LIFE & HEALTH

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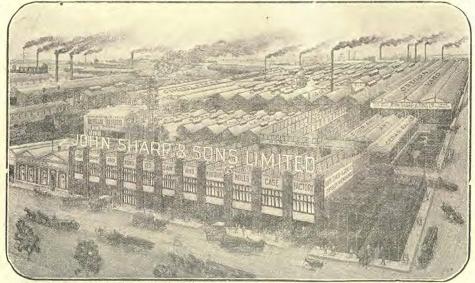
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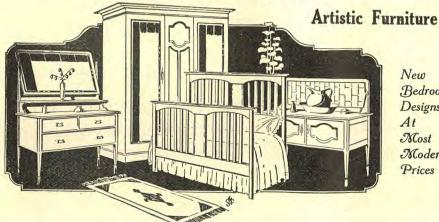
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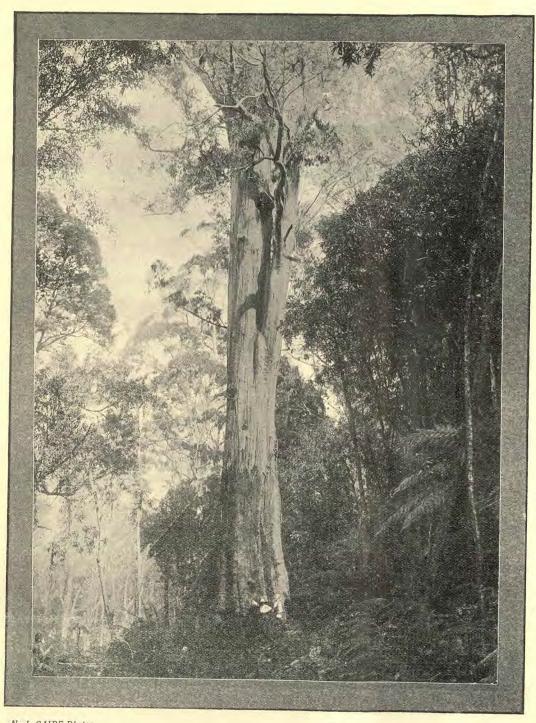
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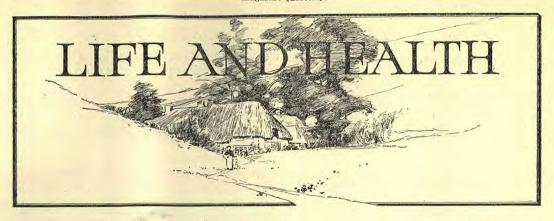
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Vol. 6

October-November, 1916

No. 5

Editor: CHARLES M. SNOW

Associate Editors:

W. HOWARD JAMES, M.B., B.S., EULALIA RICHARDS, L.R.C.P. & S., Edin.

THE decision of the publishers of LIFE AND HEALTH to publish the magazine quarterly instead of bi-monthly will undoubtedly meet with general approval. This will enable editors and contributors to better provide appropriate health suggestions for spring, summer, autumn, and winter, and will therefore enhance the value of the magazine materially. Subscribers who have in their annual subscriptions paid for six numbers, will of course receive what they have paid for by having their expiration dates advanced. For further information we would refer readers to the publishers' advertisement in this issue regarding this matter.

The Nation's Chief Concern

GREAT BRITAIN, with her great expanse of governmental jurisdiction and the small proportion of white to dark-skinned subjects, looks with some concern to the future because of the vast sacrifices she is making, particularly of her white-skinned sons, on the battle-fields of Europe. While they who would have been the fathers of the next generation are being blotted out of existence in their vigour and strength, the nation must turn with deep concern to the problem of conserving infant life. The reduction of

infant mortality thus becomes of vital importance, and the nation owes no small debt to those who are making that topic a matter of serious study.

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IT is a matter of encouragement that there has already been a lessening of infant mortality due to precautionary measures adopted as a result of this increased interest in the subject; and we shall be surprised if in future years this all-important matter does not become one of the most absorbing matters of governmental attention, with even a portion of the annual budget devoted to its interests.

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THE losses in the present titanic struggle have been a fearful drain upon the manhood of the nation; but the mass of our people do not know that, great as it is, that loss is practically equalled every year in the infants that perish from one cause or another, before they reach their first birthday anniversary. Of the 800,000 children born in England each year, 100,000 die within a year of birth; and one eminent authority declares that another hundred thousand perish before birth. And, of course, a large percentage of those who pass their first anniversary never reach manhood or womanhood.

The nation mourns—and it should mourn—the loss of its strong young manhood in battle; but it should mourn also—and just as deeply—the loss of these who might have grown to manhood and womanhood if adequate attention had been given to the conservation of infant life.

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SOME attribute our excessive infant mortality to one cause and some to another; but when the matter has had the attention which its importance demands, it will be found that no one cause will account for it all. Dr. Brend, for example, attributes it very largely to dust and dirt, carrying the germs of disease into the intestinal tract and the throat and lungs. There is no question but that herein lies the cause of many infant deaths; but if dust and dirt were the only factor to be considered, the number of infant deaths would be far less than it Miss Constance Maud, an authority on children's diseases, lays the blame on poor food and food adulterations; but it is not altogether there, either; for many children, with the best that can be provided and the most careful supervision possible from conception to birth and from birth onward, die at a tender age. While the cause of many infant deaths lies there, not all, nor even a majority, are due to that cause. In fact there is no one cause of infantile mortality that is responsible for a majority of such deaths. The causes are many; and if we centre our attention upon one or two causes, the "destroying angel" will enter through many unguarded doors.

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ONE of the most serious predisposing causes of infantile mortality is the lack of healthy, vigorous parenthood. Where this is lacking, the constitution of the infant is impaired at the start, and the soil is prepared for the seeds of death. The most careful attention then often fails to bring the child through even to the age of puberty. Ignorance, intemper-

ance, and disease form a veritable triumvirate of death whose shafts are continually aimed at the unborn and the infant. Intemperance and disease in the parents are actually breeding death to-day in the race. The town, the city, and the State have their part to perform in ensuring healthful conditions of life; but with all these properly attended to, parental disease and parental intemperance will still exact a tremendous toll in the lives of the little ones.

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WHAT can town and municipal authorities do to lessen infant mortality? They can ensure a clean and healthful supply of water and milk. They can compel the effective disposal of garbage and other decaying matter, whose presence is always dangerous to the lives of both young and They can give attention to the question of defective housing, and thus improve the conditions of living. They can show the people the necessity of eliminating, as far as possible, the fly pest, demonstrating to them that the fly is indeed a pest of the most dangerous character, whose exclusion from the house —and especially from access to the infant —is a matter of the gravest importance. Prompt and scientific grappling with the menace of contagious and infectious diseases is another of the stern duties of the town and municipal authorities if they would protect the lives of the young. is the practice of many parents whose children have whooping-cough to take them to places where they will mingle with other children, thus spreading the infection and increasing the death-toll of that disease. This is a practice that should never be permitted; and if the imposition of a penalty is necessary to put an end to the practice, the authorities should impose the penalty. Even when not fatal, whooping-cough puts upon a young child a constitutional strain from which it may never fully recover. Some parents whose children have contracted the disease may need the stimulus of legal prohibition to keep them from passing

the danger on to their neighbours. Many will be thoughtful in such matters without compulsion; those who will not should be helped in some effective way.

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IT is a cause for encouragement that wherever these matters have had the attention their importance warrants, an improvement has been manifested in mortality statistics. And still it has been the adults that have benefited most largely. Yet this should not discourage those who have child welfare most particularly at heart; for in whatever the parents benefit to-day the children will benefit to-morrow.

m m m

ONE of the factors in child welfare that needs the most serious attention is the cow's milk that is fed the young child either during or after the nursing period. Where the natural food of the infant is sufficient, one source of danger is eliminated until the child is weaned; but the child that is dependent to any extent upon other milk than that which nature designed he should have has his dangers increased just to that extent, and after that period his dangers are increased if his milk supply is impure. Milkers who milk with dirty hands, who milk without carefully removing dust and dirt from the udder of the cow, and who do not, immediately after milking, strain the milk through some close-grained fabric for the removal of any dirt that might have dropped into it, are responsible for much sickness and many deaths on the part of infants and children who take this disease-laden milk into their systems as food. The presence of "settlings" in a glass or cup in which milk has been standing is a signal of danger that should not go unheeded, especially if there are children in the family. It tells its own story of how the milkman has done his work, and he has no just cause of complaint if he receives notification that his milk is no longer needed by those who have been patronising his dairy.

MILK, especially if intended for the use of infants and young children, should be kept on ice if possible; but where ice is not procurable, it should be kept in the coolest place that can be found, and be covered so that no germs or dust can get into it. Milk kept in a warm place very quickly becomes unfit for food because of the rapid multiplication of the germs which it contains. The cooler it is kept, the more slowly these develop.

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IF a child must use a nursing bottle, make sure it is one that can be readily and thoroughly cleaned after each using. Otherwise it is a veritable death-trap for any infant using it. Never consider for a moment using one that has rubber or glass tubes as a part of its equipment. Such can never be thoroughly cleansed, and introduce into the child's system the germs of putrefaction, which inevitably set up fermentative changes in the stomach and bowels, leading to vomiting, diarrhæa, "infantile cholera," and death.

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MANY of the enemies of the human race are very small and insignificant in appearance; but the mischief they do is not at all in proportion to the amount of space they individually occupy. some people, being bitten by such vermin as sometimes infest beds or bodily clothing, or by the little flying tormentors that hum a tune while they hunt for their human prey, is merely a matter of annoyance, and to see flies crawling over their food or over a baby's face arouses no thought of real danger. Yet that harm-less-looking (anophele) mosquito is inoculating her victims with malarial fever. The equally innocent-looking stegomyia mosquito carries in her hypodermic needle the germs of the deadly yellow fever. The louse may, and often does, plant the germs of the deadly typhus fever. The flea, having bitten a rat infected with bubonic plague, is carried into the house by the cat, bites a human being, and the result is another bubonic plague victim:

while the house fly, like a travelling salesman for a general manufacturing establishment, may carry samples of scores of dangerous disease producers in his saddle bags. Parents who have a genuine interest in the welfare of their households will screen their homes against flies and mosquitoes, and see that the bodies of their children (and the beds as well) are free from anything that crawls and bites. Clean living is not only the best kind of living—it is the only safe kind.

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Disease and the Balanced Dietary

THE swift-spreading ravages of the disease known as pellagra, especially in the Southern States of America, has awakened the medical profession to the absolute necessity of ascertaining the cause of the disease and providing a The United States Public Health Service has taken the problem in hand, and has arrived at definite conclusions both as to cause and remedy. For years mouldy maize was considered the cause; but the disease progressed where no maize at all was eaten, and the theory had to be abandoned. Some laid the blame on the bite of the buffalo gnat. but this had to be given up when the disease increased in localities where the buffalo gnat was never seen. blamed faulty sanitation; and in certain localities where the death-rate was as high as 54 per 100,000 and improved sanitation reduced the rate to 30 per 100,000, pellagra continued to increase, going up in four years from 38.5 to 64.6. This seemed to demonstrate that faulty sanitation was not the cause. Eliminating these supposed causes, the Public Health Service has now come to the conclusion, from studying the habits and the dietary of the victims of the disease, that an unbalanced dietary is the true cause. The Department of Education and the Department of Agriculture have been enlisted in the work of eradicating the cause of the disease, the former by giving daily instruction in the public schools and the latter by teaching the wisdom of keeping cows, raising chickens, and growing beans and peas—all food materials that kill pellagra by preparing the system to withstand its attacks.

But if an unbalanced dietary is at the root of this dread malady, we may know that that same cause is working detrimentally in the system in other ways even when pellagra does not result. The system is required, under such conditions, to work constantly under a great and debilitating handicap. Look to your dietary. Does it contain a sufficient variety of basic food elements not only to preserve the system against positive attack, but to give you that physical efficiency which your work demands of you?

A Notable Testimony

As to the real value of a vegetarian diet we have never had any question, but it is always a pleasure to witness the endorsement of vegetarian ideas by others. The following testimony from thirteen British physicians, published in a recent issue of the Daily Express (London), will be of interest, we trust, to all our readers:—

"We hereby record our emphatic opinion that not only is the practice [of vegetarianism] based on a truly scientific foundation, but that it is conducive to the best physical conditions of human life.

"The diet of vegetarianism provides all the constituents necessary to the building up of the human body, and those constituents, as proved, not by the misleading tests of the chemical and physical laboratory, but by the experience of numerous persons living under normal conditions, are at least as digestible and as assimilable as the corresponding substances obtained from flesh.

"Moreover, considering the liability of cattle and other animals to ailments and diseases of various kinds, and the pure character of food obtained from vegetarian sources, we are convinced that abstinence from flesh food is not only more conducive to health, but from an esthetic point of view, is incomparably superior."

Colds, Influenza, Pneumonia, Etc

W. HOWARD JAMES, M.B., B.S.

EXPOSURE to draughts and wettings is not by any means the chief cause of colds, influenza, bronchitis, and allied troubles. Some people are very susceptible to these inflammatory troubles of the respiratory tract, while others escape although exposed to all sorts of adverse conditions of the weather. In fact, in the cold northern regions these complaints are said to be almost unknown. In perfect health our systems are prepared for unfavourable climatic changes and exposures to draughts and wettings. It is the man of sedentary occupation, who spends his time in warmed rooms, and who eats more than his system really requires, that is so liable to develop respiratory troubles. Some find they can readily dissipate an on-coming cold by a fast, or by the partaking of very light meals. The work of the blood is thus lessened: it can rid itself of its waste products, and is thus enabled to better overcome the intruding germs of influenza, pneumonia, and ordinary "colds," for all these troubles are due to specific microorganisms. We constantly hear of colds being "catching," and so they are to a large extent. These seeds of disease would rarely develop their poisons if it had not been for poor ventilation, close, stuffy rooms, overfeeding, and want of outdoor exercise.

