well cooked cereals, with a few vegetables and dairy products ; take a tepid or cool sponge bath each morning, followed by exercise for twenty minutes or half an hour ; live an out-of-door life as far as possible, and have your living- and sleeping-rooms well ventilated ; avoid late meals and dissipating habits of all kinds ; get eight or nine hours of restful sleep, and cultivate a feeling of good cheer. 2. Yes, "The Stomach," by J. H. Kellogg, M.D. 3. Harmful in our opinion. We would recommend you to have nothing to do with patent medicines, anemia pills and other nostrums, that are so much advertised now-a-days. The best way to make good blood is to take plain, nourishing food and a moderate amount of exercise.

Diet and Baths for an Infant.-"We have adopted a little girl of nine months, and wish to bring her up on GOOD HEALTH lines. We are both vegetarians, and have been readers of GOOD HEALTH for a long time. The child is bright and contented, but small for her age, and has no teeth. She has had a cold in her head and chest for four weeks. We give her two baths a day,-a sponge all over in the morning at 90 degrees, and a full bath of 92 to 94 degrees in the evening. She has four meals, with an interval of four hours between, and nothing during the night. Each meal consists of seven ounces of sterilised milk and one ounce of water, to which no sugar is added. 1. What treatment would you recommend for her cold? 2. Are her baths all right? 3. How often should her head be washed? 4. Should soap be used all over her body? 5. Should her head be protected by any covering during the night? 6. Is twelve inches too much to leave the windows open at the top, provided she is out of draught and the crib protected by a screen? 7. Is her food all right, or would you recommend any addition? 8. What book would you recom-mend for reference in case of illness? 9. Should she be taken out daily in pleasant weather whether she has a cold or not?

Ans.—1. Syringe her nostrils with warm water to which a little salt has been added (an even teaspoonful to half a pint). Dress her warmly, giving special attention to the extremities. It is a mistake to let the arms and legs be bare. 2. Yes. 3. Daily. 4. Yes, if you use a mild soap such as McClinton's. 5. No, if she has a fair amount of hair. 6. No. 7. We would suggest the use of thin gluten gruel, to which equal parts of sterilised milk may be added. You should either give the child a larger amount each time, or more frequent feedings,—say five per day. 8. Dr. Kellogg's "Home Hand-Book of Domestic Hygiene and Rational Medicine." 9. Yes.



THE STOMACH. Its Disorders and How to Cure Them.

By J. H. KELLOGG, M.D.

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July "Good Health" will contain a timely article dealing with Summer Diarrhœa in Children, in which the question of correct feeding will receive special consideration.

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3

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We are continually hearing of lives that have been saved by the use of this, the most natural and simple of foods.

It is a great boon to invalids, many of whom thrive on Granose, when they can eat nothing else, and it is equally good for the strong man.

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There is no food like it for simplicity, nourishment, and digestibility combined.

Send us One Shilling for package of Assorted Samples of Health Foods (including Granose), Cookery Book, and Price List. Price List sent with pleasure on receipt of post-card.

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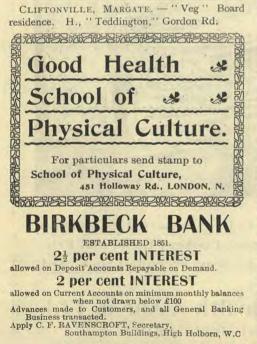
In answering advertisements kindly mention "GOOD HEALTH." "Our Young Men" is a small pamphlet by Mrs. A. S. Hunter dealing with social purity. It is published by the Progressive Press, 12 High Street, Paisley, at 3d. a copy, or 4d. post free. Mrs. Hunter considers tobacco as one of the causes which are at work in degenerating the race, and advocates teaching the children the terrible evils of secret vice before wrong habits are formed.

