

THE  
**ORIENTAL**  
**WATCHMAN**  
AND HERALD OF HEALTH



G. A. Hamilton

SINGHA GHAR, POONA

*Read in this Issue—*

**A BALANCED DIETARY**





HERR GUST RUNDSTATLER, a German engineer, has invented a machine similar to a typewriter for copying music, the keyboard being made up of musical notes, instead of letters.

IN Australia there are 22,700 factories with a total output in the vicinity of £100,000,000. These employ nearly half a million hands, and pay in normal times £90,000,000 a year in wages.

A PLAN is under consideration to equip every city and town hall in France with a wireless set to assist in broadcasting information concerning new laws, lectures on agricultural and market information. About 40,000 installations would be necessary to complete the system.

THE sending of "flowers by telegraph" has for some years been a great convenience to many people, although they have been obliged largely to leave the selection of the bouquet or plant to the florist by whom the wire was received. But, according to the statement made at the recent convention of the Florists' Telegraph Delivery Association of the United States, television will soon enable the customer actually to see his selection of blooms and to supervise their arrangements before delivery is made.

A SOAP that has neither taste nor smell has recently been developed by synthetic chemists. It is said to be harmless—even when taken internally. Chemically it is known as glycol stearate. Since nearly all toothpastes and powders contain a large proportion of soap, it is necessary to mask their taste. This is done by the addition of sugar or saccharine and oils like peppermint or wintergreen. If glycol stearate is used, these masking agents are unnecessary.

A HUGE gyro-stabiliser designed by the Sperry Gyroscope Company of the United States, and built in the Philadelphia Westinghouse plant has been shipped to Italy for installation in the destroyer *Pinafetta*, now under construction. The device weighs twenty tons, the flywheel is 91 inches in diameter and is capable of 1,350 revolutions per minute. Engineers say that the stabiliser will eliminate the heavy rolling of a war-ship in rough seas and consequently greatly increase the accuracy of gun-fire. Other advantages claimed for the device are the elimination of seasickness and the saving of fuel.

IN Japan newspaper evangelism is playing an important part in bringing Christianity before the people. In Tokio, where a C. M. S. missionary is co-operating with Japanese workers in this plan of campaign, over 10,000 inquiries about Christianity were received during 1930. One of the most important Japanese newspapers has welcomed articles, and as a result applications for further news have come from all parts of the Japanese Empire. This method of reaching the people would seem to be almost without bounds. Today when the old religions of Japan are losing their hold on the younger generation, Christianity is given an unbounded opportunity. It is significant that the requests that are being received come mainly from the younger men of average education.

THE Republican Government of Spain is planning to erect 7,000 new schools, so as to end the illiteracy which affects nearly 40 per cent of the people. The Minister of Education, Don Marcelino Domingo, is a former teacher and an educational enthusiast.

MR. HIRAM MAXIM, inventor of the Maxim machine gun, has turned to more peaceful products. This one is a silencer, to be installed in New York City hospitals. It is contained in a box ten inches high and a foot broad. This is put on the window sill, and the window is closed to the level of the box. The silencer sounds like an electric fan, but at least it does not permit the noisier sounds to enter the room.

CHAULMOOGRA oil had been the main standby in the treatment of leprosy. For years Dr. P. H. Rolfe, an American botanist, has been experimenting with various Brazilian plants and trees. He is director of the Agriculture and Veterinary College in Vicosa, Brazil. Dr. Rolfe believes that the sapucaia tree, indigenous to Brazil, produces a fruit whose seeds yield a medicinal oil equal to chaulmoogra oil in its ability to heal leprosy.

SCIENTISTS and engineers have combined to produce a new miracle, the silent explosive. Blasting operations on a large scale were carried out by the Imperial Chemical Industries at the Cowdale Limestone Quarries in England, after months of careful research work. Tons of gunpowder had been packed into the crevices, and a network of wires connected every fuse with the firing switch. The switch was pressed, and 60,000 tons of solid rock were blown into fragments without a sound.

THE stomach's digestive ferment that dissolves the starch in foodstuffs and makes it available for the energy needs of the body has been prepared in a pure state for the first time in the chemical laboratories of Columbia University, U. S. A. This marks an important step toward finding out what these complicated ferments really are, a problem that has hitherto remained unsolved because they could not be obtained pure. Professor H. C. Sherman, who is well known as an authority on the vitamins, and two associates, Professor M. L. Caldwell and L. E. Booker, announce their accomplishment in a report to the journal *Science*.

A BALL-BEARING embedded in the lung of a six-year-old boy has been removed by a magnetic operation in Nottingham General Hospital, England, the surgeon's knife not being used. It is the first time in the history of surgery that magnetism has been employed in such a way (says the *Sunday Express*). The boy was too weak to be put under an anesthetic and have the ball-bearing cut from the lung. A magnet, a massive apparatus from the eye infirmary, was taken to the operating-theatre. The boy's body was passed through the magnet. The current was switched on. He was in the centre of a powerful magnetic field. A tube was passed down his throat and the steel ball was slipped down the tube. There was a click as metal met metal. The surgeon withdrew the rod, and there, clasped to it, was the ball-bearing. The magnetic operation had succeeded. The boy had felt no pain, and he is now well.



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## Why We BREATHE *How the Body Works—III*

By D. A. R. Aufranc, M.R.C.S., L.R.C.P. (Lond.) L.D.S., R.C.S. (Eng.)

**O**XYGEN is absolutely necessary to the body for the carrying out of all its functions. It is often said that the blood is life, but this life-giving function is largely due to the oxygen which it carries. Even the remotest cells of the body require oxygen for their existence, and an organ requires more oxygen during activity than when at rest.

As the life-giving oxygen is received into, and used by the body, another gas, a waste product known as carbon dioxide, is produced. This gas is very poisonous and must be got rid of as soon as it is formed. Pure blood on its way to feed the tissues contains about twenty-one per cent of oxygen, and 0.04 per cent carbon dioxide. Impure blood on the return journey contains sixteen per cent of oxygen and four per cent carbon dioxide. The other gas in the blood, nitrogen, remains almost constant at approximately seventy-nine per cent.

### Organs of Respiration

This process of gas exchange is carried out by the respiratory system, and the importance of this part of the body mechanism is shown by the fact that man can live but a few minutes without this action. Once the respiratory system fails to function, the body is deprived of oxygen, waste gas accumulates, and unconsciousness followed by death rapidly ensues.

The chief organ of respiration is the lung, but the skin also has a share in the process, the chief function of the latter being to eliminate carbon dioxide. Although the skin's share is somewhat small yet it is important, as is shown by the fact that when the whole of the skin is completely covered with an impervious substance, such as tin-foil, death occurs in a very short time. In addition to the lungs and skin the respiratory system includes certain muscles, such as the diaphragm,



*Air is essential to life and outdoor air is  
better than indoor air*

used in breathing, and also important nerves which control the act.

The lungs are two cone-shaped organs placed on either side of the middle line in the chest. Together with the heart, which they envelope, they occupy practically the whole of the chest.



cavity. The left lung is divided into two lobes and the right into three. They are composed chiefly of spongy, elastic tissue. The trachea, or windpipe, divides into two branches, one for each lung. Each of these again divides into many smaller branches until tiny spaces called alveoli are reached. These are the terminations of the bronchi. Here the blood flows through capillaries, or tiny blood-vessels, and is separated from the air only by a very thin membrane, and it is here that the exchange of gasses takes place.

#### The Act of Breathing

We can divide the act of breathing into three stages—inspiration, expiration, and a pause. If we represent the whole act by the number ten, then the above stages of respiration would be in the proportion of three, four, and three respectively. In other words, expiration occupies a little longer than inspiration or the pause, which are equal in length.

What happens during respiration is briefly as follows: The muscles of inspiration expand the lungs and atmospheric pressure forces air into these by way of the nose, throat, larynx, and trachea. Here it comes into intimate contact with the circulating blood, which picks up the oxygen. During this stage the nostrils are dilated and the elastic tissue of the lungs put on the stretch. Carbon dioxide and waste bodies pass from the blood into the alveolar air and the elasticity of the lungs causes them to recoil producing expiration. Then follows the short pause and the act is repeated. In a normal adult, respiration occurs from seventeen to twenty-five times a minute, or once to about every four beats of the heart.

The changes which occur in the air by respiration are therefore as follows: It loses 4.77 percent of oxygen and gains 4.34 percent of carbon dioxide. In addition it is warmed by about 14 degrees Centigrade and gains nine ounces of water in twenty-four hours, as well as various organic impurities.

The oxygen in the blood is carried by the red blood corpuscles, forming a chemical combination with the haemoglobin of which they consist. This combination is weak and unstable; hence the oxygen is easily liberated for use in the tissues. When coal gas is breathed instead of air it enters into a strong chemical combination with the blood, which is very stable and poisonous. This explains why few people recover from coal-gas poisoning, except when treated in the early stages.

#### Vital Capacity

The air which passes in and out of the lungs during ordinary breathing is termed *tidal air* and measures about 20 cubic inches. The air that can be drawn into the lungs above this by a forced inspiration is termed *complemental air*. This is roughly about one hundred and twenty cubic inches. The air that can be expelled by a forcible expiration measures about ninety cubic inches, and is termed *supplemental air*. Then there remains

in the lungs still another ninety cubic inches which it is impossible to expel, and this is termed *residual air*. The greatest volume of air which an individual can expel from the chest after the most forcible inspiration is about 230 cubic inches and is termed the *vital capacity*. These figures are taken for an average man, but they are, of course, subject to some variation.

#### Hygiene of Respiration

It will be noticed from the above how small is the amount of tidal air. This is a very important point. It means that if deep breathing is not indulged in, the base of the lung remains unexpanded, the chest is poorly developed, and the air stagnates. Germs, such as the tubercle bacillus, are able to gain a foothold here and produce disease. Hence one very important point in the hygiene of the respiratory system is to take deep breathing exercises night and morning for about ten minutes.

From the facts that we have considered it will be seen that if we breathe in a confined space, such as a room, the air soon becomes contaminated. The oxygen is used up by the body and carbon dioxide and waste matter are given out. The amount of carbon dioxide in ordinary air is 0.04 per cent. When it reaches 0.06 per cent the air has a foul smell, owing chiefly to the waste organic matter present. At 0.1 per cent the effects are very bad, though it may still be breathed for some time. To ensure a good supply of pure air 1,000 cubic feet should be allowed for each individual and this should be changed three times an hour. The effects of breathing impure air are drowsiness, headache, and impairment of the general health.

To avoid these dangers the best plan to follow is to live as far as possible in the open air and to sleep at night with the window open. Fresh air is a wonderful tonic and the open-air habit has been the means of restoring health and vigour to many a sick person.

Lastly, the question of how to breathe is most important. Most people know that it is correct to breathe through the nose, but the dangers of mouth breathing are not fully understood. When air is drawn through the mouth the germs present reach the mouth and throat direct and the danger of disease is, therefore, greatly increased.

Besides this, mouth breathing leads to malformation of the jaws and teeth and, therefore, of the face. If the habit is not corrected during childhood, it frequently leads to mental dullness, which is reflected in the deformity of the face.

When breathing is practised correctly, that is, through the nose with the mouth closed, the air is filtered and also warmed, reaching the lungs at a temperature two degrees higher than when inhaled through the mouth.

Let us remember, then, these three points in connection with the respiratory system—correct breathing, pure air, and deep breathing exercises daily. If we practise these faithfully they will help us on the road to health and happiness.



# FIGURE CULTURE

## by EXERCISE

By Miss Claude Hamilton

*The wise for cure on exercise depend  
God never made His work for man to mend.*

—DRYDEN

**E**XERCISE has been described as one of the best of beauty prescriptions. Proper and systematic exercise combined with deep breathing, is undoubtedly one of the finest of beautifiers. Whether performed indoors or outdoors it purifies the blood-stream and thereby safeguards the health, with the result that the figure and personal appearance are vastly improved.

### The Benefits of Deep Breathing

Whatever exercise you may be indulging in, always see that the breathing—which must be done through the nose and with your mouth shut—is deep and rhythmic. By this means the circulation is increased, worn-out tissue is broken down and replaced by new, and impurities are eliminated. "Deep nose breathing," says an authority on this subject, "cannot be too often practised when in the open air, and the purer and clearer the air the deeper you should breathe. Try this once and it will really become a pleasant pastime, and its result will soon become apparent in your straighter shoulders, better developed chest, clearer skin, and sweeter breath. It is really better than any magic youth-restorer on the market. It is truly the best 'elixir of life' that you can use, while it will not encroach upon your purse at all."

The oxygen contained in fresh air is a vital food and of quite as much importance and as necessary to our well-being as the food we eat. Deep breathing oxygenizes the blood or, in other words, purifies it, and this should be the object in view in all beauty culture.

