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EDITORIAL

NEW YEAR

OUR *Health* is entering its twentieth year, and this unprecedented devastating world war, we are witnessing, is running its third year. Naturally the first thoughts, now-a-days, are thoughts of this war and the lesson it teaches us.

Wars and world-wars are not new to this world; and so, the lesson this war, as such, teaches us is not new to us either. In general it is, that war is a thing to be avoided as long as possible by exploring all possible means, that it should be waged only as a means to establish peace, justice and progress, and that it is always initiated as a result of some previous intolerable injustice done by one of the belligerents, and suffered by the other.

But this devastating world-war coming so soon after the war of 1914—18, has created an impression all over that peace is accidental, as if the world has contracted a chronic disease. Not only

figuratively, but really too, our world seems to have caught fever again in 1939 and is, since then running high temperature. The attack twenty years ago, seriously viewed as it was, was somehow passed away and thought finished once for all. But the germ seems to be of a new type, hitherto undiscovered, because the disease again broke out—this time more virulently—in a manner suggesting its malignant and infectious nature. It must now be admitted that the diagnosis of the last incidence was, of course, wrong. The main difficulty with this patient, the world, is that it has to be its own physician, a fact which is enough to prove that the disease will freely have its full course—we do not know with what result. If it were to be a fatal one, God forbid it, the result need not be discussed, because we shall not be existing to suffer from it. Even if, on the other hand, it will leave the world to convalesce again, there is no guarantee that the

patient will not plunge again into the same suicidal policy which has resulted in the disease.

What is the history of this disease? The greatest event in it is the last Great War. Such World Wars as this and the last, were not known to the world previously. The most significant peculiarity about them is

and any unjust and avoidable inequality came to be resisted naturally and instinctively.

Therefore, the world wars, like any fever of non-malignant nature, may be also periodical adjustments in the body of the world. They will recur only under two conditions: so long as the world remains closely linked

by various modern communications (which fact is really good), and if the injustice based on greed and fear remains the basis of world politics. This is the germ we have alluded to and it must be destroyed or counteracted.

Some maintain that machinery is responsible for the world wars. But, there are countries which, though industrialised and mechanised, have

voluntarily rejected the policy of aggression and exploitation and used their machines properly, i. e. for defence and self-progress.

So, it is the mind, managing the inanimate and innocent machinery, that is responsible for its proper or improper use; and it is therefore, the mentality of the warring nations that causes world wars.

Thus, we see that the real disease is mental and moral, and by disease



GIANT COASTAL GUNS ON GUARD IN BRITAIN

This picture is of a unit of a British defence battery showing gunners at their station—mighty engines of destruction and death—figuring so conspicuously in modern mechanised warfare!

that once they break out in one part of the world, they seem to spread to every other part of the world with a sense of inevitability. Why? Because of the wonderful inventions of the modern science linking the whole world by rail, sea, air and ether communications in such a way that they rendered the world into one political and social block and body. A sense of world-citizenship and universal brotherhood, has dawned all over the world, consciously or otherwise,

we mean, loss of self-control as explained in the October '41 issue of our *Health*. That the world has lost its control over its mind can be proved by the abnormal way in which it is seen functioning. Nobody would, indeed, contend that the present state of world affairs is quite normal. There is no belligerent who says he wants war. Every one says he is fighting for self-protection, peace and progress. It appears that the same "Struggle for existence", the meaning of life,—which evolutionists often refer to, is being conducted by men also, but more shamelessly and with more deadly weapons.

Life no doubt means struggle for existence. In lower animals, it is directly governed by certain Laws of Nature. The deer does not eat flesh. The plant kingdom feeds

only on the food available underground. The beasts of prey cannot eat vegetables. Thus the struggle of existence never ends in total extinction of any species within a short period, as the struggle, there, is 'lawful'. But here, in the human world, the story is quite a different one. Firstly, the struggle is among the same species. How shameful for the thinking and rational animal whose struggle should be for a higher existence! There is

no law restraining human beings from selecting their prey. Nature has left man free with a considerable independence not with a view to give him a fair chance to commit suicide, homicide and 'sociocide', but that he would behave better than his less developed brother - animals. But, if the big brother abuses the graceful condescension of his Parent viz., Nature, the latter will in no time bring him under control and treat him as his younger brothers.

The rational independence of man,



AIR BATTLE OF THE ATLANTIC.

Showing the "strike" crew rushing out on receiving an urgent call. The "strike" crew, who stand by in full kit, complete with rations, have to be ready to take off at a moment's notice, —yet another feature of the modern aerial warfare.

especially as greatly enhanced by the scientific discoveries, has led to his conclusion that he has conquered his Parent and become scot-free to do any mischief. But all his scientific discoveries go to prove that it is because of Nature's Laws still operating that his inventions remain useful. What is an aeroplane, after all, if the laws of air and heat fail tomorrow? It is the inviolability of the Laws of our Parent, Nature, that constitutes our freedom of thinking.

But for the Laws of Nature, the pen we are writing with, may turn into a crocodile. We cannot even breathe without the unfailing parental grip of Natural laws, that govern the whole Universe, seen and unseen, heard and unheard, thought and unthought. There is, therefore, no such thing as an accident, a chance, or freak of nature. There is nothing if not governed by the Law.

Where there is Law, there is Government. The Laws of Nature are the government of Universe, most graceful and infinitely kind. Any chance of failure in those Laws is enough to render millions of worlds into dust. It is this unfailing Government that man, the petty man, thinks he has conquered? Enough of this. Let him come to senses and recognize the Real Government and silently obey it.

Never before has man revolted against the Parental Government as now; not that he can ever dream of bringing any loss to his Creator, as he can to his earthly so-called enemies by sinking ships, but that he regards his own brothers, the sons of the same Parent, as enemies. He has ignored the Supreme Law of this Universe, the Law of Justice, to which every other law is subservient, namely, 'Do to others what you like to be done by others in similar conditions!'

The cause of world wars is this revolt against Nature, our Creator. This is lack of spirituality, morality, self-discipline whatever it

may be called. For, there can be no real and natural morality without the belief in the Government of Nature—the Almighty—and Her Laws.

So long as the ignorant but proud military man believes in no higher power than the earthly political, he feels he has neither reasons nor business to abstain from any policy he chooses. It is only when he feels his works here on earth will surely follow him wherever he may go, hereafter, to convey him the proper result, that he abstains from his homicidal policy. If he thinks he can personally escape punishment if only he can escape it till death, he is utterly wrong, for the simple reason that the Law is no fool, and man's disbelief in existence after the fall of body will not be considered an excuse for exempting him from the result he personally deserves.

We hope, therefore, that the world will recover from this disease, learn the lesson so bitterly taught, and pursue a healthy policy in future by way of preventing further relapses. Prevention of world wars is best done not only by forgiving and forgetting all the undesirable past, but also by sincerely setting out to undo it by voluntary relinquishment of unjust policies and practices. With this hope, we wish a happy and successful NEW YEAR for our readers, contributors, advertisers and one and all. Let us take this opportunity to thank all those that are responsible directly or indirectly for the successful career of our *Health* for so many years.

Destiny

Attention, old people, wherever you are!

For you indited this rhyme

A state of contentment is better by far

Than turning back pages of time—

In the hope of re-living the joys of the past

Which were not created for age;

And finding that those not intended to last,

Confront you on every page.

Take warning from one who this folly has tried

And found it a sorry mistake

Meet life's many stages with courage and pride,

And all things opposing forsake.—*Texas Parade.*

COMMON COLD

BY DR. K. L. NARAYANA RAO, M.B., B.S., Madras

WE are all familiar with this ailment—the Common Cold or Coryza. It is a universal disease and no man can say he did not suffer from common cold at some stage of his life. It is not so simple a disease as we think and the harm it causes is great. It undermines the health of the individual and, if neglected, will result in many other complications as bronchitis, bronchopneumonia, pneumonia, asthma, tuberculosis, sinusitis, etc. We all know these are all serious complaints and to prevent these, our object must be to prevent cold. As it is very prevalent at this part of the year, it is but natural we think of it now.

