

LIFE AND HEALTH



MARCH-APRIL 1918

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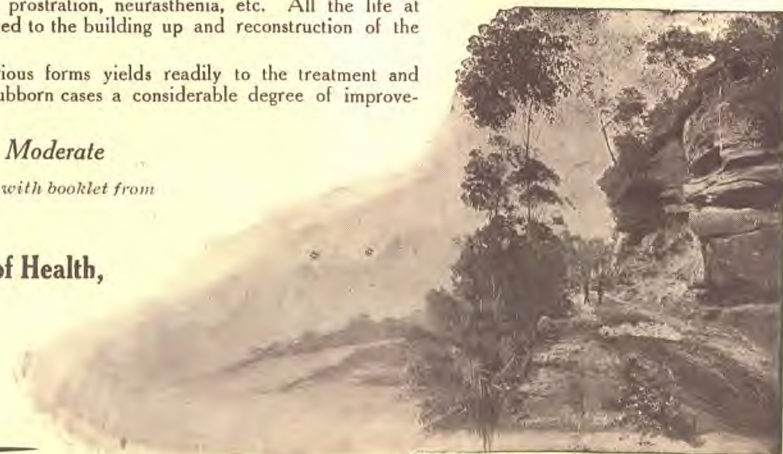
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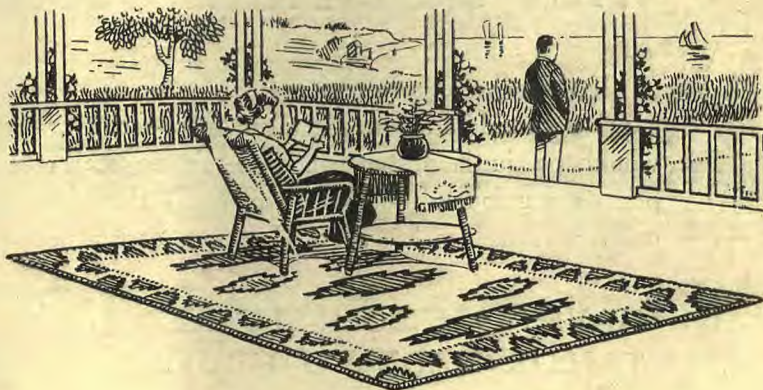
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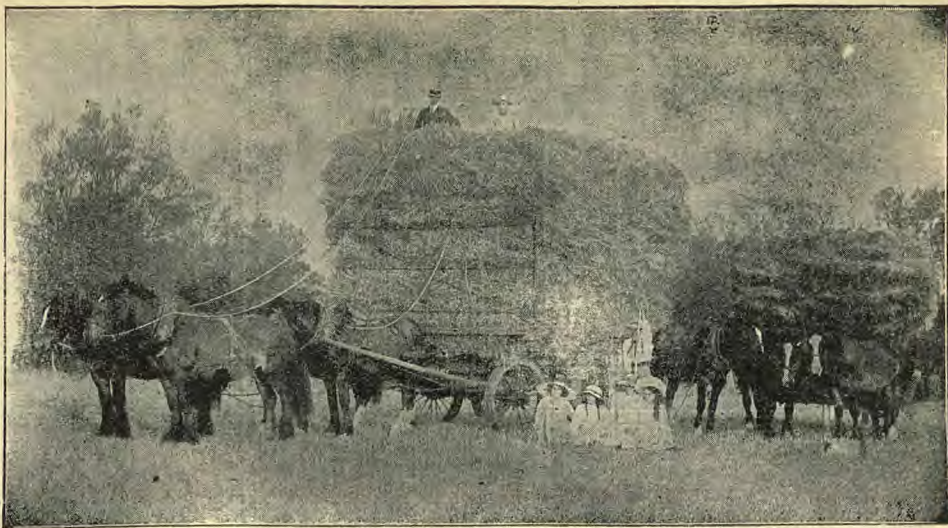
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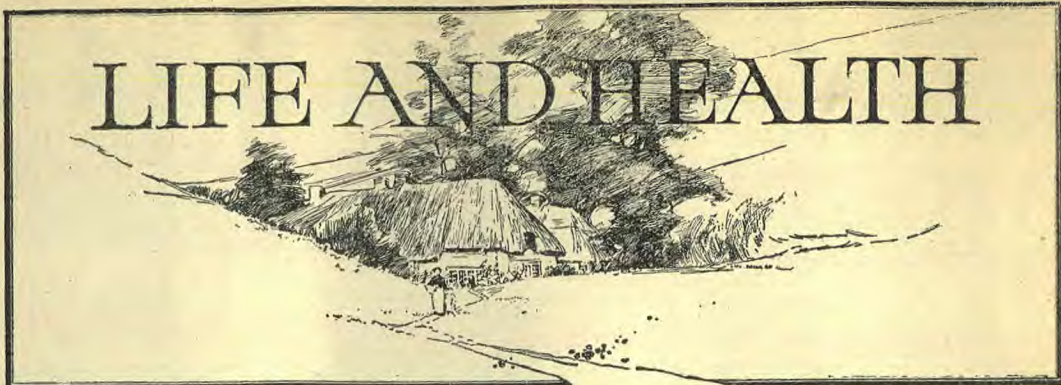
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NEAR TO NATURE'S HEART

N. J. Carey, Photo., Meib.



LIFE AND HEALTH



Vol. 8

March-April, 1918

No. 2

Editor: CHARLES M. SNOW

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

LET the children play; encourage them to play; for play is a form of recreation, and one of the best there is for children. Play gives health to the body of the child and joy to its soul. A good, innocent game, a spirited race, a hearty laugh—these all help to enhance the joy of living, and decrease doctors' bills.

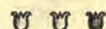


IN increasing the amount of open air and sunshine which our children are to have, it is absolutely necessary to their health that real thought and attention be given to the matter of adequate clothing. For ensuring sufficient protection from the elements, warm undergarments are more effective than heavier outer garments. Furthermore, it is difficult to ensure children getting the required amount of fresh air and sunshine unless some provision is made for games of an innocent and healthful nature.



GROWING children need good milk and plenty of vegetables and cereals, especially in the attractive form of vegetable soups. An egg added to a milk pudding is of considerable nutritive advantage. And growing children ought to have plenty of fresh fruit; but it should be ripe fruit. Fresh ripe fruits and vegetables do have

a marked effect on nutrition, and a notable influence in improving the condition of the blood. This may be due to the recently discovered (or conjectured) vitamins; but whatever it is due to, it is an uncontrovertible fact. Jam is better than nothing; but it contains too great a proportion of sugar to be a satisfactory food, and can never take the place of fresh fruit.



Baby and Bottle

FOR the infant there is only one safe food, and that is the food which only his mother can furnish him. Says one doctor of long experience: "If mothers only knew what we doctors know, nothing would induce them to put baby on the bottle. In the first place, human milk is the only perfect food for the human child, and the cleverest expert in the world cannot make an imitation which is 'just as good.' But most important of all is the fact that no other food is so safe for him.

There are three diseases, especially, which the baby must steer clear of—convulsions, rickets, and acute diarrhoea. It is authoritatively stated that out of every 100 children who have convulsions, 74 are bottle-fed babies, and only 26 are breast-fed. Rickety children, whose bones are soft and misshapen, are almost always

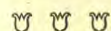
artificially fed, indeed 88 per cent are "bottle babies"; while in that terrible scourge, summer diarrhoea, which we all dread, the figures are still more startling, as 96 out of every 100 babies whose lives are lost by acute diarrhoea are artificially fed. There are so many possibilities of a bottle-fed infant contracting this disease, especially in "fly time," that the wonder is in any escaping that dread scourge. The above figures are given, not to frighten, but to encourage the exercise of greater care in the feeding of the young child. Where babies must be fed from the bottle, the bottle should be scrupulously cleansed after each feeding; the food supply should be kept absolutely free from possible contamination, either by flies or otherwise; and the milk or milk preparation should be kept where it cannot ferment. Sometimes the bottle is filled and then put where it will keep warm until baby calls for it. That is a dangerous practice, as the continued warmth affords the best possible conditions for the development of germs.

But if possible to feed the baby in the natural way, do not for a moment consider the idea of putting him "on the bottle."



THE war has led to the development of conditions which threaten in many and varied ways the welfare of children and adolescents. The excitement of war reports, the absence of fathers and older brothers on active service and the engagement of mothers and other relatives on war work away from home, the absence of masters from school, the relief from educational control of many youths, the demand for boy and girl labour, the disorganisation of the usual form of religious, educational, and philanthropic work, the exceptional abundance of money among many young persons, all combine to threaten the maintenance of order and to weaken the forces that make for moral control. In a statement recently sent out to justices of the peace by Sir Edward Troup, Under-Secretary of State at the

Home Office, London, evidence is given of the striking increase in the number of punishable offences by children and young persons in England under sixteen years of age. Enquiries had been made of the police establishments of seventeen of the largest cities, and in comparing three months of 1914 with the same three months of 1916, it was ascertained that juvenile offences had increased from 2,686 in the former period to 3,596 in the latter period. The Under-Secretary calls attention to the fact that these offences include nearly fifty per cent increase in cases of larceny, but there are also more cases of assault, malicious damage, gambling, etc. "This state of things," says the Secretary, "calls for serious attention on the part of the authorities who have to deal with the maintenance of order and are concerned with child welfare. Some of the cases are the unavoidable results of the war." In this communication attention is also drawn to the fact that the cinematograph shows are doubtless responsible for many of these juvenile crimes, because of their depicting the commission of crimes of various natures. It is our opinion that the crime-illustrating cinematograph shows are as much responsible for this condition of things as any of the other causes mentioned. The shows plant the ideas in the child mind and the other conditions give the opportunity to put the ideas into operation. This generation is not half awake to the dangerous influence of the moving-picture shows; for the ideas implanted in the youthful minds will always remain; and some day, when childhood is past perhaps, the crime seed will germinate and bear its fruit.



By all means avoid the besetting sin of having your meals served in a stereotyped manner. You can, with a little study, have variety without increasing expenditure, and very quickly the result will be seen in the improved health and brighter intellect of your family.

The Heart in Health and Disease

How to Avoid Heart Disease and Remedy Diseased Conditions

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

THE heart is one of the most vitally important organs we possess. Its business is to circulate the blood throughout the body.

The circulation of the blood by this muscle-pump is rendered possible by two sets of valves within the organ, so arranged that in health the blood can only travel in the one direction.

When the valves are imperfect, and allow the blood, in small quantities, to travel in the wrong direction, we have organic disease of the heart; this is the most usual form of heart disease. The opening and the closing of the valves produce special sounds which can be readily recognised by placing the ear to the chest in the region of the heart. If the blood is forced backwards through valves that are only partly closed, other abnormal sounds (*bruits*) are heard. It is by the character of the sounds and the recognition of abnormal sounds (*bruits*) that the physician chiefly recognises the condition of the heart.

Symptoms of Heart Disorder

Many of the disorders of the heart are functional, and are not associated with any change of structure which can be recognised by physical examination. These functional or nervous disorders constitute a very large class; the symptoms are often very distressing and not distinguishable from those of the more serious organic affections. One of the simplest symptoms is the consciousness of having a heart. In health there is neither consciousness of the existence of a heart nor of its movements. Often there is a feeling of oppression, weight, fullness, distension, tightness in the centre of the chest. Faintness is a common symptom; this is often associated with a sense of something rising from the heart to the head, of "passing," of "things looking

far away," of sounds growing faint, of weakness, or often of a feeling of approaching death. Pain in the region of the heart is common, often passing down the left arm and up into the neck, or passing through to the back. When it is very severe we have *angina pectoris*. Sometimes there is palpitation (a rapid, excited, or violent action of the heart). This is frequently noticed by others than the patient.

Pain, irregular action of the heart, fluttering, and oppression do not necessarily indicate heart disease; and faintness is often due to general weakness and debility. All the symptoms mentioned may be the result of indigestion, especially where there is much distension of the stomach. They frequently are the result of worry, anxiety, excessive mental or physical work, especially in those who are not robust, or who indulge in tobacco, alcohol, tea or coffee, or sexual excesses. The most serious and pronounced symptoms of heart diseases are difficulty of breathing and dropsy—a swelling of the feet and legs. Even these symptoms, however, result from other diseases than those of the heart.