Where the digestion is weak, deep breathing will materially aid the digestive processes, and will enable the body to assimilate food far more quickly than would otherwise be the case. You should therefore make it a rule, particularly when in the open air, to breathe deeply in order that your lungs may be filled to their utmost capacity. Practised daily this is one of the finest of beautifiers; indeed, not only is one's appearance improved immensely but the outlook becomes more optimistic, enthusiasms revive, and old hopes are rekindled.

### Home Callisthenics

In winter, the opportunity for outdoor exercise is sometimes limited, hence the need for some system of home callisthenics.

My lady readers will find that the practice of the following exercises will not only considerably improve the health but will also give them beautiful contours and, if the bust be lacking in development, the movements will enable them to develop it to a gratifying degree. If you are now thin and ill-nourished you will become plump and well-formed, and your whole physical being will be tingling with a new-found power. The movements, regularly performed, will bestow grace of movement, a superb carriage, and the indescribable element of superiority associated with these characteristics of womanly beauty, and last, but by no means least, the appearance of the skin will be enhanced.

### A System of Eight Health-and Beauty-Bestowing Exercises

(NOTE.—Perform each movement till the muscles involved are slightly fatigued.)

1. Stand erect, arms at side; inhale and raise arms outward from side to a horizontal line with shoulders; swing body round from hips (legs straight) first to the left and then to the right; exhale.
2. Position as before; inhale, raise left leg as high as possible in front of body; return and exhale. Repeat exercise with right leg.
3. Lie on floor, flat on back, arms at side; inhale and carry arms well above head; return to original position and exhale.
4. Position as before, feet under some heavy object; inhale; with hands on hips, raise body to a sitting position, exhale.
5. Lie on floor; face downward, hands and toes supporting body; inhale. Raise body on toes and hands by straightening elbows, then carry middle portion of body as high up as possible; lower body and exhale.
6. Stand erect, with arms akimbo; inhale and raise the body on toes, then sink or lower body to a sitting posture on heels, opening knees outwards; exhale.
7. Position as before; raise knees as high as possible in front of body, as in running, first right and then left.
8. Stand erect, arms at side; inhale while raising arms outward from side (*Turn to page 30*)



# JUST FOUR WORDS

By Walter H. Bradley



*Millions of lives have been sacrificed by those who have aspired to the rulership of the world. But their efforts to unite all nations under one head have not been successful. The Word of God was against them.*

ON the eighteenth day of June, 1815, "The Little General" (Napoleon) stood on a hillock and scanned, fearfully, fretfully, during all the long, weary, trying hours of the afternoon the horizon toward Paris. The cloud of dust that should have marked the approach of Marshal Grouchy's army was nowhere to be seen. The hopes of France hung on this junction with Grouchy.

Two days before, in a masterly stroke of strategy, Napoleon had crushed Blucher at Ligny. Wellington could not count on his ally; and now the English line began to break. Again the warlike genius of Napoleon has triumphed! Already he can see proud England kneeling before him to sue for an ignoble peace.

But a curse falls from the mouth of his aide-de-camp. A look of incredulity and horror is upon his face. Napoleon follows the gaze of his horror-stricken eyes, and sees a mighty cloud of dust rising up, not from the direction of Paris, but from behind the British lines. What foul trick has Fate played him now? Cheers swell up from the tottering and broken lines of England. They stiffen. They hold again! They surge forward! The French now roll backward, broken, and panic-stricken. All the fire and vehemence of the great emperor himself is powerless to stop them or even to bring order into those fleeing ranks. It is a

route! Flinging away guns and equipment, the host stampedes toward Paris.

What has happened? The defeated Blucher, the crushed Blucher, the eliminated Blucher of two days ago, has rallied his army's fragments, and by a forced march that has changed the course of history, has arrived in time to give new life to the battered ranks of England before Marshal Grouchy could arrive to re-enforce the armies of Napoleon. Napoleon is on his way to St. Helena "to fret away his life brooding over the glories of the past." But a candid study of the records of that fateful afternoon will lead anyone to exclaim with Victor Hugo, "Napoleon was overthrown, not on account of Blucher, but *on account of God!*" An act of Providence, like the blast of Senacherib's host, has humbled him whom the combined armies of all the rest of Europe could not halt in his mad career of conquest.

## The Battle of the Marne

On the sixth of September, 1914, the Allied armies, after a month or more of continuous defeat, reached the Marne, with their backs to Paris and their faces to a victorious foe. A thin Allied line, worn down by ceaseless battle and desperate with continued defeat, received the order from Joffre to "stand." They faced a confident foe, some of the finest fighting men seen since the phalanx of Alexander crossed the Hellespont. The



# Sent Napoleon to St. Helena Drove the Kaiser from Potsdam Will Frustrate Briand's "U.S.E."

cream of Germany's undefeated armies, with the finest of modern battle equipment, led by the world's acknowledged teachers of the military art, were for four days hurled like the waves of the sea on the broken ranks before Paris. But as the waves of the sea, mad with the furies of the storm, dash on Gibraltar only to be in turn hurled back, so did that thin Allied line repulse its enemies again and again, with the road to Paris still closed.

The next day saw a sullen and bewildered foe surge back on his own lines fifty miles away, and the war was won; though fierce and bitter fighting lasted for four years more. France was saved. In losing the Battle of the Marne, the Germans lost the war. And perhaps future historians will exclaim, in the same tone as Victor Hugo did of Waterloo, "It was not Joffre but God who beat back Wilhelm from Paris." Why?

Six hundred and three years before Christ, a young Hebrew scholar stood in the court of the greatest monarch of the world. Face to face with the puissant Nebuchadnezzar, Daniel was interpreting a dream of the king and telling him "what shall be in the latter days." He told (and mind you, this was before Cyrus was born, before Alexander's mighty conquests, before Rome was yet known to the civilised world) of the rise of the great world powers of Persia, Greece, and Rome. He told the king of the breaking up of the Roman empire into ten kingdoms, some weak and some strong. He told him how, by armed conflict or by intermarriage of royalty men would try to weld this great Roman empire into one again. He uttered four short words of divine inspiration that were to make and unmake history. "*They shall not cleave.*"

#### Four Potent Words

Against those four words all the might and power and genius of Napoleon were powerless, though he had upon the thrones of Europe subservient members of his own family. When all seemed in his hands, Heaven repeated, "*They shall not cleave,*" and "Napoleon fought not against Blucher, but against God."

The same ambition to restore the glory of the ancient Roman empire in a modern dress inspired the kaiser. He said, "I hope Germany will be granted through the harmonious co-operation of princes and peoples, of its armies and citizens, to become in the future as closely united, as powerful and as authoritative as once the Roman empire was, and that just as in the old time they said, 'Civis Romanus sum' (I am a citizen of Rome) hereafter at some time in the future they will say: I am a German citizen." (War Cyclopædia.) It is noteworthy that after telling of this failure to

restore the Roman empire through methods of both war and diplomacy, Daniel added, "In the days of these kings shall the God of heaven set up a kingdom that shall never be destroyed." "Like a block of granite striking the feet of a great statue," said Daniel, "the kingdom of God will smite the kingdoms in the end of the world and consume them all." So, likening himself to that block of stone, the kaiser said further, "It is to the empire of the world that German genius aspires. The German people will be that block of granite on which our Lord will be able to elevate the civilisation of the world."—*War Cyclopædia.*

But like Napoleon, Wilhelm saw victory snatched from his lips just when the draught seemed about to be sipped. His cousins, Nicholas, the Emperor of Russia, and King George of England, did not come to aid him; and he found Russia and England opposing his imperial plans. "*They shall not cleave*" sounded like the tocsin of doom at the Marne, at Jutland, at Picardy, and at the Argonne; and 1918 saw the kaiser's hopes ruined, his kingdom shattered and himself an exile. Four short words had sped him from Potsdam as they had sped Napoleon to St. Helena.

#### The Hand of God

God's prophecy is man's history written before it takes place. As one writer has succinctly said, "In the annals of human history the growth of nations, the rise and fall of empires, appear as dependent on the will and prowess of man. The shaping of events seems, to a great degree, to be determined by his power, ambition, or caprice. But in the word of God the curtain is drawn aside, and we behold, behind, above, and through all the play and counter play of human interests and power and passions the agencies of the all merciful one, silently, patiently working out the counsels of his own will."—"*Education,*" page 173.

Saddened with the sin and blasphemy of the four great world empires of Babylon, Persia, Greece, and Rome, God decreed that never again should the nations of the world weld themselves into one. Of every such enterprise He said, "*They shall not cleave,*" Napoleon and Wilhelm were, in the words of Hugo, "fighting against God."

Now this is all past; but there is still on the scene the projected United States of Europe. Though no one can tell what a day may bring forth, on the authority of Holy Writ and by the experience of the past, Briand's hopes are doomed to the mausoleum that contains (*Turn to page 28*)



# HEALING by ELECTRICITY

By Ronald Leisk



*Electricity, when skilfully applied is of great service in the treatment of many diseases.*

*Treating children in an artificial sunlight clinic.*

**N**OT long ago the writer attended a lecture on the modern uses of electricity, and although practically every possible use was described, no mention was made of its application in medicine. Bearing in mind that electricity, when skilfully applied, is of great service in the treatment of many diseases, this was a grave omission.

All the various forms of electrical and many of the "light" treatments, may be grouped under the term "electrotherapy." According to the method adopted, electrical treatment is known as high frequency, galvanism, faradism, diathermy, ionic medication, electric baths, magnetic field baths, and so forth. Then there are the "ray" treatments such as the ultra-violet (artificial sunlight), infrared, X rays, and the colour rays.

Each of these forms of electrical treatment has a definite value in certain diseases, and they nearly all, when reasonably used, tend to improve nutrition and help regeneration of the body. There is one notable exception, namely, X-rays, which have a very destructive effect upon living tissue. For this reason, exponents of natural healing only use it for diagnosis, where its value is beyond doubt.

#### Galvanism and Faradism

Galvanism is used when a soothing or stimulating effect is desired. The electrodes can be applied to local parts, or, if a large area is to be treated,

the galvanic current may be administered through the medium of a bath of water. During the application of current, the patient feels what may be described as a "burning" sensation, which is very pleasant so long as a comparatively mild dose is given.

Faradism is another form of treatment that is widely used. One common method of administration is to immerse the patient, or the limb, in a warm bath of water to which the two electrodes are connected. The faradic current produces a tingling sensation, quite different from that of the galvanic current. With this treatment the muscles involved are strongly contracted by the current, which fact makes it a valuable aid in restoring tone, after such an injury as a fracture when lack of use causes flabbiness. Alternating faradic current is known as sinusoidal current.

#### High Frequency Treatment

The high frequency current is employed in the treatment of some nervous disorders, debility, circulatory diseases, and for relieving pain. Blood disorders, skin diseases, and rheumatism in all its forms also lend themselves to this treatment.

High frequency is used in another manner which is known as diathermy. With this method, the current is passed into the deeper parts of the body so as to produce internal warmth. A mild current is applied to relieve pain, and a powerful current



to destroy tumours and diseased parts. The current may be applied by grasping an electrode in each hand or by attaching pieces of metal to the skin, either directly, or with cloths saturated in brine. When the current is "on" the patient feels a distinct sensation of warmth, and the bodily temperature rises. Sweating is induced, and by this means the waste substances are excreted instead of being retained in, and consequently clogging the system.

Ionic medication has been mentioned, but as it is a method of introducing drugs and chemicals through the unbroken skin, such treatment is not in accord with natural healing.

#### Ultra-Violet Ray Treatment

The best known light treatment is the ultra-violet rays (artificial sunlight), and while Nature Cure does not endorse excessive indulgence in this method, its moderate use is often very advantageous when natural sunlight is unobtainable.

The ultra-violet ray has the effect of a "tonic," but great care is necessary to avoid over-exposure, which results in the skin becoming excessively congested with blood. Briefly, the advantages of ultra-violet radiation are that the natural processes of the body are stimulated, the blood is enriched in calcium, phosphorous, and iron, the stability of the nervous system is increased, and the ductless glands are rendered more active.

After the rays have been applied for a certain time, the skin becomes red (erythema), and repeated exposure turns it brown. With fair people this is not always the case, and the skin peels off after becoming reddened.

Ultra-violet light has the effect of multiplying blood cells and is therefore of value in anæmia or amenorrhœ, if it be caused by ovarian insufficiency. Nephritis, skin diseases, and ulcers are also amenable to treatment. When there is an alternative, however, the writer much prefers to prescribe intelligent feeding, sensible clothes, curative baths, fresh air, exercise, and natural sunshine. Artificial sunshine, in common with other electrical treatments, has the disadvantage of keeping the patient in none too fresh an atmosphere and having to take all manner of precautions to prevent injury to the skin and eyes. Despite these disadvantages, however, it is impossible to deny the curative value of ultra-violet radiation, and where it is indicated there is no harm in its moderate use, especially when supplemented by other rational healing agents.