The popular belief is that cold is caused by chilling of the body. This is probably due to the experience of a sense of chilliness, which may usher in cold. But this is a fallacy and not supported by facts. Deliberate attempts to contract the disease by prolonged exposure to cold air or to sudden changes of temperature fail to achieve that aim. Troops spending days and nights in trenches with knee-deep water, exposed to cold winds, rains and snow are remarkably free from this disease. But, if they return to the comforts of civil life, they are as amenable to it as anybody else. If exposure to cold and chill were to cause this disease, then Polar Explorers, Everest-Expeditioners and the half-naked Indian Sadhus must be chronically suffering from this. But, in fact, it is not so. The high incidence of cold in the colder months is more attributable to the measures taken to avoid the inclemencies of weather than to the actual atmospheric conditions. In this season, people are liable to crowd

together in overheated and under-ventilated rooms and this will make the mucous membrane of the nose and accessory sinuses congested, boggy and covered with a thick secretion. This unhealthy condition predisposes to Coryza. But sometimes, cold is liable to occur if there is local chilling of the body, particularly the feet, when associated with fatigue or a warm and stuffy atmosphere as in ill-ventilated theatres.

Overclothing is another preventive measure we generally take with the onset of autumn without being aware that itself may be a predisposing factor. To have the body thickly wrapped in woollen garments throughout the day, without regard to variations in atmospheric temperature, is illogical and harmful. This produces overheating during exercise and often irregular chilling due to sweat-laden coverings during rest. For the maintenance of health, the skin must be stimulated by moving air of varying temperatures, and to have many layers of warm clothing or heavy bed sheets will be foolish and harmful. Repeated attacks of cold in some children may be mainly attributed to this *viz.*, overclothing, closed stuffy rooms and heavy bed clothes. Scanty attire of the modern Western women completely disproves the theory that cold is caused by exposure, because her health has improved with less and less clothing.

Tobacco smoking, particularly indoors, favours the development of cold due to pharyngeal irritation. The non-smoker may suffer in like manner from sitting in smoke-laden atmosphere and inhaling the obnoxious smoke. This always occurs in theatres, public places, or sitting

rooms of houses, when the doors and windows are closed to keep the room warm.

There are other causes also which precipitate an attack. It is an highly infectious disease and so, when it once starts, it spreads like wild fire and many members of the same family succumb to it one by one, and similarly, it spreads in institutions and offices. Another important contributory cause is the condition of the vaso-pharyngeal passages and the accessory sinus. Any chronic infection in the nose, throat or sinuses, as tonsils, adenoids, granules, deflected septum or sinus infection, may be the cause of repeated attacks of cold. Lastly, we have to think of the individual susceptibility to this disease. Children are more prone to this than adults. Undernourished individuals, with poor resistance power, get repeated attacks, whereas healthy individuals with good physique can withstand the infection and fight it out. Persons with chronic cold generally fall an easy prey to tuberculosis, because in the latter disease also, the nutrition and resistance power of the soil decides the course of the disease.

Symptoms of cold are too familiar to all and there is no need to dilate on it. Chillness, irritation of the eyes, sneezing and dryness of the throat are initial symptoms and later on produce head-ache, loss of appetite, stuffiness in the nose and feverishness. A watery discharge in the nose sets in within

six hours and becomes more purulent, less copious and more tenacious. In many cases, an irritating unproductive cough results indicating an extension of the disease to the larynx and trachea.

Cold can be prevented by proper care. Much suffering and economic loss due to wastage of working hours may be avoided by undertaking certain simple measures :

(1) Improve the general health of the patient by giving vitamins, cod-liver oil, nourishing food with plenty of milk and moderate exercise.

(2) Have thorough examination of the nose, throat and mouth and set right any defect or treat any infection

(3) Give up smoking and avoid smoke-laden atmosphere.

(4) Avoid overclothing and heavy bed-clothes and have as light clothing for children as possible.

(5) Have good ventilated rooms with windows wide open to stay during day and similar bed rooms with good ventilation during night. Shutting out fresh air will not prevent cold.

(6) Take a cold-water bath daily in the morning. Hot-water bath will not prevent cold and may have a contrary effect.

(7) Avoid local chilling of the body especially feet, when you are fatigued or when you are in warm stuffy rooms.

God and the doctor we both adore,
Just on the brink of death—not before ;
Sickness past, the danger o'er,
God we forget, the doctor we ignore.

—*The Medical World*—November, 1941.

FOOD and its relation to HEALTH

By DR. R. L. SONI, M.B., B.S., F.R.H.S.,
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(Contd. from page 271 of Dec. '41 Issue of 'Health'.)

THE mode of eating is no less responsible for health or its opposite. Over-eating is the most common error of eating. It is true that most people dig their own graves with their teeth. Under-feeding also weakens health. Injudicious, irregular feeding is far worse. The noxious custom of entertaining guests with eatables at all hours of the day should be discouraged. Nothing could be more harmful to the health of the guests and therefore such a mis-conceived hospitality courtesy should be dropped from custom. Injudicious eating, without due regard to time, quantity or quality, just to please the host, especially when he happens to be some superior in rank or age or material possessions, is also at times responsible to change many a good guest into suffering patients. When people go to enquire the health of friends when sick, they are entertained with drinks or refreshments. This practice is doubly bad; for it not only exposes the good enquirer to risk of infection but also robs the patient of some service from his attendants who become busy in attending to the *pan-supari-hukka* and the *sherbet* for the guests. Irregular feeding and injudicious feasting at festivals are not less contributory factors for digestive upsets. In brief, we should know that upper reaches of the digestive apparatus require at least 2 to 4 hours to digest a meal and if those are disturbed irregularly during active phases of their functions, they will cease to function efficiently. Moreover, these parts, like all other parts of the body-machine, require some rest to recuperate energy enough to digest the next meal, and therefore should not be denied this, their birth-right.

Quick eating is another error which makes poor stomach do the work which nature has assigned to the teeth; the obvious result is revolt in body economy and ill-health. To come straight from one's work to his meals is also no good habit. A little rest, 15 to 30 minutes, is good as a preliminary to eating the meals. It is also good if one makes it a habit to wash hands, face and mouth before taking the food; also the mouth must be thoroughly rinsed after the food is over. A little rest after the meals is beneficial to help the circulation to work on the digestion, but this rest does not mean sleeping after meals. Walking just after meals is also bad, for it may distract the function of digestion.

From the foregoing description, it is quite clear that it is not difficult to wed economics to efficiency. *Food economics and health efficiency are quite compatible terms.* In fact, simple nature and adequate fare and high health always go together. Unfortunately ignorance, fads and fancies, customs and superstitions, play such a role in the domain of food that at times it is not easy to be quite detached from those.

In the interest of our health, we have to detach ourselves from fads and fancies, from wrong customs and useless superstitions. We have to revise our notions about food and have to learn to balance our diets for our individual needs.

We know apples and grapes are indeed good for health, but if their price is prohibitive, we should know that the same health value can be procured easily from such cheap stuffs as papayas, oranges, limes, bananas and tomatoes etc., which are hundreds of

times cheaper, but for that reason not the less valuable from the point of view of health. Our health-food problems can easily be solved if we learn to apply the newer knowledge of nutrition to our individual needs and suit our local conditions of market and also the contents of our pocket. A poor man can eat as much nutritious food, though of different quality, as his rich brother, and both can keep equally healthy. This is a great advance that the modern science of nutrition has helped to bring about. Balanced diets for all sorts of people and for all sorts of pockets have been devised by various civilised states in the world and the results as evidenced in their national health are simply marvellous.

We may be eating without proportion in quantity or quality; our selection may be poor, cooking faulty, service nasty and eating again faulty. We may be eating un-wanted ingredients in abundance, whereas things wanted may be meagre or absent; we may be eating useless costly tinned provisions with dignity and with a false sense of security, whereas cheaper things might have done better; we may be consuming stale things imported from far off, whereas the things in the local market might have better suited our pockets and served us much better to our health. Such are the things we may be doing and unconsciously harming our health: such are the things we have to rectify if at all we desire to maintain our health. If we cannot do it ourselves, we have to take help of our physician to *balance our diets*. The foods that build, the foods that release energy in the body, and the mineral salts, have all to be balanced to suit individual requirements. We should also not forget that water is the essential fluid of the body and its incessant loss through sweating, urination and bowels should be repeatedly replenished to enable the millions of batteries in the body laboratory to go on working. Over and

above these important ingredients, the value of Vitamins to health and body economy should not be lost sight of. We know *Vitamins* have far reaching influence on health. Their presence spells health, their deficiency means inefficiency of health and, their absence manifests as disease. There are by now a number of Vitamins, named from A to K, some concerned with growth, some with digestion and some with the health of eyes, lungs, nerves, sex organs, bones, teeth, or some internal lining of the body. Every Vitamin has its specific function for a particular structure and its absence leads to disease of that structure. Thus, we see caries of teeth, softening of bones, rickets, scurvy, beriberi, stunted growth, impaired digestion, night blindness, some nerve affections, weakness of reproductive function and discoloration of skin etc, caused by deficiency of the particular vitamins. Hence, such diseases are called *Deficiency Diseases* and the foods containing those Vitamins *Protective Foods*. Fresh fruits, fresh vegetables, almond, nuts, milk and eggs are excellent protective foods and should be included in the diet. These foods correct Vitamin deficiencies in diet, raise working efficiency, give a tone to the system and vivacity to life.

