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HEALTH

A Journal Devoted to Healthful Living

Estd. Jan. 1923.

EDITED BY

DR. U. RAMA RAU, M.L.C.

AND

U. KRISHNA RAU, M.B., B.S.

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Edited by Dr. U. Rama Rau & U Krishna Rau M.B.B.S

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EDITORIAL

1940

YET another year has rolled by and our "Health" will be celebrating its eighteenth birth-day on the 1st of January, 1940. Seventeen years is a pretty long life for a journal like "Health", especially in India, and its existence for such a long period, despite odds and ends, is due not merely to the tenacity of purpose of the Editors and proprietors of 'Health' to unceasingly perform their vow of propagating health tenets to the masses and visualise a healthier and happier India, but also to the grim determination of its votaries to read 'Health' and be profited by it, notwithstanding the fact that they claim to know more of health topics than 'Health' could teach them. This is no doubt a healthy sign and there is every reason to suppose from past record, that the future of "Health" is brighter.

WE WISH YOU
A HAPPY, HEALTHY
NEW YEAR

The year just past is one of gloom and nerve-racking, due to the declaration of war by Great Britain and France against Germany. The whole world is now involved in a chaotic and destructive fight, where millions of lives would be lost. But many millions would be in a state of anxiety and nervous tension and consequently, would suffer from impaired physical and mental health. It is in times like these, that people should keep

calm and sober and keep their bodies healthy and trim. As India is also praticipating in this war, she must try to maintain robust health and help bring the war to a victorious end. The food problem will be a source of trouble during the pendency of the war and even for several years thereafter, due to restricted supply. This must be overcome by frugal living. By frugal living, we mean, partaking enough of nourishing food and eschewing all luxurious articles such as coffee, tea, chocolates, tobacco etc. — which will confer a double advantage of health and economy. Daily open-air exercises, baths and freedom from worry will also prove to be of considerable help to maintain health.

Last year,we dealt in our "Health", with such outstanding topics as "Air Raid Precautions" and Blood Pressure and War of Nerves—topics which are intimately connected with war and prevention of war accidents and we are sure our readers will have read and appreciated them. The food problems incidental to war have not escaped our attention and such articles as 'Nutritive value of Rice', 'Some Errors in Indian Diet',' Constipation' &c., will be found useful and interesting. 'Causes and Prevention of Blindness','Common Eye Diseases and Their First Aid Treatment',are also wartime articles, as blindness and eye affections are common occurrences in war and are, therefore, worthy of note. In short, we have done all that we could, to ease the nerve tension before and during the war and point the way to health.

We do not know when the war will end, though we know this for certain that the Allies, having embraced the cause of freedom, justice and righteousness, will score a victory over brute force, iniquity and lawlessness. The surest way to gain victory is for the nation to maintain their health and strength and our "Health" will continue to guide them during these troublous times and for ever afterwards. We hope we can count upon public patronage and support in the future as in the past.

Another cause for gloom during 1939 was the abrupt termination of the Congress Ministry and all their health activities tending towards the welfare of the rural population. We trust, however, the clouds will soon clear up and the Congress Ministry will begin to function as earnestly and zealously as hither-to-fore and continue their good work without serious break or impairment.

On this auspicious occasion,we offer our hearty greetings to all our subscribers, contributors, and advertisers and wish them a happy and healthy *NEW YEAR.*

WAR AND DISEASE

"The assembling of great masses of men under conditions in which sanitation is difficult, if not impossible, and the movement of great numbers of men across wide areas of country where they come in contact with new populations invariably mean the spread of disease,' The Journal of the American Medical Association asserts.

"The louse that spreads typhus fever, the rats concerned with plague, and many another insect and animal carriers of disease still exist, ready to demonstrate, when the favourable opportunity comes, that man is but a morsel in the great cosmic scheme and that when he seeks to destroy himself, Nature stands cynically ready to assist him.

"In practically every war for which accurate records are available, disease has always caused more deaths than military manœuvres and engagements. Typhus, plague, cholera, typhoid, dysentery, pneumonia and influenza do more damage under military conditions than can be brought about by dynamite, torpedoes, gun powder and poison gas. As Dr. Hans Zinsser has said, 'Epidemics get the blame for defeat ; generals the credit for victory. It ought to be the other way around.'

"In many a great war of the past, epidemic has come to terminate the conflict."—*Hygeia.*

