

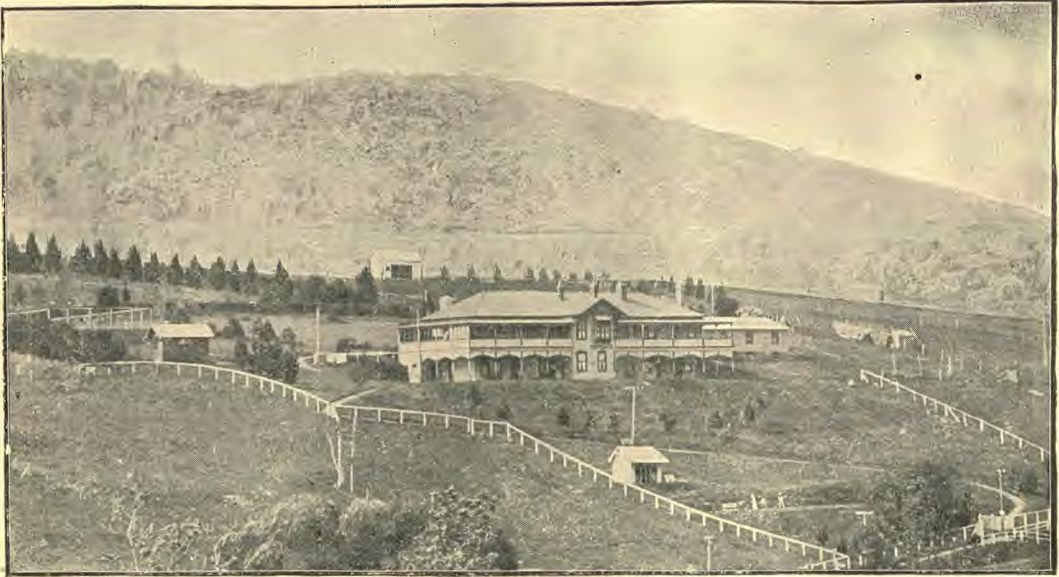


Spring Number of
LIFE & HEALTH
SEPT.-OCT. 1917

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WARBURTON, VICTORIA



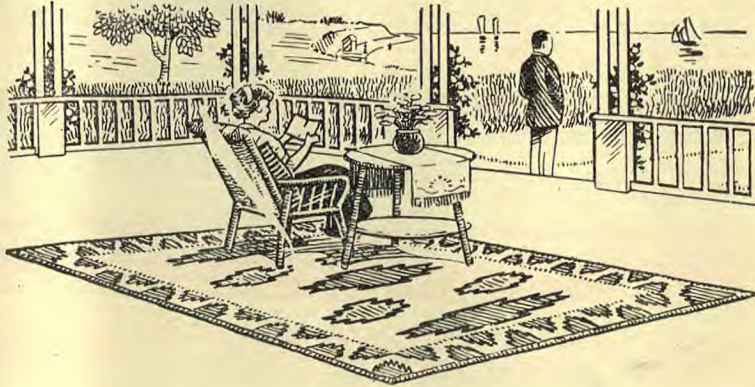
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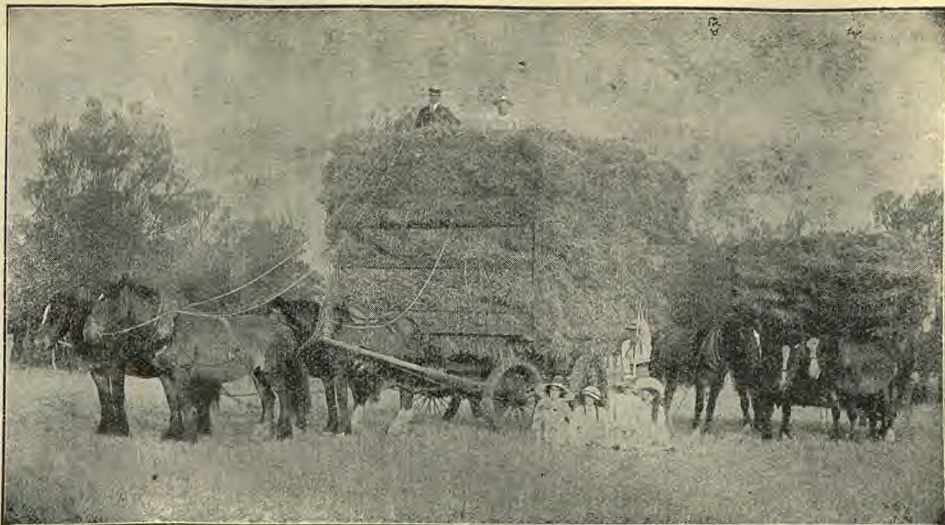
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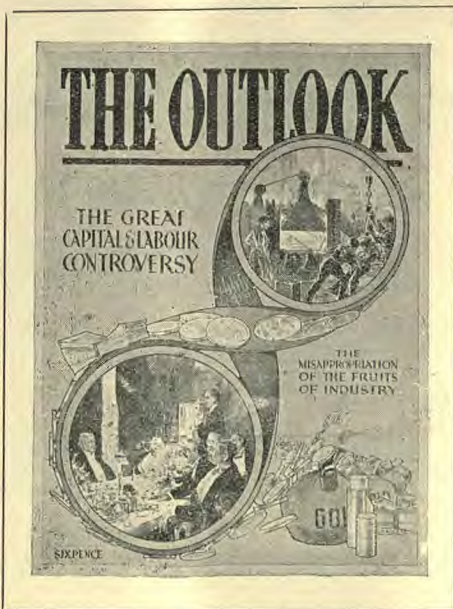
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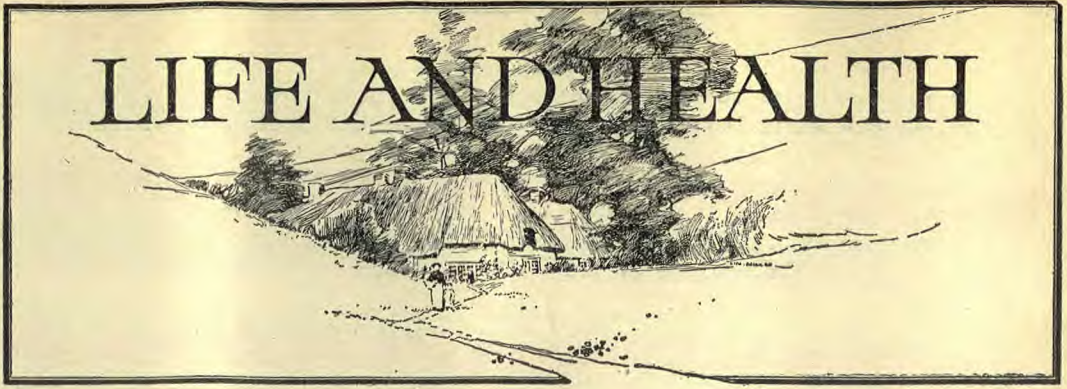
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IN HAPPY SPRING TIME

LIFE AND HEALTH



Vol. 7

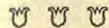
September-October, 1917

No. 4

Editor: CHARLES M. SNOW

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

No community rises above the average of its individual homes in intelligence, courage, honesty, industry, thrift, patriotism, or any other individual or civic virtue. The home is the nursery of the citizen, and nothing which Church, State, or school can do will quite make up for the lack in the home. Let us then see to it that our children do not go out into the world handicapped by a poorly-managed home, unfitted for life by having a low estimate of the home which they shall later establish.



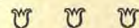
Bracken for Food

THE British Board of Agriculture draws attention to the use of bracken root as food, and this is being advocated by *Popular Science Siftings*. By chemical analysis the root of the bracken is found to contain carbohydrates to the amount of 63.4 per cent. Of starch alone the root contains 30.5 per cent. Attention is drawn to the fact that among primitive peoples the food qualities of the bracken have been known for centuries. Before the English came to New Zealand, the roots of the bracken furnished the natives with one of their chief articles of diet. The people of ancient Normandy have subsisted at times on the same article.

The root should first be roasted over

the fire until the outer skin is charred, and then the fibres separated by beating. The starchy substance that remains tastes much like oat cake, but with a slight astringency that is not unpleasant. It is stated that few substances will ward off hunger under violent exertion better than the underground stem of the brake thus prepared, a fact worth remembering by the rambler in uninhabited districts.

In times of necessity the French have used the bracken root, ground and mixed with rye flour, to make a coarse bread. For feeding domestic animals, the roots can be run through a mechanical food chopper. The young fronds of the brake when they are still in their rolled-up condition have long been used as a vegetable course. In this condition the fronds contain most starch. The exigencies of life in war times may bring to view many other sources of food supply that are now totally ignored.



A New Insecticide

It is becoming more and more generally recognised that biting and sucking insects are directly responsible for many of the diseases which afflict mankind. All insect pests are coming to be known as pests in a different way than that in which they were recognised by our fore-

fathers. The flea that has been living on a diseased rat will cause bubonic plague in human beings when it changes its feeding place from that rodent to a human being. The mosquito conveys malaria and yellow fever. The bug, it is claimed, transmits consumption, while a certain itch mite is said to be the cause of leprosy. The roaches are equally dangerous. "Only those who have watched their work in the still hours of the night can know the filthiness of their existence and the terrors they can bring to the homes that harbour them," says *Popular Science Siftings*. That journal has given to a firm of English chemists its Certificate of Merit for the production of a germicide which is deadly in its effect upon all such pests as those named, and many others, including the common housefly and the moth. The name of this insecticide is Vertroy, which is declared to be harmless to human beings, even when applied directly to the skin. Cleanliness is one of the first essentials to health, and it should include freedom from all such pests; for no human being is safe who is preyed upon by any of them. This article is not an advertisement.



Light in the Sick Room

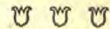
PHYSICIANS and scientists are giving us much help in these days which was not available to our forebears. Many of the practices of former times, which were supposed to be necessary for the preservation of health, are now known to be directly antagonistic to health, and it seems a wonder that the afflicted lived through the kind of treatment they received. For instance, the denial of water to fever patients, the denial of air (night air they called it) to patients suffering from lung and pulmonary troubles, and a host of other equally unwise prohibitions were thought to be essential to the health or recovery of such sufferers.

One of the practices of old that dies hard is the practice of darkening the sick room and surrounding the patient with a

general atmosphere of gloom; whereas sunlight itself is now known to be one of the most healing of agents. Frequently when the up-to-date doctor answers a call to the bedside of the sick, his first act must be to run up the shades before he can even see his patient. If a patient has had a surgical operation on his eyes, or is having sensitive and diseased eyes treated, it is necessary for a time to have light excluded, at least from his eyes. In the darkened room of the ordinary patient death lurks. In darkness and closed rooms myriads of the germs of death multiply, and make hard the work of nature and of the physician.

Run up the shades; let in the sunshine; let in the fresh air.

Like the wicked generally, the germs of disease "love darkness rather than light, because their deeds are evil."



Air, Drainage, and Health

WHO can say that he is ever as well after an attack of malaria or rheumatic fever as he was before? Those who have suffered from these afflictions—and from others—know that "recovery" is one thing, and being truly well again is quite another.

That is why we insist upon good ventilation and good drainage. The malarial mosquito requires bogs and rain barrels to breed in. A vicinity without these conveniences is unhealthy for him. Make it so. Drain the swampy land; screen the rain barrels; bury or otherwise dispose of tin cans and old tin buckets; if there is stagnant water near you which you cannot drain, pour a pint of kerosene on it occasionally, and note the result. The freedom from mosquito bites will pay a tremendous interest on the little expense involved. Furthermore, no head of a household can be held excusable for leaving his family exposed to the dangers arising from the unrestricted activities of these insect pests.

The writer was once staying for a few days at a country home, and was being bit-

Gout and Its Relationship to Purin Bodies

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

THERE is considerable difference of opinion amongst medical authorities as to the real conditions that produce gout and rheumatism and rheumatic arthritis.

These diseases are undoubtedly distinguished by definite clinical symptoms; as a rule there is no difficulty in distinguishing between gout and rheumatism, and between rheumatism and rheumatic arthritis; but it is indeed difficult to differentiate the blood conditions in these certainly allied complaints. Under similar conditions of exposure to cold and dampness, one individual will develop bronchitis, another pleurisy, and a third pneumonia. We recognise that some constitutional diathesis accounts for the different results; and this probably, to some extent, is true in the diseases under consideration.

Gout, unlike rheumatism and rheumatic arthritis, is pre-eminently a disease of good (?) living; it develops in those who live largely on flesh foods, malted liquors, wine, sweets, and foods made rich by the addition of fats, and whose occupation is sedentary.

The blood in the gouty subject contains excess of uric acid, xanthin, hypoxanthine, adenine, and other purin bodies. The body contains ferments or enzymes which form purins from the nitrogenous (proteid) elements of the blood and tissues, and which prepare these waste products for elimination through the kidneys.

It is agreed that uric acid is the chief purin body in gout. Birds and serpents excrete uric acid without change; they are unable to oxidise it into urates, which are readily soluble in the blood and passed out through the kidneys. "All mammals, with the important exception of man, are able to destroy uric acid rapidly and in considerable quantities. This destruction is an oxidation ac-

complished by a specific enzyme called uricase; and the reaction seems to consist of the removal of one of the carbon atoms from the uric acid, thus converting it into the more readily soluble allantoin."—*Wells*. Allantoin is only found in the smallest quantities in the urine of man.

Of all the mammals, man alone seems to have difficulty in oxidising uric acid in the blood, and, consequently, when formed it must be excreted as uric acid. Man forms and excretes from one-half to sixteen grains (1 gramme) of uric acid daily. If more uric acid is formed and taken into the system than can be excreted, a gouty condition will eventually supervene. More uric acid is excreted in the day than at night, and during the time of muscular exertion than in sedentary conditions. Active outdoor work aids in excretion of uric acid.