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"The Philosophy of Diet" is a clear and forcible presentation of food reform by the president of the Vegetarian Society of France, Dr. Jules Grand. R. J. James of 4 London House Yard, London, E.C., is the publisher, and the price is 4d. The author states that alcoholism is unknown among vegetarians in France, and this we believe to be universally true. He considers that alcoholism, tuberculosis, and arthritism are the three greatest enemies of mankind, and that they are largely brought on by errors of diet, and especially through the use of such an impure and stimulating diet as flesh.

* *

The International Congress of the Vegetarian Federal Union will meet at Memorial Hall, London, E.C., from June 21st to 24th, under the presidency of Mr. Arnold F. Hills, D.L. The relation of diet to physical deterioration and intemperance will be discussed at the Thursday meetings, 11 a.m. and 3 p.m. Among others Rev. James Clark, Mr. Eustace Miles, and Mr. E. H. J. Frost will take part in the meetings.



N'S A SEASONABLE CHANGE A SEASONABLE CHANGE. Hansen's Junket Tablets are double the strength of the next best. They make better junket than any other preparation and are always reliable. House wives every-where are adding this delicious dish to the day's menu. Be sure you get Hansen's. Sold by all Grocers, themist, etc., in Glass Tubes, containing 24 Tablets, esch sufficient to make a quart of Junket. Sample Tube and Book of over ge Recipes, 6d. post free from Hansen's Depót, 77, St. Thomas's Street, London, S.E. Health! Comfort!! Gracefulness!!! is obtained by wearers of the Combined Shoulder PORT Brace & Stocking PENDER. The stockings are firmly and neatly held The stockings are firmly and neatly held in place. No pressure on the abdominal organs. Walking, Cycling, and all physical exercises without fatigue. Highly recom-mended by the Editor and leading physi-clans. Are being used in the principal schools of physical culture. Fink, Blue, or White. Rushed Silk Elastic, 4/-; Mer-cerized Cotton 9/6. cerised Cotton, 2/6. Special! with Knicker Brace ends, 2/11. From PORTIA SUSPENDER CO., 182 Norwood Rd., London, S.E. And from all drapers and outfitters. (REGISTERED.) UNDERWEAR. UNSHRINKABLE. All Wool, Guaranteed. THE YARN Pervious and Porous. THE WEB TO Porous, A Stockinette Texture. * * The Advantages of a guaranteed all wool, pervious, non-chilling, and slow-conducting garment for next-the-skin wear are well known. Comfort Is ensured by the fine. Strength of the staple. Economy By the price. "SANIS" UNDERWEAR [Registered.] [Registered.] Compares favourably in price with any of its competitors, and its use is recommended by experts in health culture. Washing directions are given with each garment, which, if followed, will ensure the fulfilment of every reasonable ex-pectation. Name this paper, and these instructions will be sent you, tastily printed on a tinted card, corded for hanging. Explanatory booklet and price list sent free on application. ANY GARMENT found to have shrunk in wash-ing will be replaced. ADDRESS: THE SECRETARY, 70 & SI Fortess Rd., LONDON, N.W.

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These your child must have. They are the source of mental and physical strength.

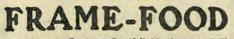
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It feeds.

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The Editors,

DEAR SIRS,-I should like the writer of "The School of To-morrow," in GOOD HEALTH, to know that there really does exist a school carried on as he dreamed ; not entirely to the letter but in the spirit; and should he ever come to South Africa he would receive a hearty welcome at the school. Yes; several children are already in the playground although it is only 7 a.m., and school does not commence till 8 a.m. There is no cloud on their bright, happy faces, neither have they any books in their arms. They have not sat up the evening before, poring over a string of definitions that they must get by heart, whether they understand them or not, or trying to solve some problem that would baffle many older heads than theirs. Their merry noise and laughter in the playground show they have no dread of their teacher, who is standing among them, nor are they afraid of picking the fruit and flowers which they appear to be enjoying.

Presently at the ringing of a bell, all betake themselves to their respective classrooms, and in a few moments all are very busy at work, or could you see them you would call it play. And play it is to the children, although they are really having a good history lesson all to themselves. How ? you will ask. With cards. What cards ?—History cards. Where did you buy them ?—Nowhere, the children made them.