#### Infra-Red Ray Treatment

Infra-red rays are heat waves and, like many other medical rays, are invisible. They have a much greater power of penetration than the ultra-violet ones, and produce erythema in a considerably shorter period. Infra-red lamps are fitted with a pilot lamp to indicate when the current is switched "on." This is necessary as there is no visible radiation.

It is beyond the scope of this article to mention all the diseases which can be successfully treated by various forms of electrical treatment. They are so numerous that it would not be inaccurate to state that practically all diseases lend themselves to treatment to a greater or lesser degree. If any warning is necessary, it is to see that electrical treatment is administered by reliable persons who are trained in their work.

It should be remembered, that in no instance does electrical treatment alone suffice to regain or preserve health. Faulty habits should be corrected and, in particular, the diet must come under review. For example, where constipation is due to irregular muscular action in the wall of the bowel it can be treated by interrupted galvanic or combined galvanic and faradic currents. But although the electrical treatment aids in restoring normal muscular action, it is obvious that for permanent restoration the patient must correct those errors of diet and habit which originally caused the muscles to fall out of tune.

#### Home Electrical Treatment

Home electrical treatment is limited in its advisability and possibilities, for the reason that the unskilled use of many types of medical electricity may do more harm than good. There are, however, thermo-magnetic cushions, electric blankets, and magnetic pads on the market, which are perfectly harmless and very useful for certain specific troubles. There are also "Home Sun" lamps for the application of artificial sunlight, if the purchaser feels competent that he can exercise reasonable caution. Some knowledge regarding times of exposure is essential if the lamp is to be put to good advantage.

Home sun lamps should never be installed in a bathroom. Owing to dampness there is risk of an "earth," in which case the whole of the main current may pass through the body of the person operating the lamp.

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*There's part of the sun in an apple,  
There's part of the moon in a rose;  
There's part of the flaming Pleiades  
In every leaf that grows.  
Out of the vast comes nearness;  
For the God whose love we sing  
Lends a little of His heaven  
To every living thing.*

—Augustus W. Bornberger



# The WORLD'S BE in thes

By Thomas Hirst

A LARGE number of panaceas offer themselves at the world's doors at the present time. Every form of government known to man in past ages and many new ideas of governmental power are being introduced by the thinkers of the world in a mad effort to stem the tide of demoralization and failure that threatens civilisation. From the most extreme forms of communism to the mildest forms of democracy, the nations of the world are experimenting in order that they might save the structures of social life without the debacle of wild, blood-red destruction, which threatens to sweep away all that is sacred and noble in its fiery tide of blood-lust.

What is coming? is the common question of today. No nation stands free from this haunting spectre of the unseen terrors of the near future.

In England men of mighty courage have placed their fame, fortune, and honour in jeopardy that they might find a solution to the pressing problems of political ills that seem to yield to no known form of social prescription. And in order to arrest the spreading disease of disintegration these men threw aside all precautionary measures that would have secured their own political safety, to avert the common danger to their nation.

Germany has just passed through a severe crisis in which it seemed certain that nothing could save the country from financial destruction, which in turn would have dragged the nation down into the pit of national chaos.

#### Every Effort Put Forth

President Hoover, by his magnificent gesture in prescribing a moratorium on war debts for one year, not only carried through a masterpiece of diplomatic policy, but saved the financial honour of Germany and perhaps averted a world-wide panic in monetary affairs.

But the moratorium is only a stop-gap. What will happen at the end of the year's rest is already troubling the minds of the world's statesmen, and no prophet is wise enough to foresee the solution of



Mussolini, Italy's Dictator

these great financial difficulties which prevent industry from becoming stabilized.

France looks forward to the economic future with fear. Her basic problems of finance seem to rest upon the security of the gold heaped up in her subterranean vaults; and should the value of gold drop below the present standards of value, it will seriously disturb her welfare. And should her power to maintain large armies and navies be depreciated, she feels that she will be in grave danger of aggressive warfare from both Germany and Italy.

In Italy, the Government rests upon the life of one man. Should Mussolini die or become incapacitated, there is grave danger that the Fascist power could not be successfully maintained against the social discontent that manifests itself on every side.

Although the Fascist Government today has full control of practically every agency of life in Italy, there are various communistic and socialistic groups that only wait to fan into life the sparks of rebellion; and let that once happen, there is no telling how fiercely the fires would burn, and Italy become a great holocaust of political destruction.

South America is torn asunder by political factions. Coffee, rubber, and bananas—these commodities are the prizes and the burden of their struggles today. With world prices dropping and world crops increasing, there seems to be no solution for the financial troubles of these one-crop countries of the southern continent. Hence as each new agitator proclaims his method of cure for the ills of his country, the people avidly seize upon it, only to discover after bloodshed and revolution that the problem still remains unsolved.

Cuba and Porto Rico, with their unsold sugar crops and the distressing condition of the peasantry, invite the attention of economists.

Unemployment and overproduction in the United States have both contributed their perplexities to add to the sorrows of humanity at this time, and the ominous forebodings of labour leaders, like President Green of the American Federation of Labour, are not the despairing visions of men who lack insight, but the result of keen,



# SON LIGHT

## Dark days of DEPRESSION

close studies into the economic welfare of the labouring classes of the world.

The large cities of the United States are being honeycombed with the insidious doctrines of communism, and what to all purposes is treason is being preached from many a street corner in the great cities.

China is a seething mass of intersectional hatreds as well as the storm centre where the propaganda of the white man's world is being handed out to the people in wholesale lots for their consumption. As a result the people of China are losing respect for the ruling powers of the rest of the world.

### In Lands of Mystery

Japan is in the throes of a social agitation that is levelling the ancient feudal systems to the dust and bringing to the fore a new set of policies for the adjustment of the social evils of this little Island Kingdom of the Rising Sun.

India has become Gandhi-ized out of its age-old servility to the Brahman caste, which so long has held the social systems of India in its grasp as the servants of its pleasure. No longer is the lower-caste man content to give implicit and complete service to the higher castes when he is required to, and the fermenting power of Gandhi's preaching has caused India's rulers grave concern.

So it goes—north, east, south, or west the story runs. Even far-off Australia has felt the pressure of change, and the world is trembling with indecision as to what course it must pursue, what healing balm it must bathe in, in order to cure the festering wounds of society.

Export trade has completely changed as the backward nations have adopted the genius and methods of the more successful trade nations.

Although Russia's five-year plan has not functioned as well as its promulgators anticipated, yet there is no denying that they are succeeding all well enough for the European nations to look upon with concern. Their commercial activities are gradually being extended; and with the almost unlimited resources of their vast territories behind them, they stand as the world's most potential threat to upset the balance of commercial power.

Armaments and war debts, doles and wage reductions, overproduction and five-day labouring weeks, national rivalries and fears—all these are the bane and topic of discussion in the world's council chambers.

And as if that were not enough, the self-evident facts are still to be considered as to the terrible increase in crime and immorality on every hand. Where will it all end? What does it all mean? What is going to happen next?

Thank God, there is an answer. There is one source of wisdom that reveals the meaning and the result of all these dire happenings of today.

Let us turn to the Bible, the solace and comfort of man's darkest hours. There we can find the only explanation of the breakdown of civilisation, and a sure cure for the world's evils. "We have also a more sure word of prophecy; whereunto ye do well that ye take heed." 2 Peter 1:19. Yes, it is there that we shall find the causes for the world's distemper, and it is also there that we shall find the guiding light that leads us forward to the better day.

Prophecy truly reveals the story of man's terrible seed-sowing of sin, and as clearly points out the fact that we are living in the last days of earthly history before the coming of the earth's true King, who shall gather all nations before Him and sift them as the wheat from the chaff. "And then shall appear the sign of the Son of man in heaven: and then shall all the tribes of the earth mourn, and they shall see the Son of man coming in the clouds of heaven with power and great glory." Matt. 24:30.

All prophecy is given to prepare the people of God for the occasion warned about. God has always warned the world and given to His people the preparatory message of grace whereby they might escape from the desolations of His anger when He brings to a stop the revolt of earth against His rule.

Every sign in nature, in social life, in political life, and in religious life, points to the culmination of earth's history.

The Apostle Paul speaks of our times thus: "This know also, that in the last days perilous times shall come. For men shall be lovers of their own selves, covetous, boasters, proud, blasphemers, disobedient to parents, unthankful, unholy, without natural affection, truce-breakers, false accusers, incontinent, fierce, despisers of those that are good, traitors, heady, highminded, lovers of pleasures more than lovers of God: having a form of godliness, but denying the power thereof." 2 Tim. 3:1-5. Here is an accurate portrayal of world social conditions that are so prevalent today from the sure word of prophecy.

Luke speaks of the perplexity of nations: "Distress of nations, with perplexity: . . . men's hearts failing them for fear." Luke 21:25, 26.

Isaiah depicts the scenes of the last days in such graphic language that our hearts shudder at the terrible depravity of human hearts, when we read his words: "In transgressing and lying against the Lord, and departing away from our God, speaking oppression and revolt, conceiving and uttering from the heart words of falsehood. And judgment is turned away backward, and justice standeth afar off: for truth is fallen in the street, and equity cannot enter." Isa. 59:13, 14.

The investigating committee (*Turn to page 28*)



# How to Ensure

# FOOT HEALTH

*A Healthy Foot is One of the Foundations of Good Health*

By A. L.

**F**EW people realize how important to their health are healthy, natural feet. There is a glut of cheap shoes on the market, bought in their thousands by the thoughtless, who are attracted by dainty colours and slender heels. What folly! A cheap shoe, however modish, is never a good investment. High heels produce a shortening and thickening of the Achilles tendon and of the muscles of the calves of the legs. Again, too narrow shoes injure the arch because the toes have no room to spread and grip the floor in walking. Choose sensible, low-heeled walking shoes, built for comfort in good leather. Remember a tired aching foot can ruin the happiest outing. A corn can destroy the beauty of the prettiest face. Take care of your feet ladies; and wear a smile.

If you would have a beautiful carriage, cultivate correct posture in walking. The position of the foot should be slightly turned inward, so that in walking a straight line could be drawn through the foot from heel to toe. Such a position prevents flat-foot—a very dangerous menace to the health. Turned-out feet cause thick ankles, puffy knees, broad hips, and a hollow back. Walk correctly and have shapely ankles, strong toes, and a straight back.

Every foot has two arches. Do not confuse your arch with your instep. The longitudinal arch, extending from toe to heel, may be exercised by rising and falling on the toes. Use this movement as you walk to strengthen it. High heels injure this arch because such a movement is impossible when walking with the foot held rigidly in an unnatural position. The anterior arch of the foot is exercised by the movement of gripping the floor with the toes. Defects such as weak ankles or dropped arch can usually be cured by regular corrective movements. Rising on the toes with the feet placed wide apart, and also with toes turning inward, is a wonderful corrective for flat-foot. The "caterpillar crawl," another exercise, is a little difficult to master at first. Stand with feet to-

gether, arch the foot as high as possible, bringing up the heel. Then straighten out flat again and as you do so, arch the other foot. Repeat the movement, progressing slowly forward in caterpillar fashion. This odd exercise strengthens the anterior arch, and corrects dropped arch.

For thick ankles practise a forward walking step preferably set to music in slow waltz time. Put the body's weight on the heel and then carry through the foot to the ball of the toe. Raise the heel as you carry your weight forward. Repeat with the other foot. Do not forget to keep a gentle lilt in the slow movement of rising and falling. Music gives the feeling of rhythm and makes the movement more enjoyable.

Another good exercise is performed by sitting on the ground, legs outstretched flat, with fingers touching the knees to remind one that they must not be moved. Bend the feet down alternately to the utmost limit. Try to touch the ground with the toes. Then raise to a vertical position and pull inwards stretching the heel. While sitting, another movement can be carried out, which has a beneficial effect upon the ankles. Rotate the feet in opposite directions, stretching the ankles as the movement is in progress.

Perseverance with these simple exercises, based on long experience, will bring about wonderful results.

There are many foot remedies on the market for aches and other troubles. A very simple one, which has the virtue of always being ready to hand, is a footbath of warm water in which a handful of common salt has been dissolved. Tender feet are strengthened and refreshed by this simple treatment. Massage with olive oil is very helpful at times, especially when foot-strain is experienced.

A healthy foot is one of the foundations of good health, and is worth a little sacrifice of time and energy to achieve. So make the effort and you will be more than pleased with the results.

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## *My Today*

*I have no other day than this;  
O Father, grant I shall not miss  
The service sweet of doing good,  
And living truly as I should.*

—Mabel Florance Ricard



# BURNS *and* SCALDS

## *and* Other Emergencies

### *Some Valuable First-Aid Hints*

By W. Howard James, M.B., B.S.