Rich foods, foods cooked with much fat, and sweets, interfere with the digestion, clog the liver, and lessen the output of uric acid; under these conditions the blood cannot circulate the excessive uric acid, and, consequently, it is deposited in the joints. In gout the big toe of the right foot is the joint first attacked, following this the other joints of the feet and the knee may be attacked, or the wrist and joints of the hand. The uric acid is deposited as urate of soda, and probably the joints of the feet are first attacked because the circulation of the joints in this region is not so active as in other parts.

An alkaline condition of blood helps to keep uric acid in solution, and this alkaline condition cannot be better brought about than by the consumption of fresh fruit and vegetables, and the abstinence from flesh and rich foods.

The joints are less alkaline than other tissues, hence they are more prone to the

rheumatic and gouty deposits. Any tissue, however, which is not well supplied with blood, such as the fibrous tissues of the muscles (including those of the heart), may become the seat of gouty or rheumatic deposits.

Haig has clearly demonstrated in his work, "Uric Acid in the Causation of Disease," that the body can well cope with all the uric acid that is formed in the body if none be introduced with the food. If, for instance, eight grains are daily formed and eight grains are daily excreted, the system will remain free from this waste product. If, however, a fraction of a grain is added, and the system only excretes the eight grains that are formed in the system, then the blood and tissues must gradually become poisoned with this gout-producing poison. If eight grains are formed in the system and five grains are taken with such foods as flesh foods, legumes, tea, and coffee, and only twelve and one-half grains are excreted, one-half of a grain of uric acid is added daily to the blood. The daily accumulation of a tenth or a twentieth of a grain of uric acid would, in a few months, undoubtedly precipitate an attack of gout. Legumes, tea, and coffee do not contain uric acid such as we get in flesh foods, but the purin bodies found in them act similarly in regard to the production of gout and rheumatism.

These purin bodies in the blood materially retard the circulation in the capillaries, and it is through the capillaries that all our tissues are nourished. In order to cope with this increased difficulty of circulation, the heart has more work to do, and consequently its muscles enlarge. This increased action of the heart produces strain on the blood vessels, a condition known as "high tension." The continued high tension lessens the elasticity of the blood vessels, the contractile tissues being replaced by firm fibrous tissue which does not expand and contract with each beat of the heart; the arteries thus, instead of being elastic tubes, are like rotten pipes. This arterial

disease is known as arteriosclerosis, and produces disease in every organ of the body. The breaking of these weakened blood vessels in the brain causes apoplexy, and their existence in the kidneys produces lack of vitality resulting in kidney disease.

We have seen that the enzyme in all mammals breaks up uric acid and allows it to escape in a soluble form through the kidneys; in man, however, this enzyme is absent, and consequently the accumulation of uric acid in the blood is not due to an abnormal condition which prevents the oxidation or destruction of uric acid, but to an inability to excrete the uric acid from the system. In all gouty subjects, the output of uric acid through the urine is low; directly, however, an acute attack of gout supervenes, the excretion of uric acid is increased. Nature puts forth special effort to rid the system of the poison, for nature always works against poison. In whooping-cough and convulsions, when the blood becomes darkened with carbonic acid, the abnormal condition acts as a sedative to the excited nervous system, and the fit of coughing or convulsion ceases. When the system is attacked by specific poisons, as those of scarlet fever, diphtheria, and typhoid fever, Nature produces antibodies, antitoxins which neutralise the poison. So, in gout, the inflammation of the joints caused by the low excretion of uric acid enables the blood to battle more effectually with the poison and excrete it, and this is the reason that an acute attack of gout comes to an end; if Nature did not work, the attack would continue.

The gouty subject is most frequently more or less of a dyspeptic, and is especially liable to biliousness. He not only takes food containing purin bodies, but he eats rich foods, foods combined largely with fats and sweets, which upset the action of the stomach, liver, and kidneys, with the result that his digestion is sluggish and the uric acid formed is only partly excreted.

The retention of the purin bodies in the liver lessens the activity of that organ; consequently, the gouty subject is not

only subject to biliousness and dyspepsia, but also diabetes, for one of the functions of the liver is the preparation of all sugars for an entrance into the blood and tissues, to produce energy and heat as required. And, again, exposure to cold, an injury, mental trouble, or a hearty meal, causes the uric acid in the blood to crystallize in the tissues of the joints, which produces inflammation, pain, and the discomfort of a gout attack.

A man engaging in active outdoor exercise excretes uric acid much more readily than the man of sedentary occupation; for there is increased circulation in the capillaries and increased oxidation, as

exercise means deeper breathing and consequent fuller oxygen-carrying power of the blood.

Rheumatism and rheumatic arthritis attack more readily those whose blood is overcharged with purin bodies, but we do not believe these diseases are actually caused by them. Rheumatism is frequently eradicated from the system by abstinence from flesh foods, tea, and legumes, if this purin-free diet is adopted at a fairly early stage; but the fact that many really careful livers are subject to rheumatism or rheumatic arthritis precludes the idea of the purin bodies being the actual cause of these diseases.

Influenza—How to Recognise It and How to Treat It

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

Causation

INFLUENZA can only be caused by the specific germ discovered by Pfeiffer in 1892. It is now recognised that the disease is communicated from person to person (*i.e.*, it is contagious), and is not communicated by germs floating about in the air. In epidemics the disease spreads very rapidly, and it was this rapidity that gave the idea that it was air-borne.

The bacilli of influenza are found abundantly in the respiratory tract—nose, throat, trachea, and bronchial tubes.

It is not, as a rule, found in the blood, but sometimes exists in discharges from the ear. Infection commences very early, and is communicable within twenty-four hours after the symptoms set in, and persists as long as the fever and other acute symptoms last; if there is cough and expectoration, it will be communicable as long as the phlegm exists. Unlike small pox, measles, and scarlet fever, one attack does not protect from another; in fact, one attack predisposes to, rather than protects from, another. One in-

fecting person may give the specific germ (Pfeiffer bacillus) to half a dozen or more in one day, and each of these may do the same, as no one seems to be immune from an attack. This great infectiousness accounts for the very rapid spread in many of the epidemics.

Fortunately the vitality of the bacillus is low; it cannot develop below a temperature of 77° F., and is destroyed by a temperature of about 120° F. It thrives best at about the normal temperature of the body (98½° to 100°). It will not live beyond two days in the dried sputum or in water, but in moist phlegm it may live for two or three weeks. Animals are said to be immune.

The germs of influenza produce their poisons (toxins) in the respiratory tract, and when these are absorbed into the blood, they play havoc with the different tissues of the body, especially the nerve cells and fibres. Climate, soil, altitude, and sanitary surroundings seem to have little bearing on the incidence of the disease. Certainly an ill-ventilated bed-

room with an influenza patient is often responsible for the development of influenza in visitors. "There are, however," writes Bertrand Dawson, "many problems connected with the spread of influenza as yet unsolved. Why, for instance, should the disease spring up simultaneously in epidemic form in widely separated regions of the earth's surface? Thus the 1891 epidemic began simultane-



A WELL-VENTILATED SLEEPING APARTMENT AND SUN-BATH ROOM

ously in the month of March in Yorkshire, Wales, and the United States. Why, again, are the visitations intermittent? There must be external conditions of the nature of which we are ignorant, acting over wide areas, that either increase the life activity and virulence of the microbes, or the vulnerability of the human beings exposed to their action."

Symptoms

The symptoms are frequently very severe and sudden; chilliness, severe headache, pains in back and limbs, and often great nervous prostration. The tongue is generally much coated, moist, and marked at the edges by the teeth; the breath may be offensive; the face flushed, and sometimes the eyes are congested. The tonsils and back part of the throat are red and dry, but, as a rule, not swollen. There is either no cough or one that is dry and very irritable, having its origin in the throat and windpipe (trachea). To begin with, the skin is hot and dry, but subsequently there may be sweating. The pain in the head is often very severe, increased by every movement, and often the eyeballs ache. The pains in the limbs are more marked in the legs than in the arms. The patient feels as if he had been bruised all over his body, and no position seems to give him any comfort. The attack usually lasts from two to five days.

The symptoms we have given define a simple attack, but the disease may also develop special chest or abdominal symptoms; in fact, there is hardly an organ or system of the body that may not be attacked. When the respiratory tract is the special seat of the disease, in addition to the symptoms already given, there will be difficult breathing, with a very annoying dry cough, especially troublesome at night time, lasting continuously for an hour or more. This cough is very persistent, and may last for weeks. When influenza

attacks the abdomen, we have symptoms similar to typhoid fever. There is not so much fever, however, the temperature perhaps not registering more than 100° F. The attacks begin with acute abdominal pain followed sometimes by vomiting and diarrhœa. There is complete loss of appetite. The headache, sore throat, and pain in the limbs point to influenza rather than typhoid fever or other abdominal trouble.

Treatment

In diphtheria we have antitoxin—a substance which neutralises the toxins (poisons) and kills the germs producing those toxins; but we have no such specific treatment for influenza. The poisons, however, can be eliminated through the skin by procedures that produce profuse sweating. An influenza patient should go to bed to avoid risks of internal complication. So as not to overload the internal organs with work, the food should be of a light nature. We cannot make a mistake in giving too light food in influenza, as the disease, when carefully treated, is of only a few days' duration. If the patient insists in going about, and eating ordinary food and in the usual quantities, the attack may remain for a considerable time, producing bronchitis, heart trouble, or even ending in pneumonia. The bowels should be freely opened with a good dose of cascara or other safe purgative, or an enema of warm water and soap may be given. The headache and pain in the limbs, as well as the fever, are reduced by treatment that will produce profuse sweating, such as four or five good fomentations to the spine; hot leg baths while the body is kept well covered with blankets; hot baths, especially hot salt water baths. Turkish baths or electric light baths are excellent, but useless unless the patient goes to bed immediately. The sweating is helped by hot lemonade or other drinks. It is essential to keep the head cool during these treatments; therefore an ice cap or cold water cloths should be kept continually on the head. Profuse sweating

draws away the blood from the respiratory organs, and thus lessens the tendency to congestion. After the patient has been put to bed, hot water bottles to the feet will bring about gentle perspiration for a number of hours. All hot treatments should be followed by a cold sponge or the regular cold mitten friction. Cold compresses to head and neck will prevent overheating from this treatment and thus lessen the liability to fainting. The sweating treatment should only be given once, unless the temperature again rises.

Bronchitis and cough with pain in the chest should be treated by large fomentations followed by the heating chest pack. (Cold wet cheese cloth of four or five thicknesses, with thick layer of cotton wool and flannel binder). Soreness of the throat should be similarly treated after fomentations. The ice cap and cold compress to the head relieve the nervous symptoms. If the temperature keeps high, an ice bag should be kept to the heart in addition to the cold application to the head.

Air, Drainage, and Health

(Continued from page 152)

ten and annoyed at night by mosquitoes. There were no pools of stagnant water within miles of the place, and the owners had no idea where the little pests came from. A look into the rain barrel solved the mystery, and a spoonful of kerosene put the lid on that Pandora's box. As children we would have laughed at any one who told us that the funny little "wigglers" in the pond where we played or in mother's rainbarrel would one day come out and bite us. But that is just what they do unless we put a film of oil over the water where they breed and smother them before they get their wings.

Kerosene is thus the best medicine you can use for malaria and yellow fever, and not you, but the "other fellow," the mosquito, is the one who takes it. And while doing this for such disease-bearing pests, see to it that you do not breed others nearer home in closed or ill-ventilated bedrooms.



GENERAL ARTICLES

Diphtheria

A. G. SIMMINS, L.R.C.P., M.R.C.S.

OF all infectious diseases common in this country, diphtheria is the one most dreaded. Usually the tonsils, throat, nose, or larynx are affected, but the general health is also so seriously involved that the most careful nursing is necessary. In this as in other diseases there are of course different degrees of severity, so that while one person may hardly know he is ill, another may be brought to death's door with an all too startling rapidity.

Diphtheria is caused by a germ which can be handed on from one person to another in many ways. It may be given along with a kiss, or carried in the clothes or towels of an infected person. Cats have carried the germ from one person to another. Instances have been known of milk becoming infected and conveying the disease, but these are very rare. The disease attacks all persons, at all ages, but is most common in children from two to twelve years old.

In the beginning of the illness there is slight fever and some malaise and loss of appetite. Soon there appear white patches on the tonsils, uvula, or other part of the throat, and soreness is complained of. These patches look like small pieces of wash-leather. There is pain on swallowing and tenderness behind the lower jaw. Few people send for a doctor as soon as anybody at home has a sore

throat, but *he should be sent for without delay if with the sore throat there is great prostration and weakness, or if there are any whitish patches anywhere on the back of the throat, or if there is a croupy cough.* The importance of this lies in the fact that all those recover who are treated with diphtheria antitoxin on the same day as the disease begins, but if there is delay there can be by no means the same certainty about effecting a cure.

In serious cases, and particularly where the giving of diphtheria antitoxin has been delayed, the patches in the throat may grow larger and spread to the inside of the hinder part of the nose, to the ear, or down to the larynx and even to the lungs. If the larynx is affected there will be difficulty in breathing, and the operation known as "tracheotomy" may have to be performed to enable the lungs to get enough air. Pneumonia results from the lungs being attacked by the diphtheria germ.

With recovery, the white patches disappear after ten or twelve days, or even earlier if antitoxin has been given in good time. If death occurs it is usually from heart failure or from suffocation. The disease may spread to the lungs and cause pneumonia. The cases in which the larynx is attacked are always the most serious, for the danger of suffocation is here very great.