On Management *of* Normal Labour

By

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IGNORANCE and prejudices are probably the main causes of high infant mortality and maternal deaths in India. In comparison with other civilised countries, it is really alarming, but nothing much has been done in this direction. If the general public could be enlightened with the preliminary knowledge of health and hygiene, this land of ours would be much happier than at present. Many deaths occur in our country as a result of sheer ignorance and want of medical help and infant mortality and maternal deaths are probably the highest. As we cannot expect a good fruit from a sickly plant, so our descendants cannot be stronger and healthier unless the mothers are properly nourished and well cared for during their pregnancies. In rural areas the question of trained dais is out of imagination; so, everyone will have to depend upon the so-called Dais who have got no idea of the medical science. It is also not possible in our country to get the help of a medical man in every case of delivery. So, as soon as the labour pain starts, the expectant mother should take an ounce of castor oil, which will help the process of delivery. In the primipara, it generally takes a longer time than in multipara. The expectant mother should be encouraged that everything will be well. During the first few hours, she may walk about in her room, but as soon as the pains become more severe, she should be in her bed. Generally delivery takes place within half an hour of passing of fore-water. But due to the weakness of uterine muscles or some other causes, delivery may be delayed. In such circumstances, it would be advisable to take the help of a medical man. In no circumstances the untrained Dais should be allowed to examine the maternal parts, as they may carry infection to these parts and give rise to puerperal sepsis, which accounts for a considerable number of maternal deaths in our country. The knife or the scissors which may be used for cutting the umbilical cord, must be boiled for at least 10 minutes, as many new-born infants die of umbilical sepsis or tetanus due to ignorance of asepsis. The umbilical cord should not be cut just after delivery. In cutting the cord, care must be taken not to injure the navel by stretching the cord. Two light ligatures should be tied on the cord, the first one two inches away from the navel and the cord should be cut in between the two ligatures. Just after the birth of the new-born infant,the mouth should be sponged out and the infant should have a warm soap water bath. It is a good plan to give a tea-spoonful of castor oil to the new-born infant, thereby cleansing the bowels. In our country, the new-born infant and the mother are generally confined in a dark, damp and ill-ventilated hut or

room, which must be discouraged by all means. During this period, special care should be taken about the bed and other comforts, but unfortunately owing to ignorance, these are totally neglected.

A HEALTHY MOTHER AND CHILD.

The newborn infant should be allowed to suck the mother's breast, which will stimulate the secretion of milk. Though milk secretion generally takes place on the 3rd or 4th day after delivery, mother's milk is the best food for the new-born infant, and as far as possible, artificial feeding should be avoided.

The delivery of the placenta generally takes place within half an hour of the birth of the infant, and if it does not occur within this period, the lower abdomen should be kneaded, which may bring about contraction of the uterus, thereby expelling the placenta. If this procedure fails, a doctor should be summoned immediately to attend the case. At this stage also the untrained Dais should not be allowed to handle the maternal parts. After the delivery of the placenta, the external parts should be washed and cleansed with warm water and a binder should be applied on the lower abdomen. The mother should take light liquid food for the first few days and should have absolute rest in bed for about a fortnight.

Defective Vision of Students—

ITS PREVENTION AND CURE

By

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In the November 1938 issue of 'Health', "Cause of Defective Eyesight of Students" was dealt with. It now remains to indicate the means of its prevention and cure.

For the prevention and cure of of defects of the eye, it is imperatively necessary that the bad habits that produced these defects should be corrected. In addition, a well-balanced diet, containing sufficient proteins, carbohydrates, fats, vitamins, salts, calcium, iron and phosphates, should be substituted in place of one-sided disproportionate diet. The diet of growing children should consist of milk, butter, ghee, codliver and fish oils, meat, liver, eggs, dhals, honey, hand-pounded rice, whole wheat, pearl barley (instead of over-milled rice-flour and barley), fruits of various sorts, such as, mangoes, bananas, pine-apples, plums, nuts, bedanas, pomegranates, oranges, lemons, grapes, apples, germinating cereals, gurh, green vegetables, root vegetables, sugar cane, etc. These food-stuffs should be mixed proportionately to supply the needs of the growing children to constitute a mixed diet, necessary for the supply of proper nutrition to the delicate coats of the eye and the fine ramifications of the optic nerve, constituting the retina. But, India has now been reduced to the status of the poorest country in the world, and as such, can ill-afford to pay for so-called infant diet, imported at high cost. India in her extreme poverty, must formulate her special diet, such as would be cheaper, and at the same time well-balanced, having full caloric value. This difficult problem of the cheapest and yet the most nutritious diet had been solved for us by the sages of yore. The germinating five cereals (panchasasya) are the cheapest and the best diet for modern India, which should follow the motto, "Plain-living and high-thinking." Thus, if the eye sight of the students is to be improved, if the brain and nervous system are to be improved, the students must partake of the plain food, consisting of germinating cereals with salts, chillies, jaggery, or gurh, as is still used in the Punjab and Rajputana.

All right-thinking Indians should try to correct the perverted mentality of young folks who consider spectacles as a fashionable thing and ornamental paraphernalia. This reminds one of the story of Aesoph's Fables, about the jackal (which is known to all students) whose tail had been cut off as a punishment by a farmer. This tailless jackal wanted to cover his shame by trying to introduce tail-cutting as a fashion among his fellow-creatures. Spectacles in young age similarly ought to

be considered as a sign of shameful failure of modern India to keep up the standard of eye-sight of the students at the normal range.

It should, therefore, be the duty of the guardians and teachers to know something about Dr. Bates's system of better sight without glasses. Glasses are but artificial aids. Something like crutches to a lame man. They do not cure the cause, but only mechanically correct the defect. Once the make-shift policy of covering the disability of eye-sight by glasses is adopted, no attempt at removing the cause is made. Thus neglected, the cause continues to act towards the worse. The glasses, continually used, not only perpetuate the existing defects, but gradually allow the defects to grow worse. The consequence is that higher power lenses are required to be substituted for the lenses hitherto used, the increasing defects ultimately lead to grave ocular lesions. Higher minus power may produce detachment of retina, etc. In order to avert such calamities, attempts should be made to cure myopia radically.