**T**HE consequences of a burning accident may often be greatly minimised and perhaps a fatal result prevented by the exercise of a little presence of mind and prompt action at the time. No flame can be continued if oxygen is not supplied. Directly the garments of anyone catch fire, the victim should be rolled over on the floor and enveloped rapidly with a blanket, carpet, or other heavy loose garment in order to exclude the air. If the victim rushes outside in search of water, the flames are fed by the extra supply of oxygen and the result in most cases is fatal.

Where the burn is less extensive, the effects may be very much lessened by the instant application of bicarbonate of soda (baking soda); this will prevent blisters and the destruction of the skin and lessen very materially the pain. It is essential that the application be made at once. Apply the dry bicarbonate of soda all over the burn and moisten with a few drops of water from time to time; or a paste of the same powder may be rapidly made and applied freely to the parts.

With burns and scalds the extent of the injury, or the superficial area affected, is of much more importance than the depth of the burn. A large surface burn means that many nerves are bared, and the shock may be so severe as to cause death. After the application described, the first endeavour should be to minimise the shock. The wound should be covered with flannel or wadding and hot stimulants given; even hot brandy or whisky may be necessary, and where the pain is severe the physician often finds it necessary to give hypodermic injection of morphia. Where the burning is very extensive, the patient is put in a warm bath and allowed to remain till the doctor arrives.

After the shock has been relieved, the wounds can be more carefully attended to. The clothing should be removed piecemeal; only a limited portion of the surface of the body should be exposed at one time. When this part has been dressed by a suitable application, such as saturated solution of picric acid or other antiseptic solution, proceed to treat other parts in the same way. Chloroform is often necessary for the first treatment, especially in children.

Carron oil is the old-fashioned remedy; it certainly soothes, but it is not antiseptic and con-

sequently it is used only where no other suitable remedy is at hand. Where, however, the surface is not broken carron oil makes a good soothing application; it may be applied by saturating linen cloths or absorbent cotton-wool.

If the skin is broken, it should be carefully cleansed by a warm antiseptic solution, such as Condyl's fluid or boracic acid and water. Where a very large surface of the body is superficially burned and the patient is in great pain, relief will be afforded by placing him in a warm bath at 98° F. containing boracic acid or Condyl's fluid. All patients with burns must be kept comfortably warm. All blisters should be pricked with a sterile needle at their lowest point to draw away the fluid, which is always full of germs.

There is no better all-round application for burns than picric acid, one part in 100 (practically a saturated solution.) The lint should be sterilised before being dipped in the picric acid solution. Cover this primary dressing with absorbent cotton-wool.

The application should be made in strips so that in redressing the wound only a small portion need be uncovered at a time. Generally one dressing every third day is sufficient; if, however, the parts smell badly, daily dressing may be needed.

Since the late war, surgeons have used a preparation known as Ambrine, a mixture of lard and soft paraffin. This is melted and sprayed on the parts with a special sprayer or painted on with a soft camel's hair brush. It is an excellent remedy and has the advantage of not requiring such frequent applications as other remedies demand.

After the first two or three days the danger of an extensive burn is septic poisoning. Free application of boracic acid or hot boracic-acid solution is advisable in these cases. Iodoform gauze is another good application. Of course, a medical man should supervise the treatment of all severe burns or scalds.

Sometimes when a burn is extensive, and especially where it occurs in the region of the abdomen, ulcer of the stomach sets in, and the patient may not be able to retain any food and may actually die of starvation. The writer treated one severe case where even nutrient in-



jections in the bowel were followed by persistent vomiting.

#### Earache

Earache of more than two or three days' duration, and which has resisted ordinary treatment, should be attended to by a physician. There are many causes of earache, and successful treatment means treating the cause. In most cases heat is required, and this is best applied by hot irrigation at about 108° F.—water as hot as can be borne should be run into the ear. A hot-water bottle is helpful. Place a moist fomentation over the ear and then apply the hot-water bottle. Carbolic acid is very soothing. Have a 5-per-cent solution made up; two or three drops of this solution in glycerine often relieves pain. Sometimes two or three drops of laudanum in hot olive oil dropped into the ear will give ease. Menthol in solution (40 grammes to one ounce of liquid vaseline) will frequently ease pain. A blister behind the ear is useful when the remedies mentioned do not give relief. On no account apply cold applications to the ear.

#### Toothache

Toothache is usually due to decayed teeth, the result of germs destroying the dentine and exposing the nerve. Sometimes it is due to inflammation around the tooth (periostitis). Often the secretion from the mouth is acid and will irritate the nerve. Washing the mouth out well with an alkaline solution will often give relief. Bicarbonate of soda and water makes a good application. The cavity of the tooth should be cleansed out with some absorbent wool and then with oil of cloves.

Carbolic acid often gives instant relief, but very great care is needed to avoid burning the mouth and cheeks. A mixture of carbolic and collodion (equal parts of each) is more manageable than the liquid carbolic acid. If applied on absorbent cotton-wool on a plug, it may be allowed to remain for some hours. Dry powders such as antipyrine, camphor, chloral, or cocaine may be placed in the cavity after it has been cleansed out, and kept in position by a little cotton-wool. Frequently some very cold water retained in the mouth for a minute or two at a time will give relief—the pain at first is increased and then relieved. Two or three applications may be necessary.

It is of great importance that decayed teeth should be attended to. A dentist should always be consulted. Decayed teeth mean multiplication of germs not only in the tooth itself, but in its surroundings. Pyorrhœa (diseased, inflamed gums) is now recognised as the cause of quite a large number of constitutional diseases. Often, if the teeth are properly filled, the pyorrhœa will cease; otherwise the teeth should be extracted.

#### Frostbite

In frostbite the parts may become quite white, hard, and insensible. Artificial heat should never be employed as it may be followed by too great a reaction bringing about inflammation and mortification (gangrene). Gradual restoration of the circulation by rubbing is the best remedy; dry snow may be rubbed well over the parts. After the circulation has been restored, the parts should be enveloped in dry wool or flannel. Gangrene often means that the parts affected must be amputated.

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## Blessings

*And can we doubt His word or fear His will*

*Who has so far preserved us on our way?*

*Who does each moment, reassuring, say:*

*"My rod and staff protection carry still;*

*I will your need with love's rich substance fill,*

*Nor once deny you bread for each new day?"*

*O tender care—that holds us in its sway*

*In shadowed valley or on sunlit hill!*

*What wealth of goodness all our life has known*

*Though our mute lips have never shaped a prayer!*

*What mercy, unpetitioned, God has shown*

*Though we His secret presence never share!*

*What shining vistas will our eyes survey,*

*What treasures find, when we shall learn to pray!*

*—Jessie Eberly Thompson*



The

# MYSTERY of JOY

By Thomas Hirst

WE so often see joy, that we think of joy as a surface quality, something we can touch as well as feel, something that pervades as well as abides, and still there are deeper soundings of joy than most people have ever had line enough to reach their depths.

Tonight as I listen to the beautiful strains of the "Hymn to the Sun" coming from the unseen player's violin through the aid of the radio, I enjoy the exquisite melody. My ears are attuned to the delightful rhythm and there is a sense of joy in my heart that thrills my being—the joy of art.

Tomorrow and each succeeding school day when all goes well, I leave my house with my school bus to pick up the children of my school route. As I leave the house, a feeling of pleasure sweeps over me and increases as I come to the different stops where the children await me. Happy greetings are given and received. We finish our journey and I leave the children to their tasks while I think of the exhilarating contact of their young lives with mine. I enjoy the task of the day. This is the joy of work.

Day by day I am responsible for my family. My wife and children depend upon my labours and look to me for guidance. I must plan and build and destroy, for the home is the work of a lifetime and its results are eternal in its finalities. Only those who have laboured likewise can understand the satisfaction and pride of the man who builds a home and rears a family, and maintains that family as an asset to the human race. This is the joy of the homemaker.

I dream a dream—ideals of life construct a beautiful building of hope within my mind. In the beginning it is but the embryo of a reality. There is but little of tangible substances in the dream to start a foundation, but like a ship emerging from the deepest fog into the gradual opening of a clear atmosphere, the dream emerges, and from the shadow it gradually becomes substance until after years of waiting I see the realization of the dream; and no longer the figment of imagination, it has become the reality of accomplishment. Then comes the joy of the creator.

## The Joy of Life's Experiences

I have a friend, the friend has been bound to me by the deepest ties of attachment, but life's devious ways lead to estrangement and deception. Better hours and days come. The dark harshness of hatred casts its baleful shadows before us and the heart is torn by the unkindness heaped upon my head. Then from woe and disaster the light of tender attachment springs to life and

the spirit of forgiveness becomes a river sweeping away all the past misunderstanding into the ocean of forgotten things. This is the joy of forgiving.

I desire, who can tell how much I desire, the wonderful unfolding joy of an education? I sacrifice, and plan and work to make this vision possible. I enter into the outer rooms of that wonderful building of knowledge and wisdom. Who can tell how much the glory of those rooms possesses, but disaster comes. The plans and the sacrifice and the work are useless. I turn away with downcast head and saddened heart to leave the building I had so hoped to explore. Gone, gone are the hopes, the desires, the awakening of the soul, and then comes the joy of resignation.

I see a soul, a human being in dire need, one who has lost his touch with the higher things of life. There seems to be not one spark of the divine fire left within his soul. So far has human life stepped down that there seems to be no possibility of climbing back to respectability, but with tender, entreating care a life is wooed back from the borderland where there is but a step to death's chamber, and finds the happiness of life that seemed to be lost forever. This is the joy of deliverance.

I lead, proud, sure of step, and positive command seems so natural, the higher seat my right, and then comes the bitter lessons of degradation. Cast down from the heights to plumb the depths, to obey when it was natural to demand obedience, to take when it had been my part to give, to say yes when my pride wanted to say no, to learn humbleness in exchange for proudness, to feel the soul almost break in its chains, and then came the joy of humility.

## The Joy of Trusting

Joy, joy, who can measure joy or count its many-sided structured walls? But the greatest of all joys is the joy of the understanding child of God who has learned the secrets and mysteries of the joy of trusting.

When the heavens are dark and the way is long, when the thorns bruise the naked feet, when silence reigns within the chambers of thy spirit and there comes no answer to the heart longing cry of thy soul, when it seems as though the shackles of a hell of torments would lock you in their clasp forever, when the night hours toll their seconds and minutes as though they were the slow moving shadow upon a sun-dial and each moment seems another eternity of grief to enter into and live, and death is also an added terror to meet and slay you, if the soul can still look (*Turn to page 30*)



**T**O maintain health one must have an understanding of the body and its functions, together with some knowledge of food elements, values, and combinations.

The human organism, unlike the man-made machine, cannot stop for repairs, but must continue running while this process is going on. For this reason it is important that we avoid giving the body more repair work than is absolutely necessary, and that we do the repairs day by day so that they do not accumulate. These ideals may be attained by putting proper fuel into the body-engine in suitable quantities and keeping the organs in such a condition as will ensure a complete combustion of the fuel and a minimum of waste to be removed.

In repair work of any kind we seek to match the repairing material with the part to be repaired. The same holds good with reference to the body. From the soil we were created and from the soil the Creator produced the same elements in the form of food to build up and maintain the body.

To a great extent the art of eating and drinking has been lost, and the resultant lack of discrimination has produced a great increase of sickness and disease. The object of eating is to keep the constructive and destructive processes of the body properly balanced. The true art of eating, therefore, is to know what elements to combine, in what quantity, and when and how to eat them.

Man's structure is made up of bone, tissue, blood, hair, nails and teeth. In natural foods all the necessary elements for the maintenance of this structure are found. These elements may be grouped in three classes: (1) Builders; (2) Energizers; (3) Purifiers, and include the proteids, starches, sugars, fats, mineral salts, water, and vitamins.

*Proteids* are contained in meat, fish, poultry, dairy produce, grains, and nuts. They are the nerve- and muscle-builders.

The *starches, sugars, and fats* produce heat and energy. The first is found in grains and in some fruits and vegetables. The purest of the sugars are found in fruits, honey, sugar-cane, and maple. Jam and sweets are composed chiefly of the



Students busily engaged harvesting dahl in North India

# A BALANCE

## The True Art of Eating to Combine, in What How to

By Nur



From the soil we were created and from the soil the Creator produced the same elements in the form of food to build up and maintain the body. Students planting

manufactured sugars which are highly deleterious to the digestive system.

The fats provide heat, energy, and lubrication. Those which are found in butter, cream, nuts, olives, etc., are more readily emulsified in the body than the animal fats of meat. Fats use up more oxygen in the process of combustion than the starches and sugars, but give off twice as much heat and energy; hence the need of lung exercise.

The *mineral salts* required by the body include lime, magnesium, iron, potassium and sodium salts, sulphuric acid, etc. They are found in fruits, nuts, grains, green vegetables, and legumes. Walnuts are particularly rich in mineral salts. They help in the formation of bone, teeth, nails, and hair. Lack of lime in the body is now believed to be a contributory cause of cancer, as well as of heart disease and the malnutritional disturbances.