A very common method of treating respiratory troubles in the present day consists of the application of antiseptics to the respiratory tract in the form of nasal douches and sprays and inhalations; but it is very doubtful whether they can be made sufficiently powerful, without unduly irritating the mucous membranes, to destroy the microscopic organisms of disease. It is a very difficult matter to thoroughly disinfect the whole of the respiratory tract. Some amount of good, however, is done in these procedures. Douches, sprays, and inhalations, how-

ever, can only reach a comparatively small part of the infected areas. Apparatus are now made by which antiseptics are introduced by compressed air with considerable force into the respiratory tract; these are more efficacious.

Undoubtedly the best method of attacking these invaders is to remove the weak points in our fortifications, and thus enable nature to do the work. One means of doing this we have already mentioned, the cutting off of our food supply. This especially applies to rich and highly nitrogenous foods. When the disease is of more than a few days' duration, food of course is required to make blood, which will produce its own special germ destroyers; but a primary abstinence from food, or the partaking of very light food, such as fruit, will often help to abort the trouble.

One of the primary conditions in these respiratory troubles is congestion of the mucous linings of the respiratory tract. The mucous membranes not only contain more blood, but also many impurities: thus a suitable soil is produced upon which the disease-producing germs can multiply, and produce their special poi-If this overladen blood can be diverted from the mucous membrane in which the invaders have settled, they will lose more or less of their virulence, and in fact may perish, and the attack will be repulsed. This can be accomplished by sweating procedures, such as Turkish bath, fomentations to spine, throat, or chest, very hot baths immediately before going to bed, hot blanket packs, the electric light bath, and the drinking of large quantities of hot water, which may be advantageously flavoured with lemon or other fruit juice. By these means, not only is the blood diverted from the congested respiratory tract, but the poisons are thrown off in the sweat, and also through the kidneys, for undoubtedly in

diseased conditions a profuse perspiration will enable the kidneys to do their work more thoroughly. In health, profuse perspiration lessens to a slight extent the amount of waste products excreted by the kidneys, but in diseased conditions the work of the kidneys is increased, and becomes more effective.

After sweating, the body should always be sponged with cold water. To bring the blood to the surface of the body, and then allow it to return to the internal organs, will produce no good effect. Cold sponging will cause a healthy reaction, and will keep the blood in the skin, especially when the individual is kept in bed or in a warm room. Undoubtedly in ordinary colds, outdoor exercise, such as long walks or chopping wood, will help to dissipate the internal congestion. Exercise has the advantage of keeping the blood in the muscles as well as the skin; the cold sponge, however, should never be omitted. When the system is attacked by influenza, pneumonia, and debilitating disease, exercise is not advisable, as it fatigues and lessens the fighting powers of the system. At the beginning of all infective diseases, whether of the respiratory or other system, the bowels should be well opened; this rids the blood of impurities, and prevents poisonous products being absorbed from the intestines.

The mechanical effect of diverting the blood from congested parts is worthy of consideration. By keeping plenty of blood in the feet, legs, and abdomen, there is less blood for the internal organs. In the early congestion which precedes pneumonia, great good can be done by diverting the blood from the lungs. The patient is feverish, the breathing is short, there is more or less pain and cough, and most likely shivering and headache. A hot foot or leg bath, fomentations to thighs and abdomen, will all help to lessen the pulmonary congestion. A cold compress on the affected side will help this action. About four thicknesses of gauze or cheese cloth should be wrung out of cold or iced water, and applied to the affected side. This should be covered with flannel and removed when warm, say, every ten or fifteen minutes. Warmth to other parts of the body by fomentations, hot-water bottles, hot drinks, etc., will prevent any chilliness from the cold-water applications. A hot fomentation every two or three hours over the parts previously covered with the cold compresses will help them to retain their nerve power. A good rubbing with a rough towel and the warm hand will have a similar effect. Congestive conditions about the throat may be similarly treated.

In all treatments of the respiratory tract it is essential that the feet be kept absolutely warm, that the shoulders be free from chills and draughts, and that the parts subjected to wet treatments should be

perfectly dried.

Diarrhoea in Children

W. HOWARD JAMES, M.B., B.S.

THE mortality among children during the first two or three years of their lives is fearfully high, and this fact is rendered more sad when we realise that a little knowledge would lessen the death rate by fully seventy-five per cent.

In making this statement we are not in any way exaggerating, for the mortality from gastro-intestinal diseases in children nursed at the mother's breast and in institutions under medical supervision is very low. It is the improper, unskilled, artificial feeding of infants that brings about such a death rate in our infant population.

There is very little digestion in the stomach of the infant; the stomach acts more as a receptacle for food than an

organ of digestion; the milk in a more or less curdled condition passes into the small intestine in an undigested state. The digestion is carried on chiefly in the first part of the small intestine, the duodenum, where the food mingles with the bile and the pancreatic juice. For a long time the opinion has been held that the sugar of milk, the most digestible part of that food, was absorbed into the blood through the walls of the stomach, but now it is known that that absorption does not take place until it has been acted on by a special ferment in the small intestine.

Thus it is that infants do not suffer from stomach, but bowel troubles; and the disorders of the bowels are really the outcome of indigestion and unfavourable conditions of the food taken.

The diarrheas of children can be very conveniently divided into two great classes: (1) Those due to imperfect digestion; (2) those due to violent poisons secreted by vegetable micro-organisms, pathogenic or disease-causing germs.

Acute Intestinal Indigestion

Many mothers have the idea that teething causes diarrhoea, and that the looseness of the bowels in teething is beneficial and should not be checked. Teething, however, is natural, and of itself is not accompanied by any irregular symptoms. It is when the teeth begin to appear that the diet is changed, and the faulty additions to the child's food cause the diarrhoea, and not the teething. A looseness of the bowels that extends over twenty-four hours demands immediate attention.

Food that is indigestible, either from its composition or method of preparation, or when given at irregular intervals, is very liable to bring an attack of diarrhœa, intestinal indigestion, in children. Nature recognises the irritant, and endeavours to expel it by increasing the secretion and the muscular action of the bowel; but when the effort becomes prolonged through the irritant not being removed, or through the addition of more indigestible food, disorder of the bowel must be

the result. It is the excessive effort of nature coupled with the absorption into the blood of poisonous matter that so frequently results in convulsions. Unless the irritant is removed, the convulsions will continue, hence the great advantage of a preliminary dose of castor oil.

Symptoms of Simple Diarrhoea

The first symptoms of simple diarrhœa. that due to indigestion, are restlessness. pain, and increased frequency of stools. The pain is generally of a griping character, and is relieved when the bowels are open. The stools are loose and more watery, they do not contain mucus (thick jelly-like material), or serum (the clear, vellowish fluid of the blood), which result from inflammatory trouble due to the very violent poisons of disease-producing germs. The motions may be of a green colour, but this need not excite any great anxiety, for the colour is generally due to some trivial cause. There is no feverishness, and the pulse after the griping pains subside is normal in the diarrhoea due to imperfect digestion.

Treatment

As a rule nothing more is required than abstinence from food for some hours (twenty-four hours is not too long) and a good dose of castor oil—a large teaspoonful to a child of one year. The pain should be treated by hot foments to the Wring out thick pieces of flannel (or better, pieces of blanket) in boiling water, and apply, after enclosing in a thick towel, to the abdomen; they should be repeated every eight or ten minutes till the pain and griping are re-The mother should first apply lieved. the fomentations to her own face to be sure it is not too hot, as the child's skin is tender and is easily scalded. Unless some redness is produced in the skin of the child the fomentation will do but little good. If the child is not relieved, or the castor oil has not acted freely, a large warm enema should be given. It is better first to empty the bowel with warm water and a little castile soap, and then

irrigate the bowel with two or three quarts of warm water. The tube from the fountain syringe should be inserted well into the bowel with the buttocks of the child well elevated; the excess of fluid will pass out by the side of the tube.

As a rule no medicine whatever is required. If the looseness and pain still continue, three grains of the subnitrate of bismuth may be given every two hours to a child of twelve months, and if the griping is not removed, five to ten drops of paregoric (compound tincture of camphor) may be given. During the attack the child is better kept warm in bed. The bismuth may be given in the following mixture:—

R. Bismuthi Subnitrate 5ip (1½ drams)
Pubr. Mag. Co. 5j (1 dram)
Ag. Menth Pep. 3iv
S.—One teaspoonful every two hours.

Chronic Intestinal Indigestion

Where the cause of the diarrhoa is not removed, or the child is debilitated from some constitutional trouble, such as syphilis, tuberculosis, rickets, or fever (scarlet, typhoid, etc.), a catarrhal state of the bowel may be established, and the diarrhoa becomes more or less chronic. Children who suffer from neglect, insufficient clothing, and other adverse conditions, are particularly prone to chronic diarrhoa. Frequent attacks of acute diarrhoa will sometimes lead to the chronic form.

The bowels are open four to six or more times in the twenty-four hours, the child is fretful, does not sleep well, and frequently the bowels are distended from flatulency. The stools are not of one consistency, usually half solid and half watery, and have a very offensive odour. Often lumps of cheesy matter (undigested casein of milk) and unchanged fat may be seen, the latter makes the evacuations of a grey or white colour. The hard lumps may be streaked with blood. green stools are often due to special variety of germs (chromogenic bacteria). The child very often is subject to acute attacks of diarrhoea with pain, fever, and

vomiting. Except during the acute attacks, the child often eats well, and may even put on weight. Mostly, however, there is a gradual loss of weight, and the more food the child takes the more rapidly does it waste.

Treatment

The cause of the trouble must be sought for. This may be found in the constitution of the child itself, in that of the mother, or in the case of artificiallyfed children, in the food supplied. may be that food is given between meals, that the child is allowed to taste food prepared for adults; that sweets, tea. coffee, and cocoa are given the child. In infants it may be necessary to hand the child over to a suitable wet nurse. Often the child will improve and gain in weight when the quantity of food is diminished. The writer has seen wonderful improvement result simply from cutting off the tit-bits between meals.

When the stools contain lumps of casein and undigested fat, and are acid from the fermentation of sugar, it is often advisable to discontinue the use of milk for some days. Egg albumen may be given for a day or two. Beat up the white of one egg with half a pint of boiled water and strain. If the stools are very feetid the fault is probably due to the proteid of the food not being digested well. All foods of animal origin are liable to render the stools fætid. Under these circumstances barley water. rice water, or solutions of dextrine, should be given for a day or two. The latter may be conveniently made by pouring hot water on granose biscuit and straining. Mellin's Food in hot water makes a suitable food for a couple of days. Add one tablespoonful to eight tablespoonfuls of hot water.

Barley Jelly

Barley jelly is more convenient to keep than barley water. Put two tablespoonfuls of washed pearl barley into a pint and a half of water, and slowly boil down to a pint; strain, and allow to settle into a jelly. Add two teaspoonfuls to a breakfast cup (8 ozs.) of warm water. This makes the usual strength of barley water.

Whey

Whey is excellent food while the diarrhoea continues. Half a pint of fresh milk should be heated to 140° to 150° F. (This temperature will not scald the mouth.) To this add one and a half teaspoonfuls of pepsin wine or a teaspoonful of Fairchild's essence of pepsin. Allow the mixture to stand in a warm place until a firm clot forms. Beat the curd up thoroughly, and strain.

The child with chronic diarrhoea needs all the tonic treatment possible. change from the city to the mountains often acts like a charm. The bedroom must be well ventilated, and the body of the child well sponged every day. About ten in the morning is a good time. Large enemata, as already directed, should be given three or four times a week while the diarrhoea lasts, and five-grain doses of subnitrate of bismuth every three hours will prove serviceable. After the bowels have been thoroughly washed out, two drams of the bismuth may be injected with a little thin boiled starch (half a breakfast cup) well into the bowel and allowed to remain.

Infective Diarrhoeas

This second class of diarrhœas is the much more important, as it embraces by far the larger percentage of cases and those that are more fatal. This is especially true of the so-called summer diarrhœas. The mortality particularly among the poorer classes is fearful. diarrhœas are produced by toxicogenic bacteria (poison-producing germs). Tuberculosis, diphtheria, etc., are produced by definite species of micro-organisms, but infective diarrhœas are brought on by one or more of a large class of germs. During feetal life the contents of the bowel are sterile, but shortly after birth germs of many kinds gain an entrance.

"The contents," says Dr. Vaughan of Ann Arbor, "of the intestines in the socalled summer diarrhœas of infancy swarm with bacteria of many species, and some of these produce most powerful poisons. These bacteria multiply outside of the body, and are disseminated widely and abundantly only when the atmospheric temperature reaches 60° F. or higher. This is the reason for the restriction of these diarrheas to the hot months of summer."

Unfortunately the germs of disease not only exist in milk, but will continue to develop and produce their poisons after obtaining an admission to the alimentary canal, and especially when the latter is in an unhealthy condition. The digestive juices of the healthy child can cope with a moderate number of disease-producing germs, but when they gain admission in great numbers, in virile forms, and into an unhealthy alimentary canal, they quickly develop fearful changes. These organic poisons, secreted by toxicogenic bacteria, are more poisonous than any known metallic poison; arsenic or strychnine are not to be compared to them in their irritating and disease-producing tendencies.

Consequently, the greatest possible care should be exercised in the selection of milk for children. Boiling destroys the germs and renders their excretions innocuous, but undoubtedly sterilisation robs the nuclein of the milk of its vital properties. Where the family possesses its own healthy cow, and it is properly cared for, the milk can be used without boiling. The cow should be fed on the best of pasture and pure food; decayed cabbage leaves or decomposing food of any kind should not be allowed. As much care should be taken with the food of the cow as with that of the human being as far as purity and cleanliness are concerned. The water should be absolutely pure; on no account should the cow be allowed to drink stagnant water. The stable should be absolutely clean, and the cow's hair should be kept free from manure or dirt of any kind. In cold weather the cow should be well rugged, but never kept in a confined stable; fresh air is absolutely necessary for the health of the cow and

the wholesomeness of its milk. Before milking, the udder should be well washed and dried. Under hygienic conditions the milk from the cow can be taken without fear. The cow gives its milk twice daily, so there is no need for long standing; milk that has been kept for some time will most certainly contain a large proportion of germs.