It is common for various kinds of paralysis to occur after or even during an attack of diphtheria. Somewhere between the third and fifth week after it begins, it may often be noticed that the patient has a nasal voice, and he may find it difficult to swallow, even fluids regurgitating through the nose when he drinks. The reason for this is that the muscles controlling the uvula and "soft palate," and even those of the "œsophagus" leading down to the stomach, become weak and paralysed. In rarer instances all the muscles of the body become very weak. This is a dangerous condition, and requires the constant supervision of a doctor.

Diphtheria and scarlet fever are often found together in the same person, or one may immediately follow the other. Experience has shown that scarlet fever which follows diphtheria is usually mild, but if diphtheria follows scarlet fever, or measles, the outlook is grave.

Diphtheria, therefore, is a most serious disease, and one that even if the acute stage lasting less than a fortnight, is safely passed through, there are yet further dangers that may have to be

encountered. Hence treatment at the earliest possible moment is very necessary. Of a hundred people treated on the first day of the disease with antitoxic serum, none will die, whereas of a hundred treated on the fourth day for the first time, about seventeen will die. Before this remedy for diphtheria was discovered, about seven people out of every twenty who got the disease used to die, while at the present time only about one in a score dies. The following figures show the advantage of giving the serum as soon as possible. These figures are taken from the 1909 report of a large hospital:—

When diphtheria antitoxin was given on the first day, there were no deaths in 100 cases; given on the second day, there were four deaths to the 100 cases; given on the fourth day, there were seventeen deaths to the 100 cases.

These figures show how very important it is that the antitoxin should be given as

soon as possible. It should be given even in doubtful cases, as it can do no harm and may do an enormous amount of good and save life.

The giving of the serum rests with the

Two Boys and a Cigarette

Ella Wheeler Wilcox

Two bright little fellows, named Harry and Will,
Were just the same age and the same size until
One day in their travels it chanced that they met
A queer little creature, surnamed Cigarette.
This queer little creature made friends with the boys,
And told them a story of masculine joys
He held for their sharing. "I tell you," quoth he,
"The way to be manly and big is through me."
Will listened and yielded, but Harry held out,
"I think your assertions are open to doubt,"
He said, "and besides, I'm afraid I'd be sick."
"Afraid!" echoed Will, "O, you cowardly stick!
Well, I'm not afraid, look here!" As he spoke
He blew out a halo of cigarette smoke.
Five years from that meeting saw them again,
The time had arrived when they should be men.
But, strangely enough, although Harry boy stood
As tall and as strong as a tree in the wood,
Poor Will seemed a dwarf; sunken eye,
hollow cheek,
Stooped shoulders proclaimed him unmanly and weak.
With thumb and forefinger he listlessly rolled
A cigarette, smoothing each wrinkle and fold;
And the smoke that he puffed from his lips,
I declare,
Took the form of a demon and grinned from the air.
And it said: "See that wreck of a man that I made
Of the boasting young fellow who wasn't afraid."

doctor. If the patient is being nursed at home a trained nurse should be engaged unless the expense is too great. The patient must be kept lying down and must not be allowed to sit up or get out of bed on any pretext. A warm sponge over should be given every day. The diet should be fluid, and may consist of half a pint of milk every two hours, varied by occasional feeds of Horlick's Malted Milk, thin Bengers', or other similar foods. Thin gluten meal gruel is a good food. A little fruit juice now and then is excellent and keeps the mouth clean. If it happens that the patient cannot swallow anything, a nurse will be absolutely necessary.

The sick-room should have the windows constantly open and even in hot weather a fire is very useful in ensuring proper ventilation of the room. The patient should of course be protected from draughts. A warm mouthwash or gargle consisting of (1) a saturated solution of boracic acid in water or of (2) a teaspoonful of "20 volume" hydrogen peroxide in half a glass of water, should be used every hour or every two hours.

If the case goes on satisfactorily, the patient may be allowed to sit up at the end of three weeks and the diet can be increased to include milk puddings, bread and butter, fruit, eggs, etc. Walking can be attempted a week or two later, but the patient must not be allowed to mix with other people until the doctor has made three consecutive examinations of the throat at intervals of two or three days and found no diphtheria germs either time, or until a fortnight after all patches on the throat have disappeared. The patients must be thoroughly disinfected by having an antiseptic bath, and all their clothes must be disinfected as in the case of other infectious diseases. Soak the clothes, handkerchiefs, sheets, etc., used by the patient for two hours in five per cent carbolic acid in water and boil for ten minutes before washing or sending to the laundry. Even with all these precautions a child just convalescent from diphtheria should not sleep in a bed with

another child for another two weeks after disinfection.

It is necessary to take various precautions in order to prevent the spread of the disease. To take an instance. Suppose in one family there are two sisters and several brothers, and the sisters sleep together, and one of the sisters has diphtheria. The other sister is very likely to have been infected before the illness was very noticeable, and as a precaution she should be given a small dose of diphtheria antitoxic serum. Also, the brothers and this sister should be kept at home and not allowed to mix with other children until twelve days have elapsed since the sister with diphtheria was taken to hospital, or since, if she remained at home, she was considered by the doctor to be cured and free from infection. At the time the little patient was disinfected, her clothes and bed and room should also be cleaned, disinfected and aired, and a good general house-cleaning would also be a help in making certain that the germs were not hanging about the house.

Unlike many infectious diseases, one attack of diphtheria does not protect against subsequent attacks.

In conclusion, let me mention again the urgency there is in giving the diphtheria antitoxin. Only a trained physician can distinguish between diphtheria and ordinary throat affections. Call him in early and help him by following out the hints in this article.

THE standard of living should be regulated not by money spent, not by servile imitation of others, but by that which will produce the best results in health of body and health of mind. To have pleasure in living implies an ideal to live for, a goal to reach by striving. If your ideal, gentle reader, is the ideal of the sleek tabby cat—plenty of food and sleep, the softest corner, and no duties—then we have no message for you, except to advise you to change your ideal as soon as possible to one that is fit to live by.

Be Prepared! The Flies Are Coming!

Not Forgetting the Mosquitoes

HORACE G. FRANKS

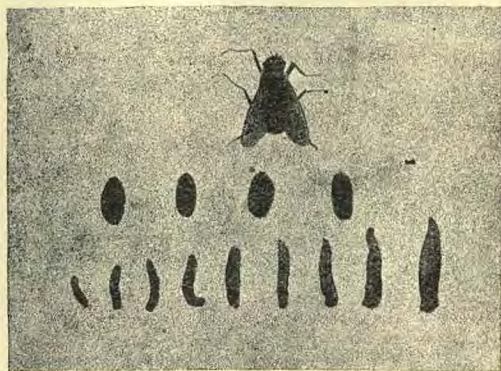
DOUBTLESS you are all prepared to deal with one who should pay you a midnight visit to relieve you of some of your worldly possessions. Maybe the doors of your house are fitted with good locks and strong bolts, and its windows securely fastened with a safety catch in order to minimise the possibility of a thief gaining an entrance. Those who are blessed (or burdened) with a goodly quantity of the treasures this world offers are often sorely perplexed as to the surest method of retaining them. Much money is spent on making their houses and offices burglar proof. But how few of us think of making our houses and offices proof against that which will steal our greatest treasure—health. Good health is hard-earned, but quickly lost; and that loss is usually a result of carelessness on either our own part or on the part of someone else.

Where good health reigns, happiness and contentment are much in evidence; but misery and discontent, and too often death, follow in the train of bad health. Disease means bad health. Flies and mosquitoes mean disease. Then why permit the fly and the mosquito? Said Sir Frederick Treves, the famous surgeon: "A fly should be looked upon as nothing but a spreader of disease. *The remedy is in the hands of the people*, but they need to be educated and to have their eyes opened to the deadliness of this enemy in their midst. When once they realise what a fly can do, and does, the remedy is easy."

Do you realise what a fly does? If not, perhaps the following facts will help you to a realisation of the greatness of this factor in connection with health and disease.

It has been computed that if a fly on October 1 lay one of the six instalments of one hundred and twenty eggs of which

it is capable, by January it would have a progeny numbering septillions. Or, if we put this in figures, by January 18 the number of flies resulting from that first batch of eggs would be 36,279,705,600,000,000,000, which, in turn, would lay 4,353,564,672,000,000,000,000 eggs. This is taking into account an equal division of males and females. These figures may not appeal to some as they stand, but



LIFE HISTORY OF A FLY

when it is recognised that each fly carries with it bacteria ranging from 250 to 6,600,000, the vast possibilities for contamination will be perceived. Every fly laden with disease germs, and this means all house and stable flies, is considerably more dangerous than a bullet, and when we consider the vast swarms of flies infesting our homes, these insects prove a far greater menace than all the soldiers of the Central Powers. One female fly can produce 506,250,000 flies in the brief space of one month, and each fly may be, in fact *is*, a carrier of one or more of the following diseases: Typhoid, enteric, and swine fevers, tuberculosis, cholera, diphtheria, meningitis, dysentery, ophthalmia, small pox, diarrhoea, and many others.

What has been said of the fly applies

in the main to the mosquito. It is also a great carrier of disease, and measures should be taken to deal with this pest just as definitely.

Preparations for Warfare

It is all very well to make a point of "swatting" every fly you see, but such



CRAWLING ON FILTH PREPARATORY TO
TAKING A REST ON YOUR FOOD

measures as these, drastic though they appear, are not nearly strong enough. Even if the fly is killed, "swatting" does not destroy the germ or microbe on that fly. Too many of us kill the flies and leave them around for the bacteria to spread in all directions. Therefore, all should remember that a fly is not finished with until, like all wicked and sinful things, it is destroyed by fire. When you have successfully hunted and killed a fly, complete its destruction by cremating it.

The average length of life of a fly is only about nineteen days, although the Methuselah of the fly realm is declared to have attained the ripe old age of seventy days. And you do not get the opportunity to "swat" every fly, so you must use other means. And the only other successful means is to deal with them before they become flies. Treat them effectively at their breeding-places. Dwellers in cities immediately console themselves with the fact that *they* are not responsible, because they have no stables, and even if they have, the stable refuse is cleared away regularly. But before comforting yourselves on this point, examine your

stables and see if all improvements that can be made have been made. And then note that stables are not the only breeding-places. There are the garbage-tins, ash-bins, slaughter-houses, heaps of waste food, and a thousand and one other places where one mother fly can raise a very happy little family. Wherever there is a collection of filth, there you will find a fly colony. So see to it that your garbage tins are emptied regularly. If they are not, either dispose of the garbage yourself, or write to the authorities.

But the end is not yet. Do you always rinse out your garbage tins and disinfect them? If you do not, particles of decaying food adhere to the sides and bottom of the tins, and, with the material, there remains fly eggs and maggots. It is the householder's duty to attend to this, and so assist in the great movement on foot for the prevention of disease by reducing the number of its most active carriers. All heaps of waste food should also be disposed of, preferably by burning, instead of being left lying around, inviting the fly to make its home there. There are



FLY MAGGOTS ON A RUBBISH HEAP

on the market bags of heavy oiled paper, strong and practically waterproof, which are designed to be used as linings for refuse receptacles. The collector then lifts the bag out of the tin, leaving behind no fly-enticing material or eggs or maggots. These bags also lengthen the lives of the tins, inasmuch as they prevent rust and corrosion.



The Mosquito

Winter is fast passing and, with it, its dreary days and rainy nights. Spring is upon us, with all its life-giving and enervating days. Many a time during the past season you have longed for a taste of some of summer's luscious fruits, and have gratified your desire by purchasing a tin of preserved peaches or apricots; or, when the cow went dry, you purchased condensed milk to supply your needs. What did you do with your empty tins? Throw them outside on the grass, or on the rubbish tip? Perhaps you did so out of the kindness of your heart to provide a breeding place for the mosquito. If you did, your kindness (or carelessness) will mean trouble for mankind, perhaps for yourself. Those tins are receptacles for rain water, and it is in water that mosquitoes have their home training.

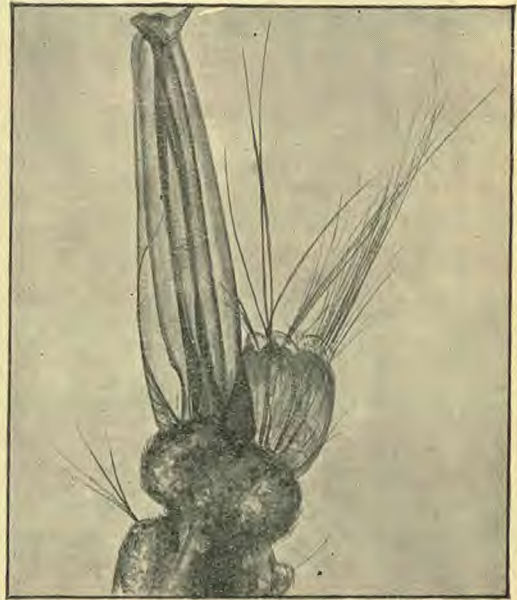
If, however, you do not wish to be plagued with mosquitoes, make holes in the bottom of all your tins so that they cannot hold water, and thus you can decrease the number of invitations to the female mosquito to start a colony in your garden. But of course we do not suggest making holes in the bottom of your water-tanks or draining your ponds and rivers. Yet they must be dealt with, nevertheless. A spoonful of kerosene poured on the water in your tank, or a cupful on the pond, will spread all over the surface of the water. This oily film will prevent the developing mosquitoes from breathing, thus suffocating all the young insects.

Final Precautions

No house is complete without fly-proof doors and windows. You may take all possible precautions outside your house, but the carelessness and indifference of others will still provide you with scores of these winged and unwelcome visitors. Therefore it is your final duty to bar their entrance into the house. Any handy man can make suitable wire screens to place outside the doors and windows, and these will be found invaluable. But even then these persistent visitants will often find a way in. To prevent those feet

which have only just promenaded over the manure heap from walking over your food, keep all food, wherever possible, in a sanitary safe, or in some place where it is covered up.