*Water*, which is the universal solvent, is a very necessary element in view of the fact that the body is composed to the extent of sixty-six per cent of this fluid. Meals should contain a certain amount of moisture to discourage the bad habit of drinking at that time, whilst the taking of a good amount of fluid (preferably water) between meals cannot be over-emphasized. Too little liquid at mealtimes will increase the acidity of the stomach; too much will dilute the gastric juices, thus retarding digestion and eventually dilating the stomach. A person living on a diet of fruit and vegetables will find it unnecessary to take some liquid with the meals. Additional water is best taken one and a half hours after meals or one hour before.

*Vitamins* are found just under the skin of fruit and grains, and are necessary to healthy growth and development, as well as being a protection against disease. They



# DIETARY

## Know What Elements Quantity, and When and Them

books



the same elements in the form of food to build up  
a school farm in South India

to convert the food we eat into living flesh and blood,  
assist the organs of the body in carrying out their al-  
ed tasks.

### Food Combinations

Just as it is important to include the right elements in  
day's bill of fare, so also it is necessary to combine them  
proper manner, so that they can be easily dealt with  
he digestive organs. Two types of food may be good  
hemselves but when taken into the stomach at the  
e time may mutually destroy their individual value.  
following lists show some good and bad combinations,  
also laxative and non-laxative foods.

### Good Combinations

1. Grains when taken with milk combine well with  
or non-acid fruits, such as prunes, dates, figs, raisins,  
anas (ripe), melons, pears, very sweet apples, and  
ries.
2. Milk and grains with vegetables, such as marrow,  
pkin, asparagus, celery, potato, onion, parsnip  
ify, sea-kale, and sweet corn.
3. Salads with nuts or cheese.
4. Milk with nuts or cheese.

### Bad Combinations

1. Grains and milk with acid fruits, such as plums,  
h currants, gooseberries, raspberries, grapefruit,  
les, lemons, oranges, damsons, and blackberries.
2. Milk and grains with all coarse vegetables, such  
cabbage, beet, carrot, cauliflower, turnip-tops, savoy,  
nuts, etc.

3. Acid fruits with any kind of vegetables.
4. Peas, beans, and lentils with flesh-foods,  
as both are high in proteid.
5. Peas, beans, and lentils with nuts or  
cheese, for the same reason.

### Laxatives

Fruits, nuts, wholewheat grains, bran, olive  
oil, butter, cream, butter-milk, and most green  
vegetables.

### Non-Laxatives

Damsons, blackberries, potatoes, rice, parsnips,  
cornstarch, tapioca, white bread, chestnuts, peas,  
beans, lentils, eggs, and boiled milk.

### A Balanced Menu

The general accepted proportions of the  
different elements for a balanced diet are as  
follows: Proteids, three parts; fats, six parts;  
starch and sugar, nine parts. The amount of  
proteid taken per day should not exceed four ounces.  
An excess of this element is one of the chief causes  
of acidity.

Below is a balanced menu for one day:

### BREAKFAST

Grains	(Proteid moderate)	Acid
Milk	(Proteid moderate)	Alkali
Cream	(Proteid moderate)	Alkali
Brown Bread	(Proteid moderate)	Acid
Fresh or stewed fruit	(Proteid nil)	Alkali

### DINNER

Baked Potatoes	(Proteid low)	Alkali
Stuffed tomatoes	(Proteid low)	Acid
Cauliflower	(Proteid nil)	Alkali
Zwieback	(Proteid low)	Acid
Raspberry milk jelly	(Proteid low)	Acid

### SUPPER

Wholemeal bread	(Proteid moderate)	Acid
Vegetable salad	(Proteid nil)	Alkali
Butter and cheese or nuts	(Proteid moderate)	Neutral



A group of boys harvesting rice at a school in Burma



# The HORRORS of a FUTURE WAR

By Merlin L. Neff



Topical Press

Display at Royal Barracks, Devenport, during Olympic Trials. Men of the anti-gas school equipped with gas masks and apparatus marching in parade

THE cities of the world are crowded. London, New York, Paris, Berlin, Tokyo, and others mill with humanity. War comes with its fierce hatreds. Over these great centres fly scores of winged birds carrying tons of deadly gases. A bomb breaks in a park or on the avenue. Firemen are helpless. Thousands try to flee in panic, but they die in suffocation. Within a few short hours the city is a charnel house. Every living creature has fled or perished.

Is such a thing possible? Listen: "Experts declared that 100 tons of luisite, launched from 50 airplanes, could make New York uninhabitable for at least a week." And again: "One bomb of phosgene gas dropped from one airplane would cause a city the size of New York to be evacuated.

Look again! Overhead the battle rages. Pursuit planes fight with bombers. Flaming wings go tailspinning down from the sky. Plane after plane drop before the anti-aircraft guns. Explosions

rend the air as bombs hit their mark.

The great navies lie far out in the great lanes of travel. Airplane carriers with their flocks of planes are among the battleships and cruisers. High explosive bombs are dropped from the swift seaplanes. The explosions rend the waves, steel crumples before the impact, and great ships go down in a moment with hundreds and thousands on deck.

Out in the harbour lies the fleet of merchant vessels. A great tri-motored bombing plane evades the enemy and flies over the harbour. A dozen missiles fall from the fuselage. A dozen explosions echo below in the harbour. The wreck of shipping vessels is seen. Flames devour the wreckage, and supplies perish before the enemy's hand.

Yes, such a scene is scientifically possible. In 1921, in official government experiments, a 25,000 ton ship was sunk in 7 minutes by air bombs. The antiquated battleship, "Alabama," was destroyed



in 30 seconds. In 1923, two battleships, the "New Jersey" and "Virginia," were below the waves in 4 minutes when bombs were dropped on or near them.

Out in the lines of battle will be scenes of death and horror. One authoritative writer says: "The great cities with their teeming life will be attacked instantly by swarms of aircraft, dropping bombs enormously more destructive than any used in the last conflict. There will be no trenches for the protection of human bodies, for they would be soaked with poison gas and captured by battalions of tanks advancing behind smoke screens."—*"The Day After Tomorrow,"* by Philip Gibbs.

Science has perfected the implements of death as well as the machines of progress. In the Civil War, the muzzle loading, percussion-cap musket required thirty-two motions for the soldier to load and fire one shot. Today the cartridges are fed through the guns with less than one-thousandth of a motion to a shot. In the last war the fighting was concentrated on a comparatively few miles of front. Another great conflict will be spread far beyond the regular battlefronts in destructive fighting, into the cities and farmlands of whole nations.

#### The Deadly Radio

The radio, which is now used for entertainment, and enjoyment, will be turned into a weapon of war. A professor of science declares that "undoubtedly we shall see wireless-controlled tanks, submarines, and torpedoes on land, air, and water. . . . Even today it is possible to operate a torpedo, to steer it properly, to slow it down; and for a pilot of an airplane many miles away to work his will upon it with a reasonable degree of accuracy."

"It is not even a secret," says one editor, "that every government, including our own, has had its chemists at work upon deadly gases for war purposes ever since the carnage (of the World War) ceased. What they have ready to release upon helpless men, women, and children in the next conflict staggers humanity in the awfulness of its effects."—*San Bernardino "Sun."*

Death rays, infernal machines, air-craft and anti-aircraft, gases, bacteria, and every other conceivable power of science is being aimed toward weapons for the next war. Can such a catastrophe be stayed? With all of man's skill and ingenuity, he has not risen in moral and spiritual power to balance the scientific knowledge to which he has attained. If science invents that with which we may destroy life, property, and even civilization, what does science profit?

Sir Philip Gibbs says: "The conditions of life are altering at a great pace. Mankind is being endowed with new and terrific instruments. The scientists are hot in the chase of the very origin of energy. But man remains with all his frailties about him, neither rising in intelligence at the rate of his opportunities nor developing any new moral sense which will secure him from the evil use of those powers."

In other words, civilization today is like a two-

year-old boy with a loaded shotgun and a box of dynamite caps and matches. "Science," declares Bertrand Russell, "enables the holders of power to realize their purpose more fully than they otherwise could do. If their purposes are good, this is gain; if they are evil, it is a loss. In the present age it seems that the purposes of the holders of power are in the main evil."

With all of the peace and prosperity, war seems to be eventual and inevitable. Although treaties are made, munitions are made faster. A former chief general officer in the British Tank Corps says: "Looking at the work as it is today, no sane man can possibly say that strife and causes of strife are things of the past." "Today Europe is armed to the teeth," declares another military man.

The chip of conflict seems to be carried on the shoulder by every nation. And the familiar prediction of Philip Gibbs, statesman and writer, adds to the fear: "The world at the present time is not on its way to peace, though there may be peace-makers. It is well on its way to a series of wars which may culminate in some new war for our children's children. We are, to tell the truth, preparing for the next war."

And worst of all, these preparations are the most ghastly and destructive in mankind's history. With rumours of war and distrust on every side, nations plunge forward in the mad merry-go-round of armaments. The greatest guns, the greatest ships, the most costly navies, the best equipped armies are the goal of all.

As the psalmist of old declared: "I am for peace; but when I speak, they are for war." Ps. 120:7. Peace and poison gas do not mix. Disarmament conferences and anti-aircraft guns will not harmonize. No war cries are drowned today by the noise of munition factories.

#### Refuge and Release

The prophet Isaiah, who had many a vision of earthly conditions in the last days, beheld the people of the world in preparation for war. His description is vivid: "None calleth for justice, nor any pleadeth for truth; they trust in vanity, and speak lies; they conceive mischief, and bring forth iniquity. Their feet run to evil, and they make haste to shed innocent blood: their thoughts are thoughts of iniquity; wasting and desolation are in their paths. The way of peace they know not; and there is no judgment in their goings: they have made them crooked paths: whosoever goeth therein shall not know peace." Isa. 59: 4, 7, 8.

But with every preparation for war the child of God need not fear. The confidence of the Christian may be as stanch today as when the "Psalm of Trust" was written. We may take courage from the words of promise and dwell safely in the protection of God. When the fierce anger of man breaks forth, God will remain a refuge and fortress.

Wars and rumours of wars (*Turn to page 30*)



# The MULTIPLIED MIRACLES of a MARVELLOUS CENTURY

By C. L. Paddock

**A** LITTLE more than a century ago, to be exact, on January 8, 1815, two thousand men were killed and wounded in the battle of New Orleans, two weeks after the treaty of Ghent had been signed between the United States and Great Britain. That battle need not have been fought, but the only way of carrying messages was by the slow-moving sailing vessels and the contending generals knew nothing about the treaty of peace. It took weeks for a message to cross the Atlantic and so, even though the two nations had signed a treaty of peace, their armies were in deadly conflict, no message having reached them. Mail and messages by land were carried by horse or stage.

At that time there were no telephones, no telegraphs, no radios. No cables linked the Eastern and Western hemispheres. Communication between nations was slow and tedious. Mails were infrequent and uncertain. Newspapers were few and not every one could read. Communities were almost isolated although separated by only a few hundred miles. We have become so accustomed to our modern conveniences that our poor brains cannot imagine the tremendous gap between the snail-pace methods of communication in the nineteenth century and the dizzy lightning speed of our own marvellous times.

Today, messages may be sent almost instantaneously by telephone, telegraph and radio to any part of the civilized world. "Have you ever stopped to think that if it were possible to shout a 'hello' in Halifax and cause it to travel through the air without the aid of wires and electricity, it would not reach Vancouver until four hours later? But the telephone puts our 'hello' there in a fifteenth of a second. Think of it; in even a small fraction of a second the voice has shot over prairies and through forest, hurtled through cities, climbed the Rockies, and reached the Pacific Coast, and the answer come back to him in an eye-wink! The telephone not only transmits speech, but transmits it thousands of times faster than its own natural speed."

#### Marvels of Radio

Some time ago an incident occurred in New York which shows the wonder and the amazing possibilities of the radio. The *New York Times* radio editor, who lived some twenty miles from his office, went home one evening determined to spend the evening listening in to Commander Byrd's broadcasts from the South Pole area. Not

wishing to be disturbed, he removed his telephone receiver from the hook so his phone would not ring. An emergency arose in the *Times* office which demanded his presence. They could not reach him by phone, but they must get in touch with him at once. They sent a message to Byrd by radio saying, "Please tell Dunlop, in Brooklyn, to put up telephone receiver; the office wants to call him."

Almost instantly Byrd had the message and from the icebergs around the South Pole came through the frosty air the message, "Dunlop, put up your phone receiver; the *Times* wants to call you up." Dunlop called his office, the whole transaction taking only a few minutes. If our great grandparents should visit our homes today and on inquiring about our radio should be told by turning this dial or that we could hear beautiful singing, instrumental music, news, programmes, etc., coming for hundreds of miles through the air, they would not believe us until they could hear for themselves.