Causes of Heart Disease

One of the most common causes of heart disease is rheumatic fever, especially in childhood and in middle and advancing ages. Any of the acute diseases due to micro-organisms and their excretions (toxins) may produce heart trouble; such as blood poisoning, scarlet fever, diphtheria, measles, syphilis, and gonorrhœa (venereal disease). The poisons from these pathogenic micro-organisms circulate in the blood, reach the tissues of the heart, and there cause inflammation of the lining membrane (endocardium) of the valves, or of the muscles (myocardium), or of the external covering (pericardium). During the acute stages of these fevers,

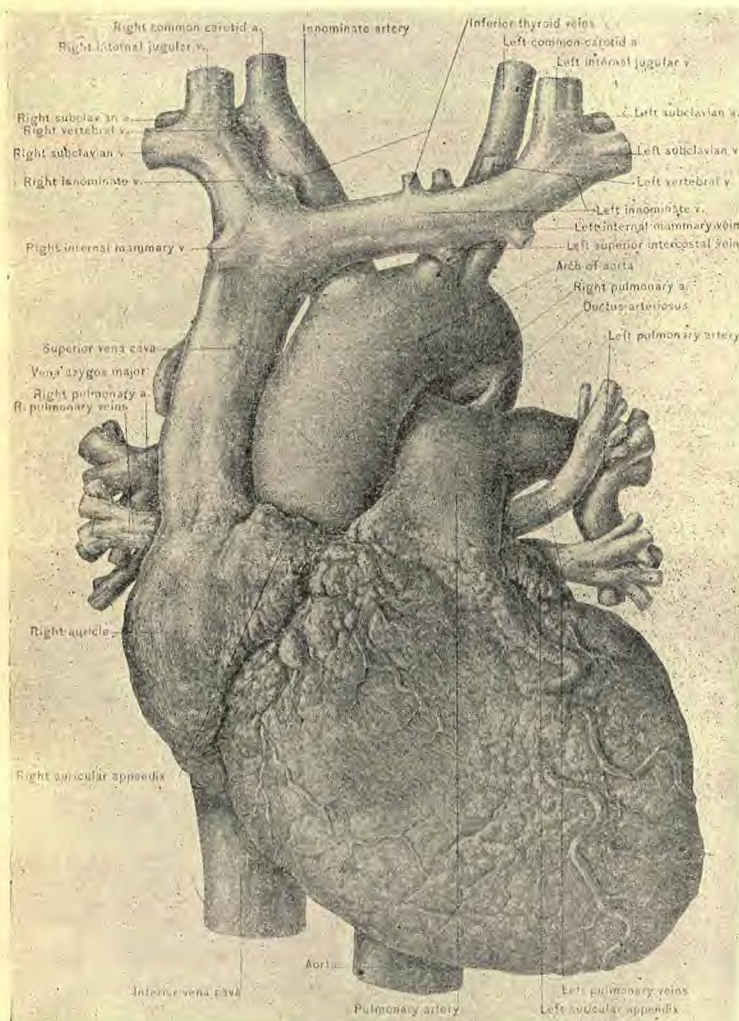
the heart symptoms may be very severe, and yet under appropriate treatment may disappear completely. Often, however, the heart remains permanently crippled.

When the heart is badly affected during rheumatic fever, scarlet fever, etc., it rarely recovers. But by keeping the

make marvellous recoveries without the administration of a single drug.

Anæmia (poorness of blood) and toxæmia (poisoning of blood from uric acid and urea as in gout and Bright's disease) interfere with the nutrition of the heart itself, and degenerative changes occur, producing chronic heart trouble. Snake poison, tobacco, chloroform, and antipyrin weaken the heart and finally produce organic disease. Syphilis (a venereal disease) often brings about a poor nutrition of the heart and its valves and produces disease, independent of its action as a blood poison, already referred to.

There are also causes of a physical nature—muscular work which is beyond the strength of the individual strains the muscles of the heart and produces disease. Excessive work needs increased circulation, the heart enlarges, and to some extent dilates, in order to keep up the increased circulation. Such a heart is much more liable to degenerate and become diseased than the heart that is maintained at its normal size. Excessive meat eating causes uric acid and excess of urea to appear in the blood, slows the circulation in the capillaries, increases



THE HUMAN HEART

Deaver's Anatomy

patient constantly in the horizontal position, with appropriate hydropathic treatment, absence of all flesh food, and the partaking of abundance of fresh ripe fruit or fruit juices, we have had the satisfaction of seeing persons thus afflicted

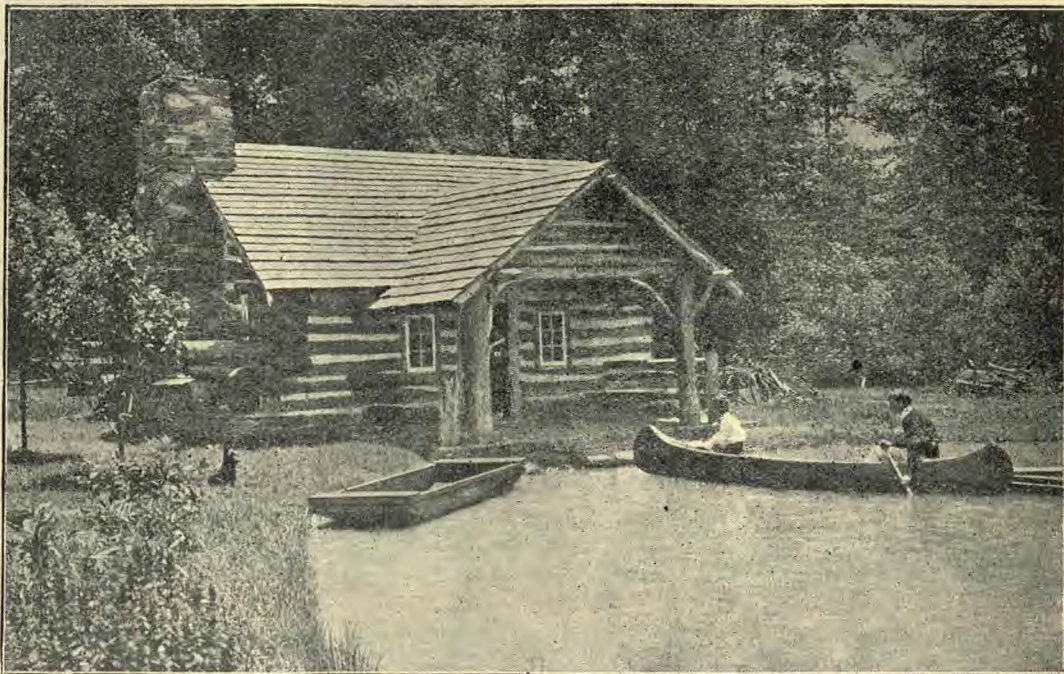
the arterial tension generally, and these conditions are responded to by an increase in the size of the heart (hypertrophy). In Bright's disease there is insufficient elimination of these poisons through the kidneys, and they are consequently retained

in the blood, increase arterial tension, and lead to increased size of the heart and to heart disease. The right side of the heart is similarly affected by diseases in the lungs. Emphysema (abnormal dilatation of the air cells of the lungs), fibrosis (an abnormal increase of the tissues uniting the lobes and lobules of the lung together), and chronic pleurisy have a similar action on the right side of the heart.

Many nervous conditions produce ir-

Treatment

The individual with heart disease must be content to live a quiet life in order to lessen its muscular contractions. The digestion must be kept healthy in order to ensure a good quality of blood for the upkeep of the heart's tissues. Abundance of fresh air is also necessary for the same reason. It should be remembered that the heart of the meat eater beats more frequently than that of the non-



DR. NATURE'S FREE DISPENSARY AND CONSULTATION ROOM

ritability of the heart's action, causing uneasiness in the region of the heart, irregular or violent action, and pain; and if the nervous conditions are continued for some time, chronic heart disease is the result. Worry, anxiety, excessive use of flesh foods, of alcohol, tobacco, tea, and coffee, continued indigestion, sexual excess,—all tend to irritate the heart and finally to produce disease. In many cases of heart disease many factors have been at work, and consequently no definite cause can be assigned.

meat eater. Children are sometimes born with heart disease (congenital heart disease), and if they are brought up on a stimulating diet, and in this diet all flesh foods are included, death will most likely result in a few years. If, however, flesh foods, tea, coffee, alcohol, tobacco, condiments, and all stimulants are avoided, the individual with congenital heart disease may lead a fairly comfortable life and live to a good age. Such cases have come under our own personal observation.

With proper living, drugs are unnecessary in heart disease, but where the indi-

vidual lives carelessly, physicians generally seek to overcome the symptoms of heart disease by artificial means, the use of drugs; but it must be remembered that the continued use of these remedies increases the trouble and hastens death. Overfeeding and indigestible food distend the stomach and intestines and increase the action of the heart, and so should be avoided. Worry and anxiety have a sim-

ilar action through the nervous system. The bowels, kidneys, and skin should be kept acting regularly, so as to ensure the riddance of poisons from the blood and to lessen the blood pressure. In acute disease, where the heart is affected, the continued application of cold wet compresses steadies the action of the heart and often does an immense amount of good.

Conserving Child Life

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

WHAT is your boy worth? "Ah! the world's wealth would not buy him," you say.

It costs money, much money, to rear a child in these days. By the time a boy reaches his majority, hundreds of pounds sterling have been invested in him.

But a boy or a girl costs the parents more than mere money. There must be a great personal sacrifice on the part of both father and mother, a sacrifice covering a long period of years. Doubtless the greater burden of self-denial rests upon the mother. During all the long months of waiting her heart is filled with thoughts of her child that is to be. She toils early and late to prepare the necessities for his comfort. Cheerfully she endures such physical pain and discomforts as fall to her lot. Courageously she passes even into "the valley of the shadow" that her child might be brought into the world.

Then come years of unselfish service and sacrifice. The young babe is the most helpless of all young creatures, being for a long period absolutely dependent upon his caretakers for all that is necessary to his life and happiness.

During all the years of his infancy and childhood, the parents must sacrifice much in leisure, personal pleasures, and comforts as well as in money that their child may be well reared and educated.

It is impossible in these few lines to point out fully the cost of a child, but we, as parents, know what it costs. Yet how gladly we make the needed sacrifice, investing our all in our children. Why this great investment?—That they may nobly fill their places in the world, faithfully and efficiently performing their share of the world's work, blessing and enriching the lives of those about them and at last winning the Christian's reward.

It is only by realising this noble purpose in life that the child can justify the great expenditure of love, labour, time, and money invested in him by his parents.

What elements are necessary to a child's success in life? Not wealth and luxurious surroundings, ease and self-gratification—oh no, not these! We may summarise the child's real needs as follows: *Health and suitable education*, mental and moral; or as it has been tersely put, "A sound mind in a sound body."

It seems reasonable that of these requirements, health is a prime essential to the child's success in life. There must be a sound physical basis upon which to build the mental and moral educational structure.

Fortunate indeed is the child whose birthright is a clean, sound constitution.

The Conservation of the Child's Health

The child's first and most vital need, as regards health, is pure air and sun-

shine. Plants wither and die if deprived of these blessings, and so do babies.

In this temperate clime it seems almost needless to bring this matter to one's notice, but those who still fear the dangers of draughts and night air are legion. Pure air contains oxygen, which is life's most vital need. We may live for days without food but only for a few moments without oxygen. It is oxygen which, by way of the lungs, gains entrance to the blood stream and there replaces the poisonous substances gathered from all the tissues as a result of vital activities. Were not the blood being constantly purified by the inhalation of oxygen, we should die of self poisoning in a few moments. The body is constantly giving off poisons in the air exhaled from the lungs. It has been estimated that an adult person, occupying a closed room, by each breath poisons or renders unfit to breathe again three cubic feet of air. A child poisons the atmosphere less rapidly but no less surely.

The effect of living in close, ill-ventilated rooms is serious. The general vitality of the body is greatly lessened and its resistance to disease is accordingly weakened. Headache, nervous disorders, colds, and other diseases of the chest, loss of appetite, decreased digestive power, and anæmia are among the common disorders resulting from disobedience to this first law of health. It is clear, then, that the outdoor life is the healthy life. Little children should spend as much time as possible in the open air. If convenient, it should be arranged for them to spend

even their sleeping hours upon a verandah or balcony. If this is not possible, their bedrooms should be spacious and always well ventilated, winter and summer, regardless of the weather.

The second great need of the body is suitable food and drink. It is astonishing what great ignorance or carelessness is displayed by many parents in the feeding of their children. If mothers would be

duly careful as regards regularity in meal hours, suitability in the choice of foods, and simplicity in the preparation, there would be but little trouble experienced.

It should be remembered that *milk* is the chief dietary requirement during the first two years of life. During the baby's second year, the milk may be variously prepared and combined with different cereals so as to afford the variety desirable.

The strained juice, and possibly the pulp of sweet ripe fruits may also be given.

Vegetables should not be included in the child's diet before the end of the second year. (A possible exception might be made in the case of a strong, healthy child, who might be given a little mashed or baked potato during the latter half of the second year). The observance of this rule would save many an infantile pain and consequently many anxious hours for the mother.

It often happens that a mother with a young child in arms, comes to the physician for advice regarding the baby's health. Careful enquiry elicits the fact that the child (often from a year to eight-



HEALTHY AND HAPPY, BUT STRANGERS TO TEA

een months of age) is being permitted to eat whatever is served on the table for other members of the family. Potato, cabbage, green beans, and other vegetables are given to the baby, also meats, including sausage. Is it any wonder that babies so fed suffer from inflammation of the stomach and bowels, vomiting, and diarrhoea? A young child, apparently in sound health, recently died in severe convulsions within twelve hours after eating sausage. Many other cases might be cited of dangerous illness in babies due entirely to such indiscretions in diet.