There are many fly-traps on the market, some sanitary and some unsanitary. Purchase a few of the former, and so keep your house as free from these pestilential purveyors of disease as possible, remembering that absence of house flies means



BREATHING TUBE OF THE YOUNG MOSQUITO REACHING TO THE SURFACE OF THE WATER

This cannot penetrate a film of oil

the presence of good health. Fly papers are not among the most sanitary of traps, but they serve their purpose well, especially if they are burned at regular periods. A paper covered with dead flies for weeks at a stretch is untidy and unsanitary.

Take this statement home to yourself and act on the principle laid down therein: The number of flies in a home is a true measure of its unhygienic condition.

Few flies mean few diseases.

Few diseases mean few doctor's bills.

Few doctor's bills mean more comforts.

Therefore, hunt those flies both before and after they are born.



The Increasing Cancer Mortality and the Remedy

D. H. KRESS, M.D.

ACCORDING to a preliminary announcement with reference to the mortality from cancer and other malignant tumours in 1915, as compared with the report of the year 1900, there has been an increase of 26 per cent. The mortality from this disease, the report shows, is greater in city than in country population. The steady increase year by year of deaths from this malady may be observed from the following:—

In the year 1900 the death rate in America was 63 per 100,000 of the total population; in 1904 it was 70.21; in 1909, 73.8; in 1912, 77, and in 1915 it was 81.

In New York City the death rate in 1913 was 82 per 100,000 of the total population, whereas for the previous five years the average was 79; in Boston it was 118, as compared with an average for the previous five years of 110; in Pittsburgh, 79, as compared with 70 for the previous five years; in Baltimore, 105, as compared with 94 for the previous five years; in Chicago, 86, as compared with 81 for the previous five years; in Philadelphia, 95, as compared with 88 for the previous five years; and in St. Louis, 95, as compared with an average of 85 for the previous five years.

For cities with a population of ten thousand and over, the average mortality rate was 88 per 100,000 living, while in rural districts it was but 69.6. Only in Australia is this reversed, the mortality being greater in rural districts than it is in the cities.

Cancer is not, as many suppose, a hereditary disease. If it was, it would be apt to appear earlier in life; and yet we know it runs in families. The most plausible conclusion to draw from this is that it is probable both parents and offspring lived in such a way as to induce it. Like causes bring about like results in like organisms.

The modern increase in the consumption of butcher's meat is, no doubt, one of the leading causes of the prevalence of cancer in modern times.

An Experiment with Mice and Rice

Ehrlich, a famous German investigator, found that when mice were fed on a diet of rice, they could not be inoculated with cancer; and when fed on meat, the implanted cancer tissue developed quickly and caused the death of the animals so fed. He also found that when cancerous mice were put on a purely rice diet, the tumours ceased to grow, and in some cases actually disappeared.

This, no doubt, explains why cancer is more common in the *rural* districts of Australia than it is in the cities, while in Europe and America it prevails more in cities than in rural districts. The rural population in Australia consumes more meat than city inhabitants.

In Great Britain there are cities where the death rate from cancer is already greater than that from tuberculosis. It is only a question of a few years until this will be the case in America. Dr. Charles Reed, ex-president of the American Medical Association, says: "I am no alarmist, but I cannot shut my eyes to the facts that are forced upon me in my daily experience. That experience teaches me that cancer is increasing in this country literally by leaps and bounds. Tuberculosis causes more deaths than any other one disease. Cancer is now second on the list. In less than ten years, if present tendencies are permitted to continue, their positions in the death-dealing category will be reversed."

With this much-to-be-dreaded disease so rapidly on the increase, and in view of the universal testimony of experts that it is a meat-eaters' disease, pork being the most objectionable of all flesh foods in

use, it is not difficult to conclude that the free use of swine's flesh is possibly the chief cause of the tremendous increase in mortality from cancer.

Cancerous growths usually make their appearance at a point that has been subjected to continuous irritation or to some injury. Cancer of the lip, mouth, or throat is, for this reason, almost wholly found in men. The local irritation produced by the pipe or cigar acts as an exciting cause. Cancer of the breast is confined to women. Cancer of the stomach and liver we find about equally divided between men and women, possibly a little more general among men because men are usually less careful in diet.

A Hopeless Malady

Cancer is practically a hopeless malady. Death is inevitable in the course of a few months, as a rule. Surgery, so far, has not accomplished brilliant results. The reason why surgery is able to do so little in this disease is, first, the cases do not appeal for help until the disease is well advanced and has become general, and, second, because the needed reforms in diet are not made to make unfavourable the soil for the growth of cancer cells.

To be effective, a cancer should be removed at the earliest possible opportunity. If this is done, and the needed reforms in eating, drinking, etc., are made, there is justifiable hope for permanent relief in most cases.

Diet for Cancer Cases

In order to avoid the recurrence of cancer, it is necessary to practically abandon animal flesh as an article of food. Cheese, butter, sugar, and other foods which readily decay or ferment in the alimentary tract and tend to give rise to inflammatory processes in the tissues of the body must be avoided or used in extreme moderation. Well-baked breads, corn flakes, puffed rice, zwieback, shredded wheat biscuits, and unfermented bread, well-baked and thoroughly masticated, are indicated. Well-cooked oat meal, corn meal, and the use of legumes are also excellent. Legumes should be eaten moderately.

Fresh fruits, as pineapples, grapefruit, oranges, apples, grapes, peaches, etc., should be freely used. Cooked vegetables readily ferment and should, therefore, not be used freely. Raw vegetables, as celery, lettuce, cabbage, carrots, etc., are beneficial, not because of their nutritive value, but because they aid in keeping the alimentary canal clean by preventing putrefaction and fermentation. Ripe olives and olive oil, or the moderate use of nuts, should be substituted for butter and other animal fats. Figs, dates, and persimmons may take the place of sugar, if sweets are desired. Salt should be used sparingly. Pepper, mustard, and spices must be given up.

A complete fast for one or even two weeks may, in some cases, be beneficial. A half-glassful of pure distilled or soft water should be taken at intervals of one-half hour. At the end of the fast, subacid fruits may form the exclusive diet for a week, and then well-baked cereals may be added, and later on a more liberal diet may be taken.

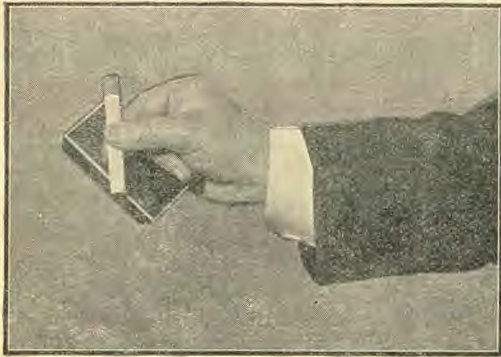
The purpose of the fast is not to starve the patient, but to cleanse the tissues and starve the cancer cells or make unfavourable the soil for their cultivation. In my own experience a number of cases have been under observation for years where the adoption of a strict vegetarian dietary prevented the return of cancer after removal by surgery. Surgery, without a change in diet, is a failure in ninety per cent of the cases operated upon; with it, it may prove a success in seventy per cent of the cases.

SOMEONE having asked Mr. Gladstone the secret of his remarkable activity, he replied with a story: "There was once a road leading out of London on which more horses died than on any other, and enquiry revealed the fact that it was perfectly level. Consequently the animals in travelling over it used only one set of muscles." The moral is, change of work, and especially for those engaged in sedentary occupations.

If It Isn't Smoke, It's Snuff

DANIEL H. KRESS, M.D.

WHILE a campaign is being carried forward against the smoking of cigarettes by women, a number of young women of a certain high school of Indiana are said to have acquired the habit of snuff-taking. This may come as a surprise to many, and yet it is merely a repetition of past



A COMBINATION THAT IS RUINING THE MENTAL AND PHYSICAL VIGOUR OF THE PRESENT GENERATION

history. The preacher said in Eccl. 1:9, "The thing that hath been, it is that which shall be; and that which is done is that which shall be done; and there is no new thing under the sun."

There was a time when in England the smoking of tobacco was general. The reign of Queen Elizabeth was termed, "The Golden Age of Tobacco." Men and women of all classes smoked. Smoking appeared to have been regarded as an essential characteristic of society. One writer said, "Men use it everywhere; some for wantonness; some for health's sake; and with that insatiable greediness past understanding, they sucked the reeking, stenchy smoke thereof through an earthen pipe which they presently blew out again through their nostrils; so that the Englishmen's bodies were so delighted with the plant, that they seemed as it were degenerated into barbarians." King James I said, "The mistress cannot

in a more manerly kind entertain her servants than by giving them out of her hand a pipe of tobacco." He said, "Is it not great vanity and uselessness that at the table, a place of respect, of cleanness, and of modesty, men should not be ashamed to sit tossing of tobacco pipes and puffing of smoke one to another, making the filthy fumes thereof to exhale across the dishes, and infect the air when very often men that abhor it are at their repast? Is it not a great vanity that a man cannot welcome his friend now, but straightway they must be in hand with tobacco? It has become, in place of a curse, a point of good fellowship; and he that will refuse to take a pipe with his fellows is accounted peevish, and no good company."

All of this sounds very modern. The same conditions now prevail. Smoking at the dinner table has become very common among the wealthy in our large cities. King James affirmed that smokers tossing pipes and puffing smoke over the dinner tables forgot all cleanliness and modesty. In appealing to his subjects to abandon this habit, he said, "Have you not reason then, to be ashamed and to forbear this filthy novelty, so basely grounded, so foolishly conceived, and so grossly mistaken in the right use thereof? To you abase sinning against God, harming yourselves both in person and in goods and making yourselves to be wondered at by all foreign civil nations, and by all strangers coming among you."

It was customary then, as it is to-day, to inhale the smoke and puff it out of the nostrils. The chief injury from smoking comes from this very practice of inhaling the smoke. In this way the smoke is brought in contact with a vast area of lung surface, the delicate membrane of which readily absorbs the poisons it contains. This was an economical way of obtaining the full effect of the smoke, for a

single pipe, before it was exhausted, being passed from mouth to mouth, served to gratify a number of people.

It is not necessary to be a smoker in order to obtain the effects of the smoke. A tribe of Indians originally inhabited Panama, whose chiefs and great men made their servants smoke and blow the tobacco smoke into their faces. It is said, "They indulged in the luxury in no other way."

In the time of King James I, smoking was so common that the air was always laden with smoke. Unwilling subjects were compelled to inhale the poison. To this they objected and finally protested. The time came when public sentiment was aroused to such a degree that the better classes "became to regard smoking with an odium." Those who persisted in smoking were regarded as veritable slaves and objects of pity. By the year 1793 it was said that "it is most unusual in England or Scotland for a gentleman of politeness to smoke," and in the year 1773 Dr. Johnson wrote, "Smoking has gone out." Gradually smoking was entirely abandoned. Smoking was considered synonymous with "blackguardism and the lowest vices." It was indeed looked upon as "vulgar to smoke."

Smoking having been tabooed, the use of snuff came into prominence through the French, whose ideas and manners infected English society. This practice spread with great rapidity, and in time became general. The reign of Queen Anne was spoken of as "the age of snuff." If a crowned head desired to acknowledge an obligation to an individual, it was generally done by the presentation of a snuff box set with diamonds. Following the battle of Waterloo, the complimentary

rewards bestowed upon the soldiers and diplomats by the House of Commons, in one year, in the form of snuff boxes, it is said, amounted to £22,500. These boxes were of various designs, and were passed around at the dinner table and social gatherings to be admired by each other. There were variously scented snuffs, and, in addition, there were medicated snuffs which were regarded as a cure for all ills. Molière was evidently under the influence



SMOKING AND NON-SMOKING BOYS

The four boys in the picture represent two classes of boys that may be found in many of our schools. The two larger boys were the only boys among twenty-one in a schoolroom who had never smoked, while the two smaller boys had used cigarettes practically as long as they could remember. The four boys were of the same age, fourteen. The smaller boys were inferior in every respect.

of its drug effect when he said, "There is nothing equal to snuff. It is the craving of upright men, and he who lives without snuff is not worthy of life. It not only rejoices and purifies the brains of men, but it also instructs their souls into righteousness, and by taking snuff we acquire virtue."

While Napoleon abhorred smoking, he carried snuff in his waistcoat pocket and used it profusely. It is said that "he calmed and stimulated his mind with snuff." The time came when fully one-half of the people of England of both sexes and all ranks took snuff. For "every one that smoked, five took snuff." The profligate Court of France was the

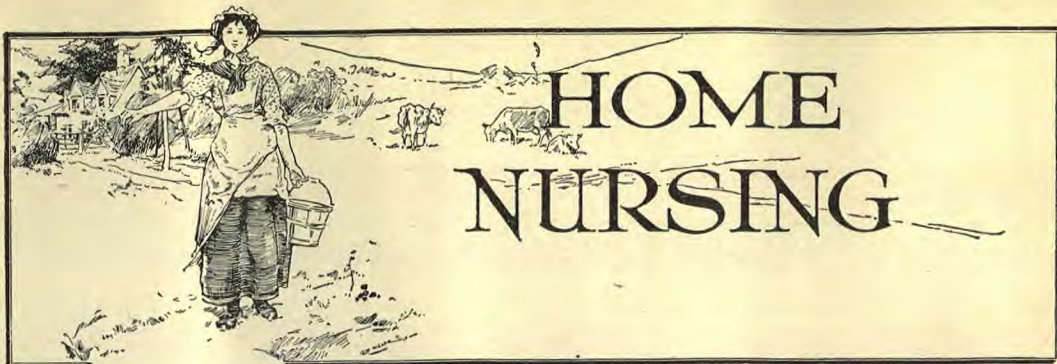
home of snuff. "The brilliancy, gaiety, and licentious excesses of the eighteenth century society were ushered in with snuff," we are informed. Who knows but that the brilliant gaiety and licentious excesses of the twentieth century will be likewise ushered in with snuff? History may repeat itself. The sentiment against the smoking of tobacco in public places is increasing, and will no doubt continue to increase. The time will probably come when smoking will be abandoned, but there is a possibility that it may be replaced by snuff. Snuff medicated with such drugs as morphine and even cocaine may become a problem for educators and legislators to deal with in the near future. Snuff taking is a filthy habit, but one thing can be said in its favour, the one who snuffs, snuffs to himself. The smoke inhaler compels those near him to inhale smoke with him. He pollutes the air others are compelled to inhale. The one who snuffs injures himself, but not his associates, as does the smoker. Snuffing is, from this viewpoint, less objectionable than smoking.