At this stage, a point should also be stressed. Inspired by the laudable words used in honour of the Vitamins, we should not be swayed to the other extreme of using them in abundant concentration. That also is known to impair health. Synthetic concentrates should not be consumed beyond prescribed doses: in natural foods, there is no danger of taking excess of Vitamins. Anyway, moderation is best in every thing and in matters related even to food, we should not forget the middle course.

In calculating our food requirements we have to keep in mind one very important matter. Our body is never the same for two consecutive

moments. Construction and destruction are incessantly going on in the body laboratory and a suitable balance is to be maintained between these two phases. In infancy and childhood, there is more of construction than destruction; in adult life both more or less balance each other; while in old age, destruction preponderates. If destruction begins to preponderate earlier, that spells premature old age. If the knowledge of dietetics is properly understood and applied to life, it is possible to postpone old age by at least 10 or 15 years. The construction destruction phenomenon must always be kept in view in allotting rations to different people. A lawyer who sits the whole day in his office, poring over his ponderous books, has different dietetic requirements than a man who breaks the stones or works in the paddy fields: a diet good for one is not enough for the other. A growing child requires more milk: it is excellent for bones and flesh, but being deficient in iron, so very essential for blood, fresh fruits and vegetables are to be supplemented. Similarly in pregnancy, protective foods are essential.

Regarding quantity, an old man requires less food than a young man, and an active young man requires more than a sedentary fellow. On the whole, it is found that people eat more than what they require. This truth gave birth to the fasting fad. Fasting is not essential for everybody: it is indeed good for those who eat more as a rule. After the age of 45, it is rather good if evening meals are missed for the caloric requirements in old age are very much reduced, and overeating may be fraught with strain and risk to vital organs.

Balancing the diet, selection of proper foods, and suitable cooking are great aids to health, but with all that, if the food is not well served at the table, it may not have much appeal for the palate. Many an exchange of hot words in the private homes is due to this fault. The wife prepares

the food with all the ability and sincerity at her command, but if she fails to serve it well, she suffers the curse and her husband indigestion. The British people have made an art of eating. They eat scientifically cooked food, served in a happy style and in an atmosphere of joys and smiles. Moreover, the courses are so graded that there is time enough to chew well. The idea of dressing and getting ready for food has a meaning in it: all the while one is getting ready to eat, his system in fact is getting ready to receive food and digest it.

No discussion on food will be complete without a word on *drinks*. We know the most natural drink of man is WATER. In fact, no better drink has so far been devised which can beat pure clean water. Drinking water, unless it be from some reliable spring, better be always boiled or filtered. Alcohol, tea and coffee are useless, in fact harmful, adjuncts. Water in plenty should be taken in between meals, but its intake should be restricted during meals. Water cleans the drains of the body in a most efficient way. A glass of water in the morning is an excellent thing to stimulate bowel movements.

A lime and a couple of tomatoes squeezed into a tumbler of water, suitably sweetened with glucose or sugar or just salted with a pinch of it, make an excellent drink for tropical afternoons. It is cheap, refreshing and healthy, and it can favourably replace the custom of entertaining guests with tea, coffee, aerated or alcoholic drinks, which are not without harm. Cocoonut water is another excellent natural drink. We should also not forget milk which is the most nutritious drink, and also its product, buttermilk, which is indeed both food and drink in one.

Conclusion.—Diet bears a profound relationship to health. Carefully chosen diets, properly served and eaten in pleasant atmosphere with cheerful

mind, are a great help to health. Exercise stimulates appetite and appetite helps digestion. Protective foods like fruits and vegetables should never be missed in any diet. They help to maintain life efficiency and keep off deficiency diseases. Health is indeed wealth and wealth of a nation depends on the health of its members. Health is our best possession and we have no right to squander it. Dr. Johnson, of literary fame, calls this folly of squandering health *a crime*; and reproaches such a man as a 'spend-thrift of his happiness', 'as a robber of the public', as a wretch that has voluntarily disqualified himself for the

business of his station, and refused that part which providence assigns him in the general task of human nature."

To maintain health, foods constitute the main pillar. Let us learn to erect it well so that the structure of health we build on it should shine with joyful radiance. Poverty is often mentioned as a great obstruction to acquisition of health-giving food. It is true to some extent, but it is more ignorance than poverty that keeps us starved. Our duty is to replace that ignorance by newer knowledge of nutrition and to help people to balance their diets according to their pockets. And this is not hard to do.

Which Casualty Would You Treat First?

By MR. A. P. BERTWISTLE, F.R.C.S.

Casualties which had to be treated.

—A bomb has landed among a number of shoppers, and there is glass everywhere. Six people are injured and have to be dealt with :

1. A man who complains of pain in the abdomen. There are cuts in his trousers through which some blood is escaping.

2. A stout, elderly woman who is looking on, when she suddenly finds herself standing in a pool of dark red blood, and promptly faints.

3. A girl about 16 years old, crying and laughing alternately, rushing about wringing her hands one minute, and the next collapsing in a heap in the road.

4. A man, prostrate, bleeding profusely from a wound two inches below the fold of the groin.

5. A woman with a deep cut on the back of the wrist, with wrist drop, and inability to use the fingers.

6. A boy with multiple scalp wounds.

The order in which I would attend to the above casualties is as follows :

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Case 4. — Hæmorrhage from Femoral Artery.

— Without question this is the most serious and urgent case, considering that a clean cut of this artery will cause death in 3 to 5 minutes. Blood will spurt vertically upwards 8 ft., the height of a low room. The appropriate digital pressure point shares with that of the subclavian artery the distinction of being the most important in the body; in each case the artery is very superficial, being little more than skin deep. Diagnosis is made from the position of the bleeding, and its copious nature. As regards treatment, apply pressure to the artery in the groin, half way between the outermost part of the pelvis and the mid line of the body with one thumb, then the other as fatigue occurs, finally turning over to another helper. Meanwhile, a doctor has been summoned who will apply artery forceps before loading on to an ambulance.

Case 2. — Hæmorrhage from a Varicose Vein.

— This case comes second, for two reasons. First, the bleeding may be very profuse, since,

with defective valves, there is an unsupported column of blood from the feet to the heart, when the individual is erect. Secondly, it is very amenable to treatment. The diagnosis was made on the colour and amount of the blood, and the absence of a violent cause. In the excitement of the occasion she would easily fail to notice the slight cut sufficient to penetrate the vein. She fainted for two reasons, the sight of blood, and loss of blood. Treat by elevating the limb to a right angle and applying a firm aseptic dressing to the wound.

Case 1. — Abdominal Injury.— This case is possibly as serious as Case 4, but not so urgent; little can be done for him until admission to hospital. Even in the absence of bowel protrusion, this must be considered as an internal injury. Undo the trousers, raise the shirt, and apply sterile dressings to each wound, remembering to examine the loin for wounds of exit; apply a broad bandage.

Case 6. — Scalp Wounds.— Though bleeding profusely, these are probably not very serious, since, so far as present knowledge goes, glass does not penetrate bone; so that unless the pieces are large there is little danger of fracture. Treatment consists

of removing the glass and applying a firm dressing.

Case 5. — Severed Tendons.— Compared with the others, this is not urgent. The presence of a deep gash on the back of the hand, the dropped wrist, and the knowledge that glass splinters do not cause fracture, should clinch the diagnosis. Apply a sterile dressing over the wound, and a splint to the front of the forearm and hand, with a pad in the palm of the hand to keep the wrist backwards.

Case 3. — Hysteria.— This case is put last as it is the least serious, though it might well have required some treatment at the outset. The best treatment is to give her something to do as was done in the following case. During a typhoon an excitable passenger kept crying out "What can I do to be saved?" "Hold on to that rope for your life," replied the captain. The storm abated, and on doing his tour of inspection two hours later the captain found the wretched man still holding on to his rope, beads of perspiration on his forehead. "May I let go now?" he asked. "Oh yes, we are all right now." The rope was fixed to a hook on the deck.— By courtesy: *The Nursing Mirror*.— *Nursing Journal of India*.

