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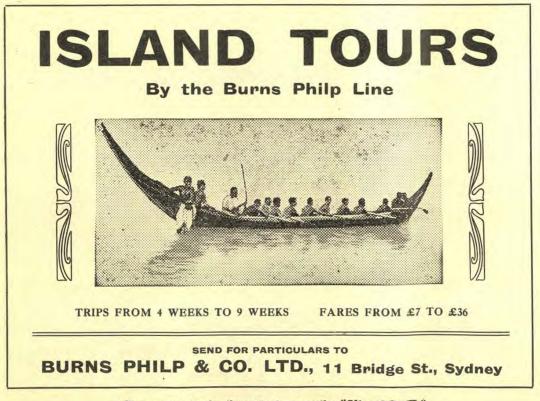
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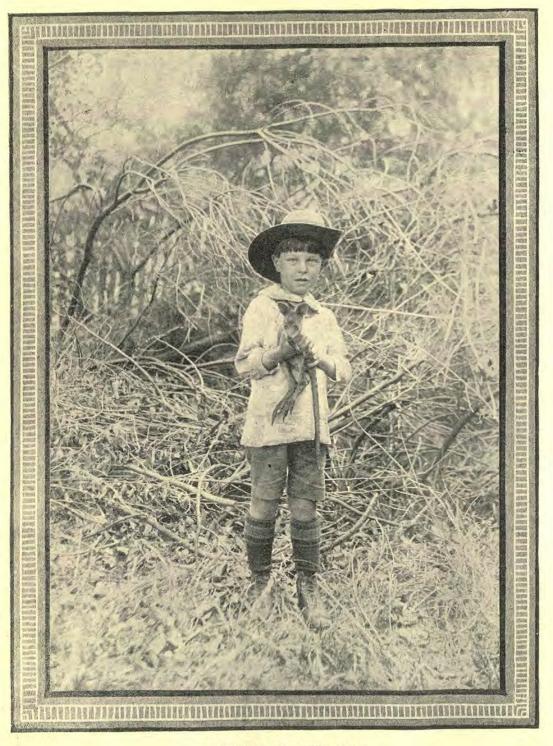
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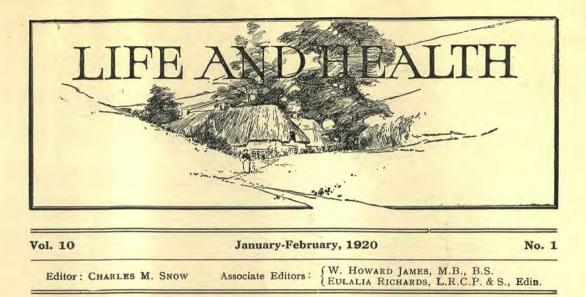
Feathered Babies in their Homes

Horace G. Franks 40

Our cover design is a reproduction of a photograph by Mr. L. Gauthier, of Papeete, Tahiti.



TWO NATIVE BORN AUSTRALIANS



DON'T fry starchy foods. It greatly reduces their food value. Starch is mainly digested in the mouth; but the oil used in frying covers the particles of starch with a protecting coat which the saliva cannot penetrate, and which is not removed until the food reaches the duodenum and small intestine. To reduce by half the food value of what we eat is just as wasteful as it would be to pay double price for it when there was no need to do so.

DON'T put a mustard and pepper plaster on the inside of your stomach-unless you relish the idea of raising a chronic gastric ulcer. If you must use such a plaster, put it on the outside where you can see what it is doing and can get it off quickly when it gets too hot. In other words, don't inflame your whole alimentary canal just to tickle the beginning of it. It may be profitable to the doctor, but it won't benefit you. Strong spices ought never to go into the stomach. Did you know that a sensitive alimentary canal can raise a crop of hæmorrhoids on a strong dose of pepper? Don't investi-Others have done so to their sorgate. row.

www

EXTREME heat and extreme cold destroy a certain vital element in foods and

render them of little value in sustaining life, maintaining strength, and preserving health. This vital element is known as the enzyme. Recent experiments have proved that puppies and kittens fed upon boiled milk and upon bread in which the enzymes had been destroyed became ill. They also got on badly when fed upon milk in which preservatives had been used. The preservatives destroyed the enzymes and so greatly reduced or destroyed the food value of the milk. Dogs fed solely upon meat that had been frozen died of dysentery. Pigs suffered in health when fed only upon blighted potatoes that had been boiled. Blight destroyed the enzymes. When the potatoes were mashed and mixed with a meal in which the enzymes had not been destroyed, the pigs recovered. Young chicks when fed upon meal baked to destroy the enzymes, soon all died. Laying hens soon stopped laying when fed upon No substance was removed baked grain. from any of these foods; but the freezing or baking had destroyed that vital element. Flour made from grain that has been baked before milling, oatmeal made from kilndried oats, frozen meats, and non-enzymic margarine, all have lost a large proportion of their food value, through the lack of the active enzymic principle. It has recently been noticed that children are checked in their growth when non-enzymic margarine

has been substituted for butter in their dietary. Flour made from wheat that has had its outer surface removed is also greatly deficient in that vital element. The white flour of civilisation is rapidly weakening the race; and this together with "rich" foods and foods blighted by burning and freezing, and unwise combinations of foods, is giving the race a hard run for existence.

w w w

CUSTOM and ignorance play a large part in the question of food supply for the various nations of earth. It is high time that mankind took stock of the food products of the world with the idea of utilising them to their utmost capacity. There are many valuable articles of diet that are restricted by prejudice within national boundary lines. For instance. one of the very best food products of America is used very sparingly in other countries, where it is used at all. Some people will not use it. We refer to Indian corn (maize). Corn bread, made from either the white or yellow corn meal, is a delicious bread, of high food value. Starving Belgium refused to eat this bread, and even the English and Irish have had to be cajoled or deceived into eating it. On the other hand, Americans as a general thing use but little rice, which forms the staff of life for hundreds of millions of human beings in other countries. The Japanese raise oats to feed to horses, but have not learned to eat oatmeal. And this reminds us of Dr. Johnson's definition of oats, "a grain which in England is generally given to horses, but in Scotland supports the people." Says the Scientific American, in treating of this subject : "Necessity is going to prove the mother of invention. We must try all things and hold fast to that which is good among the actual and potential foods within our reach. Nature is bountiful beyond all belief in the foods she provides for us. How long are we going to permit custom and caprice to prevent us from accepting her bounties?"

WHEN the wise man said there was a time for everything under the sun, we must understand his language to refer only to those things that are proper. His own testimony in other places would There make this reservation necessary. is no time for gluttony, as the good Book clearly indicates. "The drunkard and the glutton shall come to poverty." Prov. 23:21. But gluttony does not always stop at mere poverty. It often carries a sudden penalty, and sometimes that penalty is death. The following curious epitaph, which bears upon this point, is said to have been found on a tombstone in Exeter:-

> Ye who have dainty palates, lend an ear To one who little thought of lying here; If you the cause of my decease would know, Repast delicious proved my overthrow! By eating cherries I a surfeit got, And here they've laid my body down to rot. Ye dear Hibernians, and ye Britons too, O! curb your appetites, whate'er you do; Intemperance makes the suicide and glutton; Beware of eating too much beef and mutton.

Fruit is good; but the trouble with the glutton is that the balance-wheel of his appetite has come loose on the shaft, and alimentary machinery runs wild. his His taste has greater capacity than his Those who realise that this stomach. trouble is their trouble should make the strongest possible effort to accomplish by direct and positive mental effort what ought to be accomplished by a properly educated or properly constructed palate. Realising what is a proper meal, eat it and refuse to go beyond it, no matter what the palate may be urging you on to do. So doing, you will not only save many a doctor's bill, but you will increase your own self respect, decrease the cost of living for yourself, and live longer into the bargain.

Prohibition as Class Legislation

KNOWING the increasing interest there is among our readers in the question of restricting or prohibiting the sale of intoxicants in Australasia, we quote from a contemporary the following ingenious—if not childish—objection to prohibition :— One of the bitterest claims now being made against prohibition in America is that it is class legislation. And that is the cause of the unrest and resentment which are turning the country topsy-turvy. The rich man has his cellar full enough of liquor to last the rest of his life. The poor man who could not afford so to stock up has a bottle or two—or nothing. The bitterness is further increased by the poor man's knowledge now that the wealthy classes were largely instrumental in forcing prohibition upon him. In other words, the rich helped impose on the poor a prohibition which they, the rich, did not mean to observe themselves.

Now all this would be amusing were it not for the fact that there will be a few who will be foolish enough to believe it, and some might even be influenced by it to vote against the restriction or prohibition of the liquor traffic in Australasia by such childish arguments and such misrepresentations of the actual conditions In the first place, the in America. country is very far from topsy-turvy. They have disagreements between Labour and Capital-even strikes sometimes. But, if our memory has not played us false, we have the same here occasionally -and that, too, with practically no restriction of the liquor traffic. If prohibition is the cause of strikes in America, then there should be no strikes in Australia. But what are the facts? In the United States of America (according to the statistics published by the Department of Labour, Melbourne) there were in 1914 1.1 strikes per year to each 100,-000 inhabitants; whereas, for the same year, there were in Australia 6.8 strikes to each 100,000 inhabitants. The following year the average in Australia had risen to 7.3, and in 1916 to 10.3 per 100,000 inhabitants. We do not have the figures for America for the two latter vears. But if either of these two countries is topsy-turvy because of its attitude toward liquor, it is Australia rather than America, if we are to judge by the lack of harmony between Labour and Capital.

As to the charge that the rich have imposed prohibition upon those who are not rich, this charge also is both false and ridiculous. In America every citizen over twenty-one years has a vote, and the vote of the poor man counts just as much as the vote of the millionaire; and he who claims that in a country where every man's vote counts one the minority can impose its will upon the majority, is trading upon the ignorance or the credulity of his hearers. Or do such upholders of the decaying and soul-destroying and body-wrecking liquor business have the idea that in America the majority are rich and only the minority are poor. We have spent some years in America and are free to confess that no such happy condition, no such Utopia, exists there. Prohibition has been won in the United States and Canada-sister nations-by a straight-out campaign of education, and by a straight voting contest between those who are in favour of prohibition and those who are opposed to it. The "drys" have won, and the "wets" are feeling dry; but they will soon become accustomed to this temporary discomfort, and soon it will cease to be a discomfort, and they will themselves rejoice as they see their wives and children better clothed, better fed, and better housed, and see a little bank account steadily growing to care for their needs when labouring days are past.

As to the statement that the rich are stocking their premises with quantities of liquor, there may be a few who are doing so—who are willing to run the risk of government confiscation on discovery; but they are few and their stocks not inexhaustible. Some day "this too shall pass away," and a sober and prosperous nation will congratulate itself that it has wiped out the greatest curse and the greatest handicap from which its people ever suffered.

So let us not become excited over such puerile juggling with facts, such hollow misrepresentations of conditions, such bogey-men of the dark. The people are rising up and demanding release from the payment of this blood-tribute to the demon of strong drink. They have won their release in the United States and Canada, and the majority are happy over it. So will they be here throughout the great Commonwealth of Australia and in New Zealand in the not distant future.

Diseases of the Liver

Jaundice

WHEN the bile cannot escape freely into the bowel, the bile pigments find their way into the blood and give a yellowish tint to the skin, the whites of the eyes, and perhaps the lips, the lining of the mouth, and the urine.