It is well-known that there is an intimate connection between the mind and the body. This connection between the mind and body is established through the central nervous system. The brain is the power house of the central nervous system. All nervous impulses are transmitted from and to the brain which again influences or is influenced by the mind. From the brain originate twelve cranial nerves, six of which (2nd to 7th) supply the eye. The second or the optic nerve which ramifies as the retina, is considered by some to be something like a lobe of the brain. The cervical sympathetic and parasympathetic also supply the eye. The eye is, therefore, much more intimately connected with the mind through the brain and sympathetic and parasympathetic nerves than the rest of the body. Hence, it follows that mental strain, in the form of anxiety of passing an examination, fear, nervousness, worry, overwork, overstudy in preparing for an examination, bereavement, poverty, severe punishment, etc.,is an important and potent cause of defective vision. Again at an early age, when the temperament is delicate and the nervous system is impressionable, then, naturally enough, mental strain affects vision, more easily from slight causes, than in after life, when the ups and downs of life have imparted a power of endurance to strain and stress. Then, in the transition period of adolescence and youth, when the sexual and endocrine functions are being established, there is a psycho-physiologic strain upon the nervous system, which affects eye-sight from slight disturbing causes.

Thus, it is quite clear that prevention and cure of defects of vision, arising from psycho-physiologic state of adolescence,requires removal of the cause, and not spectacles. In order that prevention and cure of defective vision may be successfully treated, it is necessary that there should be mental relaxation, that there should be relaxation of the nervo-muscular apparatus of the eye.

The problem of food regulation has been solved by indicating the adequate supply of simple but nutritious well-balanced food full of vitamins. But, it is also necessary that the digestive organs, namely, the teeth,

the stomach, the pancreas, the liver, and the intestines, should properly function so as to completely digest the food. Then again, the metabolised nutritive products of digested food, should reach the eye in sufficient quantity and good quality. The channels through which the nutritive products reach the eye, are the blood vessels and the lymphatic channels. Therefore, the blood-pressure should be regulated. The centre which regulates blood pressure is situated in the medulla oblongata at the upper part of the spinal cord which is located within the neck. Therefore, swinging of the neck, and exercise and massage of the neck, are necessary for the prevention and cure of defective vision. The swinging produces relaxation ; and exercise and massage of the neck regulate the tone of the nerve centre and sympathetic and parasympathetic ganglia (that are situated in the neck) which govern the lymph and blood supply of the eye. By these scientific processes, the radical treatment should be done.

How to remove the local causes of eye-strain ? Some of these local causes may be removed by avoiding reading in dim light or in very strong light, by avoiding reading while travelling on a moving vehicle, by avoiding moving pictures, by avoiding looking at the sun or at strong light ; in addition to these, by holding the book at a distance of from 9 to 12 inches directly in front and not in a slanting way, by keeping the source of light backward so that the light falls on the book and not on the eyes. When these are properly done, it remains to give the eyes relaxation from straining by blinking frequently and regularly. The student should not stare at his book, but should read with usual relaxation of the eyes with frequent blinking. To those who have already taken to spectacles, my advice is to read without glasses for a few hours in the day when the light is good by holding the book properly as indicated.

Palming, *i.e.*, covering the closed eyes with the palm of the hand for a minute or more after reading for quarter of an hour, gives the eyes rest and relaxation and prevents strain. Palming is an effective method of guarding against eye strain. Looking at green trees, or the blue sky, is also soothing to the eye, and relieves eye strain. When the eyes are tired, then, sprinkling cold water on the closed eye relieves eye-strain, and gives tone to the tired organ. Swinging the body from side to side, and forward and backward, while relaxing the muscles of the neck at the same time, aids relaxation of the body and mind. After reading for some hours before going to sleep, the student should wash his face, and sprinkle water on closed eyes, and turn his mind away from the subject he read, to prayer and meditation of God. This will induce natural sleep, free from dreams, and relax the mind and brain from the strain of reading long hours. Early morning, after rising from bed, it is the usual practice to wash the face and eyes. Cold water should be sprinkled on the closed eyes at that time. This will aid the prevention and cure of defects of vision.

Looking at the moon with eyes open, is a pleasant way of soothing the tired eyes. A name of the moon is *Sitangshu, i.e.*, the soothing-rayed satellite. The rays of the moon

produce relaxation,and sedative effect on the muscles and media of the eyes.

The Rig Vedas reveal that the sun is the source of day-light, and the bestower of sight. In a lake within a cave in America, where sunlight cannot penetrate, the fishes are blind, and cannot see even when brought out of the dark lake. The power of sight of the eyes of these fishes, have not developed for want of day-light. Thus, sun's rays are practically bestowers of sight ; but, there are certain rays which are harmful when directly falling on the retina. Thus, it is a fact that ultraviolet rays produce sun blindness in rabbit's eyes after half an hour's exposure. It is, therefore, advisable to follow the ancient rules of sunbathing with the eyes closed, as is done in Surya-Namaskar. This sun-bathing on closed eyes should not be done for more than 10 minutes at a stretch. The tonic action of sunbath on the eyes, was thoroughly discussed in my articles on " Rising Sun " in 'Health'.