Simple First Aid

In every home where there are children, a first aid cupboard is a major necessity. It is the duty of every parent to be able to attend to the many little hurts common to childhood. Much subsequent trouble can be avoided by prompt rendering of timely assistance. Here is a suggestion for the stock of a first aid cupboard, which can be gradually collected and kept in every home where there are children.

Choose a cupboard small enough to be kept for this purpose alone, and keep it locked with the key hanging at the side. This gives older children access to the contents in the parents' absence and keeps the smaller, busy fingers from harm.

Stocking the Medicine Chest:— Now for the stock. Everything on the following list may be obtained at the chemists:— 1 Roll of Cotton Wool. 4 2-in. Bandages: 1 Roll White Gauze; 1 Roll Boracic Lint; 1 Roll Adhesive Plaster; 1 Roll Elastic Plaster: A few ozs. of Brandy; Antiseptic Emulsion; Small bottle of Castor Oil; Eye Dropper; A fine paint brush (one which will not lose its hairs); Lead Lotion; Safety Pins; Needle and Cotton; Medicine Glass.

Now to consider the occasions for using this supply. For all small cuts, scratches, grazes, and bruises if the skin is broken, dab lightly with the antiseptic lotion. Use a lotion which does not sting. This is important, as the possibility of the children fearing to come for aid because of further pain, is dispelled.— *The Citizen*, Dec. '29.

BENEFITS OF PUBLIC HEALTH LEGISLATION

Mens sana in Corpore sano. "A sound mind in a sound body". Our Sastras also declare the same thing, though in rather a different way, when they declared **शरीरमाद्यं खलु धर्मसाधनम्** meaning that a healthy body is the first requisite for spiritual progress. An attempt is made in the following pages to show that a proper orientation of the principles of Sanatana Dharma, understood in its proper perspective, will certainly lead to an enrichment of our health from every point of view; a social, moral, political and religious uplift can easily be secured for our country in these lines. Some of our English educated brethren have wrongly come to advocate a spirit of hostility to our ancient religious scriptures, without trying to understand them; our scriptures can rightly retort in the words of the famous commentator of the Rig Veda, **न हि स्थाणोरयमपराधः यदेनमन्धो न पश्यति**. It is not the fault of the pillar that the blind is not able to see it and dashes against it. It will be shown that an all-round levelling up of our society is really possible by advocating legislation in the manner inculcated in our Sastras.

Social uplift is possible by legislation in our Assemblies and also by proper propaganda. Compulsory primary education should be the aim of all popular governments. The illiterate masses should be tutored into the three R's, and should be made to read and write at least their own mother tongue. They should be taught simple sums relating to addition, subtraction, multiplication and division. They must be taught to maintain their own domestic accounts. Habits of thrift, temperance, and

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plain and clean ways of life should always be encouraged by means of proper lectures on popular lines, through the press, radio and public platforms. It is now possible for us to reach a wider audience and more quickly too, through these scientific methods. Our ancestors could not harness these measures into national service, but they have shown the way to a proper national reorganisation. "Uneasy lies the head that wears a crown"—a particular king might give way to such lamentations in Western countries, but our kings were never complaining that royal duties sat so heavily on their heads; the subjects were called **प्रजाः** or the children of the king, to be treated even more affectionately than his own sons; his spiritual redemption was ensured only through the well-being, in an all-round fashion, of his subjects. The subjects, again, were spoken of in the feminine gender; they must always have a king to husband them; as such, the king should always be accessible to them in any part of the day and hear their grievances and at once address himself to an amelioration of these. This was his *dharma* or duty, inexorable in its character, and in this respect, Kālidāsa compares his ideal King Dusyanta with the never-resting Sun (never complaining also), Vayu and Adisesa down below the earth.

He says :

भानुः सकृदुक्ततरङ्ग एव ।
रात्रिन्दिवं गन्धवहः प्रयाति ।
शेषः सदैवाहितभूमिभारः ।
षष्ठांशवृत्तेः अपि धर्म एवः ॥

The king was thus an ideal father of his subjects. In his *Raghuvamsa*, the same author remarks :

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The king's duties are enumerated here beautifully : विनया धानं or primary education, रक्षणं or maintenance of law and order, and भरणं or protection. Comparing the king to a tree, the same author in the *Sakuntala* tells us that the king should remove all *paritapa* or afflictions of the subjects, just as a tree absorbs all the heat of the sun, but radiates a cool and shady atmosphere all round.

अनुभवति हि मूर्ध्ना ।
पादपः तीव्रं उष्णम् ।
शमयति परितापं ।
छायया संश्रितानम् ॥

This king, in a later context, when he remembers of his dear wife through the token of the ring—his wife, whom he himself had repudiated before, and who, he believes sincerely, is really lost to him for ever—even under such heart-rending throes of deepest misery, is tempted to think of the welfare of his subjects alone. The minister has forwarded to him, for final orders, a particular judgment of his, escheating to the State, all the property, valued at some millions perhaps, of a rich merchant prince Dhanamitra, who has died childless. The king at once orders an investigation to be made regarding the pregnancy of any of the many wives of that merchant. On being

informed that one of them has had her *pumsavana* ceremony performed just then, he decrees that all the estate should be inherited by the child in the womb. His heart is not satisfied with this generous move ; it goes out in sympathy with any such prospective orphan ; he issues a proclamation at once :

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“ If any bread winner in any family should die leaving the survivors destitute, money will be provided from my state-treasury for the future maintenance of the family just as though that particular bread winner were living.” What an unlimited anxiety for the all-round welfare of the subjects!

Bhavabhuti mentions the way in which Sri Rama always sent out spies to fish out information regarding the reaction of the subjects to his rule. He particularly instructed him to understand any possible adverse criticisms, especially because the Kulapathi Vasistha had particularly enjoined on him “ *prajanuranjana* ” or pleasing his subjects as his primary concern as a king. The spy tells him about some capricious subject who had casually adversely commented upon Sita's life in Asokavana. Rama at once decides to banish Sita and bid farewell to all domestic happiness. Such a high conception of duty made him renounce even personal comfort at the altar of the welfare of his subjects. Only such kings could make a “ *Ramarajyam* ” really ideal and proverbial.

Modern kings and popular governments, if fired by such enthusiastic and zealous zeal for their subjects' welfare, could bring in legislation for their welfare in many ways and improve the corporate civic life in very many ways. Agricultural prosperity

could easily be secured by harnessing the services of the unemployed agricultural graduates to tour the country at State expense, demonstrating the effectiveness of scientific manuring. Some scientific method of cheaper initial outlay and quicker returns could easily be tapped by examining which soil could be made conducive to the growth of some particular grain. An intensive 'Buy Indian' campaign should be vigorously preached, and the people should be forced, by a legislation to buy only their own village produce as far as possible. State aid should always be given readily by prohibiting the dumping in of Rangoon rice or such other cheaper and less qualitative stuff, from the view point of vitamins; rice, and cottage industries, such as weaving, should be encouraged by small monthly subsidies, wherever found deserving or necessary. The services of the veterinary doctors should also be requisitioned to find out the cause for high mortality among our cattle, as also the cause for the inferior, poor quality and less quantity of milk yielded. They can easily be made to carry out a systematic investigation of the quantity and quality of food supplied to the English cows, and improve the morale of our cows thereby. Perhaps, if cross-breeds could be encouraged and popularised, a better yield might result. Schools should be started at State expense for teaching small but useful industries like choir making, manufacturing soaps, and other cheap articles of domestic use. Sugar or rice mills, tile factories and similar concerns, where a large number of people may easily be employed, should be properly supervised by a government expert, who will have also authority to check any tendency for unhealthy rivalry. In deserving cases, small subsidies may be recommended. In this way, a co-ordinated effort by the state for better and cheaper or more scientific food production may easily be conducive to the agricultural prosperity of our villages.

Even more important than all this, the women and the low class of people should be taught to lead a cleaner and neater life, not dirtying the atmosphere with all sorts of filthy rubbish all round their own filthy surroundings. Especially some women encourage their young children to answer their calls of nature just in front of their own houses, or probably in the vicinity of their neighbours' houses. Reform in such matters can never be successful, unless the people who are wonderfully conservative by nature, are made to realise definitely that our Sastras never countenance such practices; they do prohibit such things, and this must be dinned into their ears through Harikathakalaksepams by the right type of Bhagavatars. If even this is not found sufficient, magic lantern shows exhibiting scenes of deadly diseases overtaking people in such unhealthy and filthy atmospheres, should be arranged through the help of science professors at least during their vacations. Provision of good drinking water for every village, if necessary by a process of irrigation from a river sufficiently near-by, should also be made possible.