Among the chief causes of this trouble are catarrhal conditions of the duodenum (the first part of the small intestine); gall stones; growths within or outside the liver pressing on the gall duct; contraction of the orifice of the bile duct as in the healing of an ulcer; poisoning by such drugs as phosphorus, arsenic, antimony, mercury; snake poison; poisons of acute, infective fevers, such as yellow fever, malaria, and blood poisoning. The deepest staining is in closure of the bile duct by cancer or gall stones. The jaundice is deeper in those of sallow complexion, in the thin rather than the stout, and in the old rather than in the young.

The bronzing of the skin in Addison's disease, or exposure to sun, or the tinting of skin in cancer or pernicious anæmia must not be mistaken for jaundice. Jaundice, unless very deep, is not recognised at night time by artificial light. There is very often itching, especially at night, and the pulse is generally slow. The stools are generally of a light colour due to the absence of bile. There is very often constipation; the stools may be very offensive or without much odour.

Treatment.-Jaundice is but a symptom of disease, the treatment should be that of the disease which gives rise to The kidneys should be kept active by it. the drinking of water or the alkaline waters between meals; the bowels should be kept regular with Carlsbad salts, sulphate or phosphate of soda, or other similar purgative; a large simple enema is good occasionally. The itching of the skin may be relieved by vinegar or lemon juice and water. No alcoholic drinks should be given, and fat, except in the form of milk, should be avoided. The

diet given under the chronic forms of biliousness will generally be suitable. Mostly a hot bath twice weekly and the daily sponging of the skin are to be recommended.

Congestion of the Liver

Congestion always signifies a dilatation of blood vessels and a consequent excess of blood. The liver may be congested under two very different conditions. The artery to the liver (the hepatic artery) and the portal vein may supply too much blood to the liver; this would be active congestion. Or the heart may be in such a feeble state that the venous blood is not removed from the liver as rapidly as necessary; this would constitute passive congestion.

Active Congestion

The liver contains much more blood during and immediately after a meal, due chiefly to the blood supplied by the portal vein, that which brings the newly-formed blood from the alimentary canal to the liver, and the liver considerably increases in size from this cause; but this is normal and should not be called congestion. It is only when the increased amount of blood remains from one meal to another that congestion can be said to exist.

Symptoms.-The symptoms of congestion of the liver are uneasiness or pain in the region of the liver, and perhaps at the back of the right shoulder; there is generally a dull headache, foul tongue, constipation, lack of appetite, and a muddy complexion with some yellowing of the The urine is mostly scanty eveball. and dark and generally with a sediment. There will be tenderness over the liver which may be felt to extend below the margin of the ribs. In chronic congestion the symptoms are not so severe; there is always constipation, and piles are generally present; there is usually a good deal of despondency with irritability of temper. The liver will be tender to the touch and the increase in size may be noticed.

JANUARY FEBRUARY

Malaria is a frequent cause of chronic congestion of the liver, and in this case there may be occasionally a slight rise in temperature.

Causes of Congestion.—Excess of food, alcoholic drinks, rich highly-seasoned dishes, want of exercise, constipation, dyspepsia. Congestion of the liver is more frequent in hot than cold climates, in summer than in winter. Malarial applied to the liver and abdomen twice daily; prolonged cold applications must be avoided. In the chronic conditions alternate hot and cold applications are of great value; if the hot fomentations be allowed to remain on from seven to ten minutes the cold compress should remain one minute.

Passive Congestion

Passive congestion is of a more lasting



EDITORIAL

I. H. Kinnear

Some love to roam o'er the dark sea's foam Where the shrill winds whistle free.—Charles Mackay.

fever always produces congestion of the liver.

Treatment.—A very simple non-stimulating diet must be adopted. Flesh foods, alcohol, pickles, spices, pepper, mustar l, and much salt must be absolutely forbidden. Meals must be light, and mature or stewed fruits are of great service. The patient should be kept warm in bed until the symptoms have disappeared. The bowels must be kept open with Carlsbad salts, the sulphate or phosphate of soda. Hot fomentations should be nature, and is due to chronic heart or lung trouble. The increase in size of the liver is often very noticeable and the increase in size takes place very rapidly in some cases. Jaundice is frequent and often has a peculiar greenish hue. There may be a collection of fluid in the abdomen (ascites) due to obstructed circulation in the liver.

Treatment.—The treatment is that of the chronic trouble which is the cause of the disease. Food must be light and digestible and on the same lines as those for active congestion. The bowels must be kept regular. Alternate hot and cold applications to the liver are of great service.

Gall Stones

Gall stones are formed from cholesterin, a secretion of the liver which should be carried into the intestine in the bile. They may be found either in the gall bladder or in the ducts leading to or from The cholesterin forms first the bladder. in the small canals between the hepatic cells, and is deposited in the larger tubes of the liver or the gall bladder, forming stones at first of small size which are increased in size by gradual deposition of cholesterin on their outer surface. There is no pain during the formation of gall stones and frequently many stones have been found in post-mortem examinations when no special symptoms existed during life; it is in the passage of gall stones along the ducts that the severe symptoms of biliary colic arise. There may be only one attack of biliary colic or they may occur at intervals, the intervals sometimes extending over weeks, months, or even The pain, which is very severe, vears. is in the region of the liver, on the right side of the abdomen just below the ribs; it extends backwards to the side and upwards toward the shoulder blades. In renal (kidney) colic the pain extends downwards towards the pelvis. When the stone reaches the intestine, the pain suddenly ceases; the sudden stoppage of pain is a marked feature in biliary colic. While the pain is on there is complete loss of appetite, nausea, and probably vomiting; there is generally some tenderness over the liver with some enlargement of that organ. If the passage of bile is obstructed by the stone, there will be some jaundice and the stools will be a very pale colour. Sometimes the stones can be found in the fæces; in looking for them the fæces should be thoroughly softened and mixed with water and passed through a fine wire sieve or coarse canvas, Where but often they cannot be found. the stones are facetted there are probably more to come, but when round or oval a

more favourable view may be taken Sometimes gall stones that do not pass into the bowel set up inflammation in the surrounding tissues, and perhaps abscess or ulceration; in this case there would be considerable fever and probably rigours (shivering fits). Where inflammation exists, there will be continual pain, dyspeptic trouble, and general ill health. By ulcerating through into the abdomen fatal peritonitis may result, but this is rare; generally inflammation is of a mild type and adhesions occur, which prevent the stone ulcerating through the ducts.

Treatment.-During the attack frequent very hot applications should be applied in the region of the liver, and the feet should be kept warm. A good hot trunk pack is of great service. As the pains are very severe, the physician will sometimes administer a hypodermic injection of morphia. Hot water should be taken in large amounts if the vomiting allows of it. In the intervals between the attacks the patient should take plenty of pure water between the meals in order to keep the bile in a fluid condition, and thus prevent the formation of the solid cholesterin. Sugar, sweets, indigestible articles of food, and excess of flesh food should be avoided. Generally a surgical operation is advisable. and the sooner the better in order to avoid local inflammation and other complications. As a rule the operation is very successful; over eighty per cent obtain complete relief.

Hydatid of the Liver

The liver is a frequent site for the development of hydatids. Hydatids may exist for years without causing any symptoms whatever; it is only when they press on important organs or parts that symptoms are developed. When the hydatid tumour is on the front part of the liver, a rounded even swelling may be detected; sometimes this is firm and hard, and at other times, on pressure with the fingers, the existence of fluid may be detected. The swelling is not hard and irregular as in the case of alcoholic liver or cancer. Often the lower ribs on the right side have a decided bulge. At the back part of the liver hydatid tumours are difficult to detect. When the tumour is of some size there may be symptoms of dyspepsia, jaundice, and pain. The only treatment is by operation, but sometimes they undergo spontaneous cure, the hydatid actually dying and shrivelling up. When operated on the fluid is evacuated, the sac of the hydatid removed, and the wound is allowed to heal from the bottom.

Cancer of the Liver

The symptoms of cancer of the liver are at first very indefinite. The chief symptoms are great weakness, loss of flesh, jaundice with pain between and in the shoulders and down the back, and occasionally nausea and vomiting. Generally an uneven tumour can be detected in the region of the liver; occasionally, when the cancer is away from the general surface of the body, no tumour can be detected.

Treatment.—The only treatment is by operation and that can only lengthen the life of the patient for a short time.

W. H. J.

Corns

CORNS are caused through ill-fitting boots; boots that are too large are more liable to produce corns than tight fitting boots. The constant rubbing of the skin by both causes increases growth of the superficial layer of the skin. The purchase for children of boots that are too long with the idea of making provision for growth is often responsible for the development of corns. When the boots are too large, children get into the habit of bending their toes to prevent the slipping up and down of the foot inside the boot, and corns as a result appear on the upper surface of the joints of the toes and chronic deformities also result. As with bunions wide soled boots with square roomy toes and low broad heels are necessary. The corn should be pared with a sharp knife; if the corn cannot be entirely cut out apply a little glacial acetic acid on the end of a match, and when the film of skin produced by the acid peels off, renew the application until the corn has disappeared. Nearly all corn cures contain salicylic acid, which has the advantage of removing the hard skin without damaging the surrounding soft parts. Added to collodion it, when painted on the corn, forms a protecting film over the corn. The following is the usual formula :—

R ₄	Acid salicylic	(3j one dram)		
	Extract cannabis			
	indicæ	grs. x (10 grains)		
	Sulphuric ether	3ij (2 drams)		
	Flexile collodion	up to 3j (1 ounce)		

Soft corns can be painted with collodion by itself. W.H J.

Bunions

THE bunion is a deformity of the joint uniting the big toe with the foot; the metatarsal bone turns in and the toe turns outwards; consequently bunion is a partial dislocation. The bones press against the skin, a little sac of fluid (bursa) is formed, the skin is thickened, and the continued rubbing against the boot increases the thickening until a prominence is formed. The bone itself (the head of the metatarsal) is eventually thickened, and bony growths form about the joint. Practically the boot is always to blame ; in the early stages it does not give any pain or inconvenience and consequently is not recognised. If taken early and proper boots are used, the trouble is obviated. The inner border of the boot should be straight and the toe piece squared. See that the uppers of the boot are sufficiently capacious or that there is no pressure on the joint. What is known as a toe post is very useful; it may be introduced into the boot or form part of the boot. A vertical piece of stout leather is placed between the big and the second toe in such a way as to prevent the outward displacement of the big toe. At night a splint may be placed along the inner side of the foot, with a hole into which the bunion fits. The big toe is bandaged to the splint which should be padded with cotton wool. The removal of the head of the metatarsal bone (after inflammation has subsided by rest) is often the only cure, and when properly performed a movable joint still remains. W.H.J.

For You Who Are Mothers

"I AM tired, oh so tired," sighed a mother at the close of a long weary day. Yet as she sank into a chair when the last child was tucked into bed, a look of happy contentment stole over her face.

From early morning until this hour, her hands and heart had been filled with the task of home-making. She had prepared and served three meals. Thrice had she washed the dishes and restored the kitchen to order. She had swept, dusted, and tidied the house. She had prepared the children for school, helping Donald with his lessons. She had pressed several pairs of trousers for her husband, and had darned a rent in Gertrude's frock. She had bandaged an injured finger for Bobbie and had comforted Baby after several falls.

Her day had brought no great tasks, but a succession of small duties. Yet the faithful performance of these apparently trivial duties had brought happiness to her family and contentment to her own soul. She had, this day, made her home a safe, happy and helpful refuge for her family. And what more could a woman wish to do?

Do not we mothers often weary of our petty tasks and sigh for some work worthy of our talents?

If only we might realise the greatness and the sacredness of our work, how light would our burdens grow and what joy we should find in our daily service!