J. H. Kinnear.

TWO LITTLE FRIENDS ON MAN'S BEST FRIEND

Attention should be given not only to the child's food but also to his drink. The body requires much fluid, but great care must be taken to introduce nothing which will exert a detrimental effect upon the health. Pure water, sweet unfermented fruit juices, cereal waters, as rice or barley water, are practically the only drinks which should be allowed to children between meals. Milk and such milk drinks as caramel cereal or frucerea may be taken as part of the meal. Tea, coffee, and alcoholic drinks in any form are particularly injurious to growing children.

In this country where tea is so largely used, young children are often permitted

to drink it as freely as they wish. This practice is certain to lay the foundation of future disease, if not to cause immediate ill-health. Tea contains no nourishment apart from the sugar and milk served with it, but it does contain two most objectionable elements, tannin and caffeine. Tannin (which is quickly dissolved in the brewing process) interferes with the digestion of proteid and other important food elements in the child's diet. As a result, the child's natural growth is interfered with, while constipation and indigestion result. Caffeine, the other important ingredient in the tea, exerts its influence chiefly upon the nervous system. It over-stimulates the nerves without imparting any true strength to sustain the increased activity. Consequently the child becomes nervous, irritable, a restless sleeper, and perhaps later on a victim of chorea, or St. Vitus's dance, or some other nervous disorder.

Alcoholic drinks have a still more serious influence upon the child's health. Alcohol is a deadly foe to all living tissues. If alcoholic drinks are taken, the alcohol is quickly absorbed from the digestive canal, gaining entrance to the blood stream. The blood thus poisoned then traverses the entire body, poisoning all of the delicate tissue cells and interfering with their legitimate work. The entire body suffers as a result of this alcoholic poisoning, but the greatest harm is done to the vital organs—the heart, stomach, liver, and particularly the brain and spinal cord. The child's development is retarded, and serious disease is certain to develop.

Dr. Willard Parker, one of America's eminent physicians and a high authority on statistics of this kind, strongly emphasises the effects of drink upon the duration of life. He affirms that the average age of temperance people is sixty-four years and two months, while the average age of the intemperate is but thirty-five years and six months; thus making a difference between them of twenty-eight years and eight months. The life prospect of an intemperate child or youth is not a bright one—a short life

handicapped by disease and terminating in an early death.

Tobacco is another narcotic which exerts a most disastrous effect upon growing children. Its use undermines the physical health, retards mental development, and dwarfs the moral sensibilities. The use of tobacco is injurious to adults, but it has a peculiarly injurious effect upon growing lads and youths.

There are other matters relating to the child's health which require attention, but these may be considered very briefly. *Exercise* quickens the circulation of blood and increases all of the vital activities.

Children need not only exercise, but also rest and sleep. All forms of exercise result in a wearing out of bodily tissues. It is during sleep that the body is best able to repair or restore these broken-down tissues. The growth of new tissue also takes place much more rapidly during sleep than during the waking hours. Active growing children therefore require an abundance of sleep. Up to four or five years of age the child should have a day-time sleep as well as a long, undisturbed night. Children of school age should go to bed early and should have from nine to eleven or even twelve hours' sleep. Children vary greatly as regards their need of sleep, but certainly the average school child requires at least nine hours' sleep. If the child retires regularly at an early hour and is undisturbed until

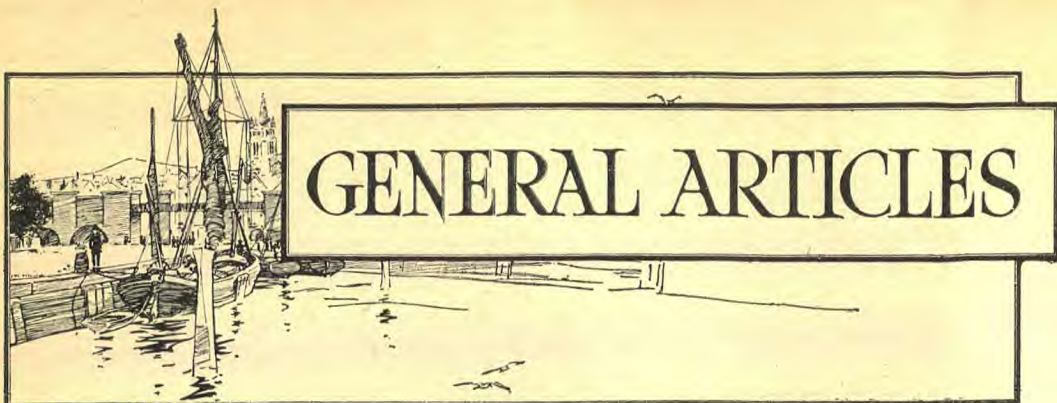
he wakens naturally in the morning, his parents may feel sure that his sleep requirements are being properly met. Some children of a nervous, high-strung disposition become much fatigued during



J. H. Kinnear, Photo., Auckland.
WITH A FAIR BREEZE ON THE TASMAN SEA

the day, and should be required to take a short rest even if they cannot sleep.

Lastly, we may mention *cleanliness* as one of the important requirements of health, cleanliness, both of the person and of the clothing. We would emphasise particularly the necessity of teaching children to care properly for their teeth. Sound teeth have a closer relation to health than most parents realise.



GENERAL ARTICLES

The Best Man Wins

G. H. HEALD, M.D., Editor American "Life and Health"

IN nature there is a continual struggle between organisms. Lowly plants or animals live at the expense of higher plants or of animals, and vice versa. Every plant and animal has its enemies, and woe be to the organism that through lack of proper nutrition begins to lose in the battle of life! Its enemies, which were before kept at bay, now gain one foothold after another, gradually rendering the body susceptible to attack on the part of some other organisms, and soon its destruction is accomplished.

Man is in nowise exempt, for these microscopic foes enter his body in various ways without his suspecting it. Milk and other foods, water, air, and other vehicles, convey to man germs which may result in invalidism and death. In fact, a very large proportion of sickness is directly traceable to the agency of disease germs.

Apples rot because of certain germs or moulds which find lodgment on their skins; other foods decay in a similar manner because of the presence of germ life. Decay and disease are the work of micro-organisms. The various fevers and ulcers and inflammations with which we are afflicted are due to germ action.

Though accident sometimes befalls the most vigorous, and germ diseases occasionally attack those of comparatively strong constitution, the general rule is that in proportion as one's physical powers are run down one becomes less resistant and

more readily yields to the inroads of disease germs. Every indulgence or accident which weakens the bodily powers is an invitation to disease germs to take possession, and usually they are not long in accepting the invitation.

The most important requisite in the fight for health, happiness, efficiency, and long life, is the early formation of right habits. Good habits are friends. The more we have of them the better. Every bad habit is an enemy, which brings regret, remorse, unhappiness, and premature death. The time to form proper habits is during the pliable period—early in life. If wrong habits have been formed, the sooner a radical change is made, the better; for every repetition of a habit fixes it the more firmly on the character.

The very common teaching about the necessity of a boy's "sowing his wild oats" is, consequently, most pernicious. Such a sowing will inevitably give a wild-oat crop of evil habits, and perhaps of disease, which ever after will likely be a handicap, not only to the young man himself, but to his posterity.

Food Supply and Vitality

Unquestionably the food supply, its quantity, and its quality have an important bearing on the vitality of an organism. Every nurseryman, every practical gardener, knows that in order to have success he must feed and water his plants prop-

erly. He knows that plants, in order to thrive, must have access to certain ingredients in the soil, and must have certain conditions of light, heat, and moisture. It is the poorly nourished plants that succumb to the attacks of other organisms.

Breeders of high grade animals, and, in fact, all intelligent stockmen know that an important element of success is careful and intelligent feeding. No less is it true

There has been for more than a generation a belief among physiologists that man requires ordinarily for moderate work not less than four ounces of protein a day, and for hard work considerably more than this. Such a dietary would necessitate the use of a considerable amount of animal food; and many of the most eminent physiologists believe that the natural dietary of man is a mixed



"CIVILISED MAN WOULD NOT EXCHANGE HIS POSITION FOR THAT OF THE SAVAGE" N. J. Caire, Photo., Melb.

that the human being in order to live a successful life must be properly nourished. This point will be conceded by all. The only point to be settled is, What constitutes proper nourishment?

It is not a question that can be answered in terms of bulk or taste. It is not enough to fill the stomach with a certain weight or measure of food, or with anything that happens to taste good. Neither is it physiologically economical to eat large quantities of certain foods because they are cheap.

dietary including a liberal amount of such food, particularly of flesh. But it must be noted that, though disregarded by many physiologists, there have been experiments performed by leading physiologists which suggest the query whether such large quantities of protein are requisite. It was not until the work of Horace Fletcher called the attention of Professor Chittenden of Yale to the possibility of health on a low protein ration that the matter was extensively worked out with the necessary checks.

The improvement in health and vigour which Mr. Fletcher attributed to his system of mastication this series of investigations seemed to show was due as much to the reduction in the amount of nourishment, particularly the protein ration. In other words, the investigations seemed to justify the belief that athlete, soldier, and laboratory man all tend to overeat, especially of protein; and that a reduction of the quantity of protein in the dietary is an advantage for the average individual.

To many this suggests the advantage of lessening or cutting off the supply of flesh food, especially when it is realised that a large proportion of flesh food is diseased, and even when inspected by the Government, it is only the grossly diseased animals that are rejected. Those in the first stages are passed as edible. But thousands of animals in the small local slaughterhouses are killed without even this much inspection, so that even the grossly and dangerously diseased not infrequently find their way to the market, if we may believe the private reports.

The generally received dietary would be perhaps four ounces of protein with fat and carbohydrates sufficient to make up one and one-half to two pounds of food a day; this, of course, for the average adult person. There is evidence, however, that this is too liberal an allowance. [The foods most rich in protein are beef steak, fish, cheese, eggs, dried peas.] Gradually we are learning the advantages of a lighter protein dietary.

An important disadvantage of the high protein ration is its tendency to putrefy and form poisonous compounds in the intestinal canal; and there are some who believe that much disease is due to this one thing. Our wisest course is to decrease the danger by lessening the consumption of protein foods which tend to putrefactive fermentation.

These considerations warrant the prediction of a more general reaction against a high protein dietary. The necessities incident to the war, and the high cost of protein foods have, moreover, forced upon unwilling minds everywhere the fact that one may live with a smaller protein

ration than has been customary, not only without danger, but with actual benefit.

Turning from the question of a liberal protein dietary, the next important topic for our consideration is, perhaps, simplicity in diet. Primitive man necessarily ate simply. As man masters nature so that he acquires more of her stores than he actually needs, and has leisure from the task of obtaining his foods, he is able to live more sumptuously.

With the development of wealth came the temptation to feast more liberally, and as a penalty civilised man has suffered from diseases unknown to the savage. This, of course, furnishes no valid argument for a "return to nature." With all the burdens and diseases of civilisation, man would not exchange his condition with that of the savage. But, without adopting the life of the aborigines, he can, if he will, so simplify his method of living as greatly to increase his comfort and efficiency. Some of the hurtful practices which he as civilised man has adopted can very profitably be given up. One benefit of the war—one eddying current in the mad self-destruction of humanity—is that it is teaching humanity to live more simply.

In a few words, man's diet, either as a whole or in any one of its constituents, should not be less than, or greatly in excess of, his needs, and should be simply prepared, free from condiments, spices, and other temptations to overeating. On the other hand, it should be palatable, and so prepared that eating will be a pleasure. This may seem a paradox; and it might be impossible to prepare foods in a simple way which would tempt the appetite of one long addicted to stimulating foods. Such a one will necessarily be some time learning to relish plain foods, and it is only by determination and the appreciation of the need of a reformation that one can succeed.

Among other dietary errors to be avoided by one who desires the best of health, is irregular eating, hasty eating, drinking much fluid at meals, and eating shortly before or after hard work, either physical or mental.

"To Save The Wheat"

NEWTON EVANS, M.D.

IN consideration of the present need of saving as much of the wheat produced in America and elsewhere as possible for human food to be used by our Allies in Europe, any information as to grain substitutes may be a help to the housewife.

Since Indian corn is probably the grain most used as a substitute for wheat, the following scientific facts are of much practical interest:—

1. Corn is used as the mainstay in the diet of large portions of the human race, particularly in the warmer parts of the northern hemisphere.

2. In composition, corn closely corresponds to the average composition of the principal grains. It is slightly below the average in proteins, slightly above in fat, and its total fuel or energy value is the highest of all the grains.

3. Its digestibility and completeness of absorption in the human digestive organs are practically the same as those of the food products made from wheat or from wheat and rye.