Last but not least, the villagers ought to be compelled by a sort of penal legislation against the spending of exorbitant sums of money, on social functions such as marriage. The feeding of the poor, the destitute and the deserving through Annadana Samajams might be encouraged, but the feeding of a very large number of people, strong and sufficiently rich, ought to be severely condemned; social functions might be made as cheap as possible. The dowry system could be denounced in strong terms through the press, stage, cinema pictures, and public platforms, and this will result in a healthy atmosphere by the removal of the nightmare for the poor parent. If he has been blessed with half a dozen daughters, he will have to deny

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INJURIES CAUSED TO THE HUMAN BODY BY BLAST

EVER since the discovery of gun-powder, injuries

BY DR. JOHN F. EUSTACE.

to the human body have probably been caused by "Blast," the first scientifically recorded case being an ear injury, caused by the discharge of a musket close to the ear in the year 1593, but attention was not drawn to it to any extent until the high-explosive shell was developed in the last war. Even then, little was known of its mechanical effect, and with the end of the war, the matter lapsed into obscurity until August 1940, when a very complete account of the effects of "Blast" was described in a paper by Professor Zuckerman, the information being obtained for the most part from animal experiments.

Let us first consider what is meant by "Blast." This consists of a compression and suction wave set up by the detonation of the high explosive. At every point in the neighbourhood of an explosion, there occurs first a momentary wave of high pressure, and this is followed by a suction wave of negative or reduced pressure; neither of these waves persists for more than a fraction of a second. As far as the human body is concerned, the compression wave seems to be responsible for the major part of the damage caused to it.

Certain fairly constant factors are now known about the conditions which govern the severity of "Blast" injuries; and they are:—

(1) The closer the person to the explosion, the greater the effect. At distances greater than fifty feet from the site of the explosion, no effect is likely to be produced to the human body by "Blast."

(2) The effect is greater in the erect position than if the person is lying down. This is due to the fact that the compression wave tends to be directed upwards by the sides of the crater produced by the bomb, which penetrates the ground to some depth before exploding. Therefore, the harder the substance on which the bomb lands the less the penetration, and consequently, the closer the blast wave approximating to ground level, the greater the effect of the blast wave to persons on ground level.

(3) If a person is shielded from the direct compression wave by a wall or building, the effect is largely rendered harmless. In this category falls the case of people sheltering in an "Anderson Shelter" when a bomb landed within ten feet of it, displacing the shelter a distance of twelve feet, and yet none of the six occupants suffered from a blast injury.

(4) With regard to the explosive itself, the thinner the casing of the explosive, the greater the blast wave. A thin walled high-explosive bomb dropped from an aeroplane produces a greater blast wave than thick-walled shell of equal charge, as some of the pressure wave is used up in bursting the wall of the shell.

(5) In a confined space, as when a bomb penetrates into a building before exploding, the blast effect is magnified considerably, as dispersal of the pressure wave is difficult.

It must, however, be remembered that cases of injury produced by blast alone are comparatively rare, as injuries from shrapnel, fragments and burns are also likely to be present.

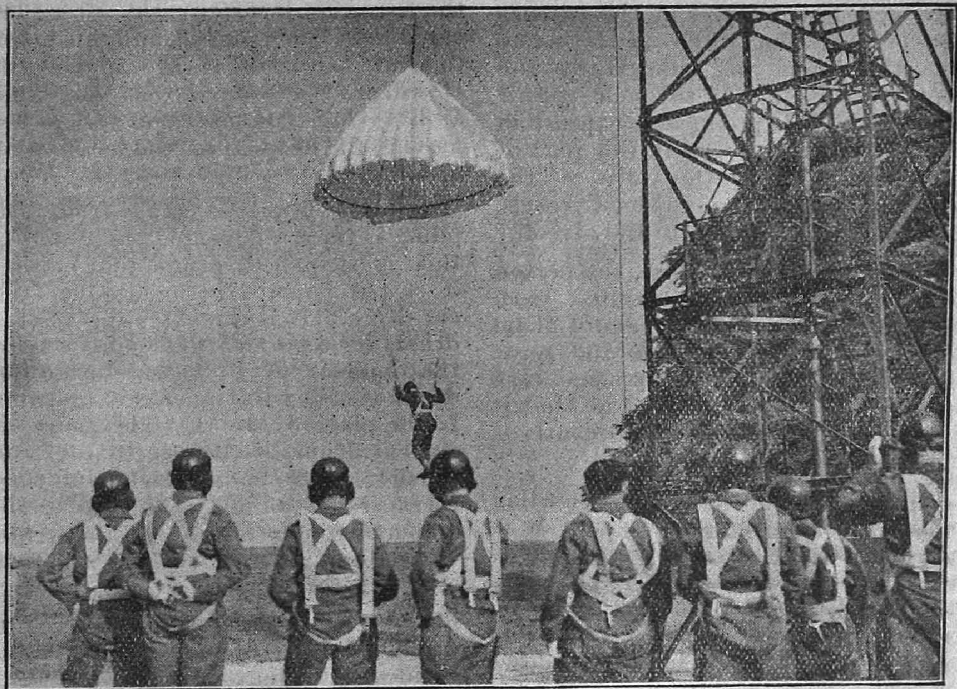
A few cases were described in Barcelona of people being found dead with little or no external signs of violence, and the cause of death was assumed to be blast. While this can take place, it is the exception rather than the rule.

Land Mines.—These are dropped from bombers with a parachute attached, and consequently descend rather

The parts of the human body likely to be injured by "Blast" are:—

- I. The Chest.
- II. The Abdominal Contents.
- III. The Ears.

I. **THE CHEST:**—There are three theories as to the causation of injuries to the chest by "Blast", and they are:—



POLISH PARATROOPS UNDER TRAINING.

The First course of Training is the correct way of Parachute landing, and this is taught by making pupils jump from a high tower with a chute controlled by a cable.

slowly (40 m.p.h.). They are magnetic and will explode at the level of the roof-tops, frequently being activated by metal gutters or steel buildings. However, if they descend to ground level without coming into a metallic field, they will explode on contact. As they weigh anything up to two and a half tons, they do tremendous destruction, and produce a terrific blast effect, and will occasion blast casualties at much greater distances than ordinary high-explosive bombs.

(a) That the destruction is produced by the suction wave acting through the air passages on the alveoli, causing them to rupture,

(b) That the lungs are distended by the compression wave acting through the air passages.

(c) That the damage is produced by the impact of the pressure wave on the chest wall.

As a result of Professor Zuckerman's experiments, it now seems clear

that (c) produces the greatest injury, but that some effect of (b) is also present.

Let us consider now what occurs when a person is exposed to a blast compression wave. For a very small fraction of a second the air pressure is very greatly raised. This pressure makes itself felt by acting on the chest wall, endeavouring to force it in. The ribs on the whole resist the pressure well, but it forces in the tissues between the ribs, while at the same time the lungs are inflated by the pressure wave acting through the air passages. This produces a rupture in the walls of the alveoli in this part of the lung, and as the walls of the alveoli contain many blood-vessels, bleeding takes place into the alveoli.

In severe cases of blast, the person is found more or less injured from splinters, and a thin stream of blood trickles from the mouth and nose. The blood differs from the usual case of bleeding from the lungs in that it is not coughed up and consequently is not frothy.

In less severe cases, no bleeding may appear on the surface, but it is present in the lungs, and if any violent exercise is taken, this, by accelerating the flow of blood through the lungs, will increase the bleeding, and this may cause collapse of the injured person.

As a result of this, it is very dangerous for a person who is believed to have been exposed to blast to have a general anæsthetic.

Treatment:—A person who is known to or suspected of having been exposed to blast should be kept absolutely at rest, lying down and kept very warm. If it is available, oxygen should be administered.

II. THE ABDOMINAL CONTENTS:—Injuries produced to the abdominal contents include hæmorrhage from the surface of the liver and bleeding into the stomach and intestines.

These are usually present, in addition to the injuries to the chest already described, and the treatment is on the same lines.