Our work includes the keeping of a house with its multitude of duties, cleaning, cooking, washing, ironing, sewing, mending; but surely it comprehends much more than this.

Our houses must be homes in the deepest and truest sense. Here the husband must find helpful companionship and satisfying pleasures at the close of his arduous days. The children too must feel that home is the dearest, sweetest, safest place in all this wide world, a place of loving sympathy and helpfulness, of joy and peace and cheer.

The mother's task is one which angels might envy, a work whose results may be immortal.

The little child who is entrusted to her care is a gift of God to be returned to Him as pure and spotless as when received from His hand. The babe is a wondrous little parcel of possibilities.

A sound physical foundation is most necessary to strong mental and moral growth. Hence the mother's first attention must be given to the child's physical health. In fact, the care of her child's health must begin months or even years before his birth. She should by right living and conformity to the laws of health strengthen her own body before ever she accepts the responsibility of motherhood. Only by so doing will she be able to give her child a heritage of buoyant health.

As soon as ever her babe is placed in her arms, her real life work begins. A precious little life, wondrous in its possibilities, is placed in her keeping, to have and to hold; to guard and to nourish, to train and to develop—all for Him who is the giver of all life.

Shall we first consider briefly the general principles underlying the correct physical development of the child during infancy and early childhood? Of course some of the principles considered apply with equal force to adult life as to infant life.

The Child's Physical Development

We may summarise the child's vital needs as follows: Pure air, sunshine and warmth, suitable food and drink, exercise, rest, and cleanliness.

JANUARY-FEBRUARY

Pure air is the first great vital need of the body. The body may live for days without food, but only a few moments without air. The blood stream, as it flows throughout the body, gathers poisonous waste substances from every living tissue cell. In a few moments the body would die of self-poisoning were not the blood being constantly purified by contact with oxygen in the lungs. Every breath

Sunshine and Warmth

Plants grow pale and die if deprived of sunshine, and so do babies. Sunshine, apart from its warmth, increases vitality and quickens the life processes within the body. So take baby out into the sunshine every day and let his room indoors be a sunny one. It seems almost unnecessary to mention that reckless *exposure* to the sun may result in heat stroke. Always



EDITORIAL

WHERE NATURE COMBINES WITH OUR PHYSICAL FORCES TO REINVIGORATE THE SYSTEM

which an adult person exhales from his lungs is so laden with poisons that it renders unclean or unfit to breathe again at least three cubic feet of air. A little child poisons the air less quickly but as surely. It will be seen, then, that a constant supply of pure out-of-door air is absolutely essential to the child's well being. In moderate weather, the baby may with great advantage live out of doors during the daylight hours. Increased vitality and greater power of resisting disease are marked results of out-of-door living. protect a child's head and face from direct rays of sunlight.

Apart from sunshine, warmth is essential to the baby's health. All young creatures enjoy warmth, as they have not the power of the adult to resist cold. The baby who begins his life in the winter, should be carefully guarded from extreme cold and sudden changes in temperature. The room which he occupies should be comfortably warmed and at the same time be thoroughly ventilated.

Warm clothing too is necessary to

baby's comfort. Particular care should be taken to cover the arms and legs warmly, as indigestion, diarrhœa, and chest affections are caused by chilling of the extremities. While baby's clothing should be warm, it should be open in texture and as light as is consistent with warmth.

Suitable Food and Drink

The mother may count both herself and her baby fortunate if she is able to nourish him in nature's way. Disorders of nutrition and developmental defects are much more prevalent among artificially fed than among breast fed infants. The mother should, therefore, assisted by the advice of her physician, make every possible effort to breast feed her baby. Should she be unsuccessful in this, she must resort to properly modified cow's milk or to one of the best of the proprietary foods on the market.

One of the most important points to be observed in the feeding of an infant is regularity. During the early weeks of baby's life an interval of two and onehalf hours should elapse between feedings, and very shortly a period of three hours should be adopted. In fact, many babies thrive best on the three-hour interval from the start. Irregular feeding results in indigestion, colic, diarrhœa, and retarded growth. Boiled water should be offered to baby several times each day, as even young babies often thirst for water.

A few teaspoonfuls of the freshly strained juice of a ripe orange or other suitable fruit in season should also be given at least once a day after the first few weeks of life. This is particularly necessary in the case of bottle-fed babies. The fruit juice should be given about an hour before a milk feeding.

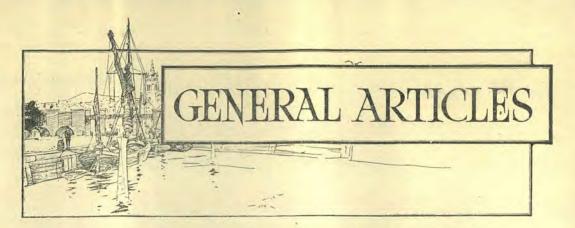
At the age of nine months or a year the child should be gradually weaned from either the breast or the bottle. To continue breast feeding for a longer period than twelve months is detrimental to both mother and child.

A great deal depends upon the feeding of the child during the second year of life, as this is a period of rapid growth and of the development of the teeth. The diet during the second year should consist chiefly of milk, in the form of light gruels and plain puddings. Wellcooked cereals, dry breads, and suitable fruits must also be included. No vegetables should be allowed, with the exception of a little mashed or baked potato toward the end of the second year. A lightly boiled or poached egg may also be given at about this time.

All during early childhood the little one's diet should be simple and carefully regulated. Many mothers permit their children to eat "whatever is going" just as soon as a few teeth appear. This is not only detrimental but actually dangerous to the child's health. Not long ago a fine child of three years died in strong convulsions twelve hours after eating a sausage. This death occurred in spite of every effort made by the doctor and nurse who were hastily summoned to the child's aid. Other cases might be mentioned, but we will only give the following typical case.

A young mother complained that her eleven months' old baby suffered greatly with the "wind." He slept very badly at night and scarcely at all by day. He cried much and seemed to be often in pain. On making enquiries it was found that this baby daily dined on potatoes with gravy, cabbage, and other vegetables. In fact, to use the mother's own words, "He eats just whatever is on the table." She seemed quite surprised when told that a baby of his age should have nothing practically but milk food, plain biscuits; and fruit juice. However, she followed the advice given and her baby was soon as happy and healthy as a baby should be.

While the young child's food should be simple and nutritious, every possible effort should be made to provide suitable variety from day to day. Especially during the second and third years of life little children often lose their appetite. In these cases, the out-of-door life, together with a proper variety of food, will usually remove this difficulty. [E. S. R.



The Correct Combination of Food

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

THE secret of the successful combination of food lies in the simplicity of the cookery and the selection of but few varieties. The would-be fruitarian, and sometimes even the practising fruitarian, is often bewildered with the great variety of diet which nature offers him so bountifully when he turns to her for Naturally, if he has not sustenance. made a careful study of food values and proper combinations he hesitates as to how to choose his diet. The very small number of vegetarians who fail to meet with success in the early stages of their change usually do so because they lack the necessary knowledge with regard to the properties and nutritional values of the fruits, nuts, cereals, vegetables, and dairy products, and do not know the proper substitutes for the beef steak, fowl and fish, which they have discarded.

Complicated Dishes

The vegetarian preparations which are most likely to give trouble to the beginner, are the complicated dishes which often have been prepared to imitate, more or less both in appearance and flavour, some meat dish. As a rule long hours in the process of concoction and preparation in the kitchen also means long hours in the process of digestion accompanied by variour gastric disturbances more or less distressing. We have every reason to believe that a dietary consisting of very few articles, prepared in a simple way and

served in as natural a state as possible, brings the best results both as regards digestion and assimilation. Many fruitarian dishes can be taken to great advantage as they come to us first-hand from nature, and in that state, provided they are properly masticated, they are not only the most wholesome, but also possess the best flavour. The addition of various condiments and spices for the purpose of artificially flavouring the food is a pernicious custom that should be discarded. The proper principle is to develop and conserve these natural flavours which various articles possess, and which cannot fail of appreciation, provided one does not have to jog up a jaded appetite by artificial stimulation.

The Making of Blood

Let us bear in mind to begin with that the real object is not merely an æsthetic one or for the purpose of gratifying temporarily a few square inches of tongue surface, but rather to make good blood. The daily wear and tear of tissues withdraws from the blood a large amount of nutritious substances and, therefore, the blood must be renewed day by day in order to keep it in a healthy and pure state. While we are providing primarily for the sustenance of the body and its energies we shall also find that the gustatory sense, which in the case of many persons has become sadly perverted, resumes its normal function. Furthermore,

the plainest of food will be enjoyable, provided there is a natural sense of hunger and the body requires nourishment. Healthy, red blood is the product equally undergoes a process of combustion in the human furnace whereby heat and energy are produced, while less than ten per cent is actually required for body building and



Just as there is a correct combination of landscapes to produce beauty, just so there must be a correct combination of food to produce health.

of good food, good digestion and an active life.

The Fuel and Repair Foods

The amateur fruitarian must speedily recognise that food serves two purposes in the human body, as fuel for the provision of warmth and energy, and as building material for growth and repair of worn-out tissues. Generally speaking, over ninety per cent of the food eaten repair purposes. With regard to fuel foods there is no controversy whatever, for all flesh eaters and flesh abstainers alike recognise that the bulk of such food must necessarily come from the plant kingdom in the form of sugars, starches, and fats. Indeed, flesh foods provide no sugar and also no starch with the minor exception of glycogen; therefore if one were obliged to subsist entirely on flesh foods it would be necessary to take a large amount of fat in the form of suet or lard, which would be very undesirable as far as health is concerned. Fat can be obtained from either animals or plants. There is no fat better than olive oil, and then there are numerous excellent nut oils, for most nuts are rich in fats, some containing over fifty. per cent. If we add cream and butter from the dairy, we shall have no difficulty in getting an ample sup-

ply of fuel foods for the fruitarian.

But the crux of the question lies in the provision of the building food. The fibrous substance of which meat and other animal flesh is composed, consists chiefly of protein or nitrogenous matter, aside from the large proportion of water which it contains. Nitrogenous matter is also found in abundance in the plant kingdom, but not equally in all varieties of food, and here is the stumbling block which sometimes gives trouble. It is not always possible "to cut out the flesh and take the rest," although many a bountifully spread table will permit of such a practice without difficulty.

A Starchy Diet

In order to avoid adopting an altogether starchy diet which is likely to produce a great deal of fermentation, flatulence, and their accompanying unpleasant symptoms, it is necessary to select food articles which contain the necessary quota of nitrogenous material. Such cereals as wheat, oats, rye, and barley too, contain approximately the proper proportion of fuel and repair material, and make by themselves almost perfect foods as far as proportion is concerned. Almost all nuts are very rich in proteid as well as in fat, and they make perhaps the best substitute for animal flesh. They may be eaten in their natural state, when they require a great deal of mastication, or they may be shredded and arethen more easily chewed, or they may be cooked in various forms. Both milk and eggs contain a goodly proportion of building food, and either may take the place of animal flesh. All the pulses are also rich in proteid and for those who can digest them they make the cheapest substitute for flesh that the market affords. On the other hand, fruits and vegetables alone, including greens, possess but a very small proportion of repair food, and therefore they do not afford anything like a complete and well-proportioned diet. The same is largely true of rice and other cereals which consist almost entirely of starch.