4. There is no ground for the belief sometimes held that corn as a food is "heating," as experiments show that corn, since it contains slightly less protein than the average of other grains, causes the body to give off less heat than other grain foods with a higher protein content. It does not act as a fattening food.

5. Corn meal prepared by the present methods of milling, called "granulated corn meal," has the advantage of better keeping qualities than the old-fashioned corn meal, in which the whole grain was included. It also contains less of the coarse matter of the skin of the grain.

6. Corn meal made from the whole grain—"old-fashioned corn meal," or "unbolted meal"—does not keep so well, because it contains more of the fat that is in the germ of the grain.

7. On the other hand, the "granulated corn meal" lacks the large percentage of

fat contained in the freshly ground "unbolted meal," which is removed by the milling process.

8. Again, the "granulated corn meal" is very deficient in the important substances called "vitamines," which are necessary to health, but which are also found in great abundance in all fresh fruits and vegetables, as well as in milk and similar foods.

9. A diet of corn meal, since it is slightly below wheat bread in the amount of protein present, calls for the use with it of a certain amount of such foods as milk, eggs, and other nitrogenous foods.

10. On account of the absence from corn of any substance similar to the gluten of wheat, it does not lend itself well to the making of yeast bread when used alone. However, when combined with certain proportions of wheat flour or rye flour, it can readily be made into yeast-raised bread.

11. On the other hand, for the same reason, it does lend itself more readily than any other grain to the making of the simple and easily prepared breads like "ash cake," "hoecake," etc. This is of special interest to campers, who can prepare a palatable bread from corn meal more readily and more quickly than from any other material.

TESTED RECIPES

New recipes from the culinary department of the College of Medical Evangelists, Loma Linda, California.

Raised Corn Bread.—Two and one-half cups warm water, one-half cake compressed yeast, one tablespoonful salt, two tablespoonfuls vegetable fat, three tablespoonfuls brown sugar, six cups bread flour, two and one half cups corn meal (lightly toasted in the oven). Dissolve the yeast in two teaspoonfuls water, add the liquid, and beat in three cups of white flour to smooth batter. Cover, and let stand in a warm room to rise for one and one-half hours. Add the salt, the sugar, and the oil, and beat into the sponge. Add the corn meal and the remaining white flour, and work into a soft dough. Turn out on a floured board, and knead until elastic to the touch, using as little additional flour as possible.

Corn Dodgers.—One cup corn meal (preferably toasted lightly in the oven), two tablespoonfuls vegetable fat, one-half teaspoonful salt, one table-

spoonful brown sugar, one and one half cups boiling water. Mix all the dry ingredients, add the fat, pour on the boiling water all at once, and stir smooth. A few tablespoonfuls of water may be added if needed, to make the batter of such a consistency as to drop from a spoon quite thick, but not run. Drop from the side of a spoon onto an oiled baking pan in oblong shapes, and bake in a hot oven.

Corn Cake.—Spread the above corn mixture in an oiled baking pan one-fourth inch deep, and bake in a hot oven.

Corn Meal Crisps.—One cup white corn meal, one cup pastry flour, two and one-half tablespoonfuls vegetable fat, one tablespoonful brown sugar, one-

mix, using the folding motion. Pour into an oiled baking pan, having the mixture about one and one-fourth inches in depth, and bake in a quick oven.

THOSE who have become addicted to the use of strong drink and find it difficult or impossible to overcome the appetite for such beverages will find great help in freeing themselves from the grip of intoxicants by eliminating from their dietary pepper, mustard, and other strong



WHEAT FARMING IN NEW SOUTH WALES

half teaspoonful salt, scant one-half cup water. Mix all the dry ingredients, add the oil, and rub between the hands to distribute the fat through the flour. Add the water, and mix to a dough. Roll out to one-fourth inch thick, cut with a biscuit cutter, prick with a fork, lay in a baking pan, and bake to a light brown colour.

Corn Bread (unleavened).—One and one-third cups corn meal, two tablespoonfuls whole wheat flour, one and one fourth teaspoonfuls salt, three tablespoonfuls vegetable butter, two tablespoonfuls brown sugar, one and one-third cups boiling water, two eggs separated. Mix all the dry ingredients in a bowl. Add the butter, and pour on the boiling water in a slow stream, stirring continuously. Add two or three tablespoonfuls cold water if needed to make a medium batter. Separate the eggs, and beat the whites stiff. Beat the yolks, and fold the yolks into the beaten whites. Add the corn mixture and

spices, as well as pickles and vinegar. These irritants of the alimentary canal are very largely responsible for the intense craving of the drinker for intoxicating liquors. If, in addition to eliminating all such irritants from the dietary, the victim of drink will adopt a diet that is wholly or even largely a fruit diet, the difficulties will be reduced again. This is a dietary also that will greatly help the victim of the tobacco habit to free himself from its tentacles. The fruit juices allay the craving and help to eliminate the poisons from the system.

Is Tea a Healthful Drink?

The Story of Its Manufacture and the Results That Follow Its Use

C. P. MICHAELS

THIS is a very important matter in view of the large amount of tea in daily consumption.

Has the health of the race improved since the virtues (?) of tea were discovered some two thousand years ago? Statistics show that diseases are increasing much faster than the population, so that the very existence of the race is in jeopardy. Is there any connection between this remarkable increase of disease and the almost universal use of tea?

It may surprise many to learn that what we call tea is not a product of nature. It is true that the leaves are plucked from a living plant, but if they were naturally dried or supplied in the green state, the trade in tea would quickly diminish, for people would soon discover that it was a cup that would neither cheer nor inebriate. It is the process of development and preparation that produces the flavour and properties that make the leaves of this plant so popular.

The tea plant, *thea sinensis*, belongs to the camellia family. The leaves of the red camellia, *thea maliflora*, are frequently mixed by the Chinese with tea for flavouring purposes, all the camellia plants being rich in essential oils.

Tea leaves when freshly plucked possess nothing of the odour or flavour of the dried leaves, these properties being developed by the roasting which the leaves undergo in the process of drying. They are subjected to continual manipulation under a gentle heat until they have reached a certain stage of maceration, when they are ready for fermentation.

Fermentation is always accompanied by the production of poisons in some shape or form. The object of the fermentation of tea leaves is to develop these poisons without the total destruction of the leaves. To effect this, care is taken to check the process when a certain stage has been

reached, and thus produce the greatest amount of poison with the least possible destruction of the leaves. This is accomplished by rolling the damp, decaying leaves on warm copper plates until quite free from moisture. The tea is then fit for the market.

The principal poison developed in this process is called theine. It is a silky white crystal, and has no odour and only a slightly bitter taste. It is to the presence of this ingredient that the peculiar physiological action of tea is due. Theine is rapidly dissolved in boiling water. It is owing to this that tea is always considered best when freshly made, and before the other constituent elements of the leaves have been dissolved.

Theine is a powerful stimulant to the system, its character as a poison being at once recognised, and every organ of the body making energetic efforts to get rid of it. This is the very opposite of what occurs in the case of food. Should an excess of food be received, provision is at once made to store it. Hence foods can in no way be called stimulants. The very nature of a stimulant requires that it shall be eliminated from the system. Consequently tea is not a food and does not strengthen the body, its peculiar action being entirely due to chemical properties developed during the preparatory process in its treatment.

But theine is not the only chemical contained in tea. Tannin, a strong astringent, forms at least twenty-five per cent of the component parts of black tea. Tannin is also present in coffee, chocolate, and cocoa in a greater or lesser degree. It dissolves slowly in water and imparts to the tea that bitter taste which is developed by allowing it to stand.

The effect of tannin in the stomach is to neutralise the acid of the gastric juice, and in this manner it delays

the work of digestion. Its tendency is to harden foods, especially flesh foods, and thus prevent their being broken up by the action of the gastric juice. When food is received in the ordinary course into the stomach, the numerous glands are stimulated and discharge profusely the digestive juices. Tannin, being a powerful astringent, contracts the openings of many of the glands, and in many cases closes them altogether, in this way



THIBETAN COOLIES CARRYING BRICK TEA

lessening the supply of the digestive juices and greatly retarding the work of digestion. The walls of the stomach are also hardened by it, thus hindering the mechanical action by which the food is broken up and emulsified, causing it to be retained too long in the stomach. Owing to this, fermentation frequently ensues, poisons are developed, and the system, instead of absorbing the nutritious elements of the food, is hardened with the necessity of eliminating the various injurious products of fermentation.

The use of tea also tends to retard the action of the digestive organs in another

way. This beverage is partaken of usually not because the system requires more moisture, but because it has become customary to drink it with each meal, so that no meal is considered complete without a cup of tea. In this way too much liquid is introduced into the stomach and, as a result, the digestive juices are diluted and cannot perform their work. This excess of liquid must first be absorbed before the work of digestion can be proceeded with.

These beverages are not valued for their nutritive properties. They cannot be considered foods; for the portion which contains the nutriment is looked upon as refuse and disposed of accordingly. The effect of a food taken into the system is that the same quantity always produces the same result, no matter how regularly this food is partaken of. Stimulants, however, differ from foods in this respect. They always require an ever-increasing quantity to produce a like result. This is because a stimulant is recognised by the system as a poison, energetic efforts being made by the various eliminative organs to discharge it from the body. As the dose is repeated, the organs become exhausted through their efforts, and nature accommodates itself to circumstances it cannot control. Its efforts to eliminate the poison become weaker and weaker with each repetition of the dose, and finally resistance ceases, the system becoming saturated with the drug which practically takes possession of and rules the man. It is this law of nature that enables men to absorb large quantities of opium, nicotine, arsenic, and other poisons without fatal results. But in every case a larger and still larger quantity is required to produce the effect resulting from the first dose.

Another evidence that tea is not a food is found in the derangement of the central nervous system following abstinence after habitual use. No matter how regularly a food has been partaken of, sudden abstinence from that food does not affect the nervous system; but everyone is acquainted with the severe headaches suffered by most women who abstain from tea for a

few days, and how quickly a strong cup of tea removes the symptom.

It must be evident, then, that there is some connection between the evils existing to-day, the marked tendency to disease, the rapid increase of what might be called breakdowns in business circles, and the use of these apparently harmless beverages. The cup that is said to cheer does also inebriate, and worse than that, is responsible for the depraved condition of the nervous system of many of the men and women we meet. We must conclude that it certainly is not a healthful drink.

Hunger After Eating

When the Full Stomach Does not Satisfy

FOOD passes through the digestive tract in somewhat the same manner in which it is taken into the stomach. To be sure, it enters the stomach in three daily portions usually, and enters the intestines in smaller quantities over a period of several hours, averaging about four. Therefore there is usually a period of an hour or more between meals in the intestine. All tissues of the body require rest; none can continue to work without it. Hence nature provides for this rest for the intestines between meals. The rest during the night is considerably longer, in which the whole body shares.

The eating of food at regular intervals results in the feeling of hunger occurring at the corresponding period of the day providing the digestion is good and sufficient work has been done to demand the replenishing of the food elements consumed from the blood. Likewise the intestine rhythmically prepares to digest its quota of food. Nature normally is harmonious and rhythmical.

Eating at irregular intervals is well known as a destroyer of appetite and a cause of indigestion, inasmuch as it interferes with the normal rhythmical digestive action and formation of digestive juices. Overeating has a similar effect,

since the stomach is longer in emptying and the intestine is busy longer before it secures its usual rest. While occasional overeating may cause little harm, its frequent repetition disarranges the normal order of the digestive function, which will become serious if long continued.

When a meal is missed and the digestive juices are secreted in the stomach, hunger recurs. It is natural to recognise the same condition in the intestine. People sometimes say that they are hungry after eating. While the stomach is full and satisfied, the intestine is not, due to the absence of food—a meal missed, a light meal, or a meal of food that did not satisfy the requirements. Thus we may have stomach hunger and intestine hunger.—*Popular Science Siftings*.

Simple Foods

DR. HAIG, in speaking of the value of simple foods, writes: "I may say, also, that simple food, of not more than two or three kinds at one meal, is another secret of health: and if this seems harsh to those whose day is at present divided between anticipating, preparing their food, and eating it, I must ask them to consider whether such a life is not the acme of selfish short-sightedness.

"In case they should ever be at a loss what to do with the time and money thus saved from feasting, I would point on the one hand to the mass of unrelieved ignorance, sorrow, and suffering; and on the other to the doors of literature, science, and art which stand open to those fortunate enough to have time to enter them; and from none of these need any turn aside for want of new kingdoms to conquer.

"Be that as it may, the best health, strength, and nutrition are not to be obtained by waste of time and money on elaborate food, for the simplest things are all that are really required and accepted by Nature."

CHATS WITH THE DOCTOR



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 answered. To avoid disappointment subscribers will please refrain from requesting replies to questions by mail.

125. Skin Eruption on Knee Cap

"Miss M." writes: "For about six or seven weeks there has been a nasty redness on my knee caps, dry and streaky, or tiny spots about the size of a pin's head, very irritable at times but not moist; one spot below the cap has formed a big, dry-looking red rash. I cannot keep from rubbing it often through the day. Could you prescribe some ointment?"