III. THE EARS:—The human ear is a delicate mechanical device, so constructed that we are able to perceive sound waves of certain frequency. On the outside, we find the pinna or the ear of the layman, and this aids in hearing. In certain animals—the hare, for instance—the pinna is capable of being moved, and this helps to locate the origin of the sound heard. However, the human has lost this ability, but compensates for it by moving the head to fix the location of a sound.

Leading into the skull from the pinna is the ear opening, and across this is stretched, completely closing it, a parchment-like membrane, the ear-drum. It is the vibrating of this drum, in response to sound waves, that enables us to hear. Inside the drum is called the inner ear, and this is the place where the vibrations of the ear drum are transmitted to the sensitive nerve endings, which in turn forward the impulses to the brain, which distinguishes in certain frequencies familiar sounds.

Injuries to the ear occur to the drum or to the inner ear, and they are brought about by the violent displacement of air following an explosion.

One or both ears may be affected, more often one, and this is sometimes the ear on the opposite side, especially if the burst occurs in a confined space. The factor determining the injury would seem to be the position of the ear opening in relation to the bursting bomb.

Symptoms:—Deafness and a roaring noise in the ears are the most constant symptoms. The deafness is immediate and may be complete so that no sound can be heard at all; the patient describes himself as dazed and confused, and complains of a loud continuous roaring in the ears.

After a time, two hours to two days, the roaring usually subsides in one ear, but may persist in the other ear, combined with a complete deafness for a long time. Giddiness and pain may also be present, but are not so constant.

The ear drum may be burst by the pressure wave and this may give rise to bleeding from the ear. This perforation is a serious proposition, as infection of the inner ear may result.

Treatment:—Ear injuries may be prevented by the wearing of suitable ear plugs. The qualities which a satisfactory ear plug must possess are: (1) That it should fit the individual ear opening firmly and yet be sufficiently plastic not to inflict any injury upon it, (2) it should not contain any

skin irritant; (3) it should not crumble in use and allow fragments to remain lodged in the ear, and (4) it should be cheap.

Very many protective materials are adequate, but probably the most simple and economical is cotton-wool impregnated with vaseline or candle grease.

Another variety of protective device is a saucer-shaped pad of sponge rubber which fits over the entire pinna, and has the advantage that hearing is only slightly impeded.

If bleeding occurs, no attempt should be made to plug the ear, and the person should not be allowed to lie down with the bleeding ear uppermost. — *Irish Ambulance Gazette.*—*First Aid, Feb. 1941.*

TO RESCUE FLYING MEN

By DR. BRIQUET, *Lille, France.*

(Translated from the Esperanto.)

EVERY flying man possesses a parachute; but when he has to fly across the sea, he cannot, unfortunately, for lack of room, be provided with any special raft or lifebelt. Because one has to anticipate a possible fall in the sea, an unsinkable combination coat has been devised for him. Thanks to this, he will be able, in case of a fall, to avoid drowning and remain for a while on the surface, even if wounded or unconscious. If necessary, he will be able to await his rescuer for a whole hour or even longer.

Many different unsinkable coats have already been tried out but up till now they all present great disadvantages. Not long ago, a substance was invented which seems to possess every possible good quality. A Belgian firm has worked it out, using long fibres of a carefully selected cotton plant from the Island of Java. They have placed this material

between the outer layer of the combination coat and the

inner lining, and we learn that it affords the following great advantages: while flying, it is a sufficient shelter from the cold; it is far more flexible than leather; it is much more durable than India-rubber; it is six times thinner than cork.

This new combination coat covers the aviator from ankle to neck; if he falls into the sea he will immediately turn on to his back, while his head will stay sufficiently above the water. Notice how people will be able to help him to escape! The accident is often observed, either by another aviator flying near, or by sailors, or by near-the-sea inhabitants. Let us imagine that a seaplane is at once dispatched to discover exactly where he is lying. Do you consider that it is easy to discover the drowning man among the rolling waves? Indeed not! To render that easier, one might be able to fasten on the helmet of every aviator who risks his life over the sea a

small brightly-covered cap. Another attempt has been made in Belgium: it is interesting. In the pockets of the above-mentioned combination coat, they have placed some soluble colour powders; in this way, when the flyer falls into the sea there is formed around him a violently contrasting ring of colour which provides for his quick discovery. When the spot where he fell is sufficiently well marked, the flyer above circles round until the lifeboat arrives to pick up the unlucky man. A seaplane is, for many reasons, not so suitable as a

boat. But it is essential that the latter should travel quickly, and contain a well sheltered berth. The British Royal Air Force has several of such boats well equipped to assist airmen in danger. They contain several berths and all the means necessary for saving life. They have to keep in readiness the things required to revive and heat the rescued man, first on the boat and afterwards in the first-aid station on shore, because on such occasions exposure to cold is exceptionally dangerous.—*The Medical World, April, 1940.*

● Topics from Medical and Health Periodicals ●

Why Babies Smile

“THERE is no evidence to indicate that the smiles of very small babies are caused by conscious thinking”, ‘Hygeia’, the Health Magazine, states in answer to an enquiry.

“Observation with a movies camera has recorded that young infants often smile in their sleeps”, Hygeia continues, “but seldom when they are awake unless stroked. The smile seen on the baby during sleeps is thought to be of reflex origin, and unconscious act of which the baby may be entirely unaware. It should be remembered that the mouth and the lips are the most sensitive parts of the body in early infancy. Stimuli in this area from within and without are readily received and the reflex movements of some of the facial muscles respond to produce the smile”—*Texas State Journal, Sept. '41.*

Why A Boy's Voice Changes

THE change in a boy's voice during puberty is due to the action of the male sex hormone produced by the sex glands. Hygeia, the Health Magazine says in answer to an enquiry. “The change in voice is one of the secondary male sex characteristics. The male sex hormones cause the larynx to enlarge the voice cords to elongate and the voice to become deeper in pitch. Their change in larynx occurs so rapidly, as a rule, in the pubescent boy that perfect control of the cord is temporarily lost and the voice is likely to crack. Once the change is completed, the cords come under control in a lower key than before. When the female develops certain types of tumours which produce excessive amounts of male hormone, the voice may change along with the growth of a beard. After the removal of the tumour, the beard and change in voice will disappear.—*Texas State Journal, Sept. '41.*

Music While You Work

THE B. B. C.'s new feature ‘Music while you work’, according to the *Radio Times*, is proving both popular and successful. Employers who fought shy of the idea are coming round rapidly to appreciate its value in promoting the cheerfulness of their workers and so increasing the output.

Where work is largely mechanical, the worker will do much better if he is allowed to sing or whistle. If the ploughman can whistle his way along the brown furrows, why should not a factory worker also hum and sing at work? No one's work ought to be of such a nature all the time that he cannot lift his head or whistle a tune.

We remember years ago being connected with a food factory that turned out first-class cereal foods. It was in the days before the advent of elaborate machinery, when much of the work was done by hand. And as the workers rolled out the dough which was to be made into biscuit rolls, they would sing in unison some familiar song. The rhythm of the song not only relieved the monotony of the task, but speeded it up wonderfully. Moreover, the workers finished their job feeling comparatively fresh, where in ordinary circumstances they would have felt very much fatigued.—*Good Health.*

Hæmorrhage

HEMORRHAGE may be slight or severe—little or much. The bigger or deeper the wound, the more it bleeds. Blood comes from three sources: (1) It oozes from the tissues as water from a wet sponge. (2) It leaks out of cut or torn veins. (3) It spurts out of the arteries as it comes from the heart.

Bleeding stops itself by clotting. Blood clots or congeals itself in from three to five minutes.

Clotting is quicker if a handkerchief or piece of shirt or paper (tissue preferably) is put in the wound to give it something to congeal upon.—*Texas State Journal of Medicine.*

Nursing-room Suggestions

MANY things may be done even in the poorest nursing-home easier and more effective, and the patient more comfortable.

It is much easier to care for a patient who is on a high bed. If the bed is low it may be raised by placing blocks of wood, or boxes under the legs.

PROTECTING THE MATTRESS

The mattress may be protected by spreading a piece of water-proof material, or even newspapers under the sheet.

BEDSIDE TABLES

There should be two tables, a small one placed beside the bed, and a larger one holding the sickroom articles. Two boxes will serve in place of the tables. They should be covered with clean white clothes.

BED PAN

If there is no bed pan, a hand basin may be used. Place a rolled pillow under the patient's hips, and hold the basin firmly against the pillow.

DRINKING TUBE

In the absence of a glass drinking tube a wheat straw or a small teapot may be used.

HANDKERCHIEFS

If there are secretions from the nose or throat, small squares of clean, old white cloth may be strung on a thread, and fastened to the pillow.