Eye exercises are necessary to strengthen the external muscles of the eye bulb, to increase the power of nervo-muscular mechanism of accommodation, to increase the acuity of near vision, and to increase the power of distant vision. This is done by keeping the eyes relaxed, and in natural position of rest. Then, the student should look at an object at the lowest level at a distance, and again, at an object high up, so as to move the eye-bulb up and down. Perform this up and down exercise six times. Then, look at an object at a distance on the extreme right, so as to move the eye-bulb from side to side. Perform this side to side exercise six times. Then, look round at distant objects in a circle thus :—right side, downward, leftside, upward, right side, and so on, in a circle, slowly, and gently, four times. Then, perform the circular movement exercise, in the reverse circular direction, *i.e.*, from right side, upward, left side, downward, rightside, circularly, so as to turn the eye-bulb round and round, in a reverse circle. The reverse circular exercise should also be performed four times. The student should be cautious not to strain the eyes. He may begin with less number of times as indicated above, and gradually increase the number.

Eye Accommodation Exercise.— The student should hold up a small object, such as a small flower, 9 inches in front of the eyes. Then, look at the flower with the right eye, the left being closed, and next look at a distant large object, such as a tree, or building, and, so on. Next, close the right eye, and look at the flower with the left eye, and then, at the distant object, and, so on. This uniocular exercise should be done ten times with each eye, or less if tired. After that, binocular exercise of accommodation with both eyes together, should be done, looking at the near point, and then, at the distant point object. The student should fix binocular near vision on the flower at 9 inches in front of the eye; then relax the eye for distant vision on the far distant tree or building. Then, near fixation, and distant relaxation, and so on, ten times. These accommodation exercises tone up the nervo-muscular mechanism of the intrinsic muscles of the eye. These fixation and relaxation accommodation exercises should be done standing in a shaded place, where no rays

of light fall on the eyes of the student from the side or the front.

To increase the acuity of near vision, eye exercise is best performed by central fixation. This is done by the student looking at a line in a page of the book, and then, concentrating the sight on a central word in the line. Then, the student should close the eyes, and imagine to see the line, with the central word vivid before the mind's eye, and clearer than the rest in that page of the book. Now, he should open the eyes again, and look at the word as before, more acutely and vividly, concentrating his vision on it, than the rest of the line and the page. Close the eyes again, and imagine to see as before. Open the eyes again, and, so on. The student should repeat the same process of central fixation with one eye at a time, and then, with both eyes together, six times each. Central fixation exercise increases the acuity of near vision, by improving the power of the Macula Lutca, the most sensitive spot of the retina.

The student should also increase his power of distant vision by exercise of the eye. Eye exercise for distant visual acuity with Snellen's Test types which should be hung on the wall at a distance of 20 feet from the seat of the student on exercise : The student should do fixation on a single letter one by one from the top line, containing biggest letters, gradually downwards, to the smallest letters in the bottom line. This distant vision exercise should be practised in a well-lighted room with diffused day light, not in a room electrically lighted, nor in direct sun light. Every day 15 minutes' exercise should be practised.

It has been said that proper regulation of endocrine and sexual functions, in the transition period from childhood to adolescence and youth, also helps the prevention and cure of defective vision. In order that the equilibrium of endocrine and sexual functions, during this unstable transition period of life, may be established, it is necessary to help nature with sex hormones and correlated endocrine hormones, judiciously administered. The recent researches on these hormones (the chemical composition of which have been definitely found out) have made it possible to synthetise the same in the laboratory artificially. Moreover, it has been possible to derive the hormones from vegetable sources. This last discovery in America of hormonic principles in certain plants, recalls the important observations of the ancient sages of Hindusthan. The Rishis noted that Somerasa and Brahmi juice rejuvenated, and stabilised the endocrine-sexual complex functions, so as to bestow health and long life. It is therefore advisable that young folks, males or females, suffering from indifferent health, and neurosis, and unstable equilibrium of endocrine-sexual complex functions, be given syrup Brahmi with fresh milk, which will supply and stabilize the hormone-vitamin requirements. This is a time-honoured remedy which supplies hormone-vitamin and brain-nerve tonic principles, and, is free from the over-stimulating effects of over doses of synthetic laboratory or animal gland hormones.

The foregoing are a few scientific directions for the preservation and improvement of vision. They are based on the teachings of Ancients and of Moderns like Dr. Bates modified by my own experience to suit the needs of Indian students. I shall consider my labours fully rewarded if its publication in the ' Health ' proves to be beneficial to the young hopefuls of India.

Disinfection

By

G. N. Aiyangar,

Vijayanagaram.

By disinfection is meant, the destroying of the particular germ of an infectious disease. This is carried on by disinfectants, which destroy poisonous organisms causing the spread of the infection of communicable diseases. Disinfectants are mostly confused with deodorants. Deodorants are those that only destroy offensive smells, whilst disinfectants destroy the germs of infection. No useful purpose would be served by only knowing that a particular substance is a disinfectant. The proportion in which the disinfectants should be used, and the degree of their concentration should also be known. The mere sprinkling of a disinfectant solution also would be of no avail, except for one's own satisfaction.

Disinfection can be done either by natural, physical or chemical process. Of natural disinfectants, sun-light and fresh air are the best ones and they kill most of the germs. Direct sun-light has the power of killing typhoid and tubercle bacilli or germs. The habit of placing bedding, clothes and other articles exposed to the sun daily by the poor, is a very good one, since any germs harboured therein are killed by the sun-light. The oxygen in the air, when the things are exposed to the open, also acts as a poison on the germs.

Heat comes under a physical disinfectant. It can be applied in various forms for purposes of disinfection.

Burning is one of the best methods of disinfection. Articles which are not costly and are suspected to contain discharges likely to spread the infection should invariably be burnt. Burning should be carried on only in a furnace, as open air burning would carry on the infection through unburnt particles.