A Well-Balanced Diet

Let us look into the matter in a little more detail. A breakfast of oatmeal porridge and cream eaten with either zwieback or some very plain biscuits to ensure mastication, and followed by a liberal helping of fresh or stewed fruit, provides a proper proportion of the various food elements that the body requires. If one substitutes rice for the oatmeal then it would be necessary to add an egg or a few nuts or nut cake. Milk would take the place of the egg, or the nuts, but unfortunately it does not combine well with fruit, and it is very likely to give rise to fermentation and acidity. A breakfast of brown bread and butter and stewed or fresh fruit is a complete meal by itself and all that one actually requires. Some cereal foods such as granose flakes, shredded wheat, or other foods which require a lot of mastication would be more acceptable to many persons, and they make an excellent dish when served with cream or stewed fruit.

The Dinner

Many courses breed many disorders, and we are glad to note that the longdrawn out dinner, with course upon course following each other, is becoming unfashionable and giving way to a saner practice. Few people as a rule have trouble with their breakfast, but it is the dinner which is most likely to give rise to digestive disturbances.

A plain vegetarian soup eaten with a piece of zwieback to assist mastication, an omelette, a nut roast or a few nuts *au naturel*, and a mealy baked potato with or without the addition of some tender green or salad, make a complete and wellbalanced meal. The addition of still further varieties throws more work upon the digestive organs and makes mischief. If such a meal is thoroughly masticated it can scarcely fail to suit anyone possessing reasonable powers of digestion, and will provide an abundance of nourishment.

Drinking at Meal-Time

The fruitarian rarely requires any drink at meal times because he finds in the abundant fruit which he takes an ample supply of fluid. There is no drink that is more wholesome, more pure, or more pleasant to take than the juice of a luscious orange, apple, cherries, or strawberries. The swallowing of large draughts of tea, coffee or cocoa, or any artificially prepared drink, or even water alone, retards digestion by unduly diluting the digestive juices and at the same time washes the food into the stomach before it is properly masticated. Those who drink, but that which they need should be couple of hours or longer after meals.

take fruit freely rarely require much taken on rising in the morning, and a

Self-Preservation from Drowning

GEO. E. WALSH

FIRST aid to the drowning is not half so important as to know how to prevent an accident in the water. The majority of people know something about the "first aid " principles-rolling the half drowned victim over a barrel, or working the arms up and down to force air into the lungs; but how many know just what to do if a

swimmers or people suddenly thrown into the water drown? Simply because they are ignorant of the best method of holding and utilising the air in their lungs, or through senseless fear.

If you close your mouth and hold your nose, you will float on the surface of the water. You cannot sink if you try. It



A STICK AND AN UMBRELLA USED AS EMERGENCY LIFE PRESERVERS

swimmer is seized with a cramp, or a rowboat is tipped over, throwing into the water several people who cannot swim?

The annual toll of deaths from swimming, rowing, and paddling at our seashores and mountain lakes is certainly large enough to inspire every one who goes near or in the water to learn a few essential facts about self-preservation. It is really unnecessary for anyone to drown under normal conditions. There is sufficient air in the human lungs to keep any man or woman afloat. Then why do

is the air in your lungs that keeps you up. The expert who floats easily and without effort has learned to make use of this air in his lungs, and the swimmer likewise secures his buoyancy in the water from the same source, and uses his arms and legs simply for propulsion.

A person thrown into the water, especially if unable to swim, invariably flounders around and shrieks for help. Both actions tend to expel the air from the lungs, and as a result he goes down quickly. But of course, it is not an easy

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matter for one unaccustomed to the water to keep his mouth shut and calmly wait until help arrives. But starting with the knowledge that the small amount of air in the lungs is sufficient to keep one afloat, we may then understand what small outside aids can be used in emergencies for saving life in the water.

An ordinary dishpan, such as one may use in camping, or a tin or wooden bucket, if inverted in the water will hold sufficient air under it to keep a man or woman afloat. If one had the presence of mind to throw any one of these articles to a the air and support one. Like the bucket or dishpan, the hat must be inverted and grasped firmly with both hands. It is the air confined underneath that produces the buoyancy and not the hat or pail itself.

The ordinary umbrella, and in lesser degree the sunshade or parasol, will support a person in the water if properly used. The material is made to shed rain, and hence is more or less waterproof. It will hold the air under it if placed in the water when opened, with the handle straight down. The best way to grasp it is to let it float naturally on the water,



A FOOTBALL AND THE UPTURNED BUCKET USED IN THE SAME CAPACITY

person drowning a short distance from the shore or boat, it might save a life. Of course, the one in the water would have to know how to use it. The proper way is to invert the bucket or dishpan, and grasp it with both arms so that it cannot tip and the air escape. One could float for hours with such an emergency life-preserver. Any article of similar shape would answer the purpose.

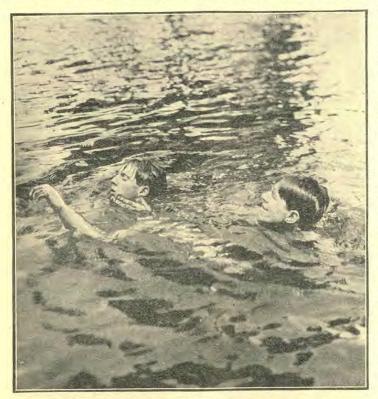
A high silk hat or even a high-crown derby can be made a useful life-preserver in an emergency. They may not be absolutely airtight, but for a matter of fifteen or twenty minutes they will hold and then grasp the edges with both hands, holding it upright in this position. The air will escape from it so slowly that one can depend upon it as an effective support until help arrives.

Experience in tanks, where tests have been made, shows that the ordinary toy balloons, filled with air, will support a man or woman in the water. The very small penny ones may not do this, but the larger ones which retail for threepence apiece hold sufficient air when inflated to keep one from drowning. The big airtight rubber balls that children play with at picnic parties are likewise ideal emer-

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gency life-preservers. One has merely to grasp the ball in the water and cling to it until help arrives. Perhaps many drowning accidents of little children could have been prevented if mothers or guardians had had the presence of mind to throw a rubber ball to the little victims. An inflated football is a still better emergency life-preserver. The inflated bicycle tire is another excellent article that can be employed for life saving in the water.

When a woman jumps into the water



RELEASING THE GRIP AND TOWING THE DROWNING MAN TOWARD SHORE

from a burning boat or dock, if she had presence of mind enough to spread her skirts out and drop in feet-foremost, she might easily save herself from immediate drowning. The skirts, if at all full, catch the air in descending, and by holding the bottom of the skirts under water the dress forms a buoyant life-preserver. The ordinary light waterproof coat that women wear in rainy weather has saved more than one life. By imprisoning sufficient air in the folds of it, as it is thrown on the surface of the water, you have something that will support you indefinitely.

One needs a very slight support to keep the head above the water. An oar or small piece of cork or plank will do it. This does not mean you can climb up on it and sit there. It will not keep the whole body on the top of the water. The proper place to put it is under the chin, and grasp it lightly on each side with the

> two hands. Let all of the body be submerged except the head above the chin. The rest of the body doesn't matter.

> Most drowning accidents are due to ignorance or fright-ignorance of what small things will save us and how to use them, and senseless fright which induces us to flounder around and shriek. The ignorance of bystanders is often as deplorable as that of the victim. With half a hundred helpless people within twenty feet of a drowning person, the disaster seems doubly tragic. Yet many times this happens, although the very articles that might save the life may be scattered around on the shore or in the boat. It is not always the good swimmer, but the person who knows what to do and keeps his head, who

prevents drowning tragedies.

A little practice in the water would teach one how to use the emergency lifepreservers—the dishpan, the water pail, the hat, the umbrella, the rubber ball, the inflated bicycle tire, an oar, or a piece of wood. Try them until you know just how to grasp them in an emergency. Then the fear of the water will lose much of its terror for you. There is hardly a row-boat that is not supplied with some sort of emergency life-preserver.

Cramps in the water, which are commonly believed to cause many drowning accidents, are really extremely rare. Cramps in the legs or arms may be painful, but not dangerous, especially to a good swimmer, who can float and work them out. Cramps in the stomach are really dangerous, and may render one powerless. They are supposed to be caused by acidity of the bowels or the shock entering cold water may be sufficient to produce sudden death. The person is not drowned then, but killed by the shock as a result of the plunge.

There are many fallacies about drowning that should be exploded if one wants a correct idea of what to do when trying to rescue another. One is that a drowning person throws up the hands just as he is about to sink. It would take an excellent swimmer to do this, for you would have to tread water hard to throw your arms



A VIEW OF MIDDLE HARBOUR, SYDNEY

to the system caused by entering the water when overheated. Many of the mysterious drownings attributed to cramps are believed by physicians to be caused by heart disease and apoplexy. Persons subject to heart trouble, especially valvular affection, should never plunge suddenly in deep water, nor for that matter venture far from the shore. The sudden shock of up over your head. Another is that you must strike a knock-out blow in the face to prevent a drowning person from seizing and pulling you down. None but an expert prize fighter could deliver a blow with sufficient force while in the water to render another unconscious. Both are floating in a yielding substance, and you could not put enough force back of your

arm to do much harm in striking. If a drowning person seizes you, the only way to make him yield his grip is to press hard with the thumbs in the hollow just where the ear joins the jaw. The pain will be so severe then that he will involuntarily loosen the grip on your arms, legs, or body. The next step is to grasp him by the hair, neck, or coat collar, and twist him over on his back. Then by swimming on your back and holding the victim at arm's length you can bring him to shore without danger to either. He cannot grasp you, and his mouth is kept above the surface, while your loose arm can be used for swimming. Any other method of rescue is apt to result disastrously to both.

Going down and coming up to the surface three times before drowning is another exploded fallacy. Some people go down once and never rise to the surface again. Others sink twice and three times. It all depends upon the vitality of the person and his ability to fill his lungs when he comes up the first or second time. It is the amount of air in the lungs that determines his buoyancy every time. Consequently, if at any time you fall into the water accidentally, don't waste your air by shouting as you fall, but take a long full breath, and hold your mouth tight. You will come to the surface again then without fail, and if you can take another deep breath when you rise, you will come up again.

Relief for Neuralgia G. H. Heald, M.D.

WHY take a heart-depressant tablet for the relief of neuralgia pain when there is at hand a physical remedy which has an efficacy often marvellous and which is followed by no undesirable results?

Ordinarily we think of heat for pain—a fomentation locally applied. If you suffer from neuralgia, have you tried the Australian remedy so called? Not heat, but cold; not locally to the pain, but up and down the spine. If you have been a sceptic regarding the efficacy of the "cold water cure," perhaps an experience with this treatment will be an eye opener.

If the writer had something to sell, some patent appliance or remedy, you would readily understand his confidence. One is always enthusiastic regarding the virtues of what he has to sell—and, as the sequel too often shows, his enthusiasm is not warranted by the actual merits of the article he is exploiting. The writer has nothing to sell, nothing to gain from the promulgation of this relief for neuralgia. And for that very reason and because the remedy seems so simple and costs nothing, it may by some sufferers be considered of little value.

The present article is written because of some remarkable experiences with the remedy, sometimes in intercostal neuralgia (between the ribs), sometimes in brachial neuralgia (down the arm), sometimes in facial neuralgia. A very brief treatment has greatly mitigated or entirely relieved an agonizing pain.

The treatment is simple enough. The patient with back bared lies face down on the bed or couch. An attendant takes a towel folded lengthwise, so as to make a compress about four inches wide and the length of the towel. This is lightly wrung out of very cold water,-the colder the better,-and laid the full length of the spine up to the hair. The patient of course is protected by a sheet or other covering. The cold compress should be left on until it is comfortable, and then followed by a second similar application, after which the back should be rubbed dry.

If, after some hours, the pain returns, the application may be repeated. Sometimes a treatment of this kind gives permanent relief.