Each square is used only once and then thrown into a bag that is pinned at a convenient place near the head of the bed. The bag may be made of paper or old cloth and the top folded down several times to form a cuff that will keep the top open.

At least once a day the bag with its contents should be burned, and another pinned in place.

SPUTUM BOX

If a sputum box is needed, an old cardboard box, a cone of paper or, an old cracked pot may be used. The bottom should be well covered with ashes. At least once a day the container should be removed and burned without removing the contents.

—*Treasure Chest.*

Giving Blood to Save Life

(Work of the Red Cross Blood Bank)

DURING 1940 over 400 people were given blood transfusion by the Blood Transfusion Committee, Calcutta. Of these 52 were supplied from the Red Cross Blood Bank. Nearly 800 subjects were grouped for blood transfusion and donors were even sent to station outside Bengal.

The Red Cross Blood Bank, Calcutta, was started, in December, 1932, in collaboration with the Indian Red Cross Society, Bengal Branch, to meet the increasing demand for transfusions and to avoid waste of time in selecting donors. It has been decided to provide an additional service by preserving blood in cold storage.

Storage of Blood:—The stored blood lasts

only ten days. After ten days the plasma is removed and stored as such to be used in the case of any sudden loss of blood and if whole blood is not available. The plasma lasts two months. After this period the plasma is concentrated and kept like concentrated area. Its original volume is restored by adding distilled water.

The Bank receives blood as free gifts from humanitarian donors; in exchange for blood issued and at a small cost from volunteers in Calcutta prisons. Blood is issued in exchange for blood which may be incompatible for donations in cash and free to indigent patients who have no relatives or friends. Blood is grouped and matched for general use, but a safe 'universal donor's blood is always available for emergencies. The Bank is controlled by a Committee with the Surgeon-General as President and the Director of Tropical School as vice President. An honorary medical staff helps in the preliminary examination of the donors, who are later tested thoroughly.

The service of supplying donors of blood to hospitals and nursing homes in India was started 17 years ago in the laboratory of the Imperial Serologist, School of Tropical Medicine. The donors were mostly Europeans and Anglo-Indians and were paid a comparatively high price. From 1934 Indian donors are also enrolled. In the hands of competent operators the donor of blood runs no risk whatsoever. Although hundreds of donors have been supplied since the service started, no serious complaint had been received so far.—*Practical Medicine.*

The Open Window

DURING the warm summer months the open window presents no problem at all. It is when the cold winter weather sets in that people are so apt to fight shy of fresh air. Yet good ventilation, even in the coldest weather, is one of Nature's principal defense against disease, as well as a most important aid to health.

Less than thirty years ago, a well-known British physician discovered by accident that the dreaded cerebrospinal fever microbe could not live in cold air. The result was, spotted fever made no headway where good ventilation was installed.

A constant supply of fresh air is also the main cure and preventive of tuberculosis, as it is of many other diseases, which our forebears took resignedly as the will of God.

After all, Nature effects her own cures, if we can but bring ourselves into harmony with her beneficent laws. The dog merely licks its out paw clean, and so aids the natural healing of the wound. So, the doctor in a more elaborate way, of course, assists Nature in her desire and ability to heal.

Let us then, as far as we possibly can, avoid confinement to stuffy, germ-laden, ill-ventilated rooms, keep our windows open night and storms of winter. There is no cosmetic that can produce a complexion so fresh and vivid as Nature's great out-of-door tonic, free to all who will use it.

—*Good Health.*

The A. B. C. of Vitamins.

A

Oh, fine and fat was Ralph the rat,
And his eye was a clear, cold grey.
How mournful that he ate less fat
As day succeeded day.
Till he found each cornea daily hornier,
Lacking its vitamin A.
"I missed my vitamin A, my dears,"
That rat was heard to say,
"And you'll find your eyes will keratinize
If you miss your vitamin A."

B

Now polished rice is extremely nice
At a high suburban tea'
But Arbuthnot Lane remarks with pain
That it lacks all vitamin B,
And beri-beri is very, very
Hard on the nerves, says he.
"Oh, take your vitamin B, my dears,"
I heard that surgeon say;
"If I hadn't been fed on standard bread
I shouldn't be here to-day."

C

The scurvy flew through the schooner's crew
As they sailed on the Arctic sea.
They were far from land and their food was
So they got not vitamin C. [canned,
For "Devil's the use of orange juice,"
The skipper had said, said he,
They were victualled with pickled pork,
my dears,
Those mariners bold and free,
Yet life's but brief on the best corned beef
If you don't get vitamin C.

D

The epiphyses of Jenima's knees
Were a truly appalling sight:
For the rickets strikes whom it jolly well
If vitamin D's not right, [likes
Though its plots we foil with our cod-liver
Or our ultra-violet light. [oil,
So swallow your cod-liver oil, my dears,
And bonny big babes you'll be.
Though it makes you sick its a cure for the
rickets
And teeming with vitamin D.

E

Now vitamins D and A, B and C
Will ensure that you are strong.
But that's no use; you must reproduce
Or the race won't last for long.
So vitamin E is the stuff for me,
And its praises end my song.
We'll double the birth-rate yet, my dears,
If we eat vitamin E.
We can blast the hopes of Marie Stopes
By taking it with our tea.

—The Birth Control News.

A Crude Vegetable Oil for the Local Treatment of Burns

NATURE is bountiful for the well-being of humanity. The whole of the plant kingdom not only embraces the food supply of all living beings, but also it supplies varieties of remedies to relieve their sufferings. From time immemorial mankind set themselves for

the detection of these remedies. Either by accident or by close observation or systematic trials and experiments many of these herbal remedies have been harnessed for the benefit of mankind. We give below an account of a vegetable oil which can be used both as an illuminative, as well as an emollient and alterant for the local treatment of burns. We will also show how it corresponds to the modern scientific conceptions.

The oil under consideration is known as Pulan oil; in Sanskrit it is called *Punnagam* and in English it is named Domba oil. In India the oil is expressed from the seeds. The latin name of the plant is *GALOPHYLLUM INOPHYLLUM*, and it is of the natural order *GUTTIFERAE*. In Orissa, the crude oil is extensively used as fuel for burning lamps, as well as for the local treatment of burns. This plant grows near about the sea coasts all over the world.

The Indian samples are of a dark greenish colour due to greater amount of green resin contained therein. The continental samples are of a brown colour. This is a glyceride of palmitic, stearic and oleic acids. The oil represents 72.5 per cent of the kernel and the unsaponifiable portion is about 1.5 per cent.

If we go back to much previous dates and search into the old Indian system of medicine (Ayurvedic) we find that even in such olden times things used for the local treatment of burns contained most oleic acids, and antiseptics such as phenols and benzols e.g. Rukhtopuri, narikel, karpas, linseed oil; mango bark, til, mangistha, haritaki methi, etc.

The advantages of this indigenous preparation are manifold. It is cheap, so much so, now-a-days, this vegetable oil is commercially used in soap making. It is handy and always ready for use and can safely be kept in every household. This can also be successfully utilised in the local treatment of rheumatism. It is used in Orissa as an illuminative.

During the present economic crisis and scarcity of medicine due to the present war, treatment has all the more become difficult and expensive. Attempts should be made to utilise the natural resources of the locality. In this product we find a satisfactory answer to this problem, the oil being useful and available throughout the world. During the present war when the incendiary bombs are so frequent, every household should possess such a remedy and every soldier should carry with him a small stock of it. This is effective, harmless, easy and costs very little.—S. D. Sanyal, B.Sc., M.B., Calcutta.—*Calcutta Medical Journal*.

Protect Your Child from Diphtheria

DIPHTHERIA is one of the dangerous ailments, and the parents must protect their children from it. Adequate protection against diphtheria is within reach of every one.

The germ is found in large numbers in the throats of all persons suffering from diphtheria and occasionally in the throats of healthy individuals who may not have the disease themselves, but are capable of transmitting

it to others; these persons are called "carriers". The presence of the germs in the nose or throat causes the formation of grayish white patches of membrane. This germ does not invade the blood stream, but remains localized in the throat, where a very virulent poison or "toxin" is produced, which is carried to the whole body and produces the general symptoms associated with diphtheria.

A half century ago nothing was known of the real cause of diphtheria, and hence nothing was done to isolate the infected case. Thousands of victims were sacrificed to its ruthless ravages. Today the germ may be clearly seen and studied under the microscope, and the disease easily combated with antitoxin, if discovered in time.