#### If Columbus Could Awake

And what strides have been made in transportation by land, sea and sky. If poor old Columbus were to awake and get a view of our modern ocean going vessels he would be dum with amazement. These luxurious, palatial hotels at sea now cross the Atlantic in a little more than four days. Columbus set sail from Spain on August 3, and did not reach San Salvador until October 12.

It was only one hundred years ago that the first locomotive made its appearance. And in that day the people of England were skeptical of such a contrivance. An influential newspaper asked the question, "What could be more palpably absurd and ridiculous than the prospect held out of locomotives travelling twice as fast as stage coaches? We should as soon expect the people of Woolwich to suffer themselves to be fired off upon one of Congreve's ricochet rockets as to trust themselves to the mercy of such a machine going at such a rate." One prominent merchant in Liverpool wagered that if the locomotive ever went ten miles an hour, he would eat stewed engine wheel for breakfast.

To the amazement of the unbelieving public the Rocket actually travelled at the rate of twenty-nine miles an hour. When the Stockton and Darlington Railway was officially opened for traffic a man on horseback preceded the famous engine Number One, to warn the people (*Turn to page 26*)



# OUR HOMES

"O LITTLE homes, ye little homes of love!  
Strength of a man; a woman's song; laugh of a child;  
Warmth of a fire; glow of a lamp; wild  
The wind without, and grim the skies above  
O little homes, set close at every hand!  
Ye narrow, walled-in worlds of joys and fears,  
Built of the commonplace, of smiles and tears,  
Ye are the heart and sinew of the land."

## Managing Philip

By Janet T. Van Osdel

FOR some minutes Mrs. Perkins watched five-year-old Philip and his "gang" in their occupation of her bit of front lawn on which she was bravely trying to grow a respectable crop of grass. There were three small boys besides Philip. Two of them had waggons and one had a kiddie-car. Philip had a tricycle.

One after another, with a great deal of noise and shouting, they would bring their various means of locomotion to the middle of the grass-plot and draw up with a flourish, sometimes with such a grand one that the rider took a header among his fellows. After a few moments, with an even greater commotion, they would ride off again.

At last Mrs. Perkins opened one of her porch windows and called, "Won't you boys keep off my lawn, please?"

"We can't, Mrs. Perkins," answered Philip in his deliberate fashion.

"What did you say, Philip?" asked Mrs. Perkins.

"I said," repeated Philip, slowly and in a louder voice, "we can't stay off your lawn, Mrs. Perkins."

"Why can't you?" asked Mrs. Perkins.

"Because this is the station for our trains—just here in the middle of this lawn. And our trains have got to come into our station. And you can't move a railway station, can you?"

"I have heard of its being done," answered Mrs. Perkins. "But I never heard of a railway station being put in the middle of the lawn in front of a person's house."

A look of doubt crept into Philip's round face.

"Didn't you?" he asked. "Where would they put railway stations?"

"They'd be more likely to put a railway station where they could have paths leading to it and something besides grass for the trains to run on."

"Where'd be a place most like that 'round here?" asked Philip.

"I should think the end of the path between the two houses would be about the best place," suggested Mrs. Perkins. "The trains could run smoothly along that path into the station instead of bumping over the grass."

Philip's chubby face cleared and in a moment was wreathed in a smile.

"Thank you, Mrs. Perkins," he said. "C'mon boys, we're going to move the railway station."

"Well!" exclaimed Philip's mother from the next porch, "I've been listening and wondering how long you'd stand Philip's impudence. You should have come out and punished him."

"Philip wasn't impudent, Mrs. Liddick," replied Mrs. Perkins. "That railway station he was talking about was as real to him as the one down the street is to us. Those waggons and the tricycle and the kiddie-car were real trains to him. For the minute it did seem impossible for him to move his station from the lawn."

"Well, I'm glad you take it that way," sighed Mrs. Liddick. "You're the first neighbour I've had that could get along with that child!"

"It is a question of understanding him, I think, Mrs. Liddick," answered Mrs. Perkins. "If one can look into a child's mind and can think his thoughts with him, a clearer conception is formed of his behaviour than is otherwise possible and he becomes a great deal easier to manage."—*National Kindergarten Association.*

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## Early to Bed

GO to bed early—waken with joy;  
Go to bed late—cross girl or boy.  
Go to bed early—ready for play;  
Go to bed late—moping all day.  
Go to bed early—no pains no ills;  
Go to bed late—doctors and pills.  
Go to bed early—grow strong and tall;  
Go to bed late—stay very small.

—W. S. Reed.

## How Johnny Was Cured

JOHNNY was a great brag; a brag is a boaster. If he heard a playmate telling of something he had done, no matter what it was, Johnny would give a snort, and exclaim, "Pooh, that's nothing! Who couldn't do that?"

One evening the family sat around the fire in the sitting room. Papa was reading, grandma and mamma were busily engaged in sewing, sister Alice and little Joe were studying their lessons, when Johnnie came strutting in. He took a chair by the table and began reading "Robinson Crusoe."

Presently Joe, who was younger than Johnny, came up to his brother, remarking, "Look at my drawing, Johnny, that I made today in school; isn't it pretty good?"

"Pooh! Call that good? You ought to see the one I drew in school today. It beats that all hollow!" answered Johnny contemptuously.

Joe looked rather crestfallen, but made no answer to his brother's remarks. Little Alice left her chair, and going to Joe, asked him to let her look at the drawing.

"I wish I could draw as well as you, Joe," she said, hoping to bring back Joe's good spirits.

Soon after Johnny left the room for a few moments. When he came back everything seemed to be going on as before.

Papa was still reading, grandma and mamma sewing, and Alice and Joe were busy with their books.

"At last I have finished this hem," said grandma, folding up the serviette she had been hemming.

"Pooh," said mamma I have hemmed two while you have been doing that one."

All looked at mamma, for who would have believed she would have spoken in that manner to grandma?

Grandma picked up another serviette and began hemming it, and no one spoke a word.

"Papa, look at my paper," said Alice; "I have done every one of my examples, and have not made a mistake," and crossing the room, she handed the paper to her father.

"Pooh! That's nothing," answered papa; "You ought to see the way I could do examples when I went to school."

Poor little Alice looked as if she would cry at such discouraging remarks from papa, who generally was so kind; but papa drew the little girl to him and whispered a few words in her ear that caused her to smile again.

Silence reigned for a few moments.

"My flowers look so well I believe they will begin to bloom soon," remarked mamma.

"Pooh! You think they look well!" put in grandma, crossly, "You ought to see Mrs. Brown's flowers; they have bloomed all the winter; and are still full of buds."

What could be the matter with the folk? thought Johnny, that they were all in such bad humour tonight.

When papa remarked that he was weighed that day, and that he weighed one hundred and eighty-seven pounds, which was "doing pretty well" for him, mamma said, "Pooh! You call that 'doing pretty well'? Old Mr. Mason weighs two hundred and twenty-five pounds, and no one ever heard him brag of it."

Everybody laughed out loud. Papa just shouted, and grandma left the room because she was choking with laughter.

Johnny saw them all looking at him. He began to suspect something, as the saying goes.

"Papa, were you laughing at me?"

"Well, not exactly laughing at you, but we thought we would see how you thought it sounded to hear us all bragging of our accomplishments, but mamma rather spoiled our game before we had finished it."

Whenever Johnny was tempted to brag of himself, he remembered the night all the family tried doing the same thing.—*Selected.*

## Why Your Finger Bleeds

DID you ever cut your finger with a knife and see the blood run out over your finger? No doubt you were afraid of the blood, but it is nothing to be afraid of, for it is your best friend.

Your blood is like an army under your skin, ready to protect you whenever anything attacks the skin or goes beneath it. On the blade of that knife there may have been a piece of lead or some poisonous thing. As the knife is drawn away from your finger the poisonous thing is left in the cut. If this were left alone, your finger would become poisoned. But as soon as the knife is withdrawn, out comes the blood army to fight for you. The blood strikes the poison, and washes it from the cut. Then, when you wash your hand, before putting some salve on your cut, you wash away all the poison that has been in the cut.—*Selected.*



# MEATLESS RECIPES



## Wheatmeal Bread

Can You Make It? If Not, Try This

By W. Howard James, M.B., B.S.

**W**HOLEMEAL bread will never come into general favour unless it is well prepared and properly cooked. There may be tons of gold at the poles, but if we cannot get at it it will never be of any benefit to mankind. So it is with wholemeal bread. Unless it can be well digested, all its calories of energy will be useless; yea, worse than useless if it produces disorder of the digestive organs. It is better to eat well-cooked, digestible white bread, notwithstanding the fact that it is a denatured food, than wholemeal bread that will not digest satisfactorily.

In order to cook wholemeal bread well, the loaves should be small, each loaf containing not more than  $1\frac{1}{4}$  or  $1\frac{1}{2}$  pounds of flour. The oven should be sufficiently hot to produce slight browning in 20 or 25 minutes. A good test is to place a little flour on white paper in the oven for five minutes before baking. In that time the flour should have a good brown colour without any burning; a piece of white paper placed in the oven for three minutes will also give one a good idea of the heat of the oven.

About one-half pint of water and one-quarter of an ounce of salt should be used for each pound of flour. Some flours require more water than others. The dough should be well kneaded until it will stick neither to the hands nor to the basin or board; dough can readily be cut with a knife into loaves without sticking to the knife.

An ordinary double stove will cook four loaves of bread. We will give a recipe for four loaves of  $1\frac{1}{4}$  pounds of flour each:—

$3\frac{1}{2}$ pounds wholemeal flour	$1\frac{1}{2}$ pounds white flour
$2\frac{1}{2}$ pints water	$1\frac{1}{4}$ ounces salt
2 heaping dessert-spoons sugar	$\frac{3}{4}$ ounce compressed yeast.

Mix the salt with the white flour, and sieve so as to distribute it evenly.

Warm the flour in a large enamel basin.

To make the sponge, add the yeast to pint warm water and 2 dessertspoonfuls of sugar. Make a hole in the centre of the flour, pour in the yeast mixture, and stir till a light batter is formed. Put in a warm place to rise, which takes about 30 minutes. Cover the basin well with some thick cloths or blankets to keep the sponge warm. The sponge is ready when it bubbles all over the top of the batter.

After the sponge is ready, add gradually the remaining  $1\frac{1}{2}$  pints of warm water; knead thoroughly for 10 minutes or more till the dough is of right consistency. Allow this dough to rise in the basin for  $2\frac{1}{2}$  hours or more, until it is so light that it sinks immediately when uncovered.

Care must be taken to keep the dough warm right through the process, especially in cold weather. Hot-water bottles are useful for this purpose. Cover the basin well, in order to keep the heat in. It should be remembered, however, that too great heat will spoil the flavour of the bread.

Cut the dough into four loaves. Knead each loaf well, and place in greased tins to rise again. If kept warm, 20 to 25 minutes will be sufficient. If the dough be allowed to rise too light in the tins before baking, the bread will be tough and coarse.

After the dough is in the oven it should continue to rise for the first 10 minutes. Be careful not to have the oven too hot at first, for a hard crust will form, which will prevent the bread rising well and hinder thorough cooking.

After the first 10 minutes, the bread should brown gradually, and a steady heat should be kept up in the oven till the bread is thoroughly baked. This will require from one hour to  $1\frac{1}{4}$  hours, or even longer. The oven door should not be opened for inspection for 20 minutes or more.

To make 100-per-cent wholemeal bread, the flour should be ground very finely and more water should be used. Sixty to eighty-per-cent bread, however, will be found most generally useful. For dyspeptics it is sometimes necessary to sieve all the coarser bran from the flour.





The

# DOCTOR SAYS



**Ques.**—"Will you give me a list of foods that are rich in fat content?"

**Ans.**—Butter is practically 100 per cent fat. Nuts are rich in fat, containing from 40 to 60 per cent fat. Cream has about 25 per cent fat. The ripe olive, about 20 per cent fat, and the soy bean has from 15 to 20 per cent fat content.

**Ques.**—"What would you suggest as the possible reason for continued pains in the spinal column in the small of the back especially when much bending is done, or the patient is tired after standing on his feet all day?"

**Ans.**—You very likely have a lateral lumbar neuritis. Hot applications, either fomentations or electricity, will give relief. Look for some source of infection in kidneys, teeth, tonsils, or intestinal tract.

**Ques.**—"I have difficulty in breathing through my nose, as one side of my nose seems to be much smaller than the other, and the partition between the two nostrils does not seem to be straight. What can I do for this condition?"

**Ans.**—You have what is called a deviated septum of the nose, and this condition can be remedied only by surgery. The operation is done under local anesthetic, and usually the patient recovers very quickly, and the condition is entirely remedied.

**Ques.**—"Why do I dream more at some times than others?"

**Ans.**—Dreams are an evidence of very light and disturbed sleeping. So when such conditions as a full stomach, tired nerves, and overfatigued body are present we sleep lightly. Being half awake at times, the mind is not entirely at rest, and dreams are the result. The next day the person will feel tired and very much in need of rest.