IS your soap bill high? Then try this: Purchase a quantity at a time, remove the wrappers, and allow to dry thoroughly before using. As a result of this treatment it will not dissolve so rapidly when placed in hot water, and the life of each cake will be extended.

Adhesive Plaster in the Home

Other Aids than Medical

ONCE upon a time a plaster meant a sticky, resinous chunk, which had to be melted over heat and spread upon cloth. If it was not clapped upon the cut or wound at just the right minute it would not stick, and if you put it on too soon it inexpensive, and adaptable to numberless purposes.

The very finest grade of rubber is kneaded and purified by mechanical and chemical processes and finally mixed by means of great machines with suitable



N. J. Caire

LONE SENTINELS OF THE SEA-MILFORD SOUND, NEW ZEALAND

burned. No wonder that plasters went out of fashion for a time! They were such a nuisance.

They were, however, too useful to stay in the background indefinitely, and much money and time were spent to improve them. To-day plaster-making has become an art, and what is known as surgeon's adhesive plaster is in common, everyday use, because it is so convenient, antiseptics. Some antiseptics are not suitable, for they are of an irritating nature. Zinc oxide is non-irritating and soothing, and is commonly used blended with the India rubber.

Value for Mends and Wounds

When the mass is just at the right consistency another machine spreads it upon sterilised cloth. Great rollers pass over it and press it out to uniform thickness. Asid The broad, cloth-backed pieces are now stretched upon long tables and by means of sharp knives are cut into strips of the

of sharp knives are cut into strips of the required widths. These are wound upon tin spools, wrapped in paraffin paper, then slipped into neat pasteboard or tin boxes to protect them further. It has taken a great deal of skill and experiment to learn just how much of each ingredient to use in order that the plaster will pull readily off the spool and yet adhere firmly to any surface to which it may be applied.

Every well-regulated home should have at least one spool of this plaster on hand for small emergencies. When it is wanted it is wanted urgently, as a rule. If there is a cut, an abrasion of the skin, or a corn has been foolishly trimmed too closely, the wound should be thoroughly cleansed first, then protected with a fresh piece of adhesive plaster. As healing takes place from the bottom of a wound up, this gives a chance for nature to do some nice repair work without surface infection. Warm water will soften the plaster so that it can be removed, or it can be easily taken off by wetting the edges with alcohol, ether, or petrol, and continuing to moisten the plaster as the surface rolls up.

Another simple way is to soak the back of the plaster with oil, which destroys its surface adhesiveness. It is often necessary to remove a dressing of this kind very gently so as not to tear apart the tender formation of new flesh.

If it is not advisable to put the adhesive plaster directly upon the wound, as in the case of a burn or a ragged cut, the proper dressing may be applied first, covered with absorbent cotton or gauze, and fastened in place with strips of adhesive reaching clear across. It is very important to protect a wound of any kind properly, as many a case of blood poisoning has resulted from infection of an open surface.

In the case of a twisted or wrenched ankle where a bandage gives support and comfort the application of adhesive plaster as a reinforcement of the weakened ligaments is very helpful. Aside from surgical "First Aid" and the countless uses to which this useful material may be put, there are a great number of household uses for adhesive plaster.

If your shoes are too large and slip up at the heel, just put a strip across the inside of the back and they will stay in place nicely. When your goloshes begin to break, repair them on the inside with plaster cut to fit. If the children lose their goloshes at school, write their names with black ink on strips of the clinging material and put these strips inside the top of the rubber at the back.

In the same way labels can be made for bottles and cans. They are easy to put on and to take off. If the garden hose, the rubber tube of your bath spray, or your hot water bag shows a crack or asmall break, mend it with adhesive. In the case of the hose wind it around several times.

A cracked broom, carpet sweeper, or umbrella handle can be repaired with this first aid to the injured. In the same way the handles of golf sticks, flagstaffs, and frayed whip handles may be given a new lease on life.

If your sheet music is torn or the window shade needs repairing, or there is a cracked pane of glass in a window, apply a strip or patch of suitable size. If your boots or shoes squeak annoyingly it may be because the leather surface of the insole is not rigid, and it rubs. Replace it with an insole of the plaster cut from a wide roll. When a room is to be fumigated all cracks may be sealed with strips of the material.

Other uses will suggest themselves to the resourceful, for adhesive plaster is sure to be a friend in need.—Popular Science Siftings.

Cream Peanut Soup.—1 pint milk, or 1 cup milk and 1 cup water; 1 tablespoonful peanut butter; 2 tablespoonfuls shredded cocoanut; 2 teaspoonfuls flour; $\frac{1}{2}$ teaspoonful salt. Rub the nut butter smooth with the liquid. Add the cocoanut. Steep fifteen or twenty minutes in a double boiler. Strain out the cocoanut. Reheat, and thicken with the flour stirred smooth with a little cold water. Add salt.



NOTICE TO SUBSCRIBERS: All questions for this department must be addressed to the EDITOR, "LIFE & HEALTH," WARBURTON, VICTORIA, 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 maswered. To avoid disappointment subscribers will please refrain from requesting replies to questions by mail.

318. Book Wanted

"Joyce" asks if we can supply copies of the book, "What a Young Girl Ought to Know," and also if the original of the picture "Asleep" which appeared in the July-August issue of LIFE AND HEALTH is for sale.

Ans.-We can supply the whole "Self and Sex" series: "What a Young Girl Ought to Know," "What a Young Woman Ought to Know," "What a Young Wife Ought to Know," "What a Woman of Forty-Five Ought to Know," "What a Young Boy Ought to Know," "What a Young Man Ought to Know," "What a Young Husband Ought to Know," "What a Man of Forty-Five Ought to Know." These can be had at 6/6 each. We also have "How Alvce was Told At Six," 1/6; "Almost a Man, 1/-; and "Confidences, Talks With a Young Girl," 3/3. Some of these books will seem rather high priced when compared with prices in normal times, and so they are, along with everything else. The increased cost of material and labour puts them where they are.

We do not have the original of "Asleep," and do not know where it can be procured.

319. Psoriasis

"J.W.J." has three friends suffering from the above skin disease, and asks for treatment.

Ans.-Psoriasis, with the exception of eczema, is the most common of all skin diseases. It appears as rough, scaly patches of the skin on a red elevated basis on any part of the body; it has no discharge like eczema, but is dry. The outside of the forearm and legs are the most common sites of the affection, but it may extend to any part of the body except the palms of the hands and the soles of the feet. It often has an irregular circular arrangement; as fast as one patch clears off another develops. The cause is certainly not known, and in this respect it is like most skin diseases. It is most probably due to the development of some bacterial infection, as it yields only to antiseptic treatment. We have found many cases clear off completely, but in more chronic cases where the disease practically extends over the whole body the disease often returns. The adoption of a non-flesh diet we have found to be decidedly beneficial. Arsenic is generally given internally (3 or 4 minim doses of liquor arsenicalis three times a day for an adult), but it is recognised that in the acute stage when there is much redness and the disease is spreading this drug does harm. When the spots are pale pink in colour and the disease has begun to disappear arsenic hastens its disappearance. Arsenic, however, when continued for some time is liable to produce neuritis and deep pigmentation of

the skin. External treatment is especially valuable. Chrysarobin ointment is the most-used external application. When the disease is general, a five per cent strength is sufficient, but for local patches double this strength may be used. The treatment should be begun with a warm bath. Some of the ointment should be well rubbed into the patches and then more applied on lint and bandaged. It has the great disadvantage of staining the clothes. Tar is a good remedy and not so unpleasant as the chrysarobin. The common crude gas-works tar may be applied with a stiff brush in as thin a layer as possible. Olive oil alone is very helpful; it may be mixed with a small amount of salicylic acid (5 grains to the ounce) or one of tar oils (pix carbonis one dram to The following varnish is a the ounce). good application and easily applied and which dries rapidly.

₿¢	Pix carbonis	3i	(one dram)
	Benzol	3ii	(two drams)
	Acetone	3i	(one ounce)

The scalp is a favourite seat of the disease and must be energetically treated. The scalp must be frequently washed with soap spirit and one of the ointments already mentioned rubbed in. The salicylic acid and olive oil is cleanly; the strength may have to be increased.

320. Irritation of Eyes (Hay Fever)

"K.Y." writes : "This last three years in September I have suffered a distressing itchiness of the eyelids and in the corner of the eyes; it is so irritating that I have to rub the eyes and that hurts the eyeball. I have bathed them in boracic water and cold water, but that does not seem to affect it much. I also have irritation in the nose after, then a slight cold in the head, and this precedes a change in the weather. When the change arrives I get better."

Ans.—This is probably a case of hay fever, an affection very common in the spring. The pollen from grasses (twenty to thirty varieties) is undoubtedly the

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especially irritating to the susceptible. The best treatment consequently is a complete change away from agricultural districts as to dry mountainous country, sea trip, or seaside. Sometimes a stay in a large city is efficacious. A special antitoxin called pollantin, prepared from the blood of horses after they have been exposed to the pollen of grass, is now a favourite remedy; a few drops should be applied to nose and eyes first thing in the morning. Windows should be kept closed at night, and exposure to the pollen avoided as much as possible. If this condition is not obtainable, our correspondent may get relief from the following :--

R Cocaine 1 per cent Adrenalin solution (1 in 20,000) 1 oz.

Drop into the eyes occasionally. We do not recommend this for the nose, for the habit is so readily acquired and will finally aggravate the trouble. There is not the same danger with the eyes. The general health must be attended to and the nervous system built up. If patient is thin, two or three pints of milk may be taken in the day.

321. Vomiting of Blood in Infant

"E.B." writes concerning an infant 10 days old: "When five days old he vomited bright blood and the diapers became stained with a dark discharge like coffee grounds. The child is not strong, but seems to be improving since the doctors transferred blood from the mother to the child."

Ans.—From the staining of the diapers the blood evidently has passed through the child also. A great change takes place in the circulation of the child after birth and the blood probably is a manifestation of that change. The probability is that the hæmorrhage would cease in two or three days; the doctors have evidently done their best for the child and deserve praise for their zeal.

322. Rheumatism

"Subiaco" writes: "I have been subject to some form of rheumatism for years, sometimes losing the use of my left arm, the elbow being the seat of the trouble. My physician says I have a rheumatic heart. I occasionally have pain in the region of the heart. Recently I have had much pain in the feet and ankles, particularly in my heels. Am quite lame while the attack lasts. I now have a good deal of swelling on the front of my leg just above the ankle, which is sore to the touch; on the other leg there are pink spots which are also tender. The veins seem very prominent near these tender spots. My eyes are also affected at times; they become bloodshot and I can scarcely see. but in a few days they are well again."

Ans.—This is a clear case of poisoning of the blood by nitrogenous waste products, a condition popularly called rheumatism. The accumulation of these waste products may be due to excess of the nitrogenous elements in the food or to deficient power of the excretory organs to get rid of the waste products; probably both causes operate. The liver is an important organ as far as the preparation of the nitrogenous principle of our food for excretion is concerned. If the liver does not do its work properly, then the waste products are not so readily excreted by The activity of the liver the kidneys. depends largely on the state of the digestive organs; consequently one of the first indications for treatment is the selection of food that will be readily digested. Another point of equal value is a reducing to the minimum of the amount of nitrogenous food taken, especially flesh foods. Tea and coffee not only upset the digestion but contain principles readily converted into uric acid, and they should consequently be avoided. Sugar and sweets certainly clog the liver and must be taken only in smallest quantities. Fruit and vegetables should be taken as freely as the digestion will allow, but not between meals. Fruit for breakfast and the evening meal, and vegetables for the mid-day meal. Fresh milk from healthy cow or

cows forms an excellent focd. Any of the wholemeal cereal preparations are not only nourishing and slightly laxative, but also keep the blood in a healthy alkaline condition which will enable it to keep the nitrogenous waste products in solution, thus aiding their excretion by the kidneys. Plenty of good water should be taken between the meals, at bedtime, and on rising in the morning. As the circulation in the capillaries around the joints and in the covering of the muscles is slow, thorough massage is to be recommended. Hot and cold applications to the liver daily are also very helpful. Twice a week some sweating procedure should be adopted, such as electric light bath, fomentations to the spine, or hot blanket pack. A good deal of perseverance is necessary, but recovery in this case should eventually take place. Exercise is good as long as the night's rest removes the tiredness. Very often tiredness on waking is due to sluggish digestion and an inactive state of the bowels; the bowels should be kept regular by appropriate diet. Drugs are useless in this affection.