Cholera Infantum

When the disease-producing germs exist in milk in virile forms and in great numbers, the symptoms of disease develop very rapidly, and death may occur in a few hours. Vomiting and purging are very severe. The stools at first are yellow or green, but as they increase in frequency they lose all colour. There may be thirty or more evacuations in the day. The vomiting is uncontrollable, and no food whatever can be taken. The child in a few hours is quite collapsed. The skin is cool, but the bowel temperature is high, 102° F. up to 107° or 108° before death. The loss of the fluid part of the blood through the excessive watery action of the bowels is great, and the child becomes pale, pinched, and collapsed, with a cold, clammy skin. The abdomen is not distended with gas, as often is the case in milder attacks, but retracted. The symptoms may subside for a short time only to come on again with renewed force.

Treatment

Not a drop of milk should be given, not even the breast. In fact, all kinds of food must be absolutely prohibited. The stomach and intestines should be washed out on the first appearance of the symptoms. The stomach of course can only be washed out by a trained hand. bowels can be cleansed first with warm water and castile soap, and then thoroughly irrigated with warm water as already described. After a thorough cleansing an injection of cool water containing fifteen to thirty grains of tannic acid to the pint should be given; the tannic acid unites with the poisons and renders them inert. The stomach is

washed out with warm water containing a teaspoonful of common salt to the pint. Calomel in doses of three to five grains should be given in order to reach the parts of the small intestine not reached by the water applications. An ice cap or frequent sponging with cold or tepid water will be necessary if the temperature is high. The skin is cold, so that good rubbing is necessary in giving the spongings. When the temperature is high the child should be placed in a hot bath, the temperature of which should be lowered gradually to 85° F. by the addition of ice. After this temperature is reached the child should not remain in the bath more than ten minutes. The child should be well rubbed while in the bath. collapsed the limbs should be bathed with hot mustard water combined with thorough rubbing. Hot water in teaspoonful doses should be given frequently, if it does not cause vomiting.

In all cases of diarrhoea, and especially those due to diseased germs, the diapers should receive special attention. On no account should they be exposed to the air. They should be boiled at once or steeped in some antiseptic solution until they can be boiled. The nurse's hands should always be well washed every time

she touches a used diaper.

Subacute Infective Diarrhoea

In this form the symptoms are much milder than in the choleriform diarrhœas. There is very much less vomiting, and the stools are not nearly so frequent and watery. There is restlessness, fever, and loss of appetite. It is distinguished from the simple diarrhoea of indigestion by some amount of feverishness. tongue as a rule is coated. In cholera, death may occur in a few hours; in the subacute form the case may be protracted for weeks, and gradually develop into marasmus. Mucus is generally excreted in the stools.

Treatment

Preventive measures against this highly dangerous disease cannot be too strongly urged. The disease is practically confined

to those children who are hand-fed. Human milk is sterile. Consequently, especially in the summer season, every endeavour should be made to keep the child on the breast. On no account should diapers of even healthy children be exposed to the air, for thus dried fæces find their way into the air and are breathed into the lungs and contaminate the food. The hands of the nurse should always be sterilised—thoroughly washed, after handling the diapers of even a healthy child. In artificially-fed children the milk should be sterilised if there is any doubt about its wholesomeness. The daily bathing of the child is imperative.

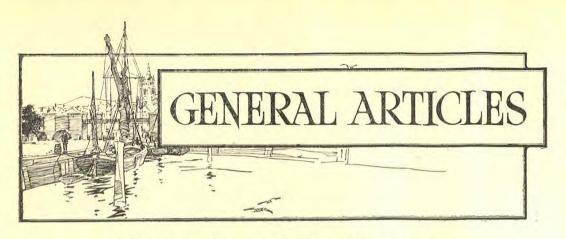
Curative Treatment

Milk should be rigorously excluded for the first two or more days. Milk, it must be remembered, is the best culture-medium for the development of the disease-producing germs. At the outset a good purgative should be given, such as castor oil (one or two teaspoonfuls). The thorough cleansing of the bowels by warm water irrigations every day should be practised. The administration of grey powder the writer has found of very great service; it destroys the germs and neutralises the poisons. One grain should be given in a spoonful of milk four times a day to a child one year old

As the germs develop so readily in milk, all milk foods must be excluded for a day or two according to the severity of the case. Barley, rice, or oatmeal water, albumin water, or whey should be the only diet until the severity of the symptoms abates. Milk should gradually be restored, and the diet and the results watched carefully.



TROLLHATTAN FALLS



Ulceration of the Stomach

CHARLES HENRY HAYTON, B.A., M.D.

VOLUMES of literature have been written and published in times past upon this distressing and painful disease. The medical books contain numerous pages of matter dealing with every aspect of the subject, but of late years the views held by the older physicians have undergone a

decided change.

Many new and intensely interesting facts concerning the stomach and ulceration in particular have been brought to light which have materially changed the old-time theories. This change has been brought about chiefly through the rapid and successful advances which surgery has made in the field of medicine. One naturally believes what one sees with one's eyes rather than what one hears with one's ears. A surgeon sees and handles the living and active structures and organs of the human body. notes the morbid processes that are taking place, and his surgical eye enables him either to confirm or deny the theories which have been advanced on the causation of disease. The light shed abroad through the revelation of surgery has done much to dispel the obscurity in which this subject has been wrapped.

Facts Concerning the Stomach

The stomach may be described as a muscular bag, a dilated portion of the alimentary tract, made for the reception and temporary storage of food. Under normal condition this storehouse enables its owner to place within it at one time a sufficient quantity of food, thus rendering continuous feeding unnecessary.

The stomach is about ten inches in length, four inches in breadth, and has a capacity of two and one-half pints. When abnormal stretching takes place it holds considerably more. Five-sixths of the stomach lie to the left of the median line of the body, one-sixth to the right. When empty, the anterior and posterior surfaces are in contact. The stomach has two definite compartments. The fundus, the large dilated portion which comprises the five-sixths on the left side, is concerned chiefly in the storage and softening of the food; and the pylorus, the small constricted end—the one-sixth to the right churns the food and forces it into the The upper surface of the intestines. stomach, as one can see from the accompanying diagram, is short and concave. and in consequence is named the lesser The lower surface is long curvature. and convex, and is termed the greater curvature.

For some little time after the ingestion of the food there is comparatively little action in the stomach. The food lies dormant in the fundus, and the outer surface of the mass is being acted upon by the gastric juice, while the action of the saliva is still going on within the mass. In about thirty minutes the motor activity begins and the food is then passed into the pyloric end of the stomach a portion

at a time, and the process of churning begins. Here is where the greatest acidity takes place, and when a certain stage of digestion is completed, the pylorus relaxes and the very acid, churned portion of food is injected into the first portion of the alkaline duodenum. This process continues until the stomach is completely emptied of its contents.

The gastric juice, which consists chiefly

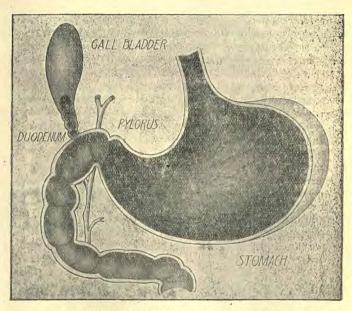
of dilute hydrochloric acid and pepsin, is largely secreted in the pyloric end.

The Cause of Ulcers

Ulceration is a toxic process which attacks the delicate mucous membrane of the stomach as well as its muscular coats. The process seems to be limited to certain well-defined areasthe pyloric end in the lesser curvature on the posterior wall of the stomach for the gastric ulcers, and the first part of the duodenum opposite the pylorus outlet for the chronic ulcers. Like all morbid processes of the structures of the body there is an acute and chronic type By an acute is of ulcer. meant a form of ulcers

limited to the mucous membrane without any feature of an inflammatory nature, which gives but few symptoms. It has a rounded, punched-out appearance, and in most cases when the general health is attended to has a tendency to heal completely. Sometimes, however, the ulceration continues, a secondary inflammation takes place, and the ulcers perforate the stomach wall and allow some of the stomach contents to escape into the abdominal cavity, a very dangerous and ofttimes fatal termination. It is then known as an acute, perforating ulcer. If the process takes on a slower form and the ulcer is continually being irritated by errors of diet, or bathed by excessive acid gastric secretion, the edges

of the ulcers become thickened and hard, and the tendency towards healing becomes less and less, as the thickening process increases. It is then called a chronic ulcer, and may continue for years with distressing gastric symptoms and short, intervening periods of relief. Later in years, when in the cancerous age, because of the constant, long-continued irritation, a cancer begins in the edge of the ulcer.



THE STOMACH AND PORTION OF THE ALIMENTARY CANAL

The starting of the ulcer is now a well-established and known process. It is due to the destruction of the mucous membrane by bacteria which are swallowed from some local foci in the mouth, nose, or throat, and find their way to the sub-mucous coat by means of the rich blood vessels in that part. Once a break in the continuity of the mucous membrane is made, the process is aided by the swarms of bacteria that are already habitants of the diseased stomach.

Ulcers are often associated with other morbid processes in the stomach. Gastritis is a common complaint, and it is an extremely interesting fact that stomachs which are affected with gastritis are also affected with ulcers. The relation exist-

ing between gastritis and the septic condition of the gums and pharynx is now a matter of passing knowledge. Unhealthful gums, defective and decaying teeth, diseases of the nose, pharynx, and associated air sinuses have all an important bearing upon the history of gastric ulcers. The continual swallowing of pus emanating from these sources sets up an inflammation of the mucous membrane of the stomach, which is often the starting-point of an ulcer.

Then, again, the poor food commonly eaten among a certain class of people, poor bread, rancid butter, tinned foods, with copious draughts of hot tea and coffee, combined with tight lacing, mental anxiety, alcoholism, and tobacco are all predisposing factors in the starting of ulcers.

Symptoms

The picture of a person suffering from ulcer of the stomach was formerly believed to be a young anæmic woman between the ages of seventeen and twenty-five, who gave a history of vomiting blood and suffering pain immediately after taking food, and which was often relieved by vomiting. To-day the patient is more often a man past thirty, who gives a history of having had stomach distress more or less for a number of years. Pain, very often his only complaint, is felt in the pit of his stomach, sometimes to the right and sometimes to the left of the median line, which comes on regularly from two to four hours after each meal. He can place his finger exactly over the painful spot. Very often the pain occurs at night towards morning, and many sufferers have food at the bedside, for they have learned that the taking of food relieves the pain. "Hunger pain" many surgeons call it, because the pain appears when they begin to feel hungry, and a good, hearty meal relieves them. Food, drinks, alkalies, relieve the pain. Anything that will neutralise the excessive acid of the stomach will bring relief. "Just take away my pain, doctor, and I shall feel alright," is their plea.

Along with pain there is a sour, burn-

ing feeling within the chest wall, with often the belching of sour gas and regurgitation of acid, bitter food particles in the mouth. There are periods when these symptoms abate and the patient seems apparently well. But these periods soon pass and the attacks come on again with all the old-time vigour and distress. The regular return of these painful symptoms, two to four hours after meals, and the temporary relief obtained by the ingestion of food or drink or alkaloids, and even by vomiting, meal after meal, day after day, with no permanent relief, is peculiar to gastric ulcer.

Sooner or later, the food fails to give relief, the pain becomes more constant, and the patient then hesitates to take food. Loss of weight then ensues. Anæmia follows from under-feeding, and while death from the ulcer itself is a rare cause, yet because of the downward course of health the patient is subject to any secondary disease which in his weakened state may easily prove fatal.

Prevention

Ulceration of the stomach is a preventable disease. Carefulness in supplying the simple needs of the body, strict attention to the nightly period of rest, the proper amount and kind of food, and the necessary protection from the extremes of weather, will do much in enabling the body to resist the inroads of bacteria. See that the stomach and the whole of the alimentary tract are kept clean and sweet. Have the bowels act at least once a day. Remember there is a difference between the action of the bowels and a simple evacuation. Keep the mouth clean. Daily attention must be given to the gums and teeth. Keep them scrupulously free from germs. See your dentist if you have any decaying or suppurating teeth. Look well to all affections of the nose and pharynx, especially to the tonsils. Give immediate attention to so-called common colds. Do not let poisons or toxins of any kind enter the body either through the food, drink, or mouth. The

observance of a few personal, hygienic regulations of this nature guards the body against disease of any kind.

Treatment

If one is the subject of gastric ulcers, immediate treatment is necessary. decided change in the mode of living is the first principle of treatment. Rest for the stomach together with such foods as require the minimum of digestion and motor activity of the stomach are required. Perfect rest can only be secured in bed. In activity the stomach is not at rest. Milk is the best food to begin with, two ounces of warmed milk sipped every two hours. Small quantities at short intervals is the rule. Drink sips of water between meals. Potash or soda water unsweetened is preferable. The bowels should be moved daily with enema. This

treatment should be kept up for three weeks. After this period the daily allowance of food may be increased, and eggs may be introduced, one a day beat up in milk, then two a day, etc., till the patient can use six eggs a day. Then soft foods may be tried, finely divided and easy of digestion. No coarse particles of food of any kind should pass into the stomach. All fruits or fruit juices should be strictly prohibited. The acids tend to irritate the condition. Long intervals between food should be carefully avoided. Every effort should be made to keep down the Olive oil, two tablespoonfuls before meals, is good, so also cream. Use no butter. Avoid all alcoholic drinks. tea, or coffee. For some time after one should be extremely careful of the diet. If medical measures fail, the question of operation is seriously to be considered.

Spotted Fever

A. B. OLSEN, M.D., D.P.H.

CEREBRO-SPINAL fever, or cerebrospinal meningitis, or, as it is more commonly called, spotted fever, is a virulent inflammation of the covering membranes of the brain and spinal cord, which is caused by a specific micro-organism or germ, and is therefore infectious. As a rule, the disease is most frequently met with in winter and spring, although epidemics or isolated cases may occur at any time of the year. The inflammation begins with a rigour or chill, and the onset is both sudden and rapid, so that the victim attacked may become very ill indeed, or even die, in the course of a few hours. There is fever and excruciating pain in the head, neck, back, and extremities, and convulsions, delirium, stupor, or coma, develop speedily. Reddish spots or blotches are frequently seen scattered pretty well over the body, and these are fairly characteristic of the disease, although they are sometimes absent. It is these spots that account for the

popular name, spotted fever. The patient is usually extremely sensitive to light, noises of any kind, and also to touch. Very frequently the body takes a characteristic arched position so that the head and the lower limbs are thrown back and the neck and spine are arched forward. The death-rate varies according to the nature of the epidemic, some forms of the fever being particularly fatal, and runs from twenty to eighty per cent.