Steam disinfection is more powerful than dry heat disinfection. Any germ is killed by boiling the infected clothes for a certain time.

Steam disinfection is done by means of steam disinfectors. The advantage of steam disinfection is, that it penetrates into all crevices and corners which dry heat disinfection is unable to do. The articles are also not damaged by such disinfection.

There are a number of chemical disinfectants. These disinfectants have a good effect on the germs, more especially in warm water. A good disinfectant is one which has better germ-killing properties, suited for ordinary uses, and at the same time does not injure those that handle it.

The chemicals ordinarily used for purposes of disinfection are, Carbolic Acid powder, Lime, Perchloride of Mercury, Mercuric Iodide, and the Coal-Tar products.

Carbolic Acid powder is of great value as a disinfectant. Quick Lime is also a popular disinfectant which can be used for purifying water as

well. Lime should be fresh for purposes of sprinkling as a powder on fæces and other matter.

Perchloride of Mercury is a very powerful disinfectant. It kills all kinds of germs being a poisonous chemical. It is likely to be mistaken for pure water and hence should always be lightly coloured and kept in bottles.

Mercury Iodide solution is used for surgical purposes.

The Coal Tar disinfectants consist of Phenyle, Creosol and the rest of their products. The colour in these disinfectants is mostly due to the agents used in them for emulsifying. Phenyle has a caustic effect on the hands and hence should be used with a spray. Potassium Permanganate is a costly germicide but a mild one. It colours the garments. Soap when used with the formation of a good lather acts as a destroyer of germs on the body. Hence while bathing soap should be used making plenty of lather.

Disinfection to be efficient should be carried on with individual care and attention. No spot suspected of infection, should be left undisinfected. The clothing of patients should be well boiled in water for half an hour and dried before it is put to use again. When such clothes have to be sent for steam disinfection, they should be tied in a gunny bag which has been previously disinfected in a five per cent solution of Phenol. Rooms requiring disinfection should be well sprayed or washed with a disinfectant solution. While disinfecting a plague-infected house, attention should be paid to rats, mice and fleas. In the case of cholera or typhoid-infected houses, care should be taken for disinfecting the urine and fæces of the patients. Bedding rugs and other articles should also be disinfected and subsequently well boiled in water.

Flooring of rooms requires more care as it contains all discharges and infected matter. Walls should be disinfected by washing and spraying. An acid solution of 1 in 1000 of Perchloride of Mercury can with advantage be used for this purpose. Fresh slaked Lime also answers the purpose.

The latrine and drains of an infected house should next receive attention. Disinfection should be carried on here with Chloride of Lime. The excreta, sputum and other discharges from the nose and throat should be disinfected with 10 per cent solution of Carbolic Acid or Chloride of Lime for a period exceeding an hour.

The stools of the patients should be mixed with a 5 per cent solution of Crude Carbolic Acid and kept for an hour before it is emptied.

Other articles of the patients such as feeding and drinking utensils should be well boiled for 15 minutes. Care should be taken of the hands by scrubbing them with a nail brush and soap and washing them in hot water. The hands should next be immersed in a solution of Mercury of 1 in 500. Disinfection by fumigation is employed in ships, granaries and railway carriages. For this purpose Formaldehyde and Sulphur are mostly used.

Disinfection if done with care and attention will prevent any infectious disease spreading and producing disastrous results. The Health Department will do a yeoman service to the public if only the public care to keep them in touch with any infectious disease in a house which may escape their attention.