323. Atrophy

Ans.—No opinion could be given to "J.G." on this subject apart from a personal examination.

324. Nervous Debility and Neuritis after Influenza

"Rheumatics," who has been subject to sciatica and lumbago for years, complains of "pains in the back, left leg, and head and a feeling of langour and nervy." These symptoms came on after recovery from an attack of influenza.

Ans. — "Rheumatics" should read "Chat" No. 322 on "Rheumatism" in this issue. He should sleep in an airy, well-ventilated bedroom, and take a cold general sponge every morning on rising

325. Obesity in a Child

"M.B. (Auckland)" writes: "My seventh child is abnormally fat; he is six and

a half years and weighs 7 stone $\frac{3}{4}$ lb. In the streets he is laughed at by the children, and even adults are very thoughtless in . . . The fat is making remarks. worse on the breasts and abdomen, undressed he is quite unsightly, the breasts hang on the stomach, and the abdomen is in rolls of fat. . . . We still have to lift him out of his bath; his only way of going up and down stairs is on his hands and knees, and he comes down backwards in the same way. He has gained as much as thirty pounds in twelve months. Mentally he is very bright but has a strangely matured mind for a child of six years. He learns slowly and has a great dread of . treatment of the above disease. She tests going to school."

Ans.-Many of the internal organs have what are known as internal secretions which help in the action of the blood and tissues; the pancreas, for instance, is said to secrete a substance which enables the tissues to convert the sugar of the blood into heat and energy. When this substance is absent sugar accumulates in the blood and is excreted by the kidneys. The thyroid gland similarly has an internal secretion which helps in the utilisation of sugars and fats, but when this secretion is absent or deficient these foods are stored up in the tissues as fat. The powdered thyroid is the only medicinal substance known which has the power of increasing the destruction, the breaking up, of fats in the body, but it unfortunately acts on the nitrogenous as well as the adipose (fatty) tissue. Adults are generally directed to take five grains of dry powdered thyroid twice a day, but its action has to be watched. Sugar should be forbidden altogether. Fresh milk must be avoided on account of the fat it contains, but skimmed milk is a good food in obesity. Puddings must be withheld. Bread should be used in the form of brown or wholemeal, as a lesser quantity satisfies the appetite. Green vegetables and fruit may be taken freely with the meals, and thus lessen the appetite for more substantial food. Fruit if stewed should be sweetened with saccharin. Where much nitrogenous food is taken

the lessening of the water taken as a drink is dangerous, for the nitrogenous waste products must be eliminated; it is very doubtful whether water drinking in any way increases the amount of fat in the tissues. Avoid too great a variety of food or anything that increases the appetite, as pickles, sauces, etc. As much exercise as possible should be taken; hill or stair climbing is good. General massage and hot baths followed by cold shower or cold mitten friction are good.

326. Bright's Disease

A correspondent asks us for advice re her own urine, and from the facts given us we would judge her case is a mild one.

Ans.-Some people continue to pass albumen in the water for years and yet remain in good health and lead active, strenuous lives. Treatment must be guided by general considerations rather than by the amount of albumen in the water. When the disease has passed from the acute to the chronic stage, there is no need to confine the diet to milk. Milk is an excellent food but is not 'sufficient by itself, except in the acute stage. The effect of both treatment and diet must always be judged by the general health rather than by the amount of albumen in the water. The following must be altogether avoided : alcohol in all forms, meat extracts, and red meats. Salted, dried, and preserved meats are injurious. Patients are better without flesh food of any kind; all the nitrogenous principles needed can be obtained from milk and eggs. In making a change of diet the testing of the urine cannot give any idea whether the change is beneficial or otherwise. Three or four days must elapse after the change of diet before a urinary test can be relied on. The general health is the main factor. It is very important to select articles of food that digest readily. Fruit and vegetables are excellent when they are digested well, but not otherwise. Fresh air is very important in all cases of kidney disease; the windows of the bedroom should be kept open, but draughts,

of course, must be avoided. Sleeping on a well-protected balcony is excellent. The bowels should be kept regular by suitable diet and the whole body should be sponged daily with cold water. Good hot baths before retiring are beneficial, but twice a week is sufficient. A good equable climate is an advantage; sudden changes are bad. If dropsy sets in (swelling of feet and ankles), salt should be omitted from the diet. Flannel, merino, or mixture of wool and cotton or wool and silk should always be worn next to the skin. The clothing should vary with the weather. Keep the legs and feet warm. Low evening dresses should be avoided. More chills are caught through exposure of feet and legs than in any other way; they form in bulk nearly half the body. Socks worn should be of wool or thick merino, and the boots should be substantial and lined with cork or felt soles. Exercise that promotes a gentle perspiration is good as long as it does not fatigue. Foods that are very acid, such as tomatoes, gooseberries, and rhubarb, are usually better avoided.

327. Self-Abuse

"Anxious" asks some important questions in regard to the above vice.

Ans.-We believe in calling the above pernicious habit by its right name, for it is indeed a vice. We doubt whether there is anything so responsible for the general poor health of our young people. It is a habit that is sapping the vitality of a very large percentage of them, a much larger percentage than most people are aware of. In Russia it is said the habit is practically universal. The habit is easily contracted, and when once contracted it soon makes its victim a veritable slave, and he loathes himself for the absolute bondage the filthy habit engenders. Quite a large percentage of the inmates of our lunatic asylum owe their mental condition to the habit, and their insanity is of the most melancholic description. The ordinary lunatic does enjoy companionship and amusement, but those

who have become insane by self-abuse seem to have no joy whatever; they avoid all companionship and have little inclination to partake of any amusements: life to them is an absolute dreary monotony. When the habit becomes fixed, the individual finds he is lacking in both mental and physical energy; he loses his memory and finds it difficult to concentrate his mind on any subject. He may recognise what is the cause of his languor, debility, and want of mental and physical ability, but he loses all control over himself and finds he is an absolute slave. The quacks who advertise their ability to treat "nervous debility" maintain their incomes mostly from these cases: they have little or no knowledge of the human frame or its diseases, but they know enough to excite the fears of their unhappy clients and rob them of their cash. Often they pretend to examine the urine and always inform their client that semen is constantly escaping by that channel. When their client's purse becomes low or exhausted the urine gradually becomes semen-free and the client is persuaded this is the result of their treatment. Undoubtedly these quacks unnecessarily alarm their patients. If the habit is overcome the health of the individual will improve and with the health the mental condition also. but a full recovery is very exceptional. "Anxious" is advised to counsel her friend to carry out her plan concerning marriage. From the facts related we believe she will improve in health, and although she may never be as robust as she should be, she will enjoy fair health and probably have children of fair constitution. Children of self-abusers will always require more care than those of healthy parentage.

328. Coccydynia (Pain at End of Spine)

"G.H." writes: "My wife suffers from pain at the end of the backbone; it is very awkward for sitting and pains very much on rising again. It has been bad for two years and followed an attack of broncho-pneumonia. She was not able to walk for seven months. Twelve or eighteen months previously she had a fall on end of the spine. My wife has a pain in the right side occasionally and is thin, does not sleep well, feels any exertion, sometimes sweats at night and eats very poorly. For the past eight months the biggest meal would not exceed half small slice of bread and a piece of meat half the size of the hand. Feels sick and full if she eats any more."

Ans.-This is a case of coccydynianeuralgia of the end bone of the spine. It frequently comes on after childbirth or injury to the part. The application of cold wet cloth for a few minutes five or six times a day, or the alternate use of hot and cold is the best treatment. Perseverance in treatment is necessary. In bad cases the bone itself has sometimes to be removed. As suggested by "G.H.," a cold wet sponge followed by brisk rubbing with a rough towel daily is excellent treatment. Rest as much as possible. Plenty of fresh air night and day and good plain digestible food are essential.

329. "Enquirer's (Hamilton)" Questions

1. ""Biff' in a foot bath " cannot possibly affect the kidneys.

2. It is impossible for Condy's crystals in a foot bath to do any serious damage to the constitution; it can only have a local effect on the feet. Cold water to the feet is refreshing but the additional benefit arising from Condy's crystals we believe to be imaginary.

3. The official dose of permanganate of potash is from one-third to one-half grain. This may be taken three times a day with safety.

4. We would not recommend the drinking of water in which vegetables have been boiled.

5. We do not think the lack of minerals in tank water has anything to do with nerve and blood disorders. Improper food and the neglect of the simple rules for healthful digestion are certainly largely responsible for nerve and blood disorders.

6. Wholemeal bread, etc. Wholemeal

bread is not made by any different recipe from the ordinary bread. The sponge is made of white flour. When the sponge has risen sufficiently, it is added to the wholemeal instead of to the ordinary white flour. Many use two parts or less of wholemeal to one of white flour. Bread made of all wholemeal with the sponge prepared from white flour is delicious. With a small grinder obtained from any hardware store the wholemeal can be prepared from any good wheat; the wheat should be first washed and dried. We do not recommend the use of any flour containing rising powders; they are harmful to the lining membrane of the stomach.

330. Consumption

"R.H." contracted a cold eighteen months ago, and not being able to get rid of it consulted a doctor, who told her she had consumption, but was curable. As she cannot afford to engage a physician and buy medicines she has asked our advice.

Ans.—There is really no need to take any medicine in the great majority of cases of tuberculosis. Patient should sleep on a verandah or in a large bedroom with several windows which should be open day and night. Place the bed out of the draught. Every morning sponge the body with cold water and then dry thoroughly by brisk rubbing with a coarse towel. Take a pint of milk, preferably from a Jersey cow, at each meal. A raw egg with each meal would also be beneficial if it can be taken in addition to A glass of hot milk may be the milk. taken on going to bed and first thing in the morning. The clothing should be light but warm, and exercise in the air moderate, patient must not get over fatigued.

PAINT that cheap paper in your kitchen, pantry, or bathroom with a coat of white varnish if you wish to keep the walls clean. When dirty the varnished paper can be washed with a damp rag.



QUIET TALKS WITH MOTHERS

Don'ts for Young Mothers

(From the New York Department of Health)

DON'T kiss the baby on the mouth or allow your friends to do so.

Don't give soothing syrups to the cross baby.

Don't give "patent" cough mixture for a cough.

Don't fail to secure the best milk you can afford to buy.

Don't allow flies to rest or feed on baby's bottle or nipple.

Don't fail to wash the bottle and nipple before feeding the baby.

Don't fail, after feeding baby, to wash bottle and nipple. Don't let the milk bottle stand about, off the ice.

Don't fail to keep the baby's food, when prepared, on the ice.

Don't fail to feed baby at regular periods, day and night.

Don't let the baby use a "pacifier or dummy." Constant sucking of a dummy teat causes deformities and interferes with baby's growth.