Prevention

Like most infectious diseases, cerebrospinal fever is, to a very large extent, if not entirely, preventable by strict attention to personal hygiene and public sanitation. In other words, carelessness with regard to drainage and disposal of garbage and manure, overcrowding and bad housing, lack of ventilation, and, in consequence, the breathing of foul air, a contaminated water supply, and, indeed, anything which savours of uncleanliness

may be looked upon as a predisposing cause in bringing on an attack of this so frequently fatal disease. Bad food, and particularly food which has been contaminated by flies, may also be a source of danger.

Professor G. Sims Woodhead, M.D., F.R.S., and Lieutenant-Colonel of the R.A.M.C. states his opinion as follows:—

"(1) That infective cerebro-spinal meningitis is a disease associated essentially with overcrowding and bad ventilation, and that bad ventilation rather than the mere overcrowding is the determining factor; (2) that it is no longer a gaol fever, in civilised countries at any rate, as our gaols are now as well ventilated as are most modern dwelling houses; (3) that it is a disease of the barracks and not of the open camp, though when weather is bad and tents are good it must be recognised that the conditions for its development, even under canvas, may not be wanting. Epidemic cerebro-spinal meningitis usually occurs in the early spring, when men, to escape the cold, shut out fresh air, when catarrh is rife, and when, especially after long-continued periods of wet and cold, the vital powers, if we may so term them, have been depressed, the activities and resisting powers of the organism generally lowered, and the protecting membrane of the upper part of the respiratory tract damaged locally."

Dr. Arthur Newsholme, Medical Officer of the Local Government Board, has advised the open-air life as one of the best means of preventing spotted fever, as well as other infectious diseases. The more we get out in the fresh air the less chance there is of breathing the close, foul air of more or less overcrowded, overheated, and ill-ventilated rooms. Leading the open-air life is also conducive to increased physical vigour and vitality, and therefore we become less and less susceptible to infections of any sort. But it is necessary to bear in mind that an open-air life in the daytime is not a sufficient antidote for closed windows and little or no ventilation at night. Good ventilation is absolutely essential to good health, and probably one of the best, if not the best, means of preventing epidemic meningitis. To secure plenty of fresh air at night time it is equally essential to provide ample covers for the bed so as to avoid a chill. Even the most enlightened man or woman will be tempted to shut out the fresh air at night if the cold interferes with sleep. Comfortable warmth is as necessary for sound sleep as fresh air, and improved ventilation will certainly mean more blankets, at least, in winter time.

Treatment

At the earliest manifestation of any of the symptoms of spotted fever, the patient should be strictly isolated in a quiet, well-ventilated, although darkened, room and put to bed at once. Quietness and restfulness are of the greatest importance for the patient, and when combined with skilful nursing and careful feeding give the patient the best chance for recovery. The diet should be light and fluid, and consist chiefly of milk or milk gruels, albumen water, barley or rice water, and similar preparations. There should be no delay in calling a physician.

It is a good practice to give a full soap enema (half a pint to a pint in the case or a child, and two or three pints for an adult) for the purpose of cleansing the bowels. It may also be necessary for the doctor to pass a catheter to empty the bladder.

Fomentations, hot packs, heating compresses, and turpentine stupes, are helpful in combating the intense pain, and may be applied freely. Frequently changed cold compresses, or even ice-bags or packs, may be applied to the head and spine under the direction of the attending physician. To relieve the fever, cool spongings, or neutral or tepid baths are useful. If the patient is very restless, a prolonged neutral bath for ten to thirty minutes, or even longer, will have soothing and quieting effects. Hot baths from 100° to 105° F. are also useful at times.

During convalescence, massage and various tonic baths and also electrical applications are most useful in restoring health and strength. A change for a week or a fortnight, or longer, to a health institution where such treatment can be obtained, as well as a nourishing and strengthening diet, will help to facilitate recovery. The greatest care must be taken to prevent complications such as pneumonia or endocarditis or middle ear disease. Various forms of paralysis are also liable to appear, as well as arthritis or inflammation of the joints. But it is often possible to prevent these complications by strict care and attention to the principles of treatment which we have laid down.

Sybil Wright's Railway Journey

E. E. Hatchell

"HERE, Miss, get in here!" shouted the porter to a young girl who was running up and down the platform looking for a seat in the overcrowded express to Shefford. The girl glanced at the carriage, the door of which the porter had opened, and drew back. "Oh, no!" she exclaimed, "It's a smoking carriage!"

"Can't help it, Miss!" replied the porter. "It's this or nothing! Quick! the train is off!" and he almost lifted her into the carriage and then slammed the door hastily, for the train was moving fast.

Sybil Wright was anything but pleased to find herself in an atmosphere heavy with tobacco smoke. She glanced down the carriage and saw to her dismay that every one of the five men who were her fellow-travellers was smoking. Her face betrayed her discomfort, but she made no remark. The men heard, of course, her protesting with the porter at his suggestion that she should occupy a seat in a smoking carriage, and some of them were amused at her apparent horror of tobacco. But evidently she was not the sort of girl to push herself into smoking carriages at every opportunity, as some ladies do, and they liked her all the better for it.

Presently the man sitting opposite to Sybil raised his cap and said: "Excuse me, Miss, but may I ask you if you really object very much to smoke? We are a party of chums going to a football match, and I am boss here, so I've only to say the word and all the pipes go out! If you dislike the smell, say so at once."

The other men laughed, and Sybil smiled as she said: "Oh, of course I dislike it, but after all, this is a smoking carriage, so you have a right to smoke

here. I am the interloper!"

"Yes, that's just it!" responded Percy Moore, "the boss." "You could not help yourself, I know, and that is the reason I am sorry for you. But why do you say 'of course' you dislike it? Some ladies profess to enjoy the smell of tobacco!"

"Do they really?" exclaimed Sybil.
"How extraordinary! I confess I prefer to breathe pure air—'God's glorious oxygen.'"

"Put out the pipes, chums!" sang out Percy Moore, and every young man good-

naturedly obeyed.

A distressed look crossed the girl's pretty face. "Oh, dear!" she exclaimed, "I am afraid you will all wish me at—at—Iericho!"

The men laughed. "No, Miss," said one of the group, Charlie Broughton by name, "we won't bear you any unkind feelings! But we have put out our pipes on this condition, that you answer this question straight—Do you see any harm in a chap smoking? We've got an hour's journey before us, and if we are not to smoke—by order of the boss!—we must do something, so we may as well talk, and if you have no objection, we would like to hear your candid opinion of smoking."

"Hear, hear!" exclaimed two or three voices.

"With pleasure!" replied Sybil, "but first may we have a bit of the window opened, please!"

"Certainly," said Percy, as he hastened

to comply with the request.

Sybil drew a long breath of the pure,

sweet air that quickly filled the carriage, and then turning to Charlie Broughton, she said with a bright smile: "You asked me if I saw any harm in smoking. Well, I am fully decided that if I were a young man I would not smoke because, first, smoking is a waste of money. I have read that we spend, as a nation, £25,000,-000 annually on smoking, and nothing to show for it! What a benefit to the country if that money had been spent in building public libraries or recreation rooms or workmen's cottages. And how much a young man could do with the money he spends on tobacco! How many books he could buy! What pleasant holiday trips he could enjoy on the Continent! How much he could do to improve himself, or to help on some grand, noble scheme for the upraising of the roughest and most neglected boys! Yes, I am bound to confess smoking is a terrible waste of money."

"Well, that's number one point!" said Percy Moore, "and there is some truth in it, I must own. Go on, Miss, please!"

"Well," continued the girl, "I have read a good deal on the subject, and I am certain that the best doctors are agreed that smoking does harm to the health. Tobacco contains nicotine, and the chemist will tell you that there is only one poison more deadly than nicotine in the whole pharmacopæia, and that is prussic acid. Everyone knows tobacco is bad for the heart, makes the blood poor and thin, and ruins the nerves. When athletes are training, they are not allowed to smoke, or only in strict moderation. If smoking does 'no harm,' why should this be the invariable rule in the athletic world? No, I am certain smoking injures the health."

"Point number two!" exclaimed Charlie Broughton. "I say, chaps, things are looking black for us! We shan't have a

leg to stand on soon!"

Everyone laughed, and the girl said: "Now I have given you two reasons why it is a mistake to be a smoker, and they are such mighty ones I should think, even though there were no other reasons—and

there are!—they would be sufficient to make me a non-smoker if I were a young man. But I don't want to have all the say. Might I ask you gentlemen your reasons for being smokers?"

"Now you have asked us something, Miss!" cried Bob Smith, a young fellow



with a good, honest face. "Well, I suppose I must confess I smoke because other fellows do!"

Again everyone laughed. "Thank you," said Sybil, "that's reason number one! And you?" she inquired, turning to the man who sat next to Bob—Joe Frost by name.

"Oh, I smoke to pass the time away," he replied, much to the amusement of all.

"Thank you!" said the girl, and then she went on to ask each young man in

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turn his reason for smoking. "Now," she continued, when the last reply had been given, "I will run through the five 'reasons' I have received in answer to my question, 'Why do you smoke?'

"First, 'because the other fellows do.' Now that does not seem to me to be a very sensible reason. Besides, some other fellows don't smoke—why not follow their example? No, I don't think that reply is worthy of a young man!"

"There, you are wiped out, Bob," cried

a voice. "Go on, Miss!"

"Secondly," continued Sybil, "someone says he smokes to pass the time
away. 'To pass the time away!' But
isn't time passing us very rapidly? and
once gone there is no getting it back.
Time! Why, that is the stuff of which
life is made! And is not life precious?
—every day of it! Oh, no, as intelligent
human beings whose lives are uncertain
and possibly short, we cannot afford to
let the time slip idly by. We must make
the most and best of every day of it, God
helping us!"

She spoke so earnestly that the young men were touched, and silence reigned in the carriage for a few moments. Then Sybil said: "Now for the third reply. 'I smoke,' says another, 'because I like it.' Tell me," she said, "is that again a worthy reason? No doubt the drunkard drinks his beer because he likes it! Are we to do a thing simply because we like it, however harmful it may be? No! I am afraid we can't allow that reply to

pass!"

There was another hearty laugh, then she said: "Let me see, what was the fourth reason given?"

"I said I smoked," cried a youth, Harry Hardick by name, "because I have got into the habit and can't break it off."

"Oh, yes," responded Sybil, "and I thought to myself as you made the reply, 'Does this young man know there is no such word as "can't" in the dictionary?' Did you ever hear these noble lines:—

"'So nigh is grandeur to our dust,
So near is God to man,
When duty whispers low, "thou must!"
The soul replies, "I can!""

"Isn't that splendid? But you say it is a habit you have got into? Well, habits can be broken, though I allow it is difficult. But, as the old Greeks said, 'All beautiful things are difficult.' And, after all, life is a matter of growth, or it is nothing at all! And growing means outgrowing. Outgrowing the old habits and putting on new and better ones. It is such a mistake to think we must do to-day what we did yesterday, however unwise were our actions of yesterday!

"Every day is a fresh beginning, Every morn is the world made new,

says the poet, and it is true. And with each new day we must be new creatures with new and better habits."

"There you are, Harry," cried Bob Smith, "the lady has knocked the bottom out of your argument, so you are settled up! Miss," he went on, turning with a bow to Sybil, "I declare you ought to be a lawyer! You've got an answer ready for all the chaps in turn, and all on the spur of the moment! It's wonderful!"

"Not a bit!" laughed Sybil. "You see—and you will, I hope, forgive the remark—your arguments in favour of smoking are so poor that it is very easy to refute them! I have not yet heard one sensible, substantial reason for smoking!"

Her frank outspokenness caused her fellow-travellers much amusement, and it was some time before she was able to continue speaking. Then she said: "There is just one reply more I have not yet examined, I think."

"Yes, Miss!" exclaimed a young man sitting in the farther corner of the carriage. "It's mine. I said I smoked because I see no harm in it. There, you can't say that's a bad reason, I'll be bound!"

"But are you sure you see' right?" inquired Sybil. "The blind man may see no danger as he gropes his way across a crowded thoroughfare, but does that ensure his safety? If medical men who have studied the human body say tobacco injures the blood, the nerves, the lungs, and the heart, does your not seeing 'any

harm in it' make it harmless? Again, even though smoking were a harmless habit, what is the good of it? I suppose there would be no actual 'harm' in my sitting still for hours daily, twiddling my thumbs; but what would be the good of it? Surely, 'what's the good in it?' is the nobler question to ask than 'what's the harm in it?' Don't you think so?"

Harry Bardick nudged his fellow-passenger and exclaimed, "You may as well own you are beaten, too, Sam! Your argument ain't no better than the rest. Hullo! here we are at Shefford. Who would have thought it? I say, chaps, we've got to thank the young lady for making the time pass away—yes, Miss, I must use the words!" he said with a merry look at Sybil—"so pleasantly. Gentlemen, I ask you to give three hearty cheers for the lady!"

The cheers were so readily and vigorously given that the passengers in the carriages on either side put their heads out of the windows to see what all the noise was about. Sybil Wright bowed to her fellow-passengers and said smilingly, "I have to thank you all for so kindly putting out your pipes for my sake; and for your patience in listening to my many words. I wish you good success at your football match, and—and—dare I say it?—I do hope you will, one and all, never light these pipes again! Good-morning!"

As she left the carriage and disappeared in the crowd on the platform, she heard the young footballers laugh merrily. But before she left, the "boss" had whispered to her as he opened the door for her, "Thank you for your words, Miss. I am sure they won't be lost on the fellows!"

And Sybil Wright thanked God in her heart for that hour spent in a third-class smoking carriage.

WHEN a cold in the nose and head is coming on rub the nose between the thumb and forefinger. This presses the blood to the mucous membrane and helps wonderfully in throwing off the cold. This of course must be done at the outset.

Dangers of Eating Fresh Bread

M. Boussingault has made a fresh loaf of bread the subject of minute investigation, and the results are interesting. New bread is so soft, clammy, flexible, and glutinous that by mastication it is with great difficulty reduced to smaller parts, and is less under the influence of the saliva and gastric juices. It consequently forms itself into hard balls by careless and hasty mastication and deglutition, becomes coated over with saliva and slime, and in this state enters the stomach. The gastric juice being unable to penetrate such hard masses, and being scarcely able so act even upon the surface of them, they frequently remain in the stomach unchanged, and, like foreign bodies, irritate and incommode it, inducing every species of suffering,—oppression of the stomach, pain in the chest, disturbed circulation of the blood, congestion and pain in the head, irritation of the brain, and inflammation, apoplectic attacks, cramp and delirium.