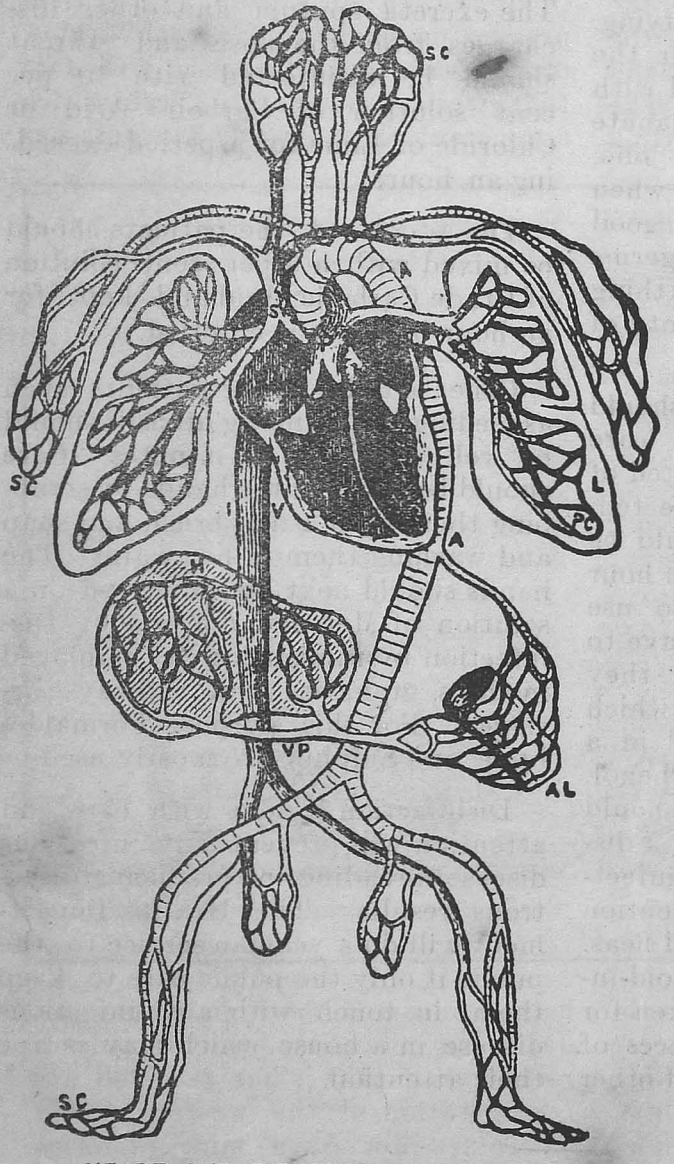
THE MOST WONDERFUL PUMP
NOT MADE BY MAN

By

Dr. R. R. SUKLA,

M. O., In charge of Municipal Hospital, Ajmere.

THE most perfect pump in the world, the most perfect ever-made, is also the oldest—how old no one knows, for it is as old as man himself. This pump is so small and so light that it might be carried in an overcoat pocket. Yet it runs day and night without a stop, without attention, drawing in and sending forth two and a half ounces of liquid seventy times a minute. In one minute it pumps 176 ounces; in one hour 656¼ pounds; in one year 5748750 pounds. Its normal life is seventy years, in which time it pumps 402412500 pounds, or more than 201206 tons.



HEART AND CIRCULATION OF BLOOD.

To transport this immense weight of liquid that it pumps would require 6700 freight cars of ordinary capacity. This would mean 223 trains of 30 cars each and as many engines to haul them. Strung out in one line, with no intervals between each train, they would cover a distance of forty seven miles.

This diminutive piece of machinery has been known to keep up its work without a single stop for more than hundred years. It pulsates 4200 times an hour, 100800 times a day, 36792000 times a year. It has no journals or bearing to oil, no bolts to tighten or slacks to be taken up. It is so constructed that

its parts are automatically repaired as it goes along. But, with all this, there is one very serious characteristic inseparably connected with this pump, which is that once it stops it cannot be started up again, unless immediate steps be taken to do so by an expert. Even this generally fails, so the owner should use care and judgement in its up-keep. There is no other machine that we have any knowledge of, of which the above can be said. How this is all accomplished is known only to its inventor. **This Pump is the Human Heart.**

MILKING THE EARTH
THE SOYA BEAN

By
O. D.
Bangalore.

In recent years renewed interest has been taken in the cultivation of the Soyabean chiefly on account of the many uses to which it can be put and its wide range of by-products. The bean is very useful in the preparation of coffee substitutes, soups, meat substitutes, sauces and vegetable cheese and its oil can be used in the making of soap, enamels, varnishes, paints, linoleum, waterproof goods : celluloid, glycerine, rubber substitutes &c. To vegetarians, the Soya Bean is especially interesting on account of its richness in proteins, fat, carbohydrates, mineral salts and vitamins and the fact that it is the raw material from which a vegetable is produced. The milk has been consumed both in China and Japan for centuries, but it is only in recent years that it has received any consideration of the western world. There are now Soya milk factories, but in Europe only two factories

THE SOYA BEAN PLANT.

appear to exist—one in Denmark (established in 1930) and the other in Russia. The Soya Institute in Russia, in point of size and its technical processes, claims to have no equal in any other country in the world. In 1934 several hundred thousand hecraries of land (acres) are devoted to the cultivation of the Soya Bean in the U. S. S. R. and no doubt the bean will play a prominent part in feeding the vast population of Russia in the years ahead.

A comparison of the contents of Soya milk is given below :—

	Protein.	Fat.	C. hydrates	Ash.
Soya milk	5.76	2.40	1.40	0.84
Human milk	1.25	2.50	6.00	0.25
Cow's milk	3.50	3.50	5.25	0.75

It is estimated that the average Soya growing districts of Manchuria produce about 1,6000 lbs to the acre, for which about 16 lbs. of seed are required.

The protein of the Soya Bean is of high biological value : it contains vitamins A, B and D; and an analysis of its mineral salts shows it to be very rich in potassium, and alse to contain sodium, calcium, magnesium and phosphorus in appreciable quantities.

Few articles of food provide so many valuable nutritive elements at so small a cost.

Natural Prevention of Diseases

By Brajendra Chandra Bhattacharyya,
L.M.F., (BENGAL.)
M. O. Mesta H. K. Ch. Dispensary, P. O., Bhanshi-Bengali, Dt. Mymensingh. Bengal.