Don't neglect the daily care of baby's mouth—wash out with boric acid after each feeding.

Don't excite the baby—especially before sleeping time or after eating.

Don't rock the baby to sleep.

Don't let anyone sleep with the baby.

Don't let the baby sleep in the sun with light shining into its eyes.

Don't overdress the baby, and in summer avoid wool near skin. Don't pick up very young babies without supporting the back.

Don't neglect to bathe the baby daily. In summer frequent wet dips help.

Don't fail to clean all folds of skin, and powder well. Don't let a wet bib or wet cap string chafe baby's neck.

Don't keep baby in the house; fresh air is necessary for growth.

Don't permit flies to bother baby when sleeping; use a net.

Don't fail to screen in the windows, particularly in the nursery, against flies and insects.

Don't forget that babies nursed by their mother's milk, and given plenty of fresh air, have three times the advantage over others in escaping diarrhœa, pneumonia, and children's infections.

Don't expect a quiet, composed, healthy baby unless you do your part thoroughly and constantly.

Don't forget that a mother who thinks her milk is not right or sufficient for her baby may secure medical advice on how to improve it in both quality and quantity—she should consult her private physician.

IF your children wear sandals, you have doubtless noted that the stitches go before the sandals are worn out. Mend them with wire, and the new stitches will outlive the leather.

3

Game-Exercises for Children

They Improve Lungs and Limbs

EVERY child should be trained to practise a setting-up drill every morning. The age of two years is not too early to begin these drills, says Dr. Leonhard F. Fuld, How TALL IS HELEN?—When mother asks, "How tall is Helen" the little child raises her arms shoulder high with the palms facing upward, stretches her little



in a recent paper we quote. Since formal calisthenics cannot be taught to very young children, these drills must be taught in the form of play to arouse and sustain the child's interest. Here are some of Dr. Fuld's sample games :— body upward, and takes a deep breath. Fig. 1. This is a position of the breathing exercise.

 her toes, raises her arms parallel above her head, stretches upward and takes another deep breath. Fig. 2. This exercise combines a balancing movement for the development of the arches of the feet with an excellent

breathing exercise.

HELEN CAN REACH THE FLOOR? -When mother asks. "Can Helen the floor?" reach the little child bends forward and places the palms of her hands on the floor. Fig. 3. This movement exercises the spine and the neck.

HELEN PLAYS Bow-wow - When mother asks, "Can Helen play bow-wow?" the little child falls on her hands and knees and begins to crawl on the floor, taking care to keep her head up and her back arched. Fig. 4. The child says, "Wow wow" as she crawls around. This is an exercise which develops the arms.

IS HELEN TIRED? -When mother asks. "Is Helen tired?" she slowly bends her

knees and drops the weight of her body as if intending to sit on the floor, when she is checked by her mother's caution, "Helen must not soil her clothes." Thereupon she immediately Fig. 5. straightens up. This is a good exercise for the legs and the abdominal muscles.

Each of these movements should be repeated as often as the mother or teacher may deem advisable. The drill may be performed at various times during the day as well as in the morning. This setting up drill serves two useful functions. It develops the child's lungs, feet, legs, spine, neck and abdominal muscles. It also develops the habit of a morning setting-

SERMONETTES FOR MOTHERS

An ounce of mother is worth a pound of clergy.

A girl reflects, as in a mirror, her mother's life.

Mothers should remember that God came to us as a babe.

God couldn't be everywhere in direct person, so He made a lot of mothers. "Don't" is about the extent of some

mothers' vocabulary.

The best thing a mother can give her children is herself.

A savage mother will not trust her baby to a hireling nurse.

Some mothers sugar their children until everybody is sick of them.

If there were more Hannahs in the world, there would be more Samuels.

If mothers don't teach their children while they are little, Satan will.

No dumb animal neglects its young as some human mothers neglect theirs.

Whenever a dog occupies a baby's place, some baby must occupy a dog's place.

Begin training early. If the dye is in the wool, it is hard to get out of the cloth. The mother, as the first trainer of the child, has the greatest power for good or evil.

If mothers would pray more for their children before they are born, they would have to worry less afterward.

-Charles G. Bellah.

up drill which will probably be followed by the child throughout its life .- Pobular Science Siftings.

Chairs for Children

THERE has been much agitation over the misfitness of_ school seats and desks, and there has doubtless been more or less correction of these sources of bad posture and of permanent deformity. Little or nothing is said, however, concerning the seat used in the home. The human sprout is often so tender that anything which causes it to be inclined from the normal must be taken into account. The average child, who cares little or nothing for books, is influenced little by either

school or home seats; but the child who likes to read and who is disinclined (always with good reason, be it said) to active muscular exercise, is the victim of ill-shaped seats in both the school and the home. Of what use is it for the general practitioner or orthopædist to prescribe corrective exercises for stooping posture and round shoulders if for many hours every day the patient is to occupy a framework which distorts the skeleton

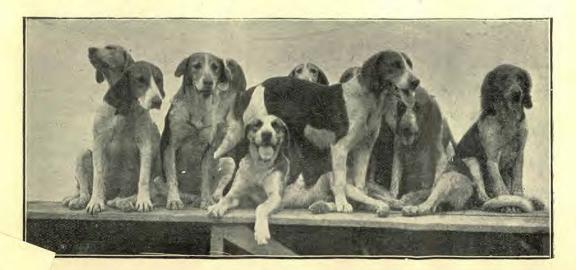
and renders nugatory all therapeutic efforts?

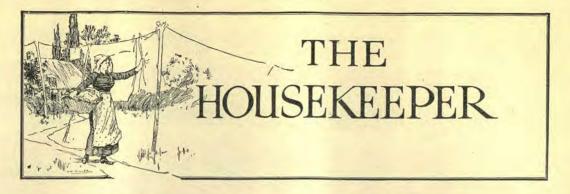
Often there is not a comfortable or well-fitting chair in the house for an adult, and for children there is no provision. Chairs are usually of two general kinds,-big and little,-those for adults, and those for children of from two to five years. Styles in chairs vary, and the chairs we find in the home are practically always of the wrong shape for the growing child and usually for the adult. To fit, a chair must conform in the curves of its back to the normal. but not exaggerated, curves of the spine of the sitter. It must be of such a height that the feet can be planted comfortably on the floor, and yet the knees not be raised high above the level of the hips; and it must not be so deep that the pelvis does not readily come in contact with the back. The inclination should be such that the back of the sitter is really supported and not pushed forward when the body is set against it.

Manufacturers have made office chairs for adults which support the back well, some of them adjustable, and perhaps the reason why there has been no effort to fit children is that there has been no demand. Perhaps some day the dealer, if he cannot fit a child, will be able to take his measure for a suitable home seat, or at least furnish one that has an adjustable support. Meanwhile, perhaps we can make some of our present chairs fit. This can be done by adjusting a suitable padding to the back, by using a footstool for the feet, or by sawing off part of the legs if the chair is too high, or by piecing out if the chair is too low, and by sawing off the front of the seat, or radding the back in front, if the chair is too deep. The product of this overhauling may not be a thing of beauty, but that matters little if it is a thing of comfort and body preservation.

A normal child at rest in a misfit chair is always, for the time being, deformed ; a normal child at rest in a chair that fits always assumes a correct posture. The child, unfortunately, is very uncomplaining about some things, and makes no outcry if his seat is not what it should be. Also, he makes no fuss if the table at which he works is too high or too low, or his book too heavy to be comfortably supported, or the light by which he reads These matters is poor or badly placed. should be taken into account in arranging conditions conducive to good posture, though of secondary importance.

Physical education is nothing more nor less than the establishment of correct bodily habits, and the habit of assuming good posture is a most important part of the physical education of every child— New York Medical Journal.





Efficiency In Home-Making

WE are hearing a good deal now-a-days about efficiency. In all walks of life efficiency is demanded, and the way most people attain it is to train for it. There is one calling, however, which, while it has had the highest tributes paid to its importance, is woefully behind in possessing really efficient workers; it is the ordinary every-day work of home-making.

To mention a few things to justify the charge, how strange it is that while most of us realise the necessity of reducing the quantity and changing the nature of our clothing when the warm weather comes, many housewives make little or no difference in their menus the whole year round; a sure sign of inefficiency. What a pity it is, too, to see a woman perspiring over the preparation of a conventional dinner on a hot day-which, by the way, is exactly the same as she got up in July -when she might considerably reduce her work and enjoy the weather by giving some thought to the matter of getting up simple meals that require little or no That such dinners would be cooking. appreciated by the family in warm weather only needs to be demonstrated. Of course, it is not suggested that one should provide cold food every day, or that the whole of a dinner need be cold, but that in many families an improvement could be made in this direction to the relief of the hard-working mother and the comfort and health of the family. Everybody's appetite undergoes a change and is inclined to be a little picksome in summertime, and so the problem of succesfully providing for the family bill of fare calls for originality, forethought, and efficiency.

Another matter in which the average housewife is often remiss is in a lack of knowledge of the essentials of what constitutes body-building food and proper food We should not think of combinations. entrusting a horse, or even a dog, to the care of one who knew nothing about its physical needs, but it is a lamentable fact that many a young woman unblushingly accepts the responsibility of selecting and preparing food for a man, and ultimately for a family, without knowing anything of food values or the first principles of scientific feeding. There was a time when this ignorance might have been excusable, but certainly it is not to-day: opportunities abound on every handschools of cookery, lectures, books, papers and magazines-all contributing to the general education of the housewife, and he is a wise young man who looks well to this qualification in selecting his partner for life.

But having taken her for better or for worse and even assuming that it is the latter, there is no need to despair. Such an article as that from the pen of Dr. A. B. Olsen, which appears on another page of this journal, will do much to enlighten anyone who will take the trouble to read it carefully and endeavour to put its advice into practice. In addition, a good, re liable book on hygienic cookery can be procured, and in the place of the happygo-lucky method of eating anything anyhow and at any time will come "the better way" of living, bringing in its train increased health and a sense of enjoyment hitherto unknown. One reform usually paves the way for another, and with a good foundation laid in the kitchen, there will be an absence of grumbling and dissatisfaction, the children will learn to respect mother's choice and eat heartily what she provides for them, and the dinner-table will be what it should be in every home-a place where thankfulness and happiness is most in evidence-all because mother is efficient in the work of preparing the family's food.

Such is the possibility and privilege of the housewife. Did someone call it drudgery and menial? We are quite aware that it is so regarded by many who find it difficult to fill the bill, but that is where their inefficiency is manifested. The result of such an attitude toward this, the greatest and noblest calling to which a woman can aspire, will never be known to mortals: it has driven men to drink, made multitudes of dyspeptics, turned home into the most uncongenial place one could wish to be in, and robbed the children of those tender memories which make home the sweet place we sing of and which exert such restraining influences upon many in after life. So, dear reader, think over this matter of efficiency in home making, and if your past has been neglectful, and if you have failed to realise the nobility of your calling, see to it that the future shall witness to the fact that you have magnified your office and made it honourable. E.H.M.

Imprisoned Sunshine

ADELAIDE OVINGTON

I HAVE often wondered why more people do not preserve their fruits in the sun. Nearly every one has heard of doing so, but very few have tried it. Why not? Why stand over a hot stove on a sweltering day, stewing yourself as well as the fruit, when the sun's golden rays are streaming down outside, waiting to do the work for you very much better than you can ever do it yourself? Why not let the sun do it?

The people I have thus questioned have invariably replied: "I should like to do it but I don't know how. It must be very difficult." It is partly because of this misapprehension, and partly because I wish to share with others the stores of imprisoned sunshine on my pantry shelves that I write this article.