As you go from room to room, you will find them all learning in a pleasant way. For although it is true "There is no royal road to learning," there is certainly a pleasing, healthy, and interesting road, and happy the teacher who finds it.

These happy children are sometimes disturbed

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Excellent nuts, dried fruits, and health foods of all kinds, including

BILSON'S COCOANUT BUTTER

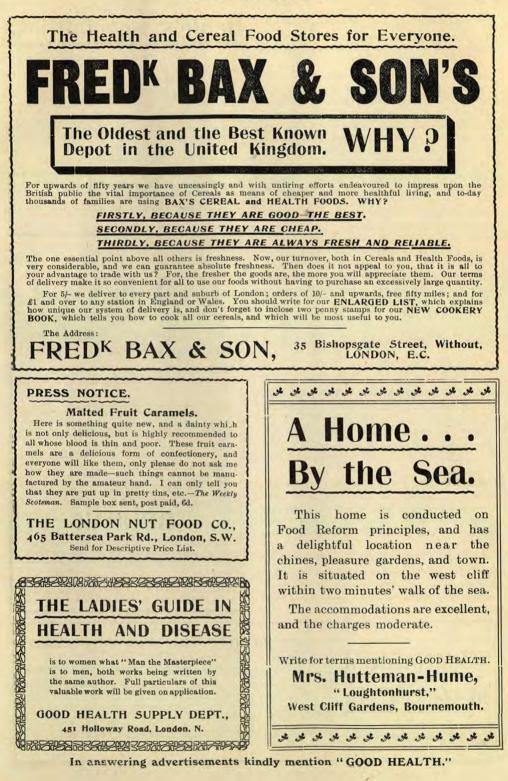
which is a splendid substitute for the ordinary dairy butter: perfectly wholesome, and of delicate flavour. 8d. PER POUND, carriage forward. Send 6d. at once for large sample packet, post free.

Ask for new price list.

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by the teacher calling, Fire ! and then, before you can count twenty, every child is out of school, and standing at a safe distance from the buildings.

We will take a peep at the rooms while they are outside. The rooms are nicely furnished with everything for the health and comfort of each child, well ventilated, and adorned with such pictures and ornaments as will interest and instruct. Their seats have backs, and are so made that each child's feet shall rest on the floor, then instead of desks there are little tables covered with white American cloth, that can be easily washed each day. All the sanitary arrangements are well attended to, in fact, the children's health is studied in every way. Their education is threefold-body, mind, and soul. There are reading books of various kinds, and science is not forgotten. Should you spend a day at this school I think you would say these children are having a nice time of it; you don't call this school, do you ?- Certainly it is school. What an absurd idea to think children can only learn when they have long faces.

But do they get the necessary discipline when things are so pleasant ? This school is carried on in love, and therefore the discipline must be good, "For 'tis love that makes the willing feet in swift obedience move."

It seems from your dream of "The School of To-morrow," that it can only be a beautiful ideal, and not practical. 1 say it is practical, and ought to be put into practice at once-all over the Empire.

Your idea about examinations is right, and you will find, sooner or later, the nation must abandon their present system. Why should not the twentieth century be memorable for the Education Reform ? 1870 may be memorable for its great awakening to the necessity of education, but over a third of a century has proved that the system arising from that awakening has not been a good one.

Is there any other question you would like to ask? Yes, I would like to know when this school was instituted ?- In the year 1874, and it is no dream, but a reality with thirty-one years to prove its working. A. L. O. C.

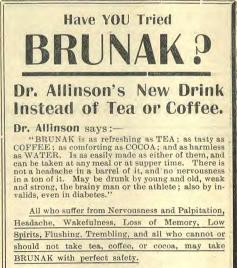
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Zwieback (Brown and White) a specially prepared predigested bread, invaluable to dyspeptics and invalids; used in the Battle Creek Sanitarium. 6d per lb. Sample packet for 6d. in stamps

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