Ever since tobacco was introduced into civilised lands, it has met with serious opposition. It is still a twentieth century

problem. Somehow this weed, *tobacco*, cannot be drowned. The devil is in it. The poetry quoted in our boyhood days, "Tobacco is a poisonous weed, it was the devil sowed the seed," has in it more truth than it has poetry.

When snuff-taking was at its height in England, to refuse a pinch in company was considered an affront. Many who were not addicted to the drug carried snuff boxes merely for fashion's sake, or so as not to appear odd. Most of the snuff had substances added which made its use, possibly, more injurious than smoking. All this it is well to keep in mind. One of the most serious problems in America to-day is that of suppressing drug addictions; among these are heroine and cocaine, both of which are taken chiefly in the form of snuff. In view of the company of high school girls having innocently become addicts to the use of snuff, it is well to keep in mind the immense injury that may result from its use, when medicated, and see that this habit does not take the place of the one we are now fighting, that of smoking. To be forewarned is to be forearmed. *Washington, D.C.*





HOME NURSING

Practical Talk on Home Nursing—Continued

Symptoms and Their Significance

MINNIE GENEVIEVE MORSE

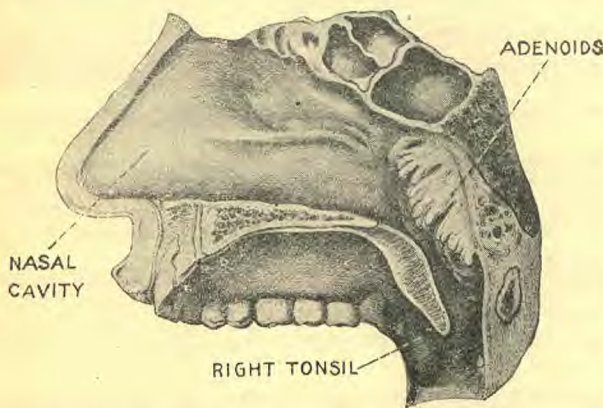
WHEN the vitality is low the arteries may feel limp and empty between the beats, and in the condition known as arteriosclerosis, or hardening of the arteries, which is almost always present in some degree in later life, they may seem hard and cordlike, and sometimes even twisted.

Another danger signal is any abnormality about the respiration, or breathing. There are about eighteen respirations per minute in the average adult, twenty or more in children, and thirty to thirty-five in young infants. Exercise or emotion will increase the rate, and when the pulse rate rises the respiration usually rises with it; there are, as a rule, four pulse beats to one respiration. Certain drugs affect the rate, especially opium, which slows it so materially that the low rate of respiration in opium poisoning is one of the most prominent symptoms. Fevers and diseases of the heart or lungs make the breathing more rapid. The act of respiration is partly under the control of the will, and in counting the rate it is better to do it without the patient's knowledge; it is usually an easy matter to count the rising and falling of the chest while pretending to be still counting the pulse. The character of the breathing is often altered in illness, as well as the rate; it may be unusually deep or shallow, noisy, difficult, or attended with pain or cough.

In croup there is a crowing sound, in bronchial disorders a wheezing, and in apoplexy and certain other conditions a stentorous or snoring respiration. Difficult breathing, known as dyspnoea, is common in all affections where the free action of the lungs is interfered with; sometimes it is so severe as to make it impossible for the patient to breathe lying down. A type of respiration that is sometimes present in very grave conditions is that known as *Cheyne-Stokes*; here the respirations begin quietly, become deeper and louder until they reach a climax, then gradually subside, when there occurs a pause, followed by a repetition of the same cycle. Breathing through the mouth means that there is some sort of nasal obstruction; it may be merely the result of a cold in the head, or it may mean the presence of enlarged tonsils or adenoid growths at the back of the nose. A child who is an habitual mouth-breather should always be shown to a physician, for very serious conditions, including incurable deafness and arrest of mental development, may result from the neglect of treatment.

Symptoms which are evident only to the patient himself are known as *subjective*. The most important of these is pain, nature's signal that something is going wrong in the body. It is a good plan, especially with children, to have the

patient place the hand on the affected locality; and the nurse should also notice whether there is sensitiveness to touch or any external symptom, and whether the patient takes any peculiar position on account of the pain. A patient with abdominal pain is apt to draw up the knees to relax the abdominal muscles, and one with a lung disease often lies upon the affected side, in an instinctive attempt to give the healthy lung as much opportunity as possible to do its increased work. Very young children, of course, can only give evidence of suffering by crying, but



the cry of pain is usually a distinctive one, being sharp, and accompanied by a distressed expression, drawing up of the legs, and restlessness, while the cry of hunger is fretful, ceasing when the child is satisfied, and the cry of temper violent and prolonged, accompanied by stiffening and throwing about of the body. Adults should be asked to describe the character of their pain; whether sharp, dull, stabbing, throbbing, paroxysmal, or continuous, and whether it is increased or relieved by pressure, change of position, etc. Subjective symptoms other than pain are nausea, dizziness, spots before the eyes or other visual disturbances, obstruction of hearing, bad taste in the mouth, chilliness, and sensations of heat, itching, or prickling of the skin.

Objective symptoms are those which are evident to others than the patient. A great deal can be told about a sick per-

son's condition by his appearance; the expression of his face, his colour, his position in bed, the presence or absence of any eruption on the skin, any abnormal swellings, any discharge from ears, nose, or other part, or any odour to the breath. The expression may be anxious, distressed, pinched, drawn, or apathetic. The face is pale in faintness and other conditions where the circulation is weak, and in anæmia; flushed in fever (in one-sided pneumonia one cheek may be flushed and the other pale), and in excitement; bluish, especially around the mouth, where the

blood is not getting sufficient oxygen, as occurs in some forms of valvular heart disease. The so-called "blue baby" is an example of this condition. A yellowish hue of the skin is present in severe affections of the liver. Skin eruptions should be shown at once to a physician. Puffiness of the feet and ankles, or about the eyes, is another symptom that calls for a doctor's opinion. Inflammation of the eyelids, redness of the whites of the eyes, or any discharge, also need immediate attention, and the same is true of discharge from the ears, earache, or defective hearing. Bad breath, if not the result of decayed teeth, is caused most commonly by indigestion. A heavily coated tongue is likely to mean something wrong in the digestive tract, a yellow tongue is present in bilious attacks, and a tongue that looks like a ripe strawberry is one of the characteristic signs of scarlet fever. A sore throat may be caused by a cold, but it may mean tonsillitis, or even diphtheria or scarlet fever.

Vomiting is very common in babies who have been fed too much or too rapidly, but in other patients it is usually the result of gastric indigestion, and often relieves the attack. The material vomited generally contains partly-digested food, and has a sour odour. Vomitus containing large quantities of mucus or traces of blood may be seen in the more serious diseases of the stomach, such as gastric

ulcer. Blood from the stomach is usually dark in colour, having been acted on by the digestive juices; its appearance is often compared to coffee grounds. In illness of any seriousness, the first material vomited should be shown to the doctor.

More or less sputum is usually raised in diseases of the throat and chest, and the nurse should notice whether it is scanty or copious, composed merely of mucus, thick and yellow, frothy, or mixed with blood or pus. At the beginning of catarrhal affections of the respiratory tract the sputum is most frequently thin and mucoid, becoming later in the disease more thick and tenacious, and of a greenish-yellow colour. The so-called "rusty sputum" of the later stages of pneumonia owes its colour to blood which has become mixed with the secretion. "Prune-juice" sputum occurs when the blood has been retained longer in the air passages; it is most commonly seen in the pneumonia of elderly people, and is an unfavourable sign. Fresh blood from the lungs is bright red and frothy, and if coughed up, it means that a blood vessel in the lungs has ruptured, and is seldom seen except in pulmonary tuberculosis. In infectious diseases of the respiratory tract the sputum usually contains the bacteria that spread the disease, and should be disinfected or burned.

The character of the stools is an important symptom in many disorders. The stools of infants should be of a mustard yellow, smooth, and free from curds of milk. Greenish and ill-smelling stools show digestive disturbance. The stools of adults are normally of a deep golden brown, and fairly well formed. Liquid stools, often accompanied by abdominal pain, are characteristic of many affections of the digestive tract, and in severe intestinal inflammation there may be mucus in the stools, or even blood, the latter giving the *fæces* a tarry appearance. Iron, bismuth, and some other drugs, however, also give the stools a blackish colour. Clay coloured stools are seen in affections of the liver. Seat-worms in

the stools look like little threads, half an inch or less in length. Infrequency, too great frequency, or irregularity of the movements from the bowels should always receive attention.

Adults usually pass something like two and one-half pints of urine during twenty-four hours, and if the amount is very greatly more or less, or there is anything unusual about its appearance, it is well to report it to the family physician, as kidney diseases sometimes become established before they are suspected. Children rarely have kidney affections except as a sequel to scarlet fever. When the doctor asks for a specimen for examination, it is usually the first urine passed in the morning that is wanted; place in a clean bottle with a clean cork and label with the date and the patient's name.

Flowers in the Sick-Room

FOR many years there has existed a very strong prejudice against placing bunches of flowers in a room occupied by a sick patient. Much has been said for and against this practice, and doubtless the following extract from the works of James King Crook, M.D., will be gladly read by the upholders of this ancient custom of cheering the sick by means of Nature's posies and scent bottles:—

"If a patient is fond of flowers, by no means exclude them. Much groundless prejudice exists upon this score, some supposing that flowers vitiate the air of the room; but if they have any appreciable effect, it is in the opposite direction, as they consume carbonic acid and probably exhale a certain amount of oxygen. Of course, rich, highly scented plants, like magnolias, hyacinths, and some varieties of lilies, are not included in these remarks, as they are liable to sicken the patient by their fragrance. Look out for a harmonious combination of colours in flowers. It is said that red has a stimulating effect, while blue is sedative, or soothing."



THE HOUSEKEEPER

How to Cook Dried Fruits

MRS. S. N. HASKELL

IN many localities during the winter months it is difficult to obtain fresh fruits; but good varieties of dried fruit can be purchased in the markets at any season of the year.

The way dried fruit is usually cooked produces a strong flavour which few people relish. In the process of drying, the water is evaporated from the fruit, and if this water can be restored to the fruit before cooking, the original flavour is retained. Instead of cooking the dried fruit several hours as is customary in most homes, it needs to be cooked no longer than fresh fruit of the same variety after the water is restored to it.

Dried Peaches

Wash thoroughly several times in tepid water; then cover with tepid water and soak over night. If the fruit is fresh, in the morning you can slip the skins from the peaches easily. If the skin does not slip off easily, leave them to soak from twelve to twenty-four hours until the skin will slip off easily. There are usually a few pieces that were not ripe when dried, and for these pieces use a knife.

After removing the skins, place the peaches in fresh, tepid water and soak twelve hours longer. The peaches will then be soft like fresh, ripe peaches. Do not boil rapidly, but simmer gently until cooked; sweeten to taste. The flavour of peaches cooked in this way is preferred by many to that of canned peaches.

Dried Apricots Cooked Without Sugar

The ripe apricot is a sweet fruit, and is never sour unless brought to a high temperature in cooking.

Wash the fruit thoroughly in tepid water; cover with tepid water and soak from twenty-four to forty-eight hours, until the fruit is as soft as fresh fruit. Cook the apricots in the water in which they have

been soaking. Slowly simmer on back of stove, watching them carefully that they do not come to the boiling point. If thoroughly soaked they need little cooking. If kept well below the boiling point, they will be sweet and luscious without any sugar.

Prunes

Prunes are very wholesome, but the strong flavour usually present is unpleasant to many. Wash thoroughly and soak from twelve to forty-eight hours. Do not cook until sufficient water has been absorbed to make them soft as fresh, ripe fruit. Boil slowly until thoroughly done. Little or no sugar is needed when prunes are cooked in this way.

Apples, rasins, currants, nectarines, and all kinds of dried fruit, lose the strong flavour so common with dried fruit if soaked until the water which was taken from it by the process of drying is absorbed again by the fruit.

Cook all fruit in the water in which it is first soaked, except peaches; these should be placed in fresh water after the skins are removed, and the fruit cooked in the second water.

Recipes

Eggs in Mashed Potatoes.—Two cupfuls of cold, mashed potatoes, half cupful of bread crumbs, half teaspoonful of grated nutmeg, four eggs, one tablespoonful of finely chopped parsley, one teaspoonful of butter.

Mix the seasoned mashed potatoes with the nutmeg, and divide into four parts (if the potatoes are stiff add a little milk). Roll in the bread-crumbs and place in an earthenware dish which has been brushed with the butter. Make a hole in the centre of the potatoes large enough to hold an egg. Break the eggs, one at a time, into the centre of each potato nest. Sprinkle the eggs with salt, place in a hot oven, and bake

until the eggs are set to one's liking. Sprinkle the top with parsley, and serve.