Ans.—Without examination it is difficult to say exactly whether the trouble is eczema or psoriasis. We would recommend the following ointment:—

R Ung: zinci oxidi
 Ung: plumbi subac.
 Ung: Hydrag. aa (of each) ʒss (½ ounce)
 Acidi Carbolici mxx

126. Indigestion and Red Nose

"E. W. W." writes: "I suffer very much from indigestion; the pain is in the pit of the stomach, sometimes a burning, gnawing feeling. In the morning I feel weak and languid, and after dinner heavy and sleepy, but feel better in the evening. For some years my nose has been very red. At times it seems swollen at tip and small pimples appear with pus, but in a day or so dry off. Sometimes it is very cold, and at other times burning hot and itchy. There seems to be a great stiffness in the nostrils and ears, and I have very severe headaches and lose considerably at certain periods."

Ans.—The condition of the nose is most probably due to the indigestion. See that the teeth are in good condition; all decayed teeth should either be filled or extracted. All food should be masticated until it becomes a pulp before being swallowed. Avoid tea, coffee, and cocoa, all fried foods, fresh bread and scones, and foods cooked with fats or baking powders. In acid dyspepsia acid fruits as a rule disagree; prunes and stewed fruits, however, may be taken. Fresh milk (sipped), lightly cooked fresh eggs, and the dextrinised foods are recommended. Zwieback, toasted corn flakes, granose biscuits, steamed granola (with or without dates), macaroni, and gluten biscuits cooked in the form of "mock tripe" will all be found serviceable. Rice, sago, and tapioca cooked at a low temperature as a rule agree. Potatoes should be well cooked and mealy. French beans, green peas in small quantities, silver beet (leaves), spinach, marrow, and pumpkin are readily digested. All rich, complicated dishes should be avoided. The burning acid in the stomach does harm, and it is better neutralised when it arises with a powder made up of equal quantities of carbonate of bismuth, carbonate of magnesia (heavy), and bicarbonate of soda (Howard's). Take a level teaspoonful in half a tumbler of warm water when burning acid symptoms occur. Read articles in a previous issue on "Acid Dyspepsia."

Dust the nose and face at night (after thoroughly washing with hot water and drying) with a lotion made up of one ounce each of calamine and oxide of zinc in half a pint of lime water. Wash off in the morning. Rest as much as possible when excessive "loss" occurs.

127. Freckles

"F.C." asks for a cure for the above.

Ans.—All the recommended lotions weis to be reduced. It is undoubtedly in-

Ans.—Starchy foods certainly help to increase one's weight, and with some, especially when there is excess of acid in the stomach, they are not easily digested. The cereal health foods contain starch in a partly digested form (dextrinised), and will agree with most dyspeptics if the food is well masticated. Sugar and sweets of all kinds help to keep up the fat in one's system, and should be discarded as much as possible if the weight



J. H. Kinnear, Photo., Auckland

BETTER THAN THE MOTOR CAR

have seen employed for the above have failed. Exposure to the sun certainly increases the trouble. Apparently they are incurable.

128. Starchy Foods.

"July" writes: "I would like to use your health foods, but believe they are starchy, and I have been advised to avoid starchy foods. I am between thirty and forty and am very stout. I lead an active life and eat meat and drink tea in moderation. Am fond of sugar and sweet dishes."

jurious to digestion, causes constipation on account of its tannin, and irritates the nervous system by the theine to which it owes its special qualities as a stimulant. Meat is only a second-rate food, as it contains uric acid already formed, and is liable to carry disease. Meat-eating certainly gives the heart, the liver, and the kidneys more work to do than would a non-flesh diet. Our correspondent asks for a dietary, but does not state any symptoms of disease. We presume she wishes to reduce her weight. Two meals a day would be better than three; the

evening meal is the best one to omit. Potatoes and milk both increase one's weight.

129. Nitrate of Silver for Throat

"Mrs. N.M." states that she took a prescription from LIFE AND HEALTH to a chemist, and that he stated twenty grains to the ounce of nitrate of silver, as recommended, was altogether too strong, and that the strongest application was five grains to the ounce. She asks for information on the subject, as she is jealous for the reputation of this magazine.

Ans.—Lennox Bröwne, F.R.C.S.E., Senior Surgeon to the Central London Throat and Nose and Ear Hospital, gives the strength of throat paints from "ten grains to sixty grains to the fluid ounce of distilled water."—"The Throat and Nose and Their Diseases," page 906. Twenty grains to the ounce is the usual strength.

130. Rough Skin

"G.H.J." writes: "My face is puckered with little holes from which formerly blackheads were squeezed. Is there any remedy to get the skin properly smooth and healthy?"

Ans.—The original condition that produced the blackheads must be treated. These "blackheads" are small masses of sebaceous matter plugging the ducts of the sebaceous glands. The black top is due partly to the hardening of the superficial layer of the skin and partly to dirt. When squeezed out, these sebaceous masses look like maggots. Sometimes a parasite develops in them, such as demodex or acarus folliculorum. These cheesy masses should be gently squeezed out of the glands, as rough handling causes inflammation. This should be followed by washing with soft soap and hot water and vigorous friction. Subsequently a paste composed of kaolin (half an ounce), glycerine (3 drams), and vinegar (2 drams), should be regularly applied night and morning after vigorous washing as

already described. A weak sulphur ointment (ten grains to an ounce of lard) can be substituted for the paste. The digestion should be carefully attended to, and all rich foods, especially those containing fat of any kind and much sugar, should be avoided. Digestive disorders have a decidedly injurious action on the skin; and the rough, greasy condition must be treated through the digestive organs as well as by local treatment.

This also answers the correspondent writing us from "Kaloora."

131. Lactosa and Dyspepsia

"G.H.J." also writes: "Lactosa being of an acid nature, would you advise it as a diet for dyspeptics? Is it possible, seeing that the Arabians live purely on whole meal, for any person to live solely on granose biscuits? Will dieting cure dyspepsia, and if so, for how long do you think one, a confirmed dyspeptic, will have to keep it up to effect a complete cure?"

Ans.—Lactosa is a preparation of milk containing bacilli which develop lactic acid in the alimentary canal. The action of these bacilli destroys other germs which are more harmful, and thus prevents the development of flatulence and general symptoms of auto-intoxication (self-poisoning). Lactosa is often of decided advantage to those suffering from so-called "biliousness" with flatulence and constipation. We certainly would not advise anyone to live on granose biscuits only. Granose biscuits and fruit are excellent as a whole dietary for a few days to cleanse the alimentary canal, but variety in food is absolutely necessary for one's well-being; it enables Nature to select the ingredients from the food that are absolutely essential. With a monotonous dietary, some element will in all probability be absent. Granose biscuits and cold fresh milk make an excellent breakfast. Undoubtedly the best treatment of dyspepsia is by dieting and attendance to general health, but it frequently takes time to ascertain the diet that is suitable

for a special case. A confirmed dyspeptic will need to be careful of his food till the end of the chapter.

132. Inability to Walk after Long Illness

"G.H." writes that she is not able to walk and has brown patches in front of her legs. She has recently had bronchopneumonia, pleurisy, ulcerated stomach, rheumatism, and piles.

133. Floating Kidney, etc.

"Adelaide" writes: "I always have a bad pain at the bottom of my ribs on the right side. A drive over a rough road will bring on severe pain and gassy colic in bowels and my skin goes dark. I feel sick and bilious at times. I have, after the pain, dark urine like brick dust. The urine smarts, and I have irritable sensation in the bladder, especially if I work a treadle machine. I have womb trouble,



J. H. Kinnear, Photo., Auckland

"SAIL-HO!"

Ans.—Probably the cause of inability to walk is sheer weakness after her prolonged ill health. The brown patches would arise from the same cause. We would advise that she take plenty of fresh milk, beaten-up eggs, malted nuts, and unfermented wine. Gluten and granose gruel would help nutrition considerably. The body should be sponged with cold water daily and the legs thoroughly massaged. See that the bedroom is thoroughly ventilated and that as much time as possible is spent out of doors.

and cannot get my bowels open if the motions are the least bit hard. Pills or cascara bring on mucous discharge and blood from the bowels. I cannot sleep in any other position than with my face down on the pillow. My menses have been very irregular for two years. I get tired very quickly. Please give me a diet; fruit does not agree with me, it turns the stomach sour. An egg at times will give me an attack of pain."

Ans.—"Adelaide" asks if a certain advertised treatment would be good for

her. We would certainly not advise it. "Adelaide" has been to several doctors; one tells her she has a floating kidney, another says gallstones, another says catarrh of the stomach, another declares it is bilious dyspepsia, and another says retroversion (backward displacement of the womb).

Probably "Adelaide" suffers from all the complaints she speaks of. The symptoms given are certainly consistent with floating kidney, gallstones, piles, and retroversion. These complaints would necessarily interfere with the digestion. If the vitality is fairly good, an operation would probably be beneficial—it would certainly be a long and a severe one. In regard to diet we would recommend "Adelaide" to read article on "Acid Dyspepsia" in the November-December issue of LIFE AND HEALTH.

134. Answer to "Anxious" (Mandalong)

The symptoms you complain of are quite natural under the circumstances and need give no cause of alarm whatever.

135. Swollen Feet and Legs

"H.M." writes: "During this hot weather my feet and legs (especially the left) swell very much, and are puffy and hot. . . I suffer from gastric fermentation. There is a rash and itchiness about the legs."

Ans.—There are so many different conditions causing the legs to swell that a medical examination is really necessary in this case. Poorness of blood, kidney, heart, or liver disease will cause the legs to swell; in fact, any condition that interferes with the circulation.

136. Abscesses Under Arms

"Childers" writes: "For three years in succession I have been troubled with abscesses under my arms. Last year within three months the doctor lanced eight. This year I am using antiphlogistine, and so far it has not been a success; the abscess I tried it on last week formed

as large as a marble, was very painful, then gradually decreased in size without breaking. What is the cause of my getting them yearly? Is there any way of preventing them?"

Ans.—The disease is most probably due to germs in the skin in the locality affected. They are difficult to eradicate. We would advise the parts be kept shaved, washed twice daily with very hot and then cold water, and dusted with a powder of equal parts of boracic acid and oxide of zinc. The parts should always be washed and dried thoroughly after perspiring. If they still persist, a vaccine prepared by the pus of the abscesses should be injected into the parts. This, of course, would have to be attended to by a medical man.

137. Neurasthenia

"Glisten" writes: "I have such terrible aching shoulders. My neck aches so that I can hardly bear it at times; when I am very bad my arms ache down to the elbows. I am in a very nervous state; very little upsets me. I am very depressed and miserable. I have got that way that I don't want to go out. When I get away from home I start and shake and my knees shake also that I am afraid I will fall. I have never had an illness but have felt like this for nearly two years. Am worse at certain periods. I can work for two hours in the morning and then have to lie down for a while again. Do you think it is change of life? I am 41 years of age."

Ans.—No, we do not consider the symptoms are due to "change of life." It is a case of neurasthenia—a general weakness of the nervous system. Abundance of nourishment is required, such as fresh milk, beaten-up or lightly-cooked eggs; spend as much time as possible in the open air; see that the bedroom is thoroughly ventilated, open the doors and windows to fullest extent. The body should be sponged with cold water twice daily. Retire to bed early and get as

much sleep as possible. Avoid tea, coffee, excitement, and everything that irritates the nervous system. A month's treatment at one of the sanitariums would do good in this case. Massage and galvanic current would help the pain in the neck and shoulders.

138. Questions of "Diamantina"

THE urine is frequently of milky appearance as the result of dyspepsia, especially when of nervous origin. Sometimes even in health there is a slight cloud of mucus derived from the bladder and urinary passages; this occurs after rest.

We have never heard of tea causing partial or total blindness.

Carrots, turnips, cabbage, and potatoes all contain phosphorus. The potato and the cabbage are richer in this ingredient than either carrots or turnips. Haricot beans contain comparatively a large percentage (.924).

139. Brown Blemishes on the Face

"Worried" asks for a remedy for the above.

Ans.—These permanent markings are generally incurable. Small patches can sometimes be removed by electricity. A qualified skin specialist should be consulted.

140. Talking at Table; Kerosene for the Hair

"J.T.B." asks if children in an institute should be allowed to talk at the table and writes: "Is it God's will that His creatures should be dumb at meals? Is talking a help to digestion? Is it good to put kerosene on children's hair to make it glossy?"

Ans.—For adults it is certainly good to have interesting conversation at meals; when the mind is pleasantly occupied many nerve influences which retard digestion may be removed. With children, however, we think otherwise, especially

in an institute; if allowed to talk they would probably bolt their food without proper mastication. Children do not worry about the digestibility of the food like dyspeptic adults. We would not advise the use of kerosene or any other application for the hair; it is best to leave Nature alone. It may be used for head lice, and is successful for these pests.