BAD FOR SMOKERS.—A careful record has been kept at Yale College with reference to the physical condition of non-smokers as compared with smokers. It has been found that the non-smokers are taller, heavier, and have considerable more lung capacity than the smokers. A recent graduating class in Amherst College presented a similar difference in favour of the non-smoker, who had gained in weight 24 per cent over the smoker and in height 37 per cent, and in chest girth 42 per cent, and also exceeded him in lung capacity.

THE importance of boiling water as a precaution against disease seems not to be a modern discovery. Travellers tell us that certain native tribes in Africa refuse to drink water "which has not been cooked," and historians tell us that Cyrus, when crossing the Choaspes, permitted his troops to drink water only after it had been boiled in silver bowls.



QUIET TALKS MOTHERS

When Baby Is a Year Old

EULALIA S. RICHARDS, L.R.C.P. & S., Edin,

Most babies receive good care during early infancy. Their very weakness and helplessness make a strong appeal to their parents. Even the poorest and most ignorant mother strives during the early weeks of her baby's life to give him every attention within her power so that he may have a fair start in life. And this is right, for the wee spark of life may so quickly go out in darkness if it be not sheltered and carefully guarded.

But when baby has passed safely through his first year, the care bestowed upon him is often visibly lessened. He is thought to have passed the danger period of early infancy and to have entered upon another period attended with less danger to life and health. It is just here that so many mothers err. The second year of a baby's life is one of grave importance, for during this year he should make great strides both in physical and mental development.

In order for a little child to progress uninterruptedly in his development, he must receive the same careful attention during the second year as during the first year of his life.

The question of proper feeding is still of the most vital importance, as are also those of cleanliness, clothing, ventilation, and sleep.

A child who is twelve months old should have trebled his birth-weight, and should have cut from four to six teeth. Under ordinary circumstances he should, by this time, be entirely weaned. As was explained in a recent article, it is a great injustice to both mother and child to continue breast-feeding for a longer period than twelve months, and in many cases it is necessary or advisable to wean the baby at the age of nine or ten months. If the child is weaned at this age, it is best not to resort to bottle-feeding. The nursing bottle is an article that at all times requires most scrupulous care, and for this reason it is best to replace the bottle with spoon-feeding at as early a date as possible.

Many parents believe that with the appearance of a baby's first teeth he may be allowed to eat almost anything and

everything that adults enjoy.

Not long since, the mother of a yearold baby came for advice because he so often suffered with wind, and was always fretful and restless. When asked about baby's diet, this mother replied, "Oh, baby has four teeth now, doctor, and he eats almost anything." When asked to say just what baby had eaten for his dinner that day, she mentioned potatoes, cabbage, and several other articles of diet wholly unfit for a baby's consumption. Another little baby was made quite ill by eating an egg fried hard. Such dietetic errors, if continued, are often attended with serious, and even fatal, results. The digestive organs of the young child are delicate and wholly unqualified to cope with foods difficult of digestion.

Milk, together with thoroughly-cooked cereals, must be accorded first place in the young child's diet. It is only in these foods that bone and tissue-forming elements are found in form and quantity suited to the child's needs.

Following, we give a suggestive diet list for a child from one to two years of age. We may say that milk in some form should constitute the chief part of each regular meal.

Baby's Diet List (one to two years of age)

Milk, whole or very slightly diluted with oatmeal, barley, or rice water.

Bread and milk boiled together.

All well-cooked gruels or thin porridges. Cornflour or arrowroot made with milk. Plain milk puddings, as rice, sago, tapioca.

Boiled or baked custard.

A lightly-boiled or poached egg with bits of bread broken in it.

Potato baked or mashed, with a little gravy, after eighteen months of age, not before.

Bread and butter, plain biscuits, rusks. Orange juice, freshly strained. To be given by itself and not in connection with a regular meal.

Baked apple; skin and core carefully

excluded.

Stewed prunes, if rubbed through a sieve to remove skins.

Honey, malt extract, etc.

Suggestive Menus for One Day

7 a.m. Oatmeal cooked to a jelly, with warm (scalded) milk. Bread and butter.

Prune pulp or baked apple.

10 a.m. A small glass of milk (warm) to be sipped slowly, or, if preferred, the freshly-strained juice of one or two sweet oranges.

1.30 p.m. A poached egg with bits of bread. Cornflour made with milk. Bread and butter and honey.

5 p.m. Bread and milk.

9 p.m. A glass of milk (warm).

This last meal is optional. Some babies demand it, others go to sleep after the five or six o'clock meal, and wish for nothing more till they wake next morning.

Some perfectly healthy and well-developed babies will take only three regular meals in the day with perhaps a fruit-juice feeding extra. The mother must study her own child and arrange a daily programme which best suits his requirements, then follow the schedule as closely as possible.

It will be noticed from the foregoing diet list that vegetables, with the exception of baked or mashed potato, should be excluded from baby's dietary. Also that fried foods, pastry, cakes (with the possible exception of plain sponge cake), raisins, salads, etc., have no place what-

ever in baby's menus.

The mother may find it hard to deny her baby food which he sees others eating, but usually a little firmness from the start will prevent difficulty. If necessary, baby may be given his simple meal just before the family eat. His hunger being satisfied, he will then amuse himself contentedly, leaving the mother free to enjoy her meal undisturbed.

Regularity in the carrying out of baby's daily programme is just as important with the year-old baby as with the young infant. A good plan is to follow the breakfast by the use of the nursery chair, and then a little later the bath, a little play or self-directed exercise, the second feed, and then the long forenoon sleep. If possible, baby should be out-of-doors for his day time sleeps. He will sleep longer, and be more refreshed if in the open air. Baby may go out for a little time in the afternoon, but at an early hour in the evening he should be tucked away in his own little bed for the night. An evening bath, particularly in the summer season, is conducive to sound sleep. Baby should be carefully screened from mosquitoes and flies while he is asleep, and as far as possible at all times.

Baby's summer wardrobe should be light and simple. However, there are many cool days even in summer, and on these days baby's abdomen and limbs should be warmly covered. Many babies suffer severely with diarrhœa during their

second summer. Insufficient clothing of the abdomen and legs, together with unsuitable food, is the most potent cause of this complaint. During the extremely hot days of summer, baby's food should be light and very simple, and he should be given an abundance of plain, boiled water to drink between his meals.

It is absolutely necessary to keep flies away from all of baby's food and drink.

The Awakening of Adolescence

WILLIAM A. McKEEVER, in "American Motherhood"
Professor and Head of Child Welfare in the University of Kansas

Social Companions for a Girl

AT the age of about twelve or thirteen the ordinary growing girl becomes very much interested in social affairs. If you will add together her interest in the work of the school, the household, and those of the commercial world, you will not thus equal the force of her instinctive desire for companionship among the young people of her age and class. It is especially difficult for parents to realise that young girls of the age named are intensely interested in things that seem very trivial and simple. It is even more difficult for ordinary parents to recognise the fundamental need of such girls for the light sociability which their hearts so fondly crave.

Types and Temperaments

Of course we must recognise that there is the same variety among girls of this adolescent age as is the case with other ages. A small majority of youthful girls incline naturally toward the character of a recluse. They are fond of being alone and are easily trained to find quiet companionship in books or other means of individual entertainment. But the recluse is never a serious problem for her parents.

The next type we may mention in passing is the exclusive social disposition; that is, the one who is fond of a very few close companions or chums, and has little or nothing to do with the passing crowd. After much observation of cases of this sort it is my belief that these fixed types are very hard to change. Very probably it will be best to assist the girl of exclusive social tendencies to find a chum or two,

and to do all possible to see that these are mutually helpful. It may be noted in passing that the exclusive young woman is inclined to be sensitive. She cannot endure the jests and personal remarks which tend to place her conspicuously before the attention of the members of the larger group. It will be found, also, that her self-chosen chum is one who seems to understand her sensitive nature, and who is careful never to cause her any serious social embarrassment.

I do not therefore believe that parents should make a serious effort to break up the persistent tendencies of a young daughter to select a very few close girl companions and to shut the common crowd out of her attentions. Probably we should be entirely satisfied if her exclusive companions themselves are all that could be desired.

It is my belief, however, that the girls of the high school age should not be permitted to form secret societies. It has been proved beyond question that such organisations are hurtful to the best interests of both home and school. The judgment of the members is entirely too immature, their experiences too meagre, for them to be capable of secretly managing their own social affairs. And this is just what they are always determined High school girls who become members of secret societies are on that account inclined toward playing false with the best teachings of their parents, and with the higher interests and meanings of home life and motherhood.

On the other hand, there is often much

good achieved by means of the organised club of young girls; provided there be someone of mature years who may act as a spiritual guide and social counsellor. It is fortunate for the parent of the adolescent daughter to have the latter attached to a club of young girls who unite for some serious purpose of altruism or self-improvement.

But the parent is warned against permitting this organised group of young people to think of themselves in any sense as belonging to a very much preferred class or a "smart set." The members will most likely need not a little counselling in regard to this very danger. It is a serious matter if jealousies grow up among those not members of this group. In so far as there are jealousies and ill-speaking in regard to such a group, then, society at large must suffer.

Perhaps the best social group to which the adolescent daughter may be attached is the so-called great common crowd. like the idea of "whosoever will." The ideal organisation here needed probably is one which places all of the girls of the same general age, or of the same community, on an equal social footing. For example, in a town of a few thousand people an ideal club for adolescent girls would provide for a chaperon or spiritual adviser, and it would admit to membership of equal terms with the others every girl of the age named within the community. The management would attempt to see that all the members of the group should be treated with the same consideration as to social advantages.

The Common Crowd

It is not enough for the mother to shut her eyes to conditions and allow her young daughter to come and go at will among the general crowd. "She is young and happy, so let her have a good time. Life will grow serious soon enough." Such was the careless remark of a mother whose daughter was running with questionable company, but who returned in seeming happiness and contentment.

Those who are acquainted with the

best systems of training will insist that the mother must know specifically where her daughter goes, with whom she keeps company, and in what social activities she participates. These are the real tests of character-forming experiences. It is not an easy matter to make sure that no one is poisoning the young girl's mind or sentiment, that she is not acquiring low and debasing standards for her conduct



LOOKING OUT ON LIFE

in the future. I do not know of any "perfectly good" young girls who are members of the so-called best families, but that these girls will rapidly deteriorate in their sentiment and morals if permitted to go and come at will and to seek their own social experiences without the aid of parents or chaperons. Mere youthfulness and lack of experience will most certainly tell adversely upon their character development.

There is grave danger that the girl of exclusive social tastes or the one who remains with the small, select group, will become narrow and one-sided in her outlook upon the world of people and affairs.

Indeed, one of the greatest problems of the wise parent during this formative period of the girl's life is to render a developing personality both sympathetic and democratic.

Let us assume that the reader is a mother who belongs to the so-called wellto-do class, and that she earnestly desires and carefully anticipates a happy and successful career for her daughter, now an adolescent. Is it not entirely satisfactory and pleasing, however, if her child be called upon to mingle with all classes in the public school? It is a splendid service for the young girl in view of the future usefulness of her life if she be called upon to study and recite with those who come from the factory districts as well as those who are growing up in richly-provided homes. Of course we should desire the presence of not a few other members who come from the other classes and conditions of society. mingle with a variety of personalities is, in itself, a valuable schooling.

The Best Social Affairs

Many anxious parents ask what specifically can be done to provide wholesome social activities for their adolescent girls. In general the answer is this: arrange for plain, simple gatherings of the group, large or small as conditions may warrant. Avoid as long as possible the idea of a brilliant "career" for the daughter. Keep out of her mind also the idea that she is especially attractive, that she must adorn herself in some striking or conspicuous manner, that she is the envy of those less attractive than herself, and that an unusual number of youths are "smitten" by her charms.

It is a most delightful situation, and promises great things for the future welfare of society for growing young girls to be kept innocent and unostentatious in their social activities. An informal gathering of congenial girls, with an improvised programme made up of such affairs as singing, performing on musical instruments, roasting marshmallows, etc.—such an occasion as this is indicative of

a wholesome and almost ideal social life.

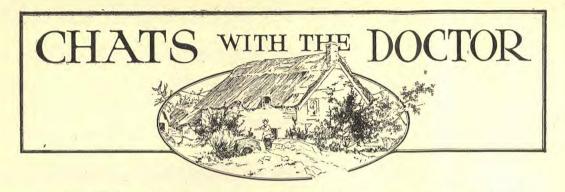
Parents everywhere should be on guard against the evil influences of the public dance, the cabaret, the cheap restaurant where feasts for the young are spread at night, and the coarse vaudeville and motion picture establishments. It has been shown beyond question that all these are contributory to the ruin of many young girls, and that they permanently lower the social and spiritual standards of many others.

The cabaret belongs to the class with the hotel and the low den. It is an integral part of that great under-world which submerges so many promising young people. It may be stated without challenge that the cabaret has blood and ruin for its prize, and that the money price of its existence is the amount paid to some unscrupulous public officials.

It is time for parents to open their eyes to the fact that many restaurants of fairly good repute are either consciously or unconsciously contributing to the downfall of girls. I have in mind those attractive-looking places where the young folks run at night after the theatre to enjoy a lunch, and for "such a good time, you know." I say that these and other such places where the young crowd assembles at night for gaiety, all help to accomplish the ruin of many girls. Keep your daughters away from them.

A CHILD'S FAVOURITE.—In a class of small children the teacher desired, by illustration, to define the word favourite. She said: "Well, children, if there was someone you loved more than anyone else in the world, and wished always to keep her with you, what would you say she was—what name would you give her?" A small boy held up his hand, and when told to answer, promptly replied, "My mother."

NOTHING will put more wrinkles in your face than worrying about things you cannot help.



NOTICE TO SUBSCRIBERS: All questions for this department must be addressed to the EDITOR, "LIFE & HEALTH," WARBURTON, VICTORIA, and not to Dr. W. H. James, who will treat correspondence only on usual conditions of private practice. Subscribers sending questions should invariably give their full name and address, not for publication, but in order that the Editor may reply by personal letter if he so desires. Because of this omission several questions have not been answered. To avoid disappointment subscribers will please refrain from requesting replies to questions by mail.