Peanut Loaf.—Two cupfuls of mashed potatoes, one cupful of fresh bread crumbs, one cupful of peanut butter, three eggs, two teaspoonfuls of salt, one teaspoonful of onion juice, one tablespoonful of chopped parsley, two tablespoonfuls of milk, one-quarter teaspoonful of paprika, two teaspoonfuls of butter.

The potatoes must be freshly boiled and mashed. Add to them the peanut butter. Beat the eggs until light, and add the milk to them. Pour over the bread crumbs; then add this mixture to the potatoes and peanut butter; add the seasoning, and mix well. Brush a baking pan with butter, put in the mixture, and bake for thirty-five minutes in a moderate oven. Serve on a plate with tomato or apple sauce.

Banana Pudding.—One cupful of flour, one-half teaspoonful of salt, one-quarter cupful of sugar, one-half cupful of milk, three eggs, two teaspoonfuls of melted butter, one cupful of mashed bananas.

Sift the flour, salt, and sugar into a bowl; slowly add the milk, and the well-beaten eggs and the bananas (which have been put through a fruit press or mashed with a fork); mix all together. Brush a round earthenware dish with melted butter, pour in the mixture, and bake for thirty minutes in a moderate oven. Serve warm with milk and sugar or fruit sauce. Serve in the dish in which it is baked.

Old-fashioned Bread Pudding.—Two cupfuls of diced stale bread, two cupfuls of milk, two eggs, one-half cupful of brown sugar, one tablespoonful of butter, two tablespoonfuls of raisins, one quarter teaspoonful of salt.

Beat the eggs until light; add the milk and the salt. Brush a round earthenware dish with a little butter; put in the diced stale bread, and then cover with the egg and the milk. Add the raisins, and mix so that they are covered with the bread, for if left on top they will easily burn. Cover the top with the brown sugar, and place in a moderate oven. Bake slowly for forty minutes. This pudding is rather stiff, and should be served with fruit or jelly sauce. Two tablespoonfuls of tart jelly dissolved in one cupful of hot water, brought to a boil and thickened with two teaspoonfuls of cornstarch, makes a very nice sauce.

Cereal Fruit Pudding.—One cupful of any kind of cereal, or left-over cereal, one cupful of fruit, raisins, dates, or figs, one teaspoonful of salt, two cupfuls of milk, two teaspoonfuls of butter, one cupful of fruit juice.

Put the cereal into two cupfuls of water, and boil until thick; then add the milk and boil slowly for one hour; add the chopped fruit. Brush an earthenware dish with butter, pour in the cereal, place in a moderate oven and bake for forty minutes. Serve warm in the dish in which it is baked. Garnish the top with orange marmalade. Serve with fruit juice.

To Thicken Milk for Custard.—Custards need not always be made of eggs, as there are three other ways of thickening them. To thicken a quart of milk for custard use either one junket tablet, one tablespoonful of rennet, six tablespoonfuls of cornstarch, or four eggs. Add the required amount of any of these

to one quart of warm milk, and sweeten it with from a quarter of a cupful to one cupful of sugar.

For the junket custard, first brown the sugar in a saucepan, which adds a caramel taste and colour.

When cornstarch is used, six teaspoonfuls of cocoa or one square of melted chocolate added will make a chocolate custard or pudding. Substituting half a cupful of any fruit juice for the same amount of milk, or adding fresh fruit when it is in season, makes another pleasing variation.

Simple Mayonnaise.—To the yolk of one egg, allow about one cup of olive oil and three tablespoonfuls of lemon juice. Add also one saltspoonful of salt, also a few drops of olive oil to the whipped yolk, and beat well with a silver fork. Add more oil, little by little, alternating with the acid until the dressing is quite stiff and glossy. Keep ice cold until used. Also this may be frozen (in glass) by burying it in ice and salt for two hours. Real olive oil freezes at a higher temperature than other oils. If the oil is merely labelled "olive oil," it will not freeze so quickly.

Cream or White Mayonnaise.—This may be made with sweet or sour cream; if the former, having the cream whipped, and adding in equal quantity to the mayonnaise already prepared. Sour thick cream may be substituted, or whipped white of egg. This may be coloured green with spinach juice or pink with berry syrup.

Plain Boiled Icing (With Egg).—To a cup of granulated sugar add one half a cup of water and let boil until it strings from a spoon or hardens slightly in cold water. Have ready a whipped white of egg (or two), and on this pour the boiling syrup, beating with a silver fork. Add flavouring, and when the icing is thickened a little, spread it on the cake.

Plain Boiled Custard and Float.—To each quart of milk allow four or five eggs and three teaspoonfuls of sugar, beating the sugar with the yolks of the eggs before adding the milk. The whites may be whipped separately with a teaspoonful of sugar and used as meringue, or whipped lightly into the body of the custard as preferred. The custard may have added to it a teaspoonful or more of dissolved corn starch. The custard may be baked in cups or not, as the one who is making it may prefer. Bake carefully in a moderate oven in an outer vessel of water. Float is a thinner form of custard, and for this three or four eggs may be used with a little corn starch. Neither the thicker "boiled" custard nor the float should be allowed to boil, but (in a double boiler) be cooked just under the boiling point and watched carefully while they thicken.

Plain Corn Starch Blanc Mange.—Allow three heaping tablespoonfuls of corn starch to one quart of milk, wetting and dissolving it with a little of the cold milk. Heat the rest of the milk to the boiling point with three tablespoonfuls of sugar and a pinch of salt. Add to it the dissolved corn starch, and cook gently for about five minutes, adding at the last the flavouring desired. Have eggs ready whipped, the whites alone (one or two or more) or both yolks and whites. Pour in, and beat lightly with the mixture just before removing. Place in a wet mould to cool and chill before serving.

CHATS WITH THE DOCTOR



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.

49. Gout ; Fatty Foods

"Warrnambool" has suffered from attacks of gout for the past twenty years. He takes neither tea nor coffee and very little meat, and is an abstainer from alcoholic drinks. He is of very light weight, and asks for advice regarding fats in his food and also finds weakness in his water which is increasing. The attacks of gout are not nearly so severe as they were, but come more often.

Ans.—We would recommend "Warrnambool" to read our article on gout in this issue of LIFE AND HEALTH

If flesh food is taken, it should be restricted to once a day. The meal at which meat is taken should be very simple—a little vegetable and bread in addition to the meat. Foods containing carbohydrates or fats are what are known as proteid savers—they prevent proteids from being oxidised so freely in the system, and therefore tend to leave more uric acid in the system. Peas, beans, and lentils should be avoided, as well as much flesh food. Soups, sauces, and gravies made from flesh foods are worse for the gouty than the meat itself. Sugars and sweets must be cut out of the dietary as much as possible. Good butter may be used, and butter made from sweet cream. Cream itself forms the best fat. Not more than two ounces of fats are needed in the twenty-four hours. In cold weather more can be assimilated than in hot weather. Take

no foods cooked with fat of any kind. Lightly cooked eggs, milk, and macaroni are the best source of albumins for the gouty. All meals should be as simple as possible. Bread is better in the form of crisp toast or rusks. Raw fruit should not be taken with a meat meal, and is better consumed early in the day. Vegetables that should be avoided are tomatoes, beetroot, cucumber, asparagus, rhubarb, onions, mushrooms. Probably the weakness of the water is due to the age of correspondent and not to the gout. Lemon and other fruit drinks are useful in gouty conditions, as they maintain the alkalinity of the blood. For the pain during an acute attack, a smart purgative is necessary—as 5 grains of calomel, followed in a couple of hours by a dose of Epsom salts. The drug usually recommended to relieve the pain is tincture of colchicum in doses of from twenty to thirty drops every four hours, in combination with citrate of potash (15 grain doses). But the drug should be stopped directly the pain abates. Fomentations to the joints are always useful.

50. Wetting the Bed

"E.R." complains that her son, aged 19 years of age, frequently passes urine involuntarily at night, and states that lately his eyes puff and swell at night.

Ans.—The urine should be examined

by a medical man, as it may show evidence of kidney disease. It may be necessary to have circumcision performed. The lad should have nothing to drink after 6 p.m. A hot bath at night, three times a week, should be given, and the lower part of the back and private organ bathed in cold water twice daily. Avoid much flesh foods, sweets, and all foods cooked with fat.

51. Continual Headache

"Morga" writes: "My head aches almost every day. It comes on with the slightest noise or worry. If I stand any time my leg, starting in the foot, is like pins and needles, until the pain gets so bad I have to lie down and have it rubbed. I have this pain especially before confinement. Would it be due to nursing or a falling of the womb? The trouble is there only after standing or washing."

Ans.—The leg symptom as well as the headache would point to some womb trouble. We would advise a thorough medical examination. These nervous headaches are made worse by constant tea drinking, and often disappear when tea and coffee are abstained from altogether. For a few days the headache is more severe, but gradually it disappears after these stimulants have been omitted. As much rest as possible should be taken, and the general health should be built up by good, nourishing food, fresh air, and daily cold sponging. Correspondent fears that her heart is weak; but the symptoms given would not indicate heart trouble.

52. Constipation

"Mrs. M.R." writes: "I suffer very much from habitual constipation and do not think it wise to keep taking aperients. I eat as much fruit and grow as many vegetables as possible. . . . The best medicine I find is liquid cascara or Kruschen salts. . . . I eat very little meat, have rolled oats and toast or bread and butter for breakfast and a very light supper, one cup of tea each meal."

Ans.—If aperients are taken, cascara sagrada in the liquid form is about the best; it is better taken in small doses

three times a day than in large doses when a purgative is essential. The salts are good when small doses are effective. Tea and coffee are certainly constipating and should be given up altogether. A good drink of water, hot or cold, should be taken at bedtime and on rising. Drink water also between meals; it may be flavoured with fruit juice. Oatmeal water is a help to the bowels. The addition of puffed wheat, prunes, and dates to the diet would help the bowels. All indigestible foods keep the bowels confined, such as hot buttered toast, fresh bread and scones, cakes, pastry, pickles, condiments, and fried foods.

53. Gastric Neurasthenia

"Subscriber" writes: "Will you kindly give me the diet and treatment for gastric neurasthenia with depression, and flatulence of intestine coming on in the evenings? I am 60 years old, and have worked hard with hand and brain. I have lived a very abstemious life, and take little meat and no tea."

Ans.—We would much prefer a detailed list of symptoms rather than the name of the disease the correspondent thinks he or she is suffering from, even though it is the diagnosis of a physician. We generally understand by neurasthenia loss of general strength and especially of nerve-tone. We would recommend the following foods: New milk (say one glass at each meal), eggs cooked below boiling point, gluten gruel made with equal parts of milk and water, granose biscuits, malted nuts, creamed rice, macaroni. Most vegetables should be avoided, as they tend to intestinal flatulence. Stewed or ripe fruit would suit better. Cook all albuminous foods at a low temperature, and avoid all rich foods. Avoid all condiments, excess of salt, also tea, coffee, and cocoa.

54. Poisoned Arm; Furunculosis; Intermittent Albuminuria

"X.Y.Z." sends us a list of questions on the above topics. He says: "I have a poisoned arm with the development of an eruption."

Ans.—We would advise him to paint the arm daily with tincture of iodine. The headache near the temples after retiring is probably due to digestive trouble. The bowels should be kept regular.

Furunculosis is the condition of the system in which boils (*furunculi*) are frequently developed. Boils are inflammatory swellings caused by the action of germs (*staphylococci aureus* and *albus*).

Intermittent Albuminuria simply signifies that albumin appears in the urine at intervals. Albumin in the urine is an indication of kidney or bladder disease. It is also found in advanced heart and lung diseases.

55. Remedy for Nits

"H.P." asks how to get rid of dead nits.

Ans.—The hair should be thoroughly wetted with acetic acid (which dissolves the glutinous material fixing the nits to the hair), and then carefully combed out.

56. Kidney Trouble (?)

"What's the Matter" writes: "Kindly tell me what to do for my kidneys. Each morning there is a slimy fluid (pale yellow in colour) in the bottom of the chamber. . . . Patent medicines have not helped. I do not smoke or drink alcoholic liquors, tea, or coffee, nor do I eat meat."

Ans.—Probably there is no kidney disease at all; the cause is very likely imperfect digestion. Only a medical examination of the urine can detect presence of kidney disease. Try the juice of half a lemon after meals. Sufficient particulars are not given about the general health to enable us to lay down a satisfactory treatment.

57. Wind and Flatulence

"J.K.," who is 78 years of age, complains of the above and states: "For several years I have used granose biscuits instead of bread, and find a great improvement in the regularity of the bowels. I also take granola and a few eggs, but little or no meat. . . . Do vegetarians live longer than meat eaters?"

Ans.—For wind and flatulence, all foods should be thoroughly masticated.

Drink no tea, coffee, or cocoa. Avoid cabbage, parsnips, carrots, turnips, much sugar, pastry, all fried foods, cakes, and fresh bread and scones. The fewer varieties of food at a meal the better; the meals, however, should be varied. Vegetarianism tends to longevity. We advise the moderate use of milk and eggs.

58. Discharge from Ear; Leucorrhoea (Whites)

"Subscriber" states: "Some time ago I received a blow on my left ear; since then there has been some discharge, and the smell of the matter is shocking. What should I do?"

Ans.—In this case a specialist should be seen.

"Subscriber" also asks for a cure for "whites." A medical examination is also necessary in this case. A daily injection of some astringent should be used, as alum or sulphate of zinc (one teaspoonful to a pint of tepid water). A daily injection of Condyl's fluid (one tablespoonful to a pint of water) is also advised. The cause, however, should be ascertained.

59. Dandruff

"Mrs. H.E.S." asks for a remedy for the above.