141. Womb Trouble and Constipation

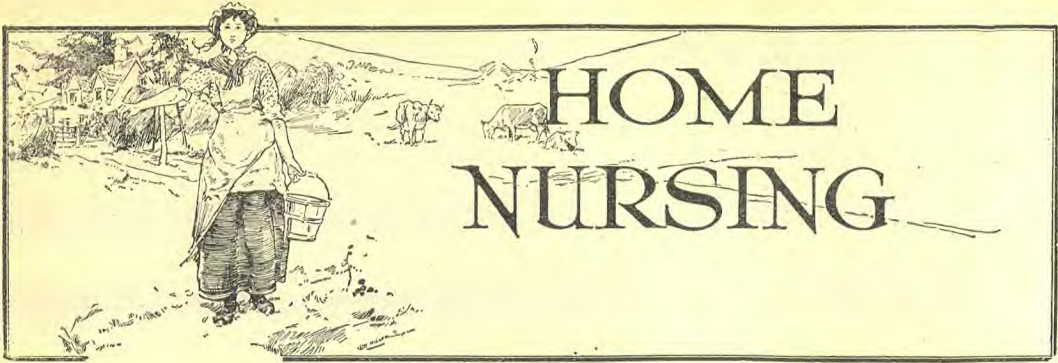
"N.S." complains of symptoms of womb trouble and lumps in the breast, and continues: "I suffer with constipation and am seldom relieved. I go about once in seven to ten days. Medicine very rarely relieves the constipation. I get pain on relieving the bowels and sharp, shooting pains on passing water, also frequent headaches. . . . Frequently my back pains me below my waist. I get tired very easily."

Ans.—"N.S." should be examined by a medical man or woman. There may be some displacement of the womb. If the constipation were relieved the other symptoms would also improve. It is certainly a mistake to allow the bowels to go so long without being relieved. We would recommend "N.S." to read article on "Constipation" in last issue of LIFE AND HEALTH. Regular doses of liquid cascara could be taken, say half a teaspoonful three times a day, or even larger doses. A good enema of warm water and soap could be used twice weekly. We, however, strongly advise "N.S." to see a medical man.

142. Red Pepper in the Eyes

"F.W.B." asks for a remedy for the above.

Ans.—Wash the eyes thoroughly with plenty of hot water. The lids should be kept open and a syringe used. After thoroughly syringing and drying, drop in castor oil. If granular lids result, a medical man should be seen as it is a mistake to play with the eyes.



Sick-Room Cookery

MRS. G. M. BROWN

IN preparing food for the sick, the following points should always be kept in mind. The food should be (1) nourishing; (2) easily digested; (3) palatable; (4) carefully and tastefully served.

1. *Nourishment.* As the recovery of the patient depends upon the body's vitality and power to combat the disease, it is very necessary that it should be aided in this important struggle by receiving nourishing food. Nature during the first few days of an illness deprives the patient of his appetite, but after that it is really necessary for the patient to take a good diet, suitable for his case. Even if the desire for food is not great, the patient should be encouraged to take his meals regularly, and to eat those things which are really best for him. While it is true that many invalids can eat but little, yet it is also true that a good number have a very erroneous idea as to what quantity or quality of food should be taken; and so we find those who, if allowed, would eat while lying in bed, with little or no exercise, a diet which might well make a strong man's stomach tremble in dismay at the thought of attempting to digest it.

A good nurse should be able by a little sound reasoning and careful persuasion to control her patient's diet, and at the same time provide suitable and palatable dishes for him.

2. *Easily digested food.* In illness all

the body functions, viz., circulation, respiration, digestion, etc., are hindered in their work, and are at a low ebb; for this reason the food given to the patient should be light and easily digested. Otherwise the system is further clogged by the addition of undigested food which instead of nourishing the body sets up fermentation in the stomach, and so floods the system with other poisons in addition to the disease germs with which the system is already battling.

3. *Palatable foods.* It is very important that an invalid's food should be palatable. Of course one can make himself eat almost anything, but in order to receive the full benefit from our food, we must enjoy it. We are sometimes told that we should "like what we eat" rather than "eat what we like," and there are some good, sensible minded people who have trained themselves to do this, and are so normal that they do really like and enjoy those things which are good for them; but we must remember that sick people are abnormal, not only in regard to appetite, but on many other points, so we must deal gently and kindly but firmly with them, and lead them on step by step, until they finally come to the stage where, as one wise man said: "They will *chew* that which is good, and *eschew* that which is evil."

4. *Tastefully served foods.* Cleanliness

is necessary in the preparation of all foods, but especially when preparing food for the sick, as a delicate appetite can be very easily upset; so all articles used in connection with the cooking of food must be perfectly clean. One must also be very particular about the serving of the food; a messed drinking-cup or a sloppy saucer is uninviting and soils the hands and clothes. Everything should look nice and tempting, the tray-cloth clean, and silver and glass bright. Always try to have a few fresh flowers on the tray. Do not overload the tray. The sight of a large quantity of food is distasteful to most invalids and seriously affects their appetite. It is very easy to procure a second helping if required, and this is better than offering the patient too much at first.

There are two small points which are often overlooked in giving a patient his food, so perhaps it would be as well to mention them here. If the patient is able to sit up to take his meals, be sure that he is placed in a comfortable position. How often, without thinking, a meal is placed before a patient who is in a half-sitting position in bed, with little or no support for his back, and a fairly heavy tray resting on his knees. He then hurries through his meals in order to get release from an uncomfortable position.

Sometimes when half-way through the meal the patient has a cramp in his foot, as the result of keeping the body in a strained position for some time. If he moves, the contents of the tray upset and all the time his back and shoulders are getting cold, or else the shawl which has been put around him is dabbling its ends in the food. Now all this could be avoided by a little forethought on the part of the nurse. Before bringing up the patient's tray make the following preparation:—

First. Put a dressing-jacket with sleeves on the patient; even a cheap flannelette one is better than a shawl, as it will not get into the food. Now raise the patient to a half-sitting position in the bed, and place a bed-rest behind him, well padded with two pillows. If a proper bed-rest cannot be obtained, a good improvised one can be made by turning up a chair and allowing the legs to rest on the upper part of the bedstead while the back of the chair slants toward the patient's back.



AN APPETISING TRAY FOR THE PATIENT

Second. A bed-table to hold the tray. A proper bed-table is rather an expensive item for the ordinary house where it may only be required occasionally; but a very good substitute may be found in an oblong wooden box with the bottom and half of each of the two sides taken out; now turn the box upside down over the patient's legs, and the remaining sides and top will form a table to support the tray. If the box is a good-sized one, the patient will be able to move his legs sufficiently to avoid cramps. An oblong low stool with two legs at each end will answer the same purpose. But see that the bed-table is safely placed and that any move of the patient will not overturn the tray.

Simple Treatments for Common Ailments

Catarrh and Hoarseness

ACCORDING to the *Medical Summary*, an excellent remedy for catarrhal affections of the air passages, hoarseness, and affections of the voice is a mixture of one part witch-hazel and two parts pure glycerine, to be used as a swab, a gargle, or a spray, as often as the case may require.

Burns

A WRITER in the *New York Medical Journal* suggests in the case of severe and extensive burns immersing the patient in a bath containing from two to four ounces of sodium bi-carbonate (saleratus). The temperature of the bath should be raised for subnormal temperature and shock, or lowered for fever. The writer declares this treatment unequalled.

Infantile Scurvy

A SIMPLE cure for scurvy is outlined in the *Medical Record*. Fruit juice, orange or prune, is the time-honoured remedy for infantile scurvy, but the white potato has proved just as efficacious and is within the reach of the poorest family. The proportion generally used is one tablespoonful of mashed potato to one pint of water, and is added to the twenty-four hours' feeding of milk in place of the usual cereal diluent. The potato should be pared very thin, and an average-sized potato when mashed covers the

amount needed. The mashed potato can be added to the water in which it is boiled, thus conserving all the vitamins.

Adenoids

IN all cases where an operation is inadvisable, says the *Medical Record*, use chemically pure resorcin and pure water, equal parts by weight; or for infants, one part of resorcin to two parts of water. This is to be applied through the mouth, behind the palate, and up against the adenoid enlargement, by means of absorbent cotton. Applications should be made once daily for ten or twelve days.

Arteriosclerosis (*Hardening of the Arteries*)

ACCORDING to the *British Medical Journal*, "first and foremost the diet must be lacto-vegetarian, that is to say, 'milk and articles made with milk, fruit, and a few eggs.'" Not more than two eggs should be eaten a day. The food, then, will consist in the main of vegetable soups, farinaceous articles, certain cooked vegetables, including beans and green peas if well borne, stewed fruit, jam, and cream cheeses. The dishes must not be highly flavoured, with not much butter, and still less salt, especially if there is a tendency to edema (dropsy). Among the articles which are forbidden are named various forms of game, fish, and preserved foods. "Spirits, tea, coffee, and tobacco are absolutely forbidden."





THE HOUSEKEEPER

A Few Wholesome Breads

GEORGE E. CORNFORTH

BREAD is a valuable article of diet, and fills an important place in the diet, especially of those who do not use flesh foods. In this article I shall confine myself to explaining the making of beaten biscuits, and variations of beaten biscuits.

Maryland Beaten Biscuits

For several years I desired to know how to make Maryland beaten biscuits. I had known of such biscuits by reputation and had read recipes for making them, but knowing neither what they looked like nor what they tasted like, nor whether they should be hard or soft, solid or spongy, I did not know what to make from the recipes. But one day a circular came to me advertising some foods of which the store that sent out the circular made a specialty, and among the things advertised were Maryland beaten biscuits. I at once determined that I would have some of those biscuits, and at my first opportunity I visited the store. On enquiring their price I was told that they were one shilling and sixpence a dozen, that is, three-halfpence apiece; and when I received them, I found they were a little larger around than a shilling piece and a little more than half an inch thick. Then I realised that they had a reputation. And when I got home to further test them, I ate one (for "the proof of the pudding is in the eating"), though I was sure they contained lard, because the

recipes for making them call for lard. Then I went to experimenting, knowing what I wanted to produce, and was not long in making something which was fully equal to the sample, but which did not contain the lard; and now I shall give my readers the benefit of my experience. For fifteen biscuits the ingredients are as follows:—

- 1 pint sifted bread flour
- $\frac{1}{4}$ cup cold cooking oil
- $\frac{1}{3}$ cup ice-water (or cold water)
- $\frac{1}{2}$ slightly rounded teaspoon salt.

A smaller proportion of oil and a little more water may be used, if desired, but the biscuits will not be quite so tender.

And this is the method of making the dough: Put the oil and salt into a mixing bowl and beat the oil vigorously with a batter whip while the ice water is slowly poured into it. As the water is beaten into the oil, the mixture turns white and becomes somewhat thick. Have the flour all ready, sifted and measured, in another bowl. Pour a little of the oil and water mixture into the flour and mix into a dough with a fork. Then pour on a little more of the oil and water, and mix to a dough. Continue thus till the oil and water are all added and you have a ragged dough formed. Gather these pieces together and knead them into a ball. This makes a very stiff dough, which is as it should be. The dough must be just as stiff as can be worked, and it will make very good biscuits if it is thoroughly kneaded and then rolled out and cut into biscuits, pricked with a fork, and baked in a slow oven. The dough may also be kneaded, as Mrs. Perkins suggests in her new cook book, by grinding it several times through a food chopper. But the original method of working the dough was beating with a wooden mallet, and I think this gives the nicest texture to the biscuits. The dough is placed on a solid block, and with a mallet, wooden potato masher, or rolling-pin, beaten out into a sheet. It is then folded up, beaten around the edge to hold the air in, and then beaten

out flat again. This process is continued till the dough is thoroughly kneaded and will snap when a little piece is quickly pulled off. The dough is then rolled out one-third inch thick and cut into small biscuits, pricked with a fork, and baked in a moderate oven. If they are baked in too hot an oven, they will be done on the outside before they are baked through, and will be soggy inside.

When properly made and baked, they will be hard but tender and crisp and easily masticated. Their hardness is a quality that is in their favour, because it compels mastication. But before one has tried them, they may seem somewhat formidable and not very inviting, especially to one who has long been used to eating soft bread. They drop on the table with a thud, which suggests that their interior can hardly be worth the effort required to explore it, but once one has "broken the crust," he finds something which invites him to masticate and taste still further. We soon learned to make them so that they would invite one's investigation rather than repel it, especially after one once gets a taste. If this recipe is followed, no fears need be entertained that the results will be anything but satisfactory.

To make whole-wheat beaten biscuits use a scant pint of sifted whole-wheat flour in place of the white flour. To make oatmeal beaten biscuits, grind rolled oats through a coffee-mill or a food chopper with a sufficiently fine cutter to pulverise the oats. Use three-fourths of a cup of the ground oats and one and one-half cups of sifted pastry flour. If these mixtures seem very dry and crumbly, do not think something is wrong. With a little kneading, they will stick together into a dough.