**Ques.**—"I am having another crop of boils. I am very careful about my diet. What can I do to prevent their coming?"

**Ans.**—You can most likely prevent boils from coming by not being quite so careful about your diet. An impoverished diet results in an undernourished body, and then the body is subject to various disorders, and boils are often a symptom of malnutrition.

**Ques.**—"Can you give me a diet for high blood pressure? Can appendicitis be cured without an operation?"

**Ans.**—I am sending two diet lists, one giving the low-protein foods and the other base-forming foods, for a person with high blood pressure should have the diet both low in protein and alkalizing, or basic. I am also enclosing some general directions for the patient with high blood pressure.

Appendicitis in some cases may be cured without an operation. In other cases an operation is absolutely necessary, and it may be advisable to have the operation promptly in order to save the patient's life. There is all the difference in the world between two different cases of appendicitis, and it requires very careful study on the part of the physician to know just what is necessary in a particular case.

**Ques.**—"Why does a person blush? I mean the real scientific reason for it."

**Ans.**—Blushing is a condition in which the dilator nerves controlling the facial circulation have been stimulated by some emotional reaction. The reason why some blush more easily than others is probably a mental and emotional rather than a physiological difference.

**Ques.**—"I am fifty-three years of age, and have been wearing glasses for many years. In the last three months I have been troubled with spots continually in front of my right eye. My health is fair, but I get hot flushes frequently. There is no pain at all in the eye, but it gets very tired when I read."

**Ans.**—These spots are probably due to little particles of matter in the fluid of the ball of the eye; they are not serious, but make one anxious. Nothing can be done for them apart from keeping the digestion in good order. They are noticed more when the stomach or bowels are sluggish. In one patient recently examined by the writer the spots apparently disappeared after examination; probably the patient ceased to take notice of them when his mind was relieved as to their nature.

**Ques.**—"I wish to write you concerning my daughter. She has been treated by a medical man for kidney trouble; she was kept in bed, but apparently recovered. She has had her urine tested since, and the water is free from albumin."

**Ans.**—We would judge from the letter written that the kidneys are not in any way diseased, but they are overworked. Overworking the kidneys is brought about by improper food or poor digestion.

She should avoid all flesh foods, tea, coffee, and cocoa, also sweets, much sugar, and foods cooked with or in fat or butter. Milk, wholemeal bread well cooked, and wholemeal foods such as oatmeal, fruit (fresh to be preferred), and green vegetables and potatoes should constitute the main part of the meal. With such nourishing and plain food the kidneys should not be overworked.

Daily sponging of the whole of the body with cold water and outdoor exercise are essential. An egg lightly cooked may be taken, three or four times during the week. If she loses in weight, increase the amount of milk, potatoes, and bread. If the water is highly coloured or there is a deposit on cooling, give a little acid fruit, such as lemon, orange, or pineapple, after meals.

**Ques.**—"I have been a sufferer for some years with rheumatoid arthritis, and have lately obtained great relief from taking lime water in milk. Is there any danger of the lime water having any bad effect upon the bones or the marrow? I have taken it for six weeks, twice per day, and it has relieved the inflammation and pain."

**Ans.**—Lime water cannot possibly do any harm as suggested in correspondent's letter. If it agrees with the stomach by all means continue the treatment. If the bowels become constipated, take more fruit and food containing bran, as wholemeal bread, etc. Probably the beneficial action is largely due to its action on the alimentary canal, and the improvement of digestion; it also probably lessens to some extent any accumulation of acids in the blood.

**Ques.**—"We were using whole-wheat bread until about a year ago. Since then our five children do not look so well, have colds, and their flesh is soft. Do you think the change in bread has caused it? Is canned milk as good as fresh milk?"

**Ans.**—Whole-wheat bread when properly made is more wholesome and more nutritious than white bread. But whether the change in bread is the sole cause of the change in the health of your children, I cannot say.

Fresh milk, provided it is clean and free from disease germs, is better than canned milk. Are the children getting an abundance of fresh fruits and vegetables, especially green vegetables?



When Your

# CHILD IS SICK—

# WHAT?

## *Some Helpful Suggestions for the Care of the Sick One, and for the Protection of Others*

By Nina M. Munson, R.N.

ANY distinct change in the usual conduct or appearance of her child should cause a mother to become suspicious of a contagious disease. She cannot be expected to detect and diagnose such a disease, but it is her duty to know when her child is not acting his normal self, and to keep him away from other children until the cause is determined. It is as important to observe his physical condition as it is to see that he is clean, that his clothes are tidy, and that he has his breakfast.

Any deviation from the normal, such as loss of appetite, listlessness, nausea, vomiting, chills, convulsions, dizziness, faintness or pale skin, rash of any kind, fever, running nose, red eyes, sore throat, cough, pain, irritability, should not be taken lightly. Any one or more of these symptoms furnish grounds for believing a child to be ill. And any illness of children should be treated as contagious until a physician has diagnosed otherwise. Other persons, professional or otherwise, are not equipped with the medical knowledge that qualifies them to diagnose, to distinguish between diseases, and therefore it is outside their realm to prescribe treatment.

The knowledge of sickness and how to care for it as handed down from parents and grandparents cannot be relied upon, for most of it is tradition and superstition nor does its great age lend to its dependability. Today there is far greater opportunity for all to learn the real truth about health than in former generations, and the mother may need to unlearn many unscientific things and learn much that is new to her, not allowing prejudice to make her blind to scientific soundness.

A hospital equipped especially to care for contagious diseases is the best place for a child who has such a disease, and especially so if there are other children in the family. But there are many cases where the responsibility for the care of the sick one, as well as the protection of others, falls upon the mother. Her burden is materially lightened if she is acquainted with the simple, but none the less important technique to follow.

When the first signs of illness are observed,

a child should be isolated from other children. The most dangerous time for the spread of contagion is in the very early stages of the disease when it has not been identified. So it may be too late to wait several days, or until the child is very ill, before isolating him and calling a physician. It is a safety-first measure to isolate the child at the beginning of symptoms; then if the disturbance does not prove to be contagious, no harm has been done. But if it proves to be infectious, you have protected yourself and the rest of the family and doubtless saved a great deal of sickness, worry and expense.

It was a very mistaken idea our grandmothers had that caused them to sigh with relief when little four-year-old Millie "caught" the measles, because "she's having them now instead of when she gets older." The fact is that more serious complications may follow such diseases in young children than in older. And, too, with the proper, intelligent precaution in keeping Millie from any known source of infection, she might never have had measles. To escape the children's diseases is a wonderful asset to the future health of any child, for serious heart, kidney, ear, and eye troubles in older children and adults can be traced to an attack of one or more of the contagious diseases, not to mention the many deaths that occur each year because of them.

The sick child should be put to bed in a room by himself. If the illness is contagious in nature, all unnecessary furniture and rugs should be removed. An electric hot plate in the room will save many steps, and aid in carrying out the isolation technique.

The mother should keep a large apron which will cover her dress, hung inside out just inside the door. The gown should be worn while in the sick room and removed before leaving it. She should also make a mask to cover her mouth and nose. This will protect her from the spray of sneezes or coughings. The mask can easily be made from two thicknesses of old linen, or about eight thicknesses of gauze. This should be about six inches by four inches. Sew strings to each corner so that it may be held on by tying the strings around the



head. A mask should be worn only once, then placed in the disinfectant solution.

All soiled linen, including the mother's apron and mask, should be soaked twenty-four hours in a disinfectant solution. Dishes used in the sick room should be boiled before washing. No books or toys should be allowed unless they may be burned or thoroughly washed after the isolation period is over. Any unused linen brought into the sick room should be disinfected before being used elsewhere.

It is very important that the hands of the mother be clean when she leaves the sick room. A basin should be kept in the room so that the hands and arms may be washed thoroughly before leaving the room, and as an additional precaution, washed again outside the sick room before handling food or taking up other duties about the house. A good disinfectant to use on the hands after wash-

ing is rubbing alcohol, or 50-70 per cent alcohol. If the hands become chapped from frequent washing, a healing lotion should be used.

There should be a supply of paper sacks, one being kept fastened to the side of the bed by adhesive or safety pins, to catch the handkerchiefs of the patient. The handkerchiefs should be squares of old linen or gauze, or soft tissue paper. The bag should be changed at least once a day and with its contents burned as soon as it is detached from the bed.

One should not rely too confidently upon the power of disinfectants to kill disease germs, but should remember the effective action of soap and hot water, and use disinfectants in addition to these.

Very frequently questions are asked concerning various contagious diseases. The chart below will answer these questions regarding some of the most common of the children's diseases.

Disease	Incubation Period	Early Signs and Symptoms	Transmission	Period of Communicability
Chicken pox	10-15 days	Rash 2nd day as small pimples. Later filled with fluids.	Discharges from nose and throat	Until all scabs have disappeared
Diphtheria	2-5 "	Sore throat. Patches in back of throat may look like simple tonsillitis. Children may be made immune by toxin-antitoxin.	Discharges of nose and throat	Until two successive cultures from nose and throat are negative
Measles	7-18 "	Symptoms of cold in head. Rash appears on forehead, face, and behind ears.	Discharges from nose and mouth, especially before rash appears	During period of symptoms of cold
Mumps	14-21 "	Fever, swelling one side of neck under ear. Pain on opening mouth. Earache.	Nose and throat discharges	Supposedly until gland returns to normal size
Scarlet fever	2-7 "	Headache, fever, sore throat, vomiting, bright-red rash on neck and upper part of chest.	Discharges from nose and mouth, pus from ears	Four weeks from onset of disease or until all abnormal discharges have stopped
Whooping cough	Within 14 "	Cough that is worse at night. Characteristic whooping begins in about 2 weeks. If vomiting after hard spell of coughing, suspect whooping cough.	Discharges from nose and mouth, especially before whoop begins	Approximately 4 weeks after catarrhal symptoms begin

## The Multiplied Miracles of a Marvellous Century

(Continued from page 20)

of its approach. But the locomotives were soon travelling fifteen miles an hour and the horseman lost his job. Imagine if you can, the contrast between one of those crude, flimsy, rattling contraptions, and our mammoth, powerful giants of the rails today. The Canadian National Railways have one of the best trains in the world, the International Limited, which makes the run between Montreal and Toronto, 334 miles in 360 minutes, making four stops. This train is equipped with radio and telephone. As the train rushes through village and countryside at sixty miles an hour or more, one may call his home, his office or even some foreign country on the telephone and carry on a conversation from the swiftly moving train.

Radio programmes are also received on the train, and passengers may enjoy music, hear world news, or market reports, as the messages from far-distant points are snatched from the air.

### Travel by Air

Thirty years ago, two brothers who ran a little bicycle shop in Dayton, Ohio, and were experimenting with gliders and aeroplanes, were called the "crazy Wright Brothers." Today air-planes have their regular routes and schedules, carrying passengers swiftly, serving meals in the air as they travel. While our forefathers took long weeks to make the tiresome tedious journey from coast to coast by the prairie schooner, it is now possible to have breakfast in San Francisco, and supper the same day in New York City.

To Benjamin Franklin is given the credit for founding the magazine which we read today, the



*Saturday Evening Post.* If he were alive now, and should attempt to print that magazine, using his old hand press, it would take him two thousand years to run one edition. Today the trees are felled, the wood converted into pulp and paper and newspapers printed and on the street in a few hours.

We do not often stop to think how recently many of our modern necessities were invented. Here is a list of some of the principal ones.

- 1798 Gas first used for lighting.
- 1800 Cast iron plough first used in North America.
- 1811 Steam printing press.
- 1829 Lucifer match.
- 1830 Railroad cars.
- 1833 Reaper and mower.
- 1837 Electrotypes.
- 1839 Photography.
- 1844 Telegraph.
- 1846 Sewing machine.
- 1851 Submarine cable.
- 1876 Telephone.
- 1877 Phonograph.

Following these came the automobile, the moving picture, the aeroplane, radio, television, and countless thousands of other wonders. Practically every invention of consequence has come within the last hundred and fifty years. Before that time our forefathers lived much as did Abraham and the other patriarchs of Bible days.

#### If the Clock of Time Turned Back ?

Try to imagine just how you would be affected should you awaken some morning and find the clock of time turned back one hundred and fifty years, and the inventions of the last century taken from us. On awakening in the morning you would grope in the darkness trying to find a candle, and then would come a real task, for there would be no common every-day match to light it. You would proceed to build a fire in the fireplace and to get your breakfast without the electric toaster, or a gas or electric range. In the absence of corn flakes and a long list of our new-fangled, devitalized breakfast foods, it would take a little longer for the good housewife to prepare the morning meal.