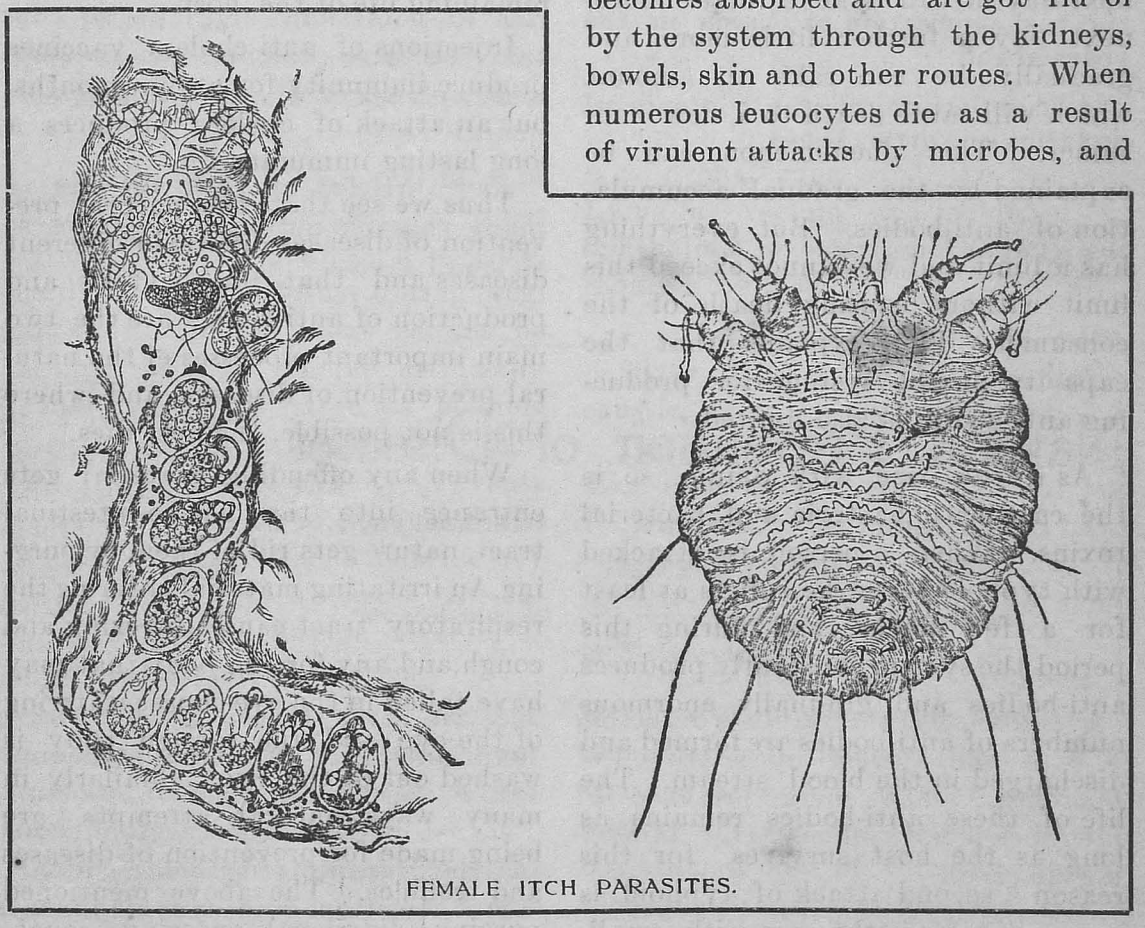
A DISEASE is the result of infection of the system by a species of microbes. The mere presence of microbes is not sufficient for producing diseases.

Born of healthy parents, the system of a newly born baby is sterile. Within a few hours numerous microbes get entrance into the body of the baby, through various routes *e. g.* nose, and mouth with inhaled air, food, etc. These microbes are of different types, of different characters and of different choices. Some microbes are pathogenic *i.e.* are capable of producing diseases while some are innocuous. Some microbes fare badly in acid medium while some others flourish well in acid medium. Those which like acid medium cause fermentation of carbohydrates and create an acid medium and those which thrive luxuriantly in an alkaline medium cause decomposition of proteids. Because of these differences in choice of the various microbes a midium which is neither acid nor alkaline is created, and as a result of this an equilibrium (which is called Biological Equilibrium) is maintained and no disease is produced. When this equilibrium is disturbed the person becomes ill.

When microbes enter the body through the oral route many are destroyed by the hydrochloric acid of the gastric juice ; when through the inspired air, microbes which die in the presence of oxygen die in the lungs;

some microbes are prevented from entering through respiratory passages by the hairs in the nostrils.

In spite of all these natural defences, some microbes enter the system, when they are attacked by the leucocytes (armies of the body) of blood. As a result of this there is a constant fight between the offending microbes and the leucocytes. In vast majority of cases the leucocytes prevail upon the offending microbes and destroy them (microbes). The dead bodies of these microbes are devoured by the leucocytes—this process is called "Phagocytosis" and for this reason the leucocytes are called by another name, "Phogocytes". It is natural and easy to understand that in a battle both the parties suffer more or less. It is also quite likely that some leucocytes die in the fight. The dead bodies of these leucocytes remain untouched by the microbes, and also by the leucocytes. We dispose of our dead bodies by burial or cremation. Because of the constant fight, the leucocytes have no time for the disposal of their dead bodies which get decomposed and pus is formed. This pus becomes absorbed and are got rid of by the system through the kidneys, bowels, skin and other routes. When numerous leucocytes die as a result of virulent attacks by microbes, and when the system fails to dispose of these dead bodies by the above mentioned process, multiples and repeated abscesses are formed, scabies and other skin diseases develop.



FEMALE ITCH PARASITES.

Every living cell has the power to produce anti-bodies which catch hold of any foreign material whether in the form of bacteria, bacterial toxins or poisons. Generally a cell produces numerous anti-bodies which are thrown in the blood stream where

they remain for varying periods. These processes are repeated whenever some foreign materials get entrance into the body. Thus the redundant anti-bodies accumulate in abundance and the system becomes tolerant to the invasion of a particular foreign material. An opium eater on the first day takes a minute quantity of opium, next day he can take a little more, next day a further little more and gradually he can take an amount which will cause death to a new consumer. This phenomenon can be explained by the gradual accumulation of anti-bodies. But everything has a limit and we cannot exceed this limit without causing death of the consumer. This explains that the capacity of the system for producing anti-bodies is also limited.