In the factories where rolls of this kind are made, what is called a "dough brake" is used to knead the dough, which is a set of rollers through which the dough is rolled several times, the dough being folded up after each rolling.

Small "biscuit brakes" for home use are made, which are very convenient to use in making beaten biscuits and crack-

ers made without soda, the rolling taking the place of the beating. I once made what was a fairly satisfactory substitute for a biscuit brake out of an ordinary clothes-wringer, by taking out one of the bars at the top so as to allow the rolls to separate farther.

The unleavened bread, or "cakes," of Old Testament times was, no doubt, a bread after the order of beaten biscuits. We read of the "barrel of meal" and the "cruse of oil" which sustained Elijah and the widow of Zarephath during a famine.

Cocoanut Rolls.— $\frac{1}{2}$ cup ground cocoanut; $\frac{3}{4}$ quart sifted pastry flour; $\frac{1}{4}$ cup oil; $\frac{1}{2}$ cup ice-water; $\frac{1}{2}$ teaspoon salt.

Grind the shredded cocoanut through a food chopper. Proceed as in making beaten biscuits, kneading the dough well, not beating it. With the hands roll the dough out into a long roll three-fourths of an inch in diameter. Cut into pieces two inches long and bake.

Date or Fig Rolls.—For the dough use $1\frac{1}{4}$ quarts sifted pastry flour; 1 slightly rounded teaspoon salt; $\frac{1}{8}$ cup oil; $\frac{1}{2}$ cup ice water.

Combine the ingredients as in making beaten biscuits. Knead the dough well. Roll out into a sheet one-eighth of an inch thick. Cut into strips two and one-half inches wide. Lay stoned dates along the middle of the strips of dough. Moisten one edge of the strip. Roll the dough around the dates. Press the edges together. Cut into two-inch pieces and bake.

For fig rolls place the following mixture along the middle of the strip of dough in place of the dates: $1\frac{1}{2}$ cups fig marmalade (made by putting steamed figs through a food chopper); $\frac{1}{4}$ cup brown sugar; 1 cup of water; 1 tablespoon rice-flour or corn starch; few grains salt.

Cook the fig marmalade, sugar, water, and salt in a double boiler till the figs are well softened. Stir in the rice-flour or corn-starch, and cook fifteen minutes. When cold, it is ready to use in making the rolls. Or plain steamed figs cut into strips may be used in the rolls instead of this marmalade mixture.

By using rich cream instead of water and oil in these recipes, biscuits and rolls can be made which are even nicer, and thin cream will make them fair, though not so tender. Pastry flour can be used, the following being the proportion of ingredients: $\frac{1}{2}$ cup thin cream; $2\frac{1}{4}$ cups sifted pastry flour; $\frac{1}{2}$ teaspoon salt.

These may be made in the form of rolls, thus making "cream rolls," or if made smaller they will be "cream sticks." Instead of using cream in this recipe, one-fourth of a cup cold oil and one-third of a cup ice cold milk may be used, beating the milk into the oil according to the directions for beating the water into the oil.



QUIET TALKS WITH MOTHERS

When the Baby Has a Right to Cry

BERTHA B. STREETER

THERE is no denying the fact that nobody enjoys hearing a baby cry. At the first intimation that things do not please him, we grown-ups seek to quiet him; some of us remove the cause of his displeasure, some do no more than try to hush his noise. Mother Nature was wise when she implanted in our hearts this instinctive dread of a baby's cry, and yet we must admit that there are times when for the baby's physical welfare we should steel ourselves against this feeling, for he has a right to cry for at least an hour every day.

Anyone who has thoughtfully watched a small baby during his wakeful periods cannot help noticing the activity of his arms and legs. It seems as if they are always moving, and their movement gives slight exercise to the parts of the body closest to them. But crying is absolutely the only exercise the baby gets for his lungs. It is the only thing that makes him breathe deep again and again, the exercise that is quite essential to the proper development of this part of his rapidly growing body.

There are a number of things, however, that the baby should not be required to cry for, because he has just as much a right to those attentions as he has to the privilege of crying. For instance, it should not be necessary for him to cry for his food. When a baby comes to us we expect to feed him—or we should. It

should be a matter of pride so to care for him that he will be a fine specimen of babyhood. He cannot be this, however, without a certain amount to eat every day, and his stomach will hold only so much, so he cannot eat two meals at once any more than you and I can. Thus it stands to reason that we must feed him regularly or we cannot get into his stomach all that he needs in order to make the most phenomenal growth of his life. We should know better than he when he is hungry, and we should see that he is promptly fed without his having to exhaust himself trying to tell us of his need.

It is not fair to make him plead for dry clothing, either. Contrary to what a great many mothers believe, chafing is due entirely to negligence in regard to the baby's excrement and not by any means to lack of powder. Solid matter against a baby's skin soon smarts as a mustard plaster does against your own, and on many a poor neglected child causes blisters before he gets the attention he has exhausted himself in crying for.

He has a right to be clean and to smell clean, and the only way to be sure that he gets these privileges is to throw into a pail of water every diaper as it becomes wet. A supply of two dozen such cloths makes it necessary to wash these out but once a day, with a boiling with the weekly wash, an arrangement that saves a great deal of time and affords a great amount of satis-

faction both to the child and to the adults who have to handle him.

The baby should not be made to cry with fatigue, either. Few grown people seem to realise how tiring even a slight change of scene is to a baby. As old people soon seek to return to the chairs

swiftly to grown-ups—during which he lies in his accustomed place and entertains himself in his usual manner of trying to catch one set of fluttering rose leaf fingers with the other hand. If his occupation is a more strenuous one he wearies in less time than that. But if the baby in the



"WHEN THE BABY HAS A RIGHT TO CRY"

and corners to which they have become accustomed, so the babies soon weary of new faces and places. It is downright cruelty to force them to continue in these conditions when it is possible to put them to rest.

How few adults there are, too, who realise how short a time a little baby can stay awake without over fatigue. A normal baby of about four months is a candidate for sleep after a waking period of about an hour—and an hour passes

average family begins to cry with fatigue, and tells just as plainly as he can that he needs rest, what happens? Ten to one someone will set him upon her knee and begin to jump him up and down so that he feels much as he would if the lift boy should amuse himself by repeatedly taking us up half a story and letting the car come down with a thump every time we neared the main floor. Honestly, it is too bad, the cruelty we so thoughtlessly practise upon our poor babies!

But, you say, if he should be allowed to cry and still not be made to cry for these things, when is he to cry?

A good rule is to let him cry for exercise when he wants things that are not good for him. That will give the average baby enough to cry for for an hour every day, I warrant you. And you need not be afraid that there will not be a good reason for letting him cry! It seems as if as fast as we overcome one habit that is bad for the baby or for the family, another crops up to be conquered. People who study babies know this to be one fact that cannot be disputed.

Here is the baby that wants constant attention. Not for three minutes will she lie quietly in her carriage as she should, amusing herself; the minute she finds herself alone she begins a protest that rapidly ascends the scale. This is a good time to let her get in some of that hour's crying that she needs for her physical development, and mental, too, in such a case as this.

Then there is the baby that will not stay out doors without crying. Make him comfortable, then let him cry. There are few things better for him than crying where only fresh air will fill his young lungs. If you let him alone, it will not be long before he finds that screaming does not gain his end and then that there are lots of entertaining things to be seen out of doors.

Babies love to be held and cuddled and played with, and they need a certain amount of such mothering if they are to grow as they should. The lack of these very essential attentions is said to be the reason why children growing up in institutions do not thrive and has led to the practise of "farming out" the babies. It takes very little over-indulgence in these attentions, however, to spoil the baby, and almost before you know it, you have a young tyrant on your hands that would reserve for himself all your body, soul, and strength. A playtime one day a little longer than usual leads to another day when he thinks life should be one long holiday for him. For the good of

the whole family he should be disillusioned. Of course he will cry. It will not harm him if he has had proper attention.

People inexperienced in the care of babies often indignantly ask such questions as this: "But how do you KNOW that it is only holding he wants?" It is very easy to prove it, because the child will stop crying the instant he is taken up, as he does whenever he gets what he has been crying for. These people cannot distinguish between screams of anger at not gaining his desire and wails for sleep or food. Perhaps it will help to tide over difficult situations with them to explain that an angry child shows two almost white, semicircular marks, one at each side of his nose at the nostril. Also, when a child is three or four months old its tears "come in." Thereafter, a cry with a tear should be responded to; a cry without a tear is almost invariably one of anger.

The greatest objection most mothers have to allowing the child to cry is the foolish fear of rupture. Now, ruptures are nowhere as frequent as many women seem to think. They *infrequently* occur in boy babies and more infrequently in girls. And in the majority of cases it has been discovered that the ruptures would have taken place anyhow, whether or not they cried hard. Most babies are quite complete and are not at all apt to break in two in the middle though they cry as if they would split their throats. Mother Nature knows her business pretty well.

Temperature of Baby's Bath at Different Ages

At Birth	98° F.
During the First Three or Four Weeks	95° F.
One to Six Months	93° F.
Six to Twelve Months	90° F.
Twelve to Twenty-Four Months	86° F.
Gradually Reduce in Summer to	80° F.
In Third or Fourth Year reduce, if possible, to	75° F.
Always Use a Bath Thermometer	

—*American Motherhood.*

Help for Children's Fears

DEAR MOTHERS: How often we as little children were afraid of something such as the dark, or animals, etc., and what real terrors they were. Grown people say to us, "There is nothing to be afraid of in the dark," or "The dark can't hurt you," and think with a few similar kindly remarks they have dispelled our fears. We try to believe them with our childish trust, but the fear is still there, pushed way down in our heart, and we are ashamed of it, and so do not admit it—but it is always there, and often stays with us hidden away until long after we are grown.

Now wouldn't it be better to take the fear, bring it out in the light, analyse it with the child and prove to it it isn't real? As for example:—

As a child I lived in a big house with several bedrooms on the second floor. At night when I went to bed I had to walk through a large, long hall to reach my own room at the extreme end. The other bedroom doors stood open, and from the time I reached the top of the stairs until I got to my own room, those open doorways with the still, black spaces beyond, were a perfect nightmare to me. Sometimes my mother would let an older cousin who lived with us come and stay outside my door until I fell asleep, but that didn't cure the fear of the dark—it was always there.

Now wouldn't it have been better for her to have taken me in each room, turned on the light, and to have looked with me in every corner, under the bed, and any place that anybody or anything could be, and to have repeated the same thing several times, finally proving to me that the rooms were just the same at night as in the day, and the only difference consisted in turning on the light.

Then take another fear, possibly a picture, maybe a group of grim looking men in battle armour with their long spears and other deadly looking weapons, hanging in a dark hall and the child is afraid to pass it, and every time she does it is a

real terror she can only feel, but cannot understand.

Now why not take the picture, if it is a print and not too valuable, remove the glass, and before the child's own eyes tear up the picture, proving it is only paper after all, and not real. If it is an oil or too valuable to destroy, put it away in the attic for a few years until the fear is outgrown.

Or if it is a picture in a favourite book, then tear out the page and destroy the picture so the child can see you.

There are so many simple little things that could be done to help the child gain courage, and don't you think that by removing those fears, as we grow older we would have stronger nervous systems to combat the real troubles and fears of life.

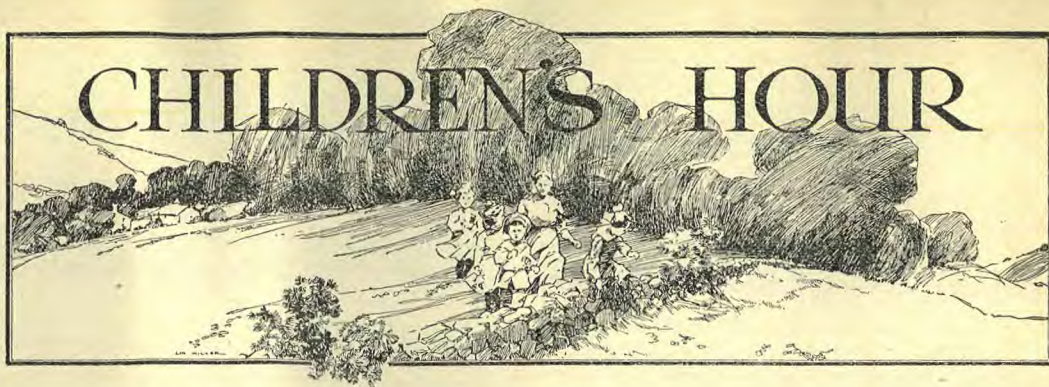
We naturally instil fear in children, and are constantly telling them not to do this or that, as it will hurt them, etc., in our efforts to keep them from danger; unfortunately it is a necessity in a good many instances.

But there are numerous fears we can help them overcome, and it is each person's privilege to make their children as fearless as possible.