The disease is transmitted from one person to another by coughing, sneezing, kissing, handling the same pencils, books and toys; and sometimes by food and milk.

How may a person know he is coming down, with diphtheria? If one knows he has been exposed to it, he will watch for symptoms to develop in from two to seven days; or, if unaware of having been exposed, he may feel as if he were coming down with a cold. The duration of the disease is from a few days to a few weeks, usually about one or two weeks.

Many cases of diphtheria are overlooked because of the similarity of tonsillitis or a common sore throat. The throat becomes red, swollen, and inflamed; swallowing is difficult; the tonsils are enlarged, and may have patches of a grayish-white membrane. Later these patches coalesce and form the characteristic membrane, which may bleed on any attempt to remove it. Breathing becomes difficult because of the swelling in the throat, and there is blueness of the nails and lips.

There is a gradual rise in temperature, not usually so high as in tonsillitis, but it may reach 103°. There are general aching pains, especially in the legs and back, with muscular weakness and marked general prostration. If antitoxin is not administered, the disease progresses rapidly and death occurs.

Do not delay; early diagnosis and treatment mean success—delay may mean death or muscular paralysis. The patient is much better off in a hospital, but may be cared for at home if proper precautions are taken.—*The Citizen*.

Alcohol—a Devil's Broth

HOW widespread and how serious are the consequences of strong drink was made clear by a symposium in Philadelphia sponsored by the Research Council on Problems of Alcohol. Six sessions were necessary for the reading of papers by distinguished scientists; the general public was admitted to the final gathering. The audiences included physicians, psychiatrists, sociologists, lawyers, clergymen and persons broadly interested in human betterment. The *New England Journal of Medicine* gives a comprehensive summary of the addresses.

Dr. Winfred Overholser said that tuberculosis, cancer, syphilis, mental disease and infantile paralysis were now receiving competent medical attention. Alcoholism was the

greatest public health problem at the present time which was not being systematically attacked. More than 100,000 persons were suffering from alcoholism in this country. Dr. Timothy Leary, medical examiner of Boston, reviewed a series of 1,000 alcoholic deaths. Only one third died from acute intoxication. The others met death from direct results of their drunkenness, such as injury, strangulation from unmastered food or vomitus, rupture of the upper opening of the stomach or hemorrhage due to vomiting, frost-bite gangrenes pneumonia and other conditions related to exposure and lack of vitamins.

Attention was called by another speaker to the effect of strong drink in producing crime and highway accidents, in shortening life and in harm to offspring. It precipitates seizures of epilepsy and aggravates attacks. It reduces mental and physical efficiency. Convictions for drunkenness in Boston were proportionately nearly twice as great as in Great Britain. One third of all fatal traffic accidents involve a driver or pedestrian under the influences of liquor.

Two speakers showed how traditional habits of thought led to general indulgence in strong drink. Said Dr. Jeremiah P. Shalloo of the University of Pennsylvania: "It is culturally imperative to toast the bride, christen the ship, seal the bargain, salute the New Year, celebrate good fortune, 'wake' the dead, and even symbolize and ingest the blood of the Saviour through the medium of alcohol." He wonders that more people do not become drunkards.

Dr. Leo Alexander, of Boston, advocated the labelling of all alcoholic beverages under the provisions of the Food, Drug and Cosmetic Act of 1938. He suggests this wording: If this beverage is indulged in immoderately, it may cause intoxication (drunkardness); later, neuralgia and paralysis (neuritis) and serious mental derangement such as delirium, tremors and other curable and incurable mental diseases, as well as kidney and liver damage.—*Good Health*

War and Disease

WHATEVER the outcome of the present war, we may be sure that disease will be the final victor, accounting for the largest number of victims and carrying on its deadly work long after the voice of the last gun has spoken. It has been said the last war was exceptional in that for the first time the number of casualties from military action exceeded the number of victims of disease. That may have been true of certain armies during the period of hostilities, but it is emphatically not true when the victims of disease among civilians are taken into consideration. Every war produces conditions favouring the spread of disease, of which mass movements of population is one of the most important. In preparation for war the strength of armies is increased by recruits from villages and agricultural districts as well as cities. The former fall ready victims to such diseases as measles and mumps, meningococci meningitis, and the pneumonias.—Frang Boudreau M.D., N.Y.—*The Medical Woman's Journal*.

Resuscitation in Cases of Drowning

THERE are several widespread misconceptions concerning the possibility of resuscitation in cases of drowning. Of these most important are: (1) That immersion for more than four or five minutes is invariably fatal. (2) That in an apparently drowned person absence of the ordinary signs of life—notably pulse beat, respiration and audible heart sounds—means death, and that if these are absent artificial respiration is unnecessary. (3) That artificial respiration need only be kept up for a limited time, half an hour to an hour. These ideas are all ill founded. It is possible for a person to have been under the water for upto half an hour and still live. All signs of life may be absent in these cases even for hours. Life under these conditions may still be present, and the person may be revived. Artificial respiration should be kept up for many hours in cases of apparent drowning. The only really safe plan is to continue efforts until rigor mortis has set in.

In cases of drowning quickly remove the victim from the water and place him on ground or other hard surface. Start artificial respiration at once. The only method to employ is Schafer's Prone Pressure Method. Any foreign body in the mouth and throat must be removed but do not stop to loosen patient's clothing before starting artificial respiration. A brief return of natural respiration is not a certain indication for stopping the resuscitation. Not infrequently the patient after a temporary recovery of respiration stops breathing again, when artificial respiration should be re-started. When the operator is to be changed, it must be done without losing the rhythm of respiration. When the patient revives, he must be kept lying down to relieve strain on the heart. — *Medical Bulletin*.

Mental Strain

THE human machine is wonderfully adapted to withstand the effects of sustained effort, sudden change and abnormal fatigue.

In healthy individuals, the powers of reaction and resilience are usually able to meet emergency calls, and cope with unseen enemies lurking even in the best environments.

But there is a limit to the endurance of nerve and brain which cannot be overstepped with impunity.

The great secret of mental serenity and physical well-being is to encourage the powers of resistance, inherent in the organism, by local observance of the laws of health and constant attention to the details of rational living. There is no royal road to the harmonious life which is the reward of self-knowledge, discipline, industry and moderation in all things.

We must live in alliance with Nature, or suffer and go under. In the complex vital processes there is no hard and fast line betwixt the mental and physical. The brain, the heart and other vital organs are linked up with the

remotest parts of the organism, and what affects the part affects the whole. The body is comparable to a perfect republic, in which each tiny cell is a sensitive citizen organically in touch with its neighbours, and the central directing power.

There is diversity of function, but unity of command. If the "power-house" be damaged or inefficient there will be loss of control and co-ordination throughout the system; and if the outlying members be in trouble there is disharmony at headquarters, often accompanied by pain and threatened collapse and disintegration.

Mental strain is a prolific source of many maladies, and its causes are as varied as its effects. High pressure of work in shop, factory or office is responsible for much nerve and brain trouble and premature breakdown. Corrosive, dull monotony is just as bad. Amelioration was prior to the war happily making headway in the form of shorter hours, scientific ventilation and lighting, canteens, and medical supervision. — *LACHLAN GRANT, M.D., D.P.H.—Medical World.*

FOR babies upto 9 months, the dirtiest foster-mother is generally better than the cleanest artificial milk. (*Jl. of C.M.A.*)

In Lighter Vein

KISSING is responsible for a great deal of heart trouble. — *Medical World.*

* * *
A business man has left his wife because she recently started dieting to reduce her weight in spite of his vow to stick to her through thick and thin. — *Medical World.*

* * *
ACCORDING to the Minister of Transport the following are entitled to have compartments reserved for them: infectious diseases, corpses, high service officials, lunatics, convicts and Cabinet Ministers. — *H. Affairs.*

* * *
Doctor :— 'Strong coffee isn't good for your husband, Mrs. Brown. It excites him too much.'

Mrs. Brown :— 'But, doctor, weak coffee excites him even more.' — *Medical World.*

* * *
Child :— 'Black hens are clever than white ones, aren't they, mother?'

Mother :— 'Why, dear?'

Child :— 'Because the black ones can lay white eggs, but the white ones can't lay black eggs.' — *Treasure Chest.*

* * *
Teacher :— 'You, lazy fellow, when George Washington was your age, he was the most brilliant boy in the class!'

Boy :— 'Yes sir! And when he was your age, he was the President of the United States.' — *Treasure Chest.*