As is the case with opium, so is the case with bacteria and bacterial toxins. When a person is attacked with typhoid fever, he suffers at least for a few weeks, and during this period the system constantly produces anti-bodies and gradually enormous numbers of anti-bodies are formed and discharged in the blood stream. The life of these anti-bodies remains as long as the host survives, for this reason a second attack of typhoid is rare. Similar is the case with small-pox. This immunity lasts for different periods for different diseases. Every disease does not produce immunity for a long time. The system cannot produce immunity for a long time. The system cannot produce abundant anti-bodies against influenza, pneumonia etc. For this reason we see that a particular person may be repeatedly attacked with Influenza, Pneumonia, etc.

Small pox vaccination produces immunity for a few years but an actual attack of smoll pox produces an immunity which generally lasts throughout the whole period of the remaining life of the host.

Injections of anti-cholera vaccines produce immunity for a few months, but an attack of cholera produces a long lasting immunity.

Thus we see that the natural prevention of diseases differs in different diseases and that phagocytosis and production of anti-bodies are the two main important processes ef the natural prevention of diseases and where this is not possible, the host dies.

When any offending material gets entrance into the gastro-intestinal tract, nature gets rid of them by purging. An irritating material entering the respiratory tract causes sneezing and cough, and any foreign body that may have fallen in the eye causes watering of the eye and the foreign body is washed out of the eye. Similarly in many ways natural attempts are being made for prevention of diseases and troubles. The above mentioned purging (diarrhœa), sneezing, cough, watering of the eyes etc., should not be considered as diseases but should be considered as natural attempts for getting rid of the offending matters. By this statement, I am not ignoring the presence of such diseases—this I like to impress upon my readers.

History of the Care of the Eyes at Birth

By J. D. M. Cardell, M.D.,

THE earliest record I can find of instructions for the care of the eyes at birth occurs in the second English edition of the "Rosengarten" published by Thomas Raynalde in 1545. He advised that after the cord had been cut and the baby swaddled, the eyes should be carefully and frequently washed with warm water.

In about 1800, Benjamin Gibson of Manchester recommended a fuller regime. "First, to remove, if possible, the disease in the mother during pregnancy. Second, if that cannot be accomplished, to remove artificially as much of the discharge as possible from the vagina at the time of delivery. And third, to pay, at all events particular attention to the eyes of the child by washing them immediately after delivery with a liquid calculated to remove the foreign matter, or to prevent its noxious action."

In 1879, Samuel Hague, of London, advocated the washing of the eyes, arms and hands as soon as each was born.

Notice the very significant fact that each of these three men advised attention to the eyes at an earlier stage than had previously been the rule.

Of the unscientific methods of preventing eye disease in the baby the following may be mentioned as a matter of interest. Licking the child's lids with the tongue, wiping the eyes with a napkin soiled by the child, and putting the mother's milk between the child's lids. The last method may occasionally be met with even to-day.

2. **Crede's Method.**—In 1881 Crede introduced the use of 2% silver nitrate drops as a prophylactic instilled into the eyes after the child had been bathed. In that few people strictly carry out his method.

By the introduction of this prophylactic Crede achieved a dramatic reduction in the incidence of ophthalmia neonatorum. In the Leipsic Lying-in Asylum an incidence of ophthalmia neonatorum of 10% was reduced to 0·15%.

3. **The Action of Silver Nitrate.**—Silver Nitrate has three actions: caustic, irritative, and antiseptic.

The caustic action causes a shedding of the surface epithelium of the conjunctiva. Bacteria which have penetrated just below the surface are mechanically eliminated at the same time.

The irritative effect produces a leucocytosis in the conjunctiva and a mobilization of defences against bacterial invasion. It is said that the lachrymal gland also responds to the irritation, a flow of secretion taking place which prevents bacteria ascending the lachrymal ducts.

The antiseptic power of silver nitrate is very well marked, especially in the concentrations generally used.

4. **Disadvantages.**— The advantages of this method are obvious and its worth has been proved over a long period of time. There are however certain disadvantages, not so much in the method itself, but in the way the procedure is applied by those entrusted with its use.

To obtain the best results with the maximum safety certain rules must be observed.

a. For use by midwives, a 1% solution is quite adequate. A solution of over that strength is only safe in the hands of a doctor with a good knowledge and experience of eyes. Strong solutions may cause burning of the lids and globe.

b. The solution should be fresh at least every three weeks. The atmosphere slowly decomposes silver nitrate, the content of silver nitrate decreases and nitric acid makes its appearance. This acid is injurious to the eye.

c. For the same reason actinic light must be excluded from the solution. Though green or blue bottles are advised, I prefer to use an amber colour since it is known that a photographer's dark room may be safely lit by an amber light.

d. The bottle must be well stoppered and the stopper should not be out of the bottle longer than is necessary. Otherwise evaporation occurs and the strength of the silver nitrate creeps up. One of the worse cases I have ever seen at St. Margaret's Hospital for Ophthalmia Neonatorum was due to the use of a partly evaporated solution of Silver nitrate. The solution had started as 