M. B. C., New Jersey.

The above article needs no comments. We all know how real a part fear plays in the child's life. That fear is often encouraged by ignorant caretakers who seek to get obedience by frightening the child, telling him that something "will get him," the policeman will carry him off, a big black dog is after him, or some other threat which is quite dreadful to the child and criminal on the part of the perpetrator.

Fear in the child is the making of a coward for life. Everything should be done to rid him of this handicap and to give him a free and unhampered spirit. He can be taught both caution and obedience without making him miserable through fear.—*American Motherhood.*



Miss Laura's Magic

"I DO hope when I grow up I'll be as pretty and sweet as Miss Laura," said Ethel, as she watched her lovely neighbour go down the street.

Mother looked at Ethel gravely. There had just been a rather distressing time, and mother wished Ethel were sweeter just now. Ethel had baked cakes for a doll's party, and little brother, finding them set out on the small table, had eaten them all. He was only two, and couldn't be expected to know that he was spoiling a doll's party. And Ethel had been very cross about it, and said brother was a horrid boy. So mother was thinking that Ethel had missed an opportunity to practise being sweet, but Ethel was only watching the young lady going down the street.

"You are going over there this afternoon," said mother. "I wonder if by watching closely you could see what kind of magic Miss Laura uses to grow so sweet and make everyone love her."

"I'll see," said Ethel. "I'll watch very closely."

Ethel went to Miss Laura's at two o'clock, which was the hour for which she had been invited.

"Miss Laura isn't here yet," said the pleasant woman who came to the door. "But she wanted you to wait if you came before she returned. Will you sit here on the verandah? and I'll bring you some magazines to look at."

Ethel sat behind the screen of climbing roses and looked over the magazines. She became very much interested in a

story though she heard the voices of children just the other side of the roses. But presently she heard them shout "Here comes Aunt Laura!" Then she laid her magazines aside and went to the steps.

The little ones were coming up the path, clinging to Miss Laura's hand.

"We made a s'prise for you, auntie," they were saying. "Here it is: look! isn't it a lovely one?"

There, right on the path in front of the steps, the little ones had carried sand and built a sand house and barn and fences. Ethel looked to see a frown gather on Miss Laura's smooth brow, for it was a dreadful mess. But Miss Laura kept on smiling. "It is beautiful, dear," she said. "You've taken great pains with it. And is this a cow going into the barn?"

"Yes," they shouted gleefully. "Donald made it all himself."

Miss Laura bent over it, and found more things to admire, so that she had a word of praise for each child. The children danced about and shouted with joy.

"But isn't it a pity," said Miss Laura at length, "that you made it on the path? When it is dark someone will be sure to step on it and spoil it. Paths are made to walk on, you know."

The children's faces fell.

"I s'pose Annie'll be cross because we got the path dirty," ventured one child, uneasily.

"How would you like to move your farm out under the pear tree? No one would disturb it there, and then I will

help you clean the path. I think you might make a chicken-coop, too, when you build it again."

"Oh, yes, let's!" The children were all happy again, and set to work.

"Here is my little visitor," said Miss Laura, coming up the steps.

"I've found out," said Ethel, in her earnestness speaking her thoughts right out.

"What have you found out, dear?"

"What makes you so sweet. It's not getting cross over bothering things."

Miss Laura turned rosy red and looked lovelier than ever.

"Tell me about it," she suggested.

"Oh, yes!" said Ethel. "Mother said I should watch very closely, and see what it was that made you sweet. And I said I would. I thought you would be cross to them for putting sand on the path. And you never made them feel bad at all, and yet you had them take it away. I guess you never get cross at vexing things."

"It's better not to," said Miss Laura, smiling. "It's better for the other person if you don't make him feel bad, and it's better for you, because getting cross leaves ugly marks on your face and heart, and it surely keeps you from being sweet."

"I had a chance to-day, and I didn't do it," confessed Ethel, gravely. "And my little brother didn't know any better than these children that he was doing wrong. But I called him a horrid boy."

"But you'll have other chances. That's the best thing about it; you are sure to have lots of chances to be sweet when things are vexing."

"I'll take the next chance," said Ethel, in a determined voice.

Then they played games and talked until it was time for Ethel to go home.

"Ethel," said mother, meeting her at the door, "I'm awfully sorry, but brother has pulled the hair off the pink doll. He is such a mischief when he is alone a minute."

"Why!" said Ethel. Then she swallowed the words that were coming up. "It doesn't matter," she said. "I can

easily paste it on again. He doesn't know any better. And I'll let him help me put it on, then perhaps he'll learn it belongs there, and not pull it off again."

Mother's face was quite blank with astonishment for a moment. Then she looked so pleased and happy. "I see you've found out," she said. "What a dear, helpful daughter you will be now."

"Yes, I've found out," said Ethel. "But if I should forget sometimes, you must remind me."—*Selected.*

Edna's Valentine

Susanna C. Mabree

IN a little house far up on the side of a high, high mountain, there lived a little girl named Edna. There were a few other houses near, where the men lived who brought the gold up from the mines deep down in the mountain, but there were no little girls or boys for Edna to play with.

Often she would have been lonely had it not been for the pigeons that lived in a little house all their own in the yard. Such pretty pigeons they were! Some were white, some were grey, and some were both grey and white with shining purple feathers on their necks. They were so tame that they would alight on Edna's shoulders or her head, or perch on her knee to eat from her hand.

One Christmas time, when Edna was nearly six years old, grandmother came for a visit, and brought with her a little cousin whose name was Alice. They stayed for ever so many days, and Edna, at last, had a little girl to play with. What fun they had with the toys that the day had brought them and what fun they had out of doors with the pigeons! Alice was so kind and gentle that in a little while the pigeons were no more afraid of her than they were of Edna.

By and by the time came for grandmother and Alice to go home, and then Edna gave Alice one of the pigeons, a white one named Snowflake, to take home with her. Alice carried it in a covered

basket, and she was so happy to think that she could have pretty Snowflake for her very own.

Edna missed Alice very much when she had gone; but she was a happy-hearted little girl, and so did not fret about it but made the most of playing alone again.

One morning mother said to her, "Valentine's Day is coming soon. Don't you think we should be making some valentines?"

"Oh, yes, mother!" she cried; "and I must go right to work, for I love so many people I shall have to make a great many."

So they went to work and made a lot of pretty valentines, and father carried them to the post office and started them on their way to all the people that Edna loved. Then Edna began to wonder whether anyone would send her a valentine. Every day when her father came home she asked if he had brought her one. He always said, "Oh, it's not St. Valentine's Day yet." At last the evening before Valentine's Day came, and when Edna asked her father about her valentine he said, "No, little daughter, and I am afraid you will not have any for several days. The floods down in the valley have washed away the tracks, and the trains cannot come up the mountain. I am afraid you will have to be patient a little longer."

She was a disappointed little girl; but she tried hard not to think about it, and went to bed and was soon fast asleep. In the morning, bright and early, she woke up, and the very first thing she thought was, "Now it really is St. Valentine's Day!" and then, "But the floods are keeping back all my valentines, and I won't have a single one. O dear!"

Just then she heard a little noise—*tap! tap!*—on her window, and there on the window sill was a white pigeon! She opened the window and he spread his wings and tried to fly in, but he was so tired he just dropped to the floor. Then Edna picked him up to warm and stroke him and saw something on his leg.

When she looked to see what it was, she found a tiny letter tied by a little band to one of his legs. Downstairs she ran, calling, "Father! Mother! Look! look! See what I have! A valentine has come, in spite of the floods. Snowflake has brought it. Please take it, and I will carry him out to the pigeon house to rest and have some breakfast. When I come back you may read my valentine."

Away she went, and was back in a little while to hear what the valentine said. Here it is:—

TO EDNA

Over mountain, plains, and valley
I've flown for many a day,
And now that I have reached here,
I hope you'll let me stay.
I was lonely and unhappy
Far from you and all the rest,
For it's hard to be away from home
And those you love the best.
So the little girl who took me
Sends me flying back to you,
To bear a loving greeting
From a heart both kind and true.

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THE following story shows how true politeness was once rewarded:—Two boys, the one a gentleman's son and the other the son of a poor widow, applied to a merchant for a situation, when the latter was chosen. A trifling incident decided the choice. Just as the two boys came together to the merchant's door, a poor, ragged girl fell on the icy sidewalk and lost her pennies and cried bitterly. The first boy laughed rudely; but the other went to the girl's aid, and, fishing in the gutter for the pennies, found one and replaced the other from his own little purse. The merchant observed all, and, though the first had strong recommendations and the other none, the poor boy's politeness secured him the place.

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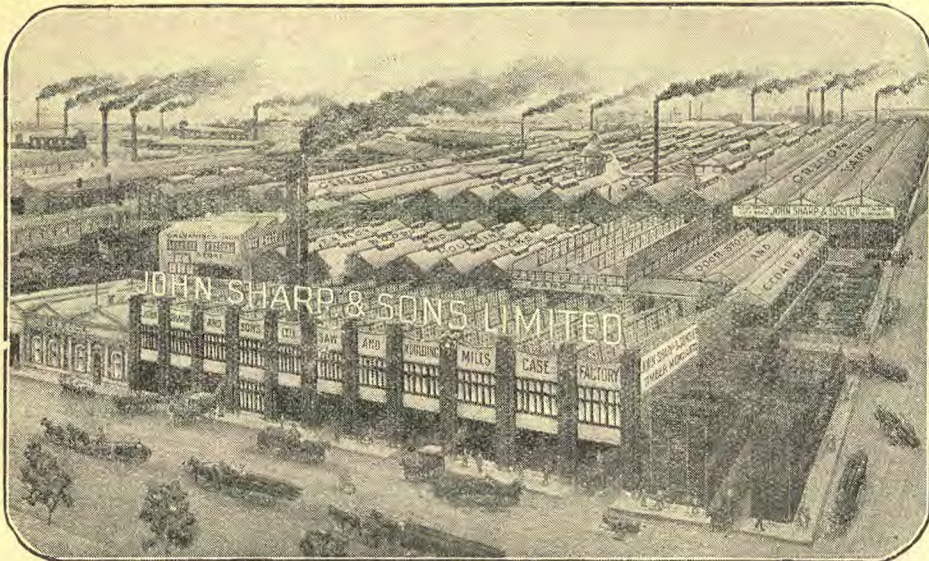
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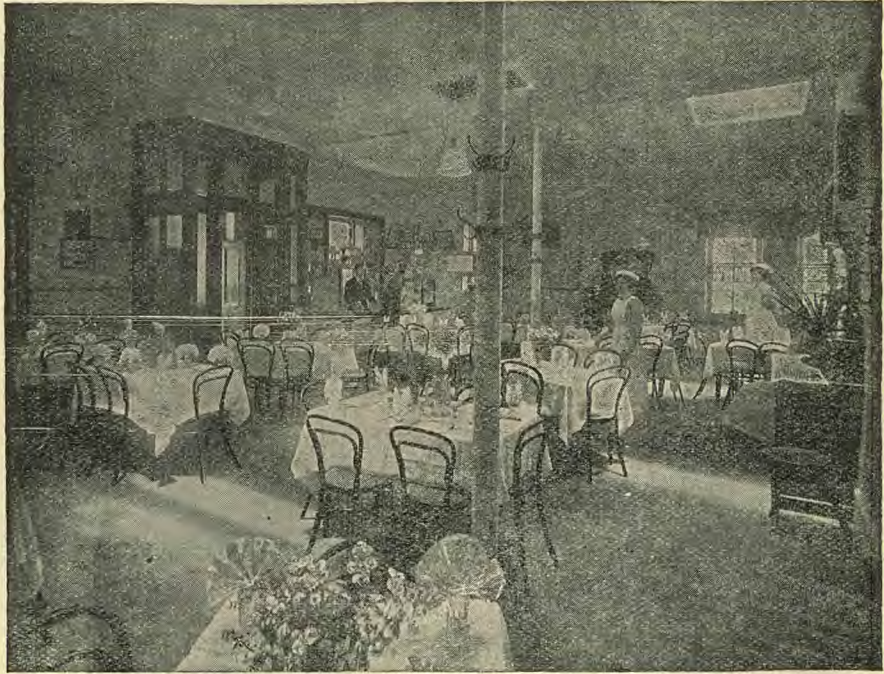
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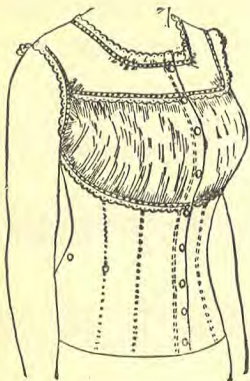
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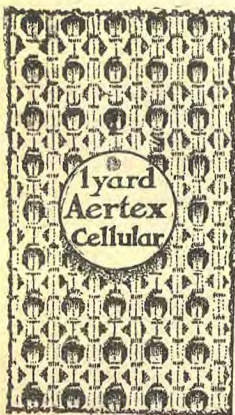
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