Ans.—Precipitated sulphur in cold cream (one part sulphur to 10 of cream) is a good application, or half a teaspoonful of sulphur to one ounce of lanoline. Apply at night and wash head in warm water twice weekly during application. Dr. Vidal gives the following prescription:—

R	Precipitated sulphur	ʒiiss (1½ drams)
	Cacao Butter	ʒiiss (1½ ")
	Castor Oil	ʒivss (4½ ")
	Balsam of Peru or tincture of benzoine to scent the pomade a little.	

60. Gum Boil

"Old Subscriber" writes: "I am troubled with a gum boil on the left upper gum. It frequently matures and bursts, only to mature again. This has been going on for six months. . . . There is no pain."

Ans.—All decayed teeth in the vicinity of the boil should be extracted. After drying the gums with cotton wool thor-

oughly, paint twice weekly with a lotion composed of equal parts of tincture and liniment of iodine.

61. Anorexia Nervosa

"Hinemon" writes: "Will you please give in your column of chats, the origin, nature, and symptoms of disease called *anorexia nervosa*."

Ans.—"Anorexia" simply means *loss of appetite*, and "nervosa" that it is of *nervous origin*. As anorexia is a symptom of a multitude of diseases, we cannot give advice without further particulars.

62. Inward Goitre (Exophthalmic)

"Lindesfarne" writes: "I suffer from palpitation of the heart, am very easily tired, the bowels are very constipated, and, at times, I have a feeling in the throat as if someone were pressing on it. My doctor tells me I am suffering from inward goitre. I always feel better after rest."

Ans.—This disease is generally accompanied by more or less prominence of the eyeballs; hence it is called, "exophthalmic goitre." It is a disease that cannot be treated without a thorough knowledge of the constitution, and that can only be gained by an examination. Sometimes the goitre can be operated on, and the results are good.

63. Heart Symptoms and Pruritus

"Mrs. C. H." complains of uncomfortable symptoms in the region of the heart, burning sensations in her chest, and shortness of breath; when talking quickly or singing she is obliged to stop. Also of intense itching about private parts.

Ans.—Probably the symptoms are those of indigestion. The heart's action is often affected by wind in the stomach, especially in those who take tea and coffee in excess. Dr. Malcolm Morris, in speaking of the itching, writes: "The patient's diet must be carefully regulated, abstinence from coffee, tea, and sugar, in particular being enjoined, and alcohol being absolutely forbidden. It will be well also if the patient can be induced to exclude

shell-fish, pickles, and all highly-seasoned, salted, or preserved foods from his dietary. White meats, green vegetables, and light milk puddings should form the bill of fare, and he should drink nothing but aerated waters." "Diseases of the Skin," page 158. For the itching we would recommend injections into front passage of Condy's fluid and water (one tablespoonful to a pint of water). Bathe the parts alternately with very hot and very cold water and, after drying thoroughly, anoint the parts with the following ointment:—

Ry Ichthyol ʒii (2 drams)
Vaseline ʒiiss (1½ ounces)

64. Pain in Stomach

"Mrs. C. P." writes: "I have a peculiar pain just a tiny bit above the waist line of the stomach. It commenced last August, and I was satisfied by having another meal, the previous one being only one and a half to two hours before; then I used to take biscuits to bed and eat them about midnight to satisfy my hunger. . . . The spot has become very tender, and pressure of any kind gives pain; the pain has now become almost constant. My bowels are very regular. I often have a very bad taste from the teeth, though they look perfect. Should I have them out?"

Ans.—On no account have the teeth out. There may be ulceration of the stomach. The following are the best foods to take: Zwieback, gluten, milk, lightly cooked eggs, rice, sago, tapioca, and oatmeal gruels if they agree. Avoid flesh foods (especially red meats), tea, coffee, cocoa, fried food, cakes and all rich dishes, also acid fruits. Take, a quarter of an hour before meals, a half-teaspoonful of the following powder in warm water:—

Bismuth carbonate
Magnesia carb-pond.
of each two ounces

65. Nourishing Foods

"Mac.", who has started to live without meat, gives a detailed list of his dietary, and asks if we would recommend

anything further. He takes for breakfast: Porridge, poached egg, toast, bread and butter, jam, and an apple; for lunch: Cold rice pudding, fruit, bread and butter; and for evening dinner: Soup, potatoes, some vegetable, milk pudding, and finish with bread and butter.

Ans.—Some of the following dishes could be added to the dietary occasionally: Stale bread and hot milk; granola and dates; gluten gruel; well-cooked lima beans or Canadian wonders; macaroni. A little granose biscuit and hot milk would be appreciated before he starts his milk round at 3.30 a.m. The granola should be made with exactly double quantity of boiling water (salted to taste) and allowed to stand five or ten minutes without any stirring. To half a cup of granola and dates, for instance, add a cupful of boiling water.

66. Inflammation Around Finger Nails

"A.A." writes: "For some years I have been troubled with a more or less frequent inflammation and gathering around the finger nails. A short time ago I had two removed as a cure. The nails have grown, but the condition has not improved."

Ans.—After thoroughly soaking the nails in hot water and then for a short time in cold water, dry thoroughly and paint parts with a mixture of equal parts of tincture and liniment of iodine. Do this every night. If parts get tender, leave treatment off for a few days.

67. Displacement of Womb; Backache, etc.

"Enquirer" asks for information on the above.

Ans.—The womb may be displaced although the monthlies are regular and free from pain, especially in women who have had children.

Backache, difficulty in passing urine, with indigestion and flatulence, discharge of a yellowish colour, yellow complexion, etc., point to the probability of some displacement of the womb. We would certainly recommend a thorough medical examination, and if there is displacement,

an operation. "Enquirer" states that the pain is not in the small of the back, but lower down; this fact also points to womb trouble.

68. Ulcerated Stomach

"C.S." complains of heavy pressure on top of the head, ulcerated stomach, and gastritis. Three years ago she had bleeding from the stomach. Everything she eats turns to gas.

Ans.—The best diet in such a case would include: milk (not boiled), lightly cooked eggs, zwieback, creamed rice, sago, or custard, little white meat, stewed non-acid fruits. Avoid acid fruits and the coarser vegetables. Floury potatoes (baked in their skins), cauliflower, and marrow may be taken. Avoid tea and coffee, red meats, spices, pickles, pastry, sugar, and sweets of all kinds. Only take the freshest of butter. As much rest as possible should be taken. A cold sponge daily would tone up the general health. The powder recommended under "Pain in Stomach" would be helpful. The doses may be repeated one hour after meals if necessary.

69. Pains in Legs, etc.

"H.H." and "Mrs. J.T." are recommended to have regular massage of lower limbs. Sanitarium treatment would help them considerably.

70. Bony Growth; Asthma

"Correspondent" complains of a hard, firm lump on the head near the ear, about the size of a pea; it does not give any pain, and is not sore to the touch. Her husband suffers from wheezing and distressing breathing after active exercise. They live in a damp climate 1,700 feet above sea level.

Ans.—The bony growth (exostosis) need not give any cause for alarm, unless it increases in size, as it can do no harm. The husband suffers from asthma and requires a change of climate.

71. Reducing One's Weight

"A Correspondent" wishes to know how to keep down her weight. She gets flushes on her face during the coldest nights and gets tired on exertion.

Ans.—Chalmers Watson gives the following summary on the "Treatment of Obesity": "The total amount of food must be reduced, farinaceous foods in particular being very greatly restricted. Sugar should be cut off from the dietary, saccharin being employed in its place. Dried fruits should be forbidden because of their richness in sugar, but fresh fruits may be allowed in moderation, and, when desired, may be stewed, and sweetened with saccharin. The meats should, as a rule, be selected from the leaner varieties, such articles as pork, mackerel, eel, and salmon being excluded from the list. Skimmed milk may with advantage take the place of ordinary milk, and no milk puddings should be allowed. Bread and bread foods should be given in the greatest moderation, and are often advantageously cut off altogether for a time. Green vegetables should be freely used, as they have comparatively little nutritive value, and by their bulk give a feeling of fullness. The amount of fluid taken with the meals should be much reduced, and alcohol in all its forms should be avoided. Suitable exercises, either in the form of open-air exercises, Swedish movements, or massage, according to the condition of the patient, constitute a very important part of the treatment."—"*Food and Feeding in Health and in Disease*," page 500.

72. Abscess

"Mrs. E.J.C." is "much troubled with abscesses on face and inside of nose. She is elderly, and eats very little meat."

Ans.—These abscesses are due to inactivity of the skin and to the presence of certain germs. The face should be well bathed in very hot water and before drying sponged with cold water. This should be done twice daily. Avoid fatty, sweet, and flesh foods, all of which foods

throw increased work on the glands of the skin. The sulphide of calcium pills (grs 1), one three times a day, prove beneficial in these cases.

73. Milky Legs and Ulcers

"Mrs. A.F." complains of "milky legs" which came on after confinement, and formation of ulcers about the ankles.

Ans.—Her case is a very chronic one. These ulcers are very difficult to heal, and will not heal under any treatment unless the legs are kept in a horizontal position. There is no better treatment than dressing with sterilised lint and boiled water covered with oiled silk and bandage. Treat the ulcers in this way four times a day. When they are healed, rest in the horizontal position is still necessary. The treatment after healing is the alternate application of hot and cold water followed by massage. Much perseverance will be required. Of course the general health must be attended to. Instead of lint, any ordinary old clean linen will do if boiled in the water to be applied to the ulcers.

74. Loss of Smell; Boils; Itching; Loss of Voice

"Enquirer" complains of complete loss of smell after influenza three years ago.

Ans.—We would suggest the use of the galvanic current for ten minutes twice daily. It is a very difficult matter to regain sense of smell after so long an interval. For the treatment of *boils* see *Furunculosis* in this department of "Chats."

Intense Itching in the back passage may be due to threadworms, fissure of anus, or piles. For threadworms inject solution of salt into the bowel after stooling three times weekly, and give once weekly three grains of santonin with a purgative. Fissure of anus must be treated by a medical man. Piles often yield to a lotion of tannic acid and water (two drams of tannic acid to one ounce of water). This may be injected into the lower bowel.

Loss of voice depends on so many

causes that a medical examination is necessary before any treatment can be suggested.

75. Loss of Weight after Rheumatism

"Durban" complains of the above, and wishes to rectify it. Milk should enter largely into the dietary, also bread, rice, and potatoes. Fresh fruit after meals (except when vegetables form a part of the meal) maintains the alkalinity of the blood and thus lessens the rheumatic tendency. The body should be sponged daily with cold water, and a hot bath taken twice weekly. "Durban" has done well in getting a new set of teeth; probably this will help him considerably. Drink freely of pure water between meals, but avoid tea and coffee.

76. Nervousness and Rupture

"Androssan" writes: "I am now (thanks largely to dietetics advocated by LIFE AND HEALTH) heavier and, generally speaking, in better health than ever I have been previously. In fact, I surprise my friends by the flesh I have put on. . . . However, I am extremely nervous. . . . I am also ruptured and have bleeding piles at times. Would you advise operation for rupture, and would that help my nervousness?"

Ans.—We would advise an operation both for the rupture and for the piles. The loss of blood, the continuous use of a truss, and the other inconveniences of a rupture, play on the nervous system of some individuals considerably. The operations are safe and the results certain.

77. Sore Breasts

"E.T." asks the reason of above at certain periods.

Ans.—It is a very common symptom, and does not indicate any abnormality. Gentle massage is helpful.

78. Liver Spots

"A.M.C." writes: "Could you tell the cause of brown patches coming on the skin? They appear first on the temples and spread across the forehead. The

skin is shiny and sometimes peels. It then looks clearer for a few days, but soon resumes its shiny brown appearance. No external applications seem to have any effect."

Ans.—These spots are similar to freckles, only of a larger size. They occur in pregnancy, in diseases of the womb, and also in some cases of imperfect intestinal digestion (often called liver trouble). Exposure to the sun and wind will increase the size and intensity of these spots. Local applications are not very satisfactory. Perchloride of mercury is the most efficacious. The following local application may be painted on the spots at night with a camel hair brush:—

R	Magnesii carb: levis	ʒii (2 drams)
	Zinc oxide	ʒiii (3 "
	Glycerine	ʒiv (4 "
	Hydrag. perchlor.	grs iv "
	Aquam Rosæ	ʒiv (4 ounces)

79. Obesity

"G.S." is 22 years of age, 5 feet 4 inches in height, and weighs 11 stone. She has plenty of exercise. Breakfast consists of two slices of toast and a cup of tea without milk. Lunch: Mostly bread and butter, jam, cold meat or cheese, and scones, cakes or cold puddings. Dinner (6 p.m.): Meat, vegetables, and pudding. She often takes Epsom salts for constipation.

Ans.—Epsom salts, when small doses (teaspoonful) are effective, are good, but large doses do harm. Avoid too great a variety of food, as that always tends to increase appetite. Spices, condiments, etc., should be avoided for the same reason. Sugar should be avoided altogether, and puddings must be omitted from dietary. Take very little bread; potatoes are fattening but not so much so as bread. Dried fruits, it should be remembered, contain much sugar. Alcohol should be avoided, as it prevents the oxidation of fat in the system. Avoid much butter, and remove all visible fat from the food. The diet must be cut down as much as possible.



A PATIENT statistician has calculated that a person who coughs once every quarter of an hour for ten hours expends energy equal to 250 units of heat, which may be translated as equivalent to the nourishment contained in three eggs or two glasses of milk. In normal respiration the air is expelled from the chest at the rate of four feet per second, whereas in violent coughing it sometimes attains a velocity of three hundred feet—*Medical Critic and Guide*.