In the first place, have you ever tasted any real sun preserves—strawberries, for instance, transparent, plump, luscious, and of a brilliant colour, with a flavour every bit as delectable as the fresh fruit itself? Or have you simply found a few recipes on the subject, each one telling a different way to do the same thing? No wonder that most people go on cooking their fruit on the stove, putting up strawberries as they always have—flabby, brown, and tasteless.

Now let me tell you how I do it:---

Weigh the fruit, and to each pound allow one pound of sugar. Boil five minutes, pour into stone platters, cover with glass, and stand in the hot sun for about four days.

That is all there is to it, except that some fruits require less cooking than others. Strawberries should be brought just to the boiling point, removed from the stove for a second, and put back long enough to come to a boil again. Then they will remain whole and perfect. Other fruits, like plums, should be cooked until they can be pierced easily with a fork—about five minutes.

And the number of fruits that one can preserve in this way! At the very head of the list I put strawberries, but raspberries are a close second, and are of an even more gorgeous colour. Peaches, if they are of the right sort, have a lingering, flower-like flavour, while blackberries, gooseberries, plums, white currants, green gages, and cherries are all unsurpassed when mixed with this liquid sunshine.

Some authorities advocate not cooking the fruit at all. They say simply to heat the platters, cover with fruit and sugar, and stand in the sun. I have tried this method, but find the fruit apt to be a little dry and leathery, so greatly prefer bringing it to a boil with the sugar first. It is not necessary to add any water, as the juice from the fruit makes the sugar moist enough; but the fruit must be perfect and exceedingly ripe.

In the summer I have a large table out of doors, upon which I place the platters; then I cover them with an old window sash which fits over them so tightly that it is not necessary to bring them in, even should it rain, and I always leave them out at night. Thus I eliminate the only drawback to this method—the inconvenience of carrying the fruit back and forth twice a day.

Each morning I turn the fruit with a silver fork. When it is first put out the syrup is as thin as water, but at the end of the fourth day, provided the weather has been fine, it is as thick as honey. Then it is ready to be put away, without reheating, in jelly glasses, and covered with paraffine wax.

The bottled sunshine that you thus store up will help to cheer the long winter months, and the tea or supper table will have an added charm when graced with this dish of gold or crimson.

SNEEZING is averted by pressing the upper lip, which deadens the impression made on one of the branches of the fifth nerve, sneezing being a reflex action excited by a slight impression on that nerve. Sneezing does not take place when the fifth nerve is paralysed, even though the sense of smell is retained.

Salads and Toasts

THE following recipes are intended to be merely suggestive; many others will occur to the mind of the resourceful housewife who will be well advised to make a note of successful recipes.

Pink Salad.—One medium-sized beetroot; four or five potatoes; six spring onions; celery salt. Slice the beet and potatoes and slightly chop, add the onions and cut fine. Cover with a dressing made of three tablespoonfuls thin cream; juice of small lemon; saltspoonful of salt; teaspoonful of sugar. If this salad stands for an hour or two the beet will colour it a pretty pink. Garnish with lettuce leaves.

Nuttolene Salad.—One tin nuttolene; one lettuce; three tomatoes; salt to taste. Cut up the nuttolene into cubes, put same and lettuce in alternate layers in a dish, having lettuce finely-chopped. Slice the tomatoes and lay on the top. Pour over the whole a mayonaisse dressing composed of one egg; one lemon; one cup rich milk or cream; one teaspoonful sugar; one half teaspoonful salt. Put egg (beaten) with lemon juice, sugar, and salt in double boiler. Cook until thick. Then add cream or rich milk, and pour over the salad.

Fruit Toast.—Take a quart of ripe cherries; remove stems, wash, and stew (if preferred the stones may be removed) until tender but not broken; add sugar to sweeten, and pour over slices of wellbrowned dry toast, zwieback, or granose biscuit. This may be served either hot or cold. Plums, gooseberries, strawberries, and any similar fruit may be used in the same way. A spoonful of ground Brazil nuts, almond meal, or malted nuts sprinkled over each dish will increase the nutritive value.

Cream Peas on Toast.—Bring half-cup green peas to boil, drain off liquor; mash the peas through colander, having them separate from the liquid in which they were heated, add half cup hot milk or thin cream and salt to taste. Reheat; dip a piece of zwieback in milk to soften, lay on a platter, and cover with cream peas, which should be thick enough not to run off.

Creamed Potatoes.—Put one cup of cream, or one cup of milk and one tablespoonful of butter, on the fire, and when it comes to a boil, add two cups chopped cold boiled potatoes with salt to taste, let them simmer, stirring now and then until they are creamy and begin to thicken ; then put them on the top grate of a medium oven to brown lightly.

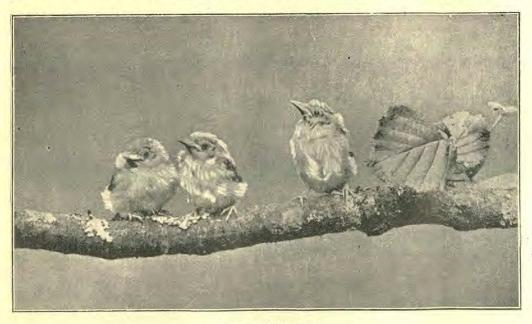
Prune Toast.—Rub well-cooked prunes through fine colander, add enough of the prune juice to make it of the consistency to spread on toast and not run off; reheat, and dip a slice of zwieback in hot milk or prune juice to soften, lay on platter, and cover with the prune pulp.

Tomato Toast —Dip a slice of zwieback in hot milk or tomato juice, lay on platter, and cover with a spoonful of cream tomato sauce.



Feathered Babies in Their Homes

BIRDS are, I think, the most graceful, the most interesting, and sometimes the most shy of all of Nature's many children. There are, of course, many features of bird life which we could study, but perered home-builders are plasterers, others raft-builders, others carpenters, others weavers, and still others miners. The sand martin, for instance, is a miner, and with only a frail beak for a spade it digs tunnels three or four feet long in a river bank, a sandpit, or a railway cutting. On



GARDEN WARBLERS

haps that which will most interest the youthful readers of this journal will be the story of baby birds at home.

Of course, before the mother bird lays the eggs from which the feathered babies come, she and her mate have to build a home. There are some children who believe that birds always make their nests in trees; but this is not so. Some feaththe other hand, the house martin, a close relation to the sand martin, builds his palace by collecting pellets of mud and clay and plastering them one by one to the walls of a building until his home assumes the shape of half a basin face downwards. His doors are usually two in number, one front door at the top and one side entrance.

J NUARY-FEBRUARY

But now let me tell you about the home life of a few of the many different kinds of birds. Let us first take an English bird known as

The Garden Warbler

The nest is made of straws and grasses, lined with horsehair. The eggs usually number five, and vary in colour from white to greenish white, splashed with brown, olive, and grey spots. When you find the nest with chicks in, says the ing their tiny wings and cleaning their small beaks as if they were preparing for a most important journey. The father and mother thrushes watch them carefully, and if in the distance they suddenly spy a large bird which they know is out for a feed of their little chicks, off they will fly and chase the invader away. I have been told that one thrush has been known to sacrifice her life in trying to defend her babies from the attack of a weasel. Look



A FAMILY OF MISSEL THRUSHES

scientist who took the accompanying picture, the parents seem to be greatly concerned and scold you in notes that sound like "tech." Next we will take

The Missel Thrush

There are usually five baby thrushes to a family. These feathered children are most ravenous eaters and gulp down every worm and grub that their kind parents will bring them. As they get bigger and the time comes for them to begin to fly, they get very uneasy, shifting about and standing on the edge of their nest, flutterat the picture well so that if ever you see a missel thrush you will know it

The Cuckoo

This bird has some most strange habits. The mother cuckoo never builds a nest, sits on the eggs, or rears her young ones. She seems almost too lazy to do that, for, after laying her egg, she visits the nests of birds whose eggs are about the same size as her own, carrying her egg in her beak, and lays it down by the side of another bird-mother's eggs. This mother usually does not notice—or does not

JANUARY-FEBRUARY

mind—the addition, with the result that in due course a mixed family of babies arrives. But the baby cuckoo soon takes charge of the nest, and although it cannot see, it can feel, and is not satisfied until it succeeds in getting all the other chicks —or eggs—on its back, and heaving them out of the nest!

In addition to being cruel, the cuckoobabe is greedy. It never appears satisfied

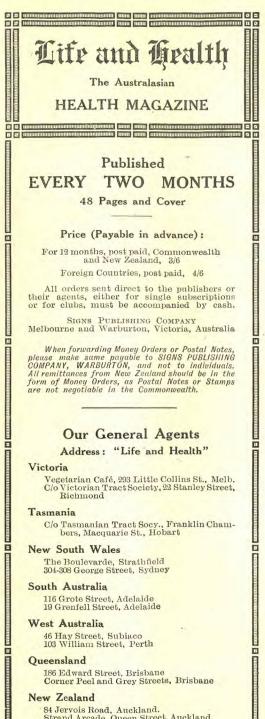


A FOSTER MOTHER FEEDING A CUCKOO

or thankful. It is a stupid chick, too, because when it is fledged and is waiting for its foster-parent to return with food, it does not wait to meet her, but throws its head high in the air, quite out of reach of its tiny parent. So what do you think the mother does? Look at the photograph! The little bird is obliged to jump on to the cuckoo's back and drop the food right down its throat.

In the next issue we will have some more stories—and some more pictures about feathered babies.

IN many districts of Japan, horses are not shod with iron shoes, and it is common to see them wearing straw shoes.

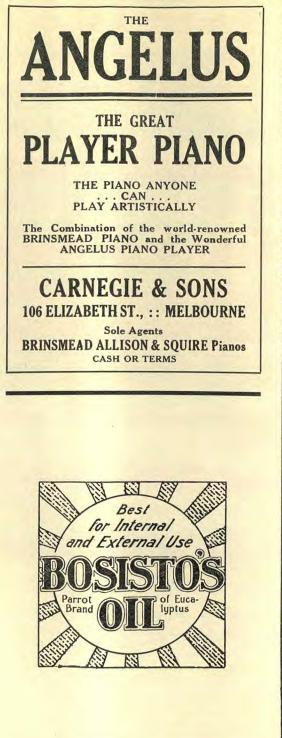


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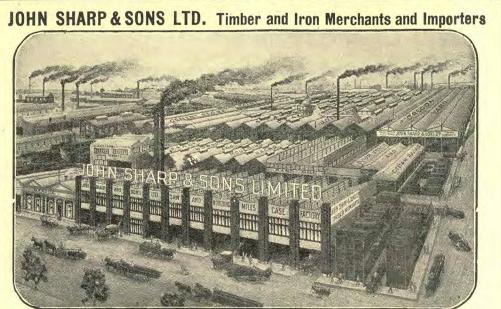
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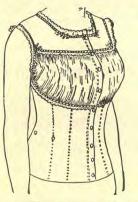
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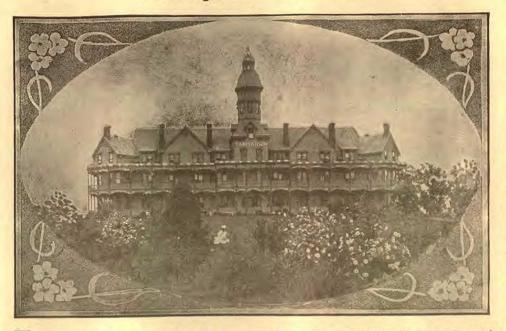
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