451. Barber's Rash

"E.W.S." asks for treatment of "Barber's Rash" of long standing.

Ans.—This is an extremely obstinate disease due to infection of the hair follicles of the face (and especially the skin) by parasitic organisms. Pustules form around each hair, the hair is ill-nourished and easily brakes off, and there is frequently a good deal of itching. The hairs must all be pulled out. This is better done after good, hot fomenting. After the crusts have been removed, apply the following ointment:—

Resorcin ½ dram Lanolini 1 ounce

Hot and cold compresses (alternately) should be applied to the face daily. Treatment should be continued for some months, even though the rash has disappeared. It is very liable to recur. It may be necessary to use a strength of ointment up to ten per cent.

Another valuable ointment consists of one grain of corrosive sublimate to one ounce of lanoline.

452. Nasal Catarrh

"Troubled" complains of the above. She has had influenza several times, and writes: "I have no cough, just a continual dropping of phlegm from the nasal passage into the throat, and a continual hawking and spitting. . . . I suffer with dreadful headaches in the temples, and

dream all night. . . . I am generally very constipated and have bleeding piles. My tonsils are generally red and inflamed."

Ans.—The general health must be attended to, and especially the bowels. The latter should be kept regular by dieting rather than by purgatives. If at all of a bilious nature, butter and fats generally should be used very sparingly. No foods should be used which have been prepared with fat of any kind and brought to a temperature higher than boiling point, as in frying or baking. much sugar or sweets, and abstain from tea, coffee, and cocoa. Fruit, either stewed or fresh, should be taken for breakfast and the evening meal. more easily digested vegetables, such as green peas, French beans, marrow, cauliflower, and spinach, should be taken with the midday meal. Avoid all rich foods. Eggs should be cooked at a temperature below boiling point. The meals should consist largely of rice, granose biscuits, toasted corn flakes, unsweetened biscuits, stale bread, crisp toast (buttered cold), and fruit. Cleanse the nose and throat twice daily with the following powder (teaspoonful to one-half pint of tepid water): Equal parts of bicarbonate of soda, borax, and common salt. Once daily spray nostrils and the back part of the throat behind the soft palate with a solution of sulphate of zinc, one level teaspoonful to a pint of water. Daval Co.'s

Throat and Nasal Spray, No. 43, is a very suitable one. Sleep in a well ventilated bedroom, and get as much outdoor exercise as possible.

The removal of the piles would probably

be helpful.

453. Flatulence, Indigestion, etc.

"E.K." writes: "I suffer very badly with flatulence, and get hardly any sleep at night, for belching and burning acid comes up my throat. . . I take wheatmeal bread for tea, but do not think it agrees with me. I do not think fruit agrees either, as I sometimes have a fruit tea. Grape juice suits me. My tongue is badly coated of a morning, and I take a drink of hot lemon water. Would you advise me to have vapour bath treatment, as my skin is full of little bits of grit? Would you advise olive oil at night to improve my weight, which is only seven stone six pounds?"

Ans.—From the symptoms we would judge that "E.K." is suffering from hypopepsia (deficient digestive secretions). We would suggest the following menu:—

BREAKFAST.—Granola and milk; gluten gruel; toasted corn flakes and milk; lightly-poached egg; stale white bread—no butter.

DINNER.—Lightly-poached or boiled egg; macaroni, or mock tripe (made from gluten biscuits); creamed rice; tapioca or sago; no vegetables; stale bread with a little unscalded cream.

TEA.—Benger's Food; groats or toasted corn flakes with a little unscalded cream. This should be a light meal.

Take a level teaspoonful of the following powder in a little hot water twenty minutes before meals:—

Bismuth carbonate, carbonate of magnesia, Howard's bicarbonate of soda. One ounce of each. Mix well.

We would advise a strict adherence to the above diet for some weeks. No fruit or vegetables should be taken. A few stewed prunes, however, may be taken for dinner or the evening meal. The general rules constantly advocated in this magazine should of course be followed. Half an hour's rest before and after meals. Thorough mastication of food. Thoroughly masticate with each meal some dry dextrinised food. Abstinence from tea, coffee, and cocoa. Very little to drink with meals.

MOCK TRIPE.—Place three or four gluten biscuits (cut in halves) in a sauce-pan with one pint of milk. Add a little finely-chopped onion and parsley. After boiling for half an hour, thicken with a little cold milk and flour mixed smoothly together. Add salt to taste. (Use a double saucepan, or the milk will burn.)

"New Reader" also complains of flatulent indigestion. He writes: "I have a sinking sensation in the stomach which seems to take all the energy out of me. Immediately I have breakfast this feeling leaves me, and I feel all right till about 11 a.m., when this sinking sensation comes over the stomach, and I get relief when dinner-time comes. I have had this for months."

Ans.—This sinking sensation is a frequent accompaniment of dyspepsia. It is very frequently associated with the taking of hot drinks, especially tea and coffee, and also of stimulating foods, such as animal foods and spices. "New Reader" should follow the directions given "E.K." As there is no constipation, milk and lightly-cooked eggs should agree well. He might add a little cauliflower or marrow to the diet given.

454. Palpitation and Feeling of Oppression

"J.A.P." complains of "palpitation, flatulence, and a feeling of oppression. At times I have an acid in the mouth, and belch a good deal of wind. Latterly I have developed pains down the back and in the pit of the stomach. I suffer from constipation, and four times lately have passed blood by rectum. Am fond of fruit. Can I eat apples and oranges? Are bush biscuits a good food? Do you.

advise O-T. as a winter's beverage? My occupation is very sedentary. Would you advise a more active life?"

Ans.—The stomach is closely connected with the heart both in regard to its position and nerve supply, consequently palpitation often accompanies indigestion. and when tobacco, tea, and coffee are indulged in. "J.A.P." should follow the general directions already given. A more active life would certainly agree with him much better. Some work daily in the garden would be beneficial. should sponge the body daily with cold water, and rub briskly with a rough towel, or take a cold shower bath. Drink freely of water between meals, especially on retiring or rising. Oranges may be partaken of between meals, but not apples. Apples can be taken after breakfast. Spinach, cauliflower, marrow, and perhaps a little well-cooked potato may be taken at meals. We would suggest as a menu:-

BREAKFAST.—Toasted corn flakes with a little unscalded cream; granola and dates. In cooking, add exactly double the quantity of boiling water to quantity of granola used. Do not stir in the least, and allow to stand in a warm place for five or ten minutes. The dates, cleaned and cut up, should be added before hot water. Granose biscuit or wholemeal bread and butter; stewed prunes; apples.

DINNER.—Same as recommended to "E.K.," except that the more easily-digested vegetables should be taken. Nuttolene, nut meat lightly fried in a little egg batter, would make an agreeable change.

TEA.—Granose biscuits; wholemeal bread; raw cream; fruit. Make the meal a very light one.

We are not acquainted with bush biscuits. We do not recommend hot, irritating drinks; they tend to produce an unhealthy, catarrhal condition. A little orange juice, juice from dried apricots, or grape juice and water, would make a good beverage. In winter these can be taken hot if desired.

455. Bad Breath and Furred Tongue

"Farmer's Wife" complains of the above. She sleeps with her mouth open, and has dry tongue in the morning. Has some obstruction in the nose.

Ans.—Bad breath and furred tongue are an evidence of indigestion. This is especially the case when flesh foods and tea are taken. Follow directions given to "J.A.P.," etc., and attend to nose as directed under "Nasal Catarrh."

456. Burning in Throat, etc.

"Mrs. J. W." complains of the above. Her motions are "like a thin skin, but without blood. There is also a burning in the front passage."

Ans.—A personal examination is necessary in this case. There may be some obstruction to bowels, as piles. Follow directions given under indigestion. Use a douche for front passage daily. A dessertspoonful of Condy's fluid to quart of water will be about the right strength. Crystals of permanganate of potash will serve the same purpose.

457. Paralysis

"F.F." writes: "My wife has had three paralytic strokes. . . . She has recovered sufficiently to be able to do a lot of things, such as dusting, etc. She can hold a crochet needle. She can walk about, but wets her underclothing. . . . What advice would you give?"

Ans.—There is not much home treatment that could be recommended in this case. A sponging of lower part of spine with cold water and thorough rubbing and massage every day would do good. Sanitarium treatment for a month would be helpful. The difficulty with the water could be made more bearable by wearing an apparatus for catching the water. Write to one of the surgical instrument makers in Melbourne about the matter.

458. Nervous Headache

"Mrs. C. N." writes: "I am not strong, and suffer with nervous headaches. I

have had three children in six and a half years. My head is very bad. I am very distressed and miserable, and cannot stand any worry or excitement. I am worse at night. I am pregnant, and at these times suffer much with indigestion. I am regular at stool every day. I do not eat much meat, but light diet. . . . I do not take tea or coffee."

Ans.—General weakness is undoubtedly a cause of nervous headache. Tea drinking relieves for a short time, but makes the headache return more frequently and more severely. Very often there is some irregularity about the eyes. glasses will relieve quite a number of nervous headaches. Often the cause is due to some womb or ovarian trouble. "C.N." needs plenty of sleep, rest, and good, nourishing food. Get as much fresh air as possible both by night and day. Sponge the body daily with cold water, or with a short hot sponge followed by a cold sponge. Take freely of milk, lightly-cooked or raw eggs, creamed rice, malted nuts, and other nourishing food. At night, three times a week, take a hot Sit in the hot water (104° F.) for fifteen minutes. The feet should be placed at the same time in water at a higher temperature. Keep the shoulders covered well with a blanket during the bath. Sponge the body with cold or tepid water, and get to bed at once.

459. Flatulence in Baby

"E.M." writes for directions for feeding her child aged seven weeks. She can only part feed it in the breast. It suffers from "wind." She asks if peppermint water and a half teaspoonful of castor oil can be given.

Ans.—Give the child as much breast milk as possible. Add Mellins' Food, barley water or lime water, milk sugar, and unscalded cream to cow's milk as directed in editorial on "Diarrheea" in this issue. Dil water (aqua anethi) is better than peppermint water. Do not give castor oil unless necessary to open the bowels.

460. Ear Trouble

"Ear," Narrabri, writes: "I suffer from proud flesh on ear-drum—an after effect of measles. There is a discharge from the ear. I am deaf on that side, but can hear a watch tick if held close to the ear."

Ans.—This is a case for a specialist. Treatment given by unskilled hands is likely to do harm. The ear should be syringed with equal parts of peroxide of hydrogen and warm water and thoroughly dried with cotton wool (absorbent). It is important to dry the ear thoroughly after syringing, otherwise injury may result to drum of the ear.

461. Vitamines and Granose Biscuits

"Vitamines" writes: "I am writing to ascertain if the important "vitamines" are preserved and contained in granose biscuits. According to an article in LIFE AND HEALTH of Aug.-Sept., 1915, it seems probable that the heating of the grain can destroy the vitamine qualities. I should like advice concerning diet, exercise, etc. A doctor informs me that through thinness my organs are liable to drop somewhat. I have a good deal of dyspeptic trouble between meals, experiencing a gurgling and movement of the abdomen. After lifting I get a "catch" on the right side of the abdomen, and have often a rumbling noise in that part."

Ans.—The vitamines are contained in the outer layers of the wheat; these are retained in the granose biscuit. Many of the organic salts necessary for our health are found in granose biscuits, and which are absent in the ordinary white bread. If the biscuits are burnt the vitamines are to a large extent destroyed, but under ordinary conditions the increased digestibility of the biscuits over ordinary bread more than makes up for any slight lessening of vitamines due to the high temperature at which the biscuits are manufac-We would advise "Vitamines" to read comments on "Indigestion" in this issue. The pain in the right side is

due most probably to intestinal flatulence. The best exercise is light gardening, walking, rowing, or chopping wood. A good cold sponge after sweating will increase the beneficial effect.

462. Celluloid Collars

"H.L.H." asks: "Is it harmful to wear celluloid collars? Will they cause consumption or any trouble of the throat?"

Ans.—We do not believe that any injurious effects whatever can follow the wearing of celluloid collars.

463. Swollen Leg After Confinement

"Concretion" writes: "When my only child was born eight years ago, I had a very bad leg (clot of blood I believe it was). I was lame for a few months. Since then it is often very painful, and is much larger than the other leg. What would you advise?"

Ans.—The general health must be attended to. The leg should be regularly massaged. Hot and cold applications (alternately) should be given before massage. Recovery largely depends on the building up of the general health. Moderate exercise is beneficial, but standing should be avoided as much as possible. If anæmic, iron in some form should be taken. The citrate of iron and ammonia is a good preparation. About as much as will go on a sixpence should be taken immediately after meals.

464. Shingles, and Time of Dinner

"Boonah" asks for cause of shingles, and writes, "Which is the most beneficial to one's system, a midday dinner or an evening dinner? I always have a cup of cocoa or so forth at 10.30 a.m., then I feel tip-top as regards my faculties till 1.30 p.m., when I have a hot dinner, then I seem to get a wee bit tired till 3 p.m., and from that on till 5 o'clock deadly tired. I suffer from nerves awfully, though I sleep from ten to twelve hours, eat well, bowels like a clock."

Ans.—Shingles is a disease of nervous origin, the eruption follows the course of the nerves running from the spine between the ribs. We believe the tired feeling in "Boonah" is due to waste products circulating in the blood, and therefore through the brain and nervous system. The cocoa at 10.30 a.m. is a mistake. The hot drink increases the circulation temporally, and thus gives some temporary relief. We would advise a light breakfast, followed by a fair amount of fresh fruit. Avoid butter and fats as much as The dinner at the middle of possible. the day should not consist of more than two courses. Avoid soups and bulky Do not drink with meals, especifoods. ally tea, coffee, or cocoa. The best vegetables for midday meal are green peas, French beans, cauliflower, marrow, and a little well-cooked potato. Avoid all fried foods and foods cooked with fat at a higher temperature than boiling point. The evening meal should be light, consisting of cereal foods and fruit. Heavy and rich meals will increase the tired feeling. Exercise that produces gentle perspiration will be beneficial. Exercise that is enjoyed is far preferable to monotonous movements that are a burden to the mind.

465. Varicose Veins

"J.D.B." asks for advice in reference to the above.

Ans.—The bowels should be kept regular. As much rest in the horizontal position as possible should be taken. An elastic stocking or well-applied bandage should be used during the day. Standing is worse than walking. The best cure treatment undoubtedly is an operation. The veins are tied and cut, and thus obliterated. The deeper veins take on the work of those obliterated. The results are very satisfactory as a rule.

466. Hydatids in Lungs

"Inquirer" writes: "Can you advise me how to treat hydatids on the lung after they have burst? The patient spits phlegm sometimes mixed with blood, and at times pure blood. He has been doing this for more than two years."

Ans.—Although the case is not consumptive, it should be treated in exactly the same manner, except for the fact that the disease is not contagious. There must be abundance of fresh air night and Draughts, of course, must be day. Milk, lightly-cooked or raw avoided. eggs, and good, nourishing diet are essential. A dry, mountainous climate is advisable: damp localities of low elevation and city life should be avoided. body should not have more clothing than is really necessary, but see that the feet are kept warm. Heavy evening meals and suppers should be avoided. Sponge the body daily with cold water. There is no specific treatment. Drugs are useless.

467. Chronic Diarrhoea

"Mrs. W.R." asks for treatment of the above, which has existed for five years.

Ans.—The conditions of the individual vary so much in these cases, especially in regard to the digestion, that it is difficult to give satisfactory advice. The food should be of the most digestible nature, and should consist largely of milk, eggs, gluten, rice, and stale white bread. Avoid vegetables and fruit, also tea, coffee, and everything that hinders the digestion in any way. Food that is thoroughly digested has less irritant action on the intestine. Tobacco, pepper, and spices of all kinds should not be used.

468. Gall Stones

"Mrs. J.C.B." writes: "A few years ago I began to get giddiness and a pain in my right side and between the shoulders, and dark circles and puffiness under the eyes; the urine is a dark brick colour at times. I get violent pains which begin in the right side of the stomach and go round to just below the navel. I vomit a very bitter substance; the pain lasts from one to three hours.

. . I have been using the Sanitarium Health Foods, and although I was pale

and weak three months ago I have got stronger and have recovered somewhat, but I still have the dizziness. I take a teaspoonful of olive oil after each meal and a dessertspoonful at bedtime. Would you advise the free use of lemons? When I am sitting in a chair I am not able to lean back for a pain below the shoulder. The doctor told me not to use jam. Would honey be good for me?"

Ans.—The symptoms decidedly point to gall stones. Tablespoonful of olive oil could be taken three or four times a day as long as it does not act too freely on the bowels and does not upset digestion. We see no need for frequent doses of lemon water—one or two in the day can do no harm. Jam and sweets in excess interfere with digestion, and would increase liability to pain. Honey is a pure sweet, and often, but not always, agrees well. There is really no cure for gall stones apart from an operation. Operations in case of gall stones are generally very satisfactory.

469. Flushed Face

"A.M.G." writes: "After eating my meals I get very flushed in the face. What is the cause? I am a healthylocking girl, and never have any sickness."

Ans.—The symptom is nervous, and depends on the digestion of food. Eat food slowly, do not drink with meals, and observe rules given under "Indigestion."

470. Delayed Teething

"Mrs. L.C.W." writes: "I have a baby girl just twelve months. She has not cut any teeth, and has not been altogether weaned. She is in perfect health. Would you recommend granose biscuits and milk?"

Ans.—We would advise that the child be weaned. The mother's milk after twelve months is not suitable for the child. Nothing better could be given than granose biscuits and milk; these contain all the lime salts necessary for the development of the teeth, bones, and tissues of the body. The teeth will probably show within a couple of months.

471. Angina Pectoris

"Mrs. J.J." writes that her husband suffers from the above and wants advice.

Ans.—This disease is accompanied by great pain in the region of the heart, extending down the left arm to the tips of the fingers. There is a feeling of suffocation, and the face is very pale. It is usually accompanied by some form of heart disease, but not necessarily.

The diet and general health need very careful attention. Capsules of nitrite of amyl should be broken in a small handkerchief and inhaled during the attack. These give relief to the great pain. All constrictions about the neck must be removed, and the patient supported in the position which gives him most relief. Keep the extremities warm. Electricity has been followed by very satisfactory Use the continuous current, beginning with fifteen Leclanche elements. The negative pole of the battery should be placed on the nape of the neck, and the positive pole on the lower half of the breast bone. Apply twice daily for ten minutes. Up to twenty-five of Leclanche elements may be used.

472. Paralysis Agitans-Shaking Palsy

"Correspondent" asks for treatment of the above.

Ans.—This trouble shows itself in the form of continual trembling in some parts of the body, usually the limbs. In sleep the trembling ceases. When it is confined to one part it is amenable to treatment, and may be cured, but if it extends to the whole body, only palliative results can be expected. All irritants should be avoided, such as alcohol, tea, and red meats. As much rest as possible is advisable. Hot and cold applications to spine,—sponging, shower, or douching, galvanism to spine and daily hot applications to the parts affected are the best procedures. Outdoor life in the country and mountainous districts is beneficial.

"Anxious is a sufferer from paralysis agitans, and finds he cannot retain his water, and asks for advice.

Ans.—Use freely hot and cold applications to lower part of spine and to genital organs. Take internally ten grains of boric acid three times a day.

473. Insomnia

"Mrs. H.O." asks for advice on above trouble.

Ans.—The evening meal should be very light. Avoid altogether tea and coffee. A bath at 95° or 97° F. should be given in a fairly warm, quiet room for half an hour or longer. Stretch a sheet across the top of the bath to prevent draughts. Lower the temperature two or three degrees at the close of the bath. Patient should be thoroughly warm, especially at the feet, before taking the bath. A neutral pack is also excellent. Wrap the body, from neck to feet, in a wet sheet. Wrap around this woollen blankets, but do not allow patient to become more than comfortably warm. This can be regulated by the thickness of blanket covering. This pack is excellent where there is excitement. Do not attempt to sleep in the day, and take as much exercise as your strength will allow. Sometimes three good fomentations to spine just before bedtime will prove effective. This may be followed by a light rub to spine alone or to the body generally. Often a very hot foot and leg bath for fifteen minutes with cold to head will produce sleep. The moist abdominal girdle is an excellent adjunct to the above treatments. It should be worn all night. If properly applied, it should be quite warm and comfortable. Apply four thicknesses of moist cheese cloth to the whole of the abdomen, and cover well with wadding or two or three thicknesses of flannel. A course of treatment at a sanitarium is very advisable in these cases.

474. Tuberculosis

"Anxious" writes: "A friend has a little boy aged three years suffering from tuberculosis. On different parts of the body are hard, purplish lumps. These

soften, and the doctor lances them. These lumps have appeared on the face, on the lip, on the hand, and now on the thigh. They leave a disfiguring scar. The child is otherwise healthy."

Ans.—This is a form of consumption. The child needs abundance of good, nourishing food, such as milk, eggs, brown bread, rice, etc. Open-air treatment is advisable. The bedroom should be thoroughly ventilated, and the windows opened to the full, but avoid draughts. The weekly hypodermic injections of tuberculin for three months or more undoubtedly do good in some cases, but this is a matter for the decision of the physician.

475. Sugar in Urine, Piles, etc.

"Catarrh" asks for test of sugar in urine.

Ans.—The general test is to add to a test tube about half a teaspoonful each of Fehlings solution (No. 1 and No. 2). Add a little of the urine and boil. If sugar is present a decidedly rusty-coloured precipitate takes the place of the blue Treatment for "piles" has solution. been given in this issue of "Chats." The plugging in the ears is probably due to wax. Syringe daily with warm water to which a little baking soda has been added (a teaspoonful to half a pint). Warm oil in the ear at night will soften the wax. If there is a continual discharge from nose or throat, follow advice given in earlier part of Chats for "Catarrh."

476. Swelling of the Legs

"Mrs. S. G." writes: "I have suffered for years with neuritis. The last few weeks my feet are very much swollen; the left foot is very sore. When it gets hot it swells more, and is shiny and very painful. I use the electric battery on them (continuous current). How long would you advise keeping it on at a time?"

Ans.—We do not think the battery will do much good in this case. Hot and cold applications with gentle upward rub-

bing would be better. Keep the leg in a horizontal position as much as possible. The heart, kidneys, and liver need special examination, as disease in either of these organs would cause a swelling of the legs.

477. Constipation

"Miss N.W." asks for treatment of the above.

Ans.—Constipation is often a result of indigestion, although there may be no definite symptoms of such. Sometimes it is a result of poor, general health or want of exercise. At other times, insufficient fluid is taken during the day. All these matters should be attended to. Exercise which brings the abdominal muscles into action is especially good. Gardening and rowing are excellent. Plain water or water and fruit juice should be taken frequently during the day, and especially on rising and retiring. Avoid boiled milk and hard-cooked eggs. Take fresh fruit at breakfast and evening meal, and vegetables with midday meal. Avoid tea and coffee, for the tannin contained in these harmful beverages has a constipating effect. Wholemeal bread, figs, prunes, and oatmeal have a laxative action. Sponge the body daily with cold water; the abdomen should have a special application. If a warm enema and soap is used to open the bowels, a small injection of cold water (half a pint) should be injected after the bowels have been opened, and this should be retained. A regular time (just after breakfast) should be scrupulously adhered to for going to stool. This is very important. Some people can get a good action of bowels from a small dose of Epsom salts before breakfast. If small doses (teaspoonful) are not efficacious, do not use large doses. Liquid cascara sagrada in from ten to twenty drops three times a day is one of the best laxatives. It is, however, much better to do without drugs.

478. Sleeping in Tent and Deposit in Urine

"Inquirer" asks if sleeping in a tent is good where there has been kidney trouble, and what can be done to prevent sand-like particles appearing in the urine? She states that a few years ago she had a large phosphatic stone taken out of the kidney.

Ans.— We believe a good airy bedroom, with a fire-place and plenty of light, is preferable to an uncomfortable, draughty

tent, especially in winter.

The deposit in the urine is phosphatic. This may result from dyspepsia, severe mental work, insomnia, or nerve trouble. The general health must be attended to, and especially the digestion. Dilute nitro-muriatic acid in doses of twelve drops in water after meals often proves beneficial. Good water, or water and fruit juice, should be partaken of freely during the day, but not to produce discomfort.

479. Paralysis After Diphtheria

"R.W.B."—Three years ago "R.W.B." had diphtheria, followed by paralysis of throat and other muscles. She was at times unable to speak or swallow. Now her hands and arms "go to sleep," and she has to get someone to "move them until they wake up." This waking up is accompanied by very great pain. The arms will get numb and tingling when knitting or crocheting.

Ans.—The general health must be attended to. Keep out in the open air as much as possible. Every day the whole body should be sponged with cold water and thoroughly dried with a rough towel. Very hot water applications to the spine followed by cold are helpful. Apply very hot and then cold water, or use fomentations to spine, and then cold compresses. Several hot and cold applications should be made at the one sitting. Electricity combined with massage is advisable. The galvanic current would suit this case. One pole of the battery should be placed on the spine and the other moved about the painful parts. This should be done for ten minutes once daily. This case should have a month's sanitarium treatment. Diphtheritic paralysis as a rule is very amenable to treatment.

480. Exercise After Brain Work

"Yampo" asks if football, hockey, and gymnastic exercise are good after nine and a half to eleven hours' brain work daily, or would some lighter exercise be advisable?

Ans.—If the exercise is followed by fatigue lasting more than one hour, we would advise something of a lighter nature, such as gardening, walking, or wood chopping. Tiredness on rising after exercise is an evidence that the exercise is too severe. Exercise does more good when followed by a gentle perspiration.

481. Burning Feet, Indigestion, Constipation, and Backache

"Mother" asks for remedy for the above.

Ans.—Very probably these symptoms are due to the one and the same cause. We would advise "Mother" to read what has already been given on "Indigestion" and "Constipation." Belladonna plasters would do no good to the back. Try the juice of half a medium lemon in water after each meal, and the bathing of the feet in tepid water for fully twenty minutes before bedtime.

"Mother" also writes: "My little girl aged six years often complains of a pain under the left breast when she is in the midst of her meal. . . . She gets nasty sores about the mouth."

Ans.—Avoid sloppy, bulky foods, and give with each meal a granose biscuit to be eaten dry. Bathe the sores twice daily with hot boracic water (teaspoonful to half a pint), and apply an ointment of zinc and vaseline (equal parts).

482. Noises in the Head

"H.M." complains of the above with giddiness and vomiting at times. These noises make him deaf and miserable. He has had the noises for about seventeen months, also palpitation of heart. A specialist told him it was "inner ear trouble."

Ans.—We think the specialist is most probably right. Our correspondent lives

in the back blocks. We would certainly advise him to come to town and be attended to regularly by skilled hands for some weeks, either at an eye or ear hospital or by a specialist in these troubles.

483. Mucous Colitis

"Verax" writes: "A sufferer who has been unsuccessfully treated by leading specialists for mucous membranous colitis desires information which would lead

to a permanent cure."

Ans.-We would advise sanitarium treatment for one month. Instructions cannot be properly carried out in the home without skilled attention. Patients are generally of a nervous temperament and pass quantities of tenacious mucus, which is slimy and gelatinous or in strings or strips; sometimes a regular tubular membrane is passed. If there is constipation, and this is usually the case, the foods already mentioned in "Chats" should be given. At night, a couple of tablespoonfuls or more of olive oil should be injected into the bowel through a tube at least six inches long. In the morning inject about a pint of saline solution (one tablespoonful of salt to two quarts of warm water). After thoroughly irrigating with this solution, inject a solution of tannic acid and boric acid (one teaspoonful of each in pint of cold water). Retain for half an hour. All the injections should be given with the buttocks elevated and through long, indiarubber tubing.

484. How to Gain Weight

"J.N." only weighs nine and a half stone, and is 5 ft. 10 in. high. He wishes to know how to put on weight. Sometimes weight is gained by taking a smaller amount of food. This is true only in cases of indigestion due to overfeeding. The best foods for increasing weight are milk, lightly-cooked eggs, rice, potatoes, and stale bread. The health foods, granola, nut meat, nuttolene, malted nuts, are very helpful. Fresh air, gentle exercise, plenty of sleep, and cold sponging are helpful.

485. Syphilis

"A.H." asks for a friend: (1) How can he test the blood for the syphilitic poison? (2) Name all the glycero-phosphates as a friend of his requires a mixture containing them all. (3) What are the chemical elements contained in brain cells?

Ans.—The testing of the blood for syphilis can only be carried out by a specialist with special appliances. It is absurd to attempt to build up the brain tissues by chemicals, even though they are the exact chemical composition of the deficient structures. Chemical salts are only built up into living tissue when taken in some organic form, either as built up in the vegetable or the animal kingdoms. The plants take up these chemicals from air, soil, and water, and animals and man obtain them after they have thus been vitalised in the fruit and vegetables of the vegetable kingdom. "A.H." will find all the salts necessary for brain tissue in whole cereal foods. We would recommend fruit, grains, and nuts, and abstinence from flesh foods. Milk and eggs are rich in these salts. Granose biscuits, bread made from wholemeal flour, granola, malted nuts, all contain these salts in abundance and in the best forms for the human system.

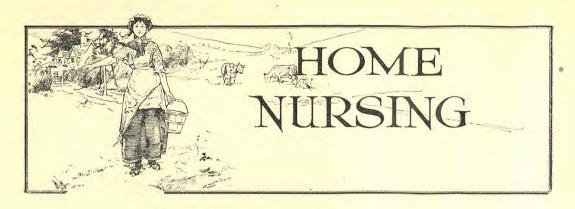
486. Boils

"E.D." asks for treatment of the above. She finds it difficult to get the cores from the boils.

Ans.—We would advise frequent fomentations. They must be very hot and frequently repeated. The best ointment is resin ointment; if it is hard, rub up with a little vaseline. We have found benefit from sulphide of calcium pills one grain. One should be taken four times a day for two or three weeks.

487. Letters Unanswered

"Mrs. J.G." and "J.M." require thorough medical examination. Sufficient information cannot be given by letter to guide in a successful line of treatment.



First Aid in the Home

EULALIA S. RICHARDS, L.R.C.P. & S., EDIN.

OF all injuries likely to occur in the home, probably burns are most common and most painful as well. Often serious burns may be prevented by the exercise of care and forethought. If there are young children in the home, always guard an open fire with a fire screen. In preparing a bath for a child, always pour cold water into the tub first, and then add the required quantity of hot water. Do not leave boiling saucepans on the stove with the handles projecting out into the rcom. A child may so easily catch hold of the handle and upset the boiling contents upon himself. Do not leave matches lying about in places accessible to the children. Teach children the danger of Let them light a candle or set a match to a laid fire under supervision, but teach them never to play with matches or light a fire when alone. ever, in spite of all care, accidents will Much depends upon prompt happen. and correct treatment of a burn. If the burn is but slight and the skin unbroken, there is no dressing better than picric Have a bottle of the saturated solution of picric acid in the medicine cupboard. Pour a few drops of the acid into a saucer and add an equal amount of water.

Now moisten a piece of muslin or linen with this solution and lay it over the burn, holding it in place with a few turns of bandage lightly applied. Picric acid very quickly eases the pain and hastens

healing. While this acid is not caustic in its action, poisoning might occur through absorption from the skin if it be applied to a large area with broken skin. In the case of a severe burn, if the part be covered, the clothing must be removed very gently to prevent doing further damage to the tissues. A doctor should be sent for, but in the meantime the part may be covered with strips of clean linen wrung from olive or salad oil, or from the well-known caron oil, which consists of an equal mixture of linseed oil and lime water. After applying the oil, cover well with cotton wool or clean, dry cloths, and hold these coverings in place with a band-It is the contact of air with the burned surface which causes so much pain. If there is no oil at hand, clean muslin or linen wrung from boiled water containing a teaspoonful of table salt may be wrapped gently round the part, and held in place with a bandage. If there are blisters on the burned surface great care must be taken not to rupture or break them. A needle which has been sterilised by passing through the flame of a match may be carefully, inserted under the edge of the blisters, to draw off the In case of a large or severe burn, the patient may suffer from shock. Hot bottles should then be applied to the feet and legs, and a hot drink should be given.

Should a person's clothing catch fire, he should lie down and roll himself in a rug or blanket. To run out into the open air is the worst possible thing to do.

If a person is burned by a corrosive acid, bathe the part with a weak solution of washing soda, baking soda, or magnesia before applying the dressing. If the burn is caused by a corrosive alkali, bathe the part with dilute vinegar or lemon juice, then apply a soothing dressing.

Fractured Bone

Another serious accident that sometimes occurs is the fracture of a bone. fracture may usually be recognised by great pain, swelling, deformity, abnormal mobility, loss of power, and sometimes a grating sound between the ends of fractured bone. All fractures should be treated by a doctor, but if there is any delay in the doctor's arrival, or if it be necessary to move the patient from one place to another, the broken limb must be protected from further injury by the application of a temporary splint or sup-An umbrella, a walking stick, a broom handle, or a piece of board, may be used for a fracture of a leg. The splint must be long enough to include the joints immediately above and below the fracture. The fractured limb must be gently but firmly straightened; then the splint applied to it by means of bandages, one of which should be fastened around the limb above the fracture and the other below.

If a joint is sprained, as in the case of a sprained ankle, wrist, or shoulder, apply a cold-water bandage firmly around the part, and rest the limb. Hot fomentations may be employed occasionally for the relief of pain and swelling. Gentle rubbing of the part is of great benefit after the first severe symptoms have abated.

Foreign Body in the Eye

A cinder or particle of grit in the eye is most distressing. First draw down the lower lid; when if the foreign body is visible, it may be easily removed with the corner of a clean handkerchief. But very frequently the annoying particle is lodged beneath the upper eyelid. If this seems to be the case, draw the upper

eyelid forward, push up the lower lid beneath it, and then let go. The lower eyelashes brush the inner surface of the upper lid and may dislodge the foreign body. If several attempts fail, the upper eyelid may easily be turned back. Have the patient facing the light. Stand behind him with his head against your chest, having ready a small rod, as a bodkin or match. Now grasp the lashes of the upper lid firmly and draw the lid forward, at the same time place the small rod along the upper lid about half-aninch from the edge. Now turn the lid back over the rod, and look carefully for the offending particle. It is usually easily removed with the corner of a handkerchief.

If a piece of steel becomes embedded in the eyeball, drop a little castor or olive oil between the lids, close the eye, apply a pad of cotton wool over the eye, and keep it in place by a bandage tied tightly enough to steady the eyeball, then take the patient to a doctor.

If a foreign body enters the passage leading to the inner ear, make no attempt to remove it if the services of a doctor may be obtained. There is very great danger of injuring the delicate structures of the inner ear, so never pass a probe or other instrument into the ear. Should an insect enter the ear passage, pour a few drops of olive oil into the ear, when the insect will float upward and may then be removed.

Heat or Sunstroke

A person may suffer from heat stroke though not exposed to the direct rays of the sun. The usual symptoms are: Great thirst, a dry, burning skin, very high temperature, rapid pulse, difficult breathing; and later, insensibility.

A person so suffering must be at once removed to the coolest place available. Unfasten all tight clothing, and strip the patient to the waist. Now apply iced compresses or the coolest water obtainable to the face, head, neck, and spine, and continue this treatment until the condition is normal, or nearly so. Water

may be given to drink if the patient is conscious.

Infantile Convulsions

Convulsions often mark the beginning of a serious illness in infancy, or they may result from the eating of some particularly indigestible food.

If a convulsion is threatening, the child may turn pale, especially round the lips, and there will likely be twitchings of the muscles of the face and limbs. Prepare a warm bath at once. The temperature of the water should be about 100° F., or just comfortably warm, as tested by the bare elbow. Undress the child and place him in a warm bath applying a cold compress to the head and also bathing the face with cold water. After baby has been in the bath a few moments, remove him, dry gently, and wrap in a warm, dry blanket. Give a dose of castor oil, and for its immediate effect inject a small amount of warm water into the bowel. and secure a free motion if possible.

Fainting, Epileptic Fits

If a person becomes colourless and is apparently about to faint, lay her down at once with the head as low or lower than the body. Loosen the clothing, particularly the corsets and waistbands. Open the doors and windows, and give the patient smelling salts if handy. If a person falls in an epileptic fit there is nothing to do other than to loosen the clothing, and place a clothes' peg, a pencil, a spoon, or a knotted handkerchief between the teeth to prevent the tongue from being injured by the teeth.

Give Me "Castor Oil"

"IF I had a household of small children to take care of, and could have only one remedy to use for them under all conditions of health and sickness, give me castor oil."

The doctor who said this knew that the majority of children's disorders arise from some form of indigestion. Castor oil will remove the offending matter and is harmless for boy or baby. Given in proper dose, it is very effective. It is not so useful for chronic constipation in adults as some other remedies, because after it has acted it leaves a little tendency to constipation itself. Recently it has been found very useful in surgery.

One of the battlefield discoveries of the present war is that castor oil is an admirable dressing for slight abrasions, burns, and minor wounds. The wound is first washed with some antiseptic solution or painted with tincture of iodine, and then covered with a piece of gauze saturated with castor oil.

This dressing is in effect that of an antiseptic, and wounds treated with it usually heal rapidly. It has the advantage of keeping the skin about the wound soft and pliable, is cheap, and always available. It appears, therefore, that this ancient and honourable household remedy has extended its usefulness to a field quite outside that of commonplace, digestive disorders.—Healthy Home.

The Wet Compress for Constipation

PERSONS who suffer from torpid bowels are often much relieved by the application of a wet compress over the stomach. This is a very old remedy. A moist rag or towel, folded into four thicknesses. may be applied to the surface of the abdomen, or a piece of moistened spongiopiline may be used. It matters not whether the water be cold, tepid, or warm. If applied cold, it soon becomes warm, and I am not aware that any benefit results to many persons, from the very unpleasant application of a cold rag to the warm skin. Care must be taken that the compress, or other application, be not too wet when applied. It may be worn for two or three hours daily, and in this way relief is often obtained without the use of any medicine whatever.-Mothers' Magazine.



The Plan

CECIE and Elsa were neighbours, and they often talked through the fence palings.

Elsa was always interesting, even through a fence. "Let's be naughty and selfish all day," she said one morning, "and find out what will happen."

"Very well," agreed Cecie, and she

felt much excited.

"We'll begin right now," called Elsa, as she ran off, with her black curls bobbing.

"Very well, I'll begin," Cecie agreed

again.

While she was walking to her own door, she had the feeling that permission had been given her to do all the naughty things in the world; and it filled her with a sort of gaiety and kindness for every one. That is why she picked a dewy white rosebud and carried it to her mother.

"Why, thank you, dear," said her mother, and her face brightened. "I needed something nice to take my mind from my worries."

"What are your worries?" asked Cecie, to whom other people's worries were as interesting as fairy-tales, because she did not understand them.

"One of them is that this note ought to go to your Aunt Clara at once, and the

postman has just passed."

"I can take it," says Cecie, as she danced about happily, for Aunt Clara was her favourite. "All I have to do is to go on and on till I get there. And I don't have to cross a car-track. I never

went alone before, and it's time to begin."

"How can you tell when you come to her house?" asked her mother, doubtfully.

"Why, mother, didn't you know that Aunt Clara's house is the only one in town that has yellow 'kissanthemums' growing at the gate?"

"I knew," said her mother, "but I



wanted to see if you did. You may go, and you are a dear little daughter to help me."

On her careful way to Aunt Clara's,

Cecie felt as important and happy as if she were going to a party. To be holding a real, true letter in her hand! It was exciting to stand at each corner and look both ways for automobiles before she dared to cross.

Aunt Clara praised her warmly, and gave her a piece of cake when she sent her home again. She did even more.

"Such a nice little mail-carrier deserves a gift," she said, and she tied Cecie's hair with a beautiful big pink ribbon.

At home the pleasant happenings kept on.

"For your luncheon I've opened the

preserves that you like best," said her mother, "because you helped me so much."

"What is another worry?" asked Cecie, after luncheon, seeing that her mother's face was not quite happy.

"Why, baby's teeth make him fretful, and I ought to take

him out in the air, but I have too much work to do."

"I'll wheel him," offered Cecie.

"Why, you treasure child!" said her mother, cheerily. "I'll dress you in your second-best dress, to make you look as sweet as you really are."

At first, while she was wheeling the baby up and down in the warm sunshine in front of the house, Cecie had her little hands full, for the baby cried, and had to be amused. It is not easy to wheel a carriage with one hand, shake a rattle with the other, and keep talking cheerfully. But Cecie managed them all. And at last the fresh air began to help the baby, and he fell into a needed sleep. For over an hour longer Cecie wheeled him faithfully up and down. When he

finally woke up, he was happy and rested. Cecie took him in to her mother, and found her happy and rested, too.

"You may have your splendidest doll

to play with," she said, gratefully.

Cecie flushed with delight when the "splendidest doll" was taken down from the closet and placed in her arms; its satin and laces were as fresh as new.

Cecie went out to hunt for Elsa to share her joy. But as Elsa was not in sight, Cecie went to look for her.

She found her away upstairs in her room. Elsa was still in her morning dress, and she was sobbing dismally.



Her curls were tangled and her sorrowful face was stained with tears. Beside her, on a box, were a piece of dry bread and a glass of water.

With tearful amazement, Elsa looked at Cecie's pink ribbon, her second-best dress, and her "splendidest doll."

"Is that what you got for being naughty and selfish?" she asked.

"Oh," said Cecie, as the promise came to her mind, "I've been having such a happy time being good that I quite forgot to do as I promised."

"You forgot?"

"I forgot. But what is the matter with you?" she asked, in wonder.

Elsa's tears flowed afresh.

"The matter with me is that I kept my promise!" she sobbed.

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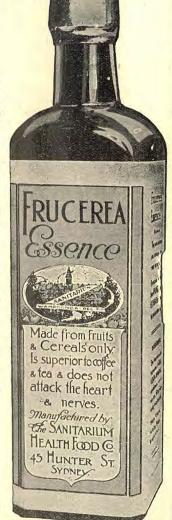
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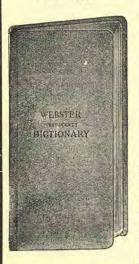
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