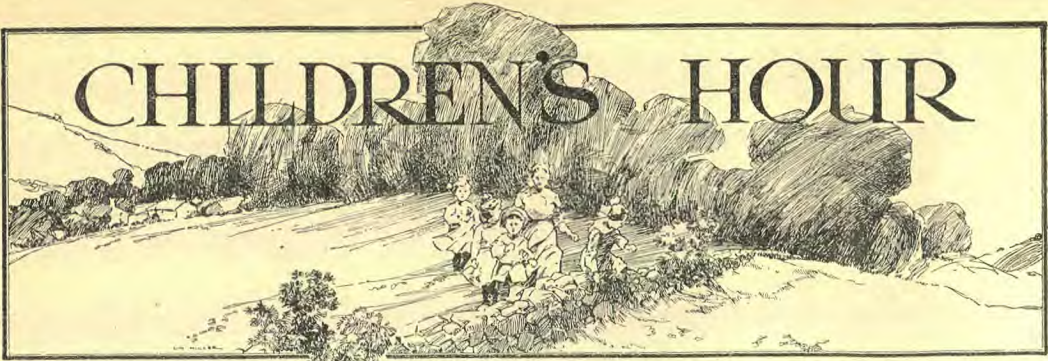
ANILINE dyes are being extensively used by a Prussian surgeon for curative purposes. They have proved to be far superior as germ killers to any antiseptic substances so far known, and they are quickly distributed. After experiments, methyl violet dye was found to be most successful, and burns, cuts, abscesses, and skin wounds, after painting with a four per cent solution, closed up at once. In wounds that were easily accessible, the dye in powder form was used, whilst in the case of deep wounds, a solution of the dye was worked into a paste with glycerine.

THE American Department of Agriculture has called attention, says the *Scientific American*, to the fact that in using street sweepings to fertilise gardens, great care should be taken to avoid material containing oil and tar, as both these substances are harmful to plants. This caution is rendered necessary by the rapidly increasing practice of tarring pavements and oiling roads, and the frequent presence of oil droppings from motor vehicles. An instance is cited of a garden ruined by the tar products in the fertiliser, so that it was necessary to remove the top soil and re-surface the entire plot with new soil.

DURING the recent epidemic of infantile paralysis in America, quacks and imposters plied their trade to great advantage to themselves until the authorities prosecuted them. A maker of amulets, which were "guaranteed" to ward off the dread disease, and which were found to be bags of cedar shavings, was fined £50. Another charlatan selling what he called a sure cure was given thirty days in gaol. His preparation consisted of red pepper, sassafras, and alcohol. Unfortunately, imposters such as these are found in great numbers the world over, plying their nefarious trade, but if people would only realise the fraudulent nature of these patent nostrums and cease "biting," these quacks would soon be looking for other means of earning a livelihood.

WHAT may prove to bring about a revolution in economic conditions, says the *Scientific American*, is to be found in the new process of drying vegetables. The evaporation of the water from the vegetables takes from two and one-half to five hours. The cellular membranes of the vegetable matter remain unaltered, and when soaked in water and re-cooked they retain to a remarkable degree their fresh taste, full flavour, and original shape. Since it is asserted that, through wastage, fully fifty per cent of the vegetables and fruit grown in America never reaches the table of the consumer, this new method of preserving will no doubt enable it to be saved and made fit for transportation. The process will also enable the food to be kept well nigh indefinitely, and to be marketed at a price lower than that of the fresh products only obtainable at certain seasons. A large truck load of mixed vegetables can be dried so that they will weigh only a hundred pounds and fill only a single barrel, while soup vegetables of this sort weighing but one pound will make sufficient soup for sixty adults. As all can see, this will be of the utmost value to explorers, travellers, workmen, and for military operations, not mentioning the valuable space that will be saved in transportation.

CHILDREN'S HOUR



ON THE FARM

WHEN grandma was a little girl—
She's told it many times to me—
She lived out on a country farm
That was as nice as it could be.
She trotted barefoot all day long.
She didn't have to fuss with curls.
And her best friends were cunning calves
Instead of other little girls.



At evening when the shadows fell,
She'd hear them lowing without fail;
And so she'd hurry out to them,
With supper in a wooden pail.
The Alderney was Buttercup,
The little spotted one was Pearl.
Oh, how I wish I'd known her then,
When grandma was a little girl!
—Rose Marie Schmidt.

Little Man Friday

Clara Morris

LITTLE Sue Ames's voice outside called, "Fwiday! Fwiday! Fwiday!"

Then came a piercing whistle, followed by Harry's voice at highest pitch, crying, "Friday! Friday! Friday!" Mrs. Ames twitched her shoulders impatiently. She was distinctly cross, for the jelly that she was making had refused to "jell."

"What's the use of screeching like that?" she exclaimed, as the calls of her

progeny outside pierced her ears. "If the dog were dead, even a Comanche couldn't yell him to life; but as he's alive, neither leather straps nor clotheslines could keep him from following Harry and Sue! Just look at that glass of jelly—nearly cold and no thicker than cream! And all my life I have despised the woman that has to stiffen her jelly with gelatine! Well, it serves me right for beginning a thing on Friday!

"Didn't Little Man Friday come to you on that day?" I asked with a laugh.

"Yes, he did, if you call *him* anything good. And he came in a storm that tore off the shingles and let in the rain, and spoiled the ceiling of my spare bedroom. No, nothing good ever comes to anyone on Friday.

Like most boys' dogs, Friday was a mongrel. It would be much easier to say what he was not than to say what he was. He was not a retriever or a pointer or a St. Bernard or a bull or a mastiff—or anything else that is well-bred or clearly defined. But he was intelligence itself; and he was never tired, never cross; he was always ready to play, to eat, or to sleep.

He was of medium size, and had a yellow-brown coat of short, stiff hair, marked with a dark stripe running down his backbone. Nature had carelessly given him four misfit feet, much too large for him; his tail was curiously like a rolling-pin.

On the morning of the equinoctial storm of two years before, Mr. Ames had found on the porch a wet, shivering little puppy. He was hungry, he was cold,

and he was probably frightened; but he rose and ambled with shivery joy to meet Mr. Ames. Lifting his bright eyes to the man's face, he looked at him with that expression of immeasurable, undying trust that can be found only in the eyes of a boy's dog.

Mr. Ames stepped quickly back to avoid the rain, and the puppy, moved doubtless by the same impulse to avoid further wetting, slipped inside. His muddy feet left tracks on the creamy whiteness of the kitchen floor, and Mrs. Ames, bustling and indignant, was making some threats about "putting that little beast right out of here," when Harry came in. The moment the twinkling blue eyes of the boy met the bright brown eyes of the dog, they understood each other.

"O mother," cried Harry, "I want him!"

"You can go right on wanting," Mrs. Ames replied, turning the pancakes with unnecessary emphasis. "If you want a dog, you'd better wait and get a decent one, not a poor, miserable, splay-footed, no-breed thing like that!"

Harry saw the tracks on the floor. "Oh, please let him stay just to-day," he pleaded artfully, "to play Man Friday when I'm Robinson Crusoe! See his nice footprints—already made; and you won't let me go to school to-day, and I have to play with something."

Mrs. Ames, vowing that she would never consent, at last, of course, consented. The little waif had meanwhile discreetly withdrawn behind the kitchen stove, where the pleasant warmth was gradually subduing his convulsive shivers. When Harry put before him a dish of warm bread and milk, the famished little animal polished the dish, and then, stretching himself out behind the stove, slept like a small log until the children came from the dining-room and called him to take his part in their production of the thrilling drama of "Robinson Crusoe."

But before beginning that, they had to perform the duty of naming him. Considering the day of the week and the part he was to play for them, they thought

that "Man Friday" would be a suitable name.

And so the little wanderer and waif suddenly found himself in possession of a name and a habitation.

Like all intelligent dogs, Man Friday could measure time perfectly. Every morning he escorted the children to the school-yard gate, there giving up to Sue the small bag containing her primer, slate, and apples. Of course he did not surrender them peacefully—every boy's dog will understand that. When bidden to give up the bag, he growled as savagely as his full mouth would permit, and jerked the bag away from the hand that Sue held out for it. A struggle always followed, in which Sue had to inflict some very dreadful blows with her chubby hands, while the delighted tots, looking on, screamed, "Oh, he's a-goin' to bite—yes, he is! He's goin' to bite!"

The invincible Sue then boldly seized upon the long, lumpy tail; when Friday Ames dropped the bag to defend himself, Sue deftly snatched it up. The children shrieked in triumph.

Having performed his duty of amusing the children, Man Friday turned and trotted home alone.

One day I heard the rattle of gravel flung by flying feet, and saw Man Friday tear round the house, up the porch steps, and into the kitchen. With yelps such as I had never heard from him before, he flung himself against Mrs. Ames. He was trembling all over, and he seemed literally wild with excitement and fear.

Mrs. Ames caught her skirts tight round her, and cried, "He's mad, as sure as you live, he is!"

But I had risen, for an awful thought had come into my mind—"The children!"

Friday gave another bound against Mrs. Ames, and then rushed out to the head of the steps. Looking back and seeing that we did not follow, he sat down suddenly, lifted his muzzle, and gave forth a long howl!

"Oh, something's wrong!" Mrs. Ames cried at that instant. "The dog's

alone!" Then she called loudly, "Harry! Harry! Susie! Sue!"

At those names little Friday sprang down the steps and, barking furiously, rushed to the gate. Man Friday returned, caught her apron in his teeth, and running backward, pulled her to the porch. In another moment two terrified women were seen apparently playing tag with a common yellow dog in the public street.

We had gone only a block when little Friday, after looking back to see whether we were following, turned the corner. My brain was working fast. Where were the children likely to go in that street to play? Mr. Brown's little private stable? There was a pony there. No, Friday had passed Mr. Brown's house. To the lot where a house was building? Nothing could happen to them there, for the men would take care of them. The men—the men! Had I not heard that work had stopped there for some days? Dear, dear! Friday had turned in there!

A mass of fallen sand at one end; a number of small footprints, all pointing the same way, as if children had fled in sudden panic; Sue's little hat on the ground; and devoted, frantic Man Friday digging like mad—that was what we saw when we turned into the open lot!

After that it seemed a sort of nightmare—the summoning of help, the digging, the cautions to be careful not to hurt the children with the shovels, the prayers of Mrs. Ames, and through it all the sobbing breath of Little Man Friday—digging—digging—all the time!

Then there came a cry from the mother. The dog had uncovered a bit of Sue's pink dress. Leaving her to stronger helpers, Friday turned away. He looked at the men with a kind of pitying contempt, as if he were saying, "Oh, these men! Why don't they put their noses to the sand and find my boy's trail before they dig? Like this!"

He nosed along the sand, and then suddenly began to dig furiously at a spot quite removed from the place where the

men were digging; he was barking with all the strength he had left.

"Oh," I cried, see little Friday! You're working in the wrong place—he says so!"

The men looked at one another. Every moment was precious; they could not afford to waste an instant. But the dog seemed so sure that they accepted him as their guide—master workman and "boss."

And where he led them they found Harry. Presently the children lay upon the ground, with their suffocated little faces turned upward to the blessed light and air. Whimpering and shivering, Man Friday licked their closed eyes and their cheeks.

When the children had been taken home and put to bed, Harry called rather weakly, "Friday! Friday!" At that call poor Friday simply lost his wits. He ran, he leaped, he barked, he chased his own tail round and round, until he fell over in a helpless heap of joy.

As we sat at dinner that day, Mrs. Ames said in a determined manner:—

"James, I want a piece of the *breast* of that chicken, and plenty of gravy, too. Just put it on that gilt-edged plate, please."

Rising grimly, she walked to the kitchen and put the plate before the surprised dog, who had always eaten from a tin pie dish before.

"The best I have is what you'll get, little man, the rest of your days," she said, as she gently stroked him.

The china plate worried Friday a little, it was so fine. So he carried off all the pieces of chicken and ate them on the zinc under the stove, and afterward attended rather gingerly to the gravy, which was really too good to be left.

But Mrs. Ames did not know that, for she had returned to the dining-room.

"As long as I'm a living woman," she said, as she sat down again at the table, "I'll never say another word against Friday—for it was the luckiest day of my life that brought Little Man Friday to our door!"—*The Companion*.

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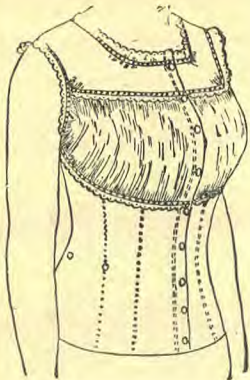
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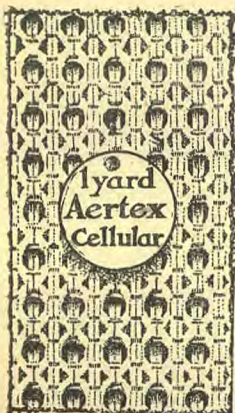
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Lactose	6.38	6.6
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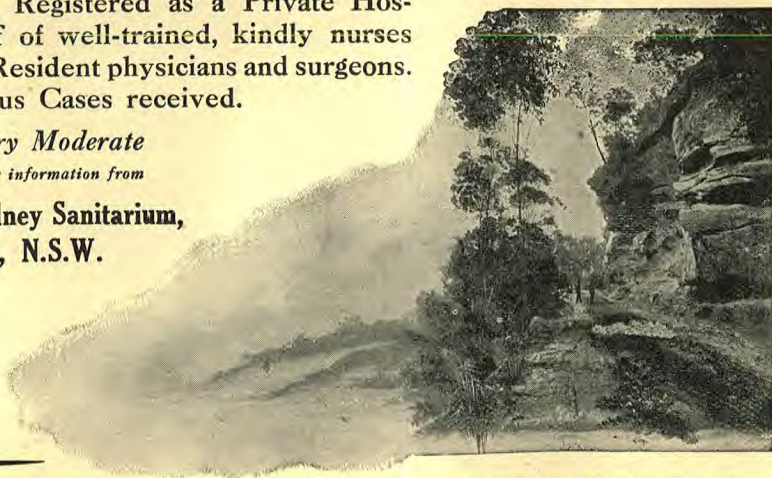
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