No morning paper would be delivered to our doors. We would walk to the office and when we got there find no elevator running. In the office you would accomplish much less with the old quill pen and no adding machines, typewriters, dictaphones, and other modern equipment. You would not be bothered with mail, for instead of several deliveries a day there might possibly be one a week. No telegrams would be delivered. And what would you office men do with no telephone? No motor car would be in readiness near your office. There would be no incoming or outgoing freight trains, and for the business trip reservations would have to be made in the stage-coach.

#### In the Home

In the home the housewife would miss the electric sweeper, washer, iron and other useful conveniences of our time. There would be the

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baking, and the milking to do, for no baker nor milkman would make a daily call. Of course there would be no radio in the home. You housewives can complete the picture from your imagination. On the farm the farmer would use an old wooden plough, and in the absence of the modern tractor would probably use oxen or horses. The grain would be planted, reaped and threshed by hand. A good many farmers today would not know how to cradle grain. On the prairie farms the grain is now cut and threshed in one operation by a combined harvester and thresher.

Have you ever thought, reader, why for nearly six thousand years men went on in the same old rut doing precisely as their fathers before them had done, and, then, suddenly in one brief century the whole life of mankind has been revolutionized by the increase of knowledge and by the multitude of miraculous inventions?

#### Prophecy Fulfilled

When Jesus left this earth and returned to heaven, He promised His disciples that He would come again and take His children to Himself. John 14:1-3. He also gave them many signs which would precede His coming and tell His people when His coming is near. While the Bible plainly teaches that no man knows the exact time of His return, the Saviour gave us in different parts of the Bible very definite signs of His second coming. In Matthew the twenty-fourth chapter, the Saviour mentioned a list of these signs and then remarked to His disciples, "Now learn a parable



of the fig tree; when his branch is yet tender, and putteth forth leaves, ye know that summer is nigh: So likewise ye, when ye shall see all these things, know that it is near, even at the doors." They had asked Him to tell them some of the signs of the end of the world and He had answered their definite question.

In Daniel the twelfth chapter and the fourth verse, the Lord foretold, through the Prophet Daniel, the remarkable increase of knowledge, and the running to and fro of our time. "But thou, O Daniel, shut up the words, and seal the book, even to the time of the end: many shall run to and fro and knowledge shall be increased." If we believe the Bible, surely we can come to no other conclusion but that this prophecy is fulfilled in our day. And if so, we must be living in the time of the end. Of course, the time of the end does not mean the end of time, but it should tell us of a certainty that soon the Lord is to return to the earth again. There are many other prophecies which point to this same event. Before the flood the Lord in mercy warned the antediluvians of the coming deluge, but only a few listened to the warning. They made fun, they ridiculed, they scoffed, until the rain began to fall and the door of the ark was shut. You and I have access to the Bible and it tells us very definitely of the days in which we live. You may scoff at the thought, reader, that our earthly programme is some day to come to an end and that the time cannot be far away, or you may study your Bible and weigh the evidence impartially. We are sure you are fairminded enough to at least give it serious thought.

### Just Four Words

(Continued from page 7)

the hopes of Napoleon and Wilhelm. "They shall not cleave one to another," God said.

Daniel, however, did not close his prediction without a brighter picture than the wrecking of empires. "In the days of these kings shall the God of heaven set up a kingdom, which shall never be destroyed: and . . . it shall break in pieces and consume all these kingdoms, and it shall stand forever."

To this blessed hope, my readers, I now invite you. As surely as the imperialistic hopes of Napoleon and Wilhelm met failure, so will the imperial plans of Jesus Christ meet with success. But only upon the breaking in pieces of all earthly kingdoms will this glorious empire of eternity be ushered in. And it will be a kingdom of peace. It will be a kingdom of justice and equity. It will not be filled with disappointed hopes and frustrated ambitions. Ignorance and sorrow will be exiled, and the knowledge of the Lord will cover that kingdom with glory for ever and ever.

## Hives in Children

IN an attack of hives, give at once a dose of castor oil or some other purgative, then give an alkali such as the following:—

Potassium citrate	1 oz.
Wintergreen water to make	4 oz.

Give a teaspoonful in water every four hours while the rash is on.

It is possible that one can get the same result by giving half a teaspoonful of baking-soda in orange juice prepared in this way: To the juice of one large orange or two small ones, stir in a half-teaspoonful of baking soda just before the child drinks it.

In summer have the child wear thin, unirritating underwear, and during an attack keep it cool. It will give relief to the skin to give a warm bath to which baking-soda has been added to relieve the itching. Do not dry the child by rubbing, but mop the skin gently, just as you would take up ink with a blotter. Rubbing the skin would probably irritate it.

The separate wheals may be sprayed with alcohol or with vinegar, or with a 2 per cent solution of carbolic acid. Anything stronger would be injurious. Hamamelis (witch-hazel) applied to the wheals may soothe, also the following mixture which acts with a sedative effect when applied to the wheals:—

Camphor	2 parts
Chloral	2 "
Menthol	1 "
Glycerine	50 "
Alcohol	200 "

Label it, POISON, FOR EXTERNAL USE. Your chemist can make this up for you.—  
*Dr. G. H. Heald.*

## The World's Beacon Light

(Continued from page 11)

known as the Wickersham Commission to Investigate the Causes of Crime in the United States has just rendered a scathing report of conditions of corruption among the guardians of the public welfare showing that, almost without exception, every large police force in the United States has fallen in a large degree from the high standards of righteousness that the people have a right to expect from those who minister the powers of justice to us.

The reign of man apart from God has failed. The solution of our world problems lies outside ourselves. Humanity has tried for six thousand years to regulate the affairs of this sphere, and the record is one of failure, disease, and death. Every cemetery is a mute testimony that man has failed and that death is the only victor in the struggle for supremacy.

But we hasten on to that supreme event toward which all creation moves. The coming of our Lord draws nigh, and in the glorious appearing of our Saviour all the problems of life and death will be settled forever.



### Glorious Future

Sin will be consumed, death will vanish away in the cleansing fires of the last day, and he who for all these millenniums of earth's history has disputed the right of Jesus to reign will come to his end.

In Heb. 2:14, reading of the work of Christ, we find the promise: "That through death He might destroy him that had the power of death, that is, the devil; and deliver them who through fear of death were all their lifetime subject to bondage."

Thank God, the way is not dark to those who are willing to study these blessed promises of the prophetic word. The way may be hard; it will be hard. Strife may compass the pathway of the saints; but as they press onward and upward to the kingdom of God, the light of prophecy will illuminate the way to the end of the journey.

"But of the times and seasons, brethren, ye have no need that I write unto you. For yourselves know perfectly that the day of the Lord so cometh as a thief in the night. . . . But ye, brethren, are not in darkness, that that day should overtake you as a thief. Ye are all the children of light, and the children of the day; we are not of the night, nor of darkness. Therefore let us not sleep, as do others; but let us watch and be sober." 1 Thess. 5:1, 2; 4-6.

The glorious light of prophecy grows brighter and brighter as we near the end. Fulfilled and fulfilling prophecies are telling the story of God's over-ruling power and of His care for His children.

You who read this article but are unfamiliar with the meaning of prophecy, may I urge you to study as for your life.

### Plants Suffer No Terror

ANIMALS obviously suffer terror when put to death in the abattoirs. And some, basing their opinions on the experiments of Sir J. C. Bose, entrench themselves in the view that plants must likewise suffer when used for food. But Sir J. C. Bose himself denies the possibilities of plants so suffering. From an article by Henry S. Salt in the *Vegetarian News*, we quote the following:—

"The sum of the whole matter is expressed in a letter of Sir J. C. Bose himself, from which I am permitted to quote. It is a reply to a correspondent who had questioned him about our use of plants for human food. The cause of humanitarism, he wrote, 'can only be advanced by change of spirit, and not by making fun of people who feel compassion for the suffering of animals, greatly accentuated by terror when they are being done to death. Obviously, plants do not suffer from this terror, their nervous structure, when present, being far more rudimentary.' No statement could be more authoritative or more conclusive."—*Selected*.

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### "Lazy Liver"

"LAZY liver" may be simply a term used by a lazy doctor to avoid the trouble of making a careful diagnosis and learning just what the trouble is.

The liver has many functions: it removes from the blood various poisons, it manufactures bile, it stores sugar, and there are others. The symptoms would depend somewhat on what function of the liver was not working properly.

Ordinarily a torpid liver is accompanied by more or less constipation, the stools being lighter coloured than usual, there being loss of appetite, coated tongue, and other symptoms of indigestion, and perhaps a bad breath. But as we said before, "lazy liver" may be simply a lazy diagnosis.

The causes of liver trouble, that is, acute liver trouble, are the use of rich foods, overeating, and the like, and there is no better remedy for the trouble than a partial fast.

To stir up the liver one might try vibration over the liver either by an electric vibrator or by a competent masseur. One might also try fomentations over the liver, with a waist pack at night; that is, a heating pack consisting of a cloth wrung out of cold water, wrapped around the waist about eight inches wide at the level of the liver, and over this a flannel cloth sufficient to prevent evaporation, wearing this all night.



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## Figure Culture by Exercise

(Continued from page 5)

to above head; lower and exhale.

These exercises can be advantageously practised immediately on rising and just before retiring. Discard all tight-fitting clothing and take up a position as near as possible to an open window.

Special attention has been given to those movements which involve the use of the abdominal muscles, for it is by the regular exercise of these—lack of tone and strength in which is the cause of most digestive disturbances—that the stomach is strengthened and the digestive organs re-invigorated.

### Outdoor Sports

Outdoor exercises—if the inclemency of the weather will permit it—should be regularly followed, and walking is particularly recommended. Take a daily walk, if possible, and practise deep nose breathing while out of doors. Should you be caught in a shower, console yourself with the reflection that rain is the best of beautifiers. Walking is one of the finest promoters of the circulation.

Next to walking, as an aid to beauty comes swimming, which is an unrivalled figure-moulder, but this sport cannot be followed to the same extent or so pleasurably as in the summer.

It is by the regular practise of these and other sports, together with a system of applied exercises similar to those given above that you may realize your highest aspirations of health and beauty.

## The Horrors of a Future War

(Continued from page 19)

will continue until the prince of peace shall come. At that time, He shall come with "healing in His wings," and there shall be no more war, hatred, bloodshed, or sorrow. "The former things" shall have passed away. And until that glorious day shall come, the Christian looks with confidence to his God as his unfailing protection and shelter.

"He that dwelleth in the secret place of the Most High

Shall abide under the shadow of the Almighty.  
I will say of Jehovah, He is my refuge and my fortress;

My God, in whom I trust, . . .

A thousand shall fall at thy side,  
And ten thousand at thy right hand;  
But it shall not come nigh thee."

Psalm 91 : 1, 2, 7, A.R.V.

## The Mystery of Joy

(Continued from page 15)

beyond today and see in the morrow the gleaming glory of a better day, when through all these things the soul can still retain the calm composure of a land-locked lake and in the glory of eternal trust retain a confidence in our heavenly Father's abiding mercies, then thy soul has unlocked the doors to the "Holiest of All" and has been ushered into the presence of Omnipotence to receive the gift of the joy of trust.

## Mind-Cure

THE relation that exists between the mind and the body is very intimate. When one is affected, the other sympathises. The condition of the mind affects the health to a far greater degree than many realise. Many of the diseases from which men suffer are the result of mental depression. Grief, anxiety, discontent, remorse, guilt, distrust, all tend to break down the life forces, and to invite decay and death.

Disease is sometimes produced, and is often greatly aggravated, by the imagination. Many are lifelong invalids who might be well if they only thought so. Many imagine that every slight exposure will cause illness, and the evil effect is produced because it is expected. Many die from disease, the cause of which is wholly imaginary.

Courage, hope, faith, sympathy, love, promote health and prolong life. A contented mind, a cheerful spirit, is health to the body and strength to the soul. "A merry (rejoicing) heart doeth good like medicine."

In the treatment of the sick, the effect of mental influence should not be overlooked. Rightly used, this influence affords one of the most effective agencies for combating disease.—"Ministry of Healing," p. 241.



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**VIGOROUS OLD AGE** is the natural birthright of every man. But the average length of life in India is only twenty-two years. By observing a few simple rules it is possible for nearly everyone to increase his expectation of life by many years.

**HEALTHY HAPPY CHILDHOOD** is also the birthright of every child. The happiness and future welfare of the child is influenced in a large measure by prenatal factors. The sex life of the parents; the care of the expectant mother; the use or non use of alcoholic drinks by the parents all affect the future of the child. Reliable information on these topics is much sought after.

**EMERGENCIES** arise in every household.

Are you prepared to meet them. If your child should suddenly go into a convulsion or push a pea into his nose would you know what to do? Do you know how to bandage a wound so that the bandage will stay where it is put? Would you know how to stop bleeding from the face or scalp or what to do for a scorpion sting or snake bite?

If the life of your son or another member of your family were dependent upon your nursing and care would you know what to do? Or if the doctor required your intelligent co-operation would you be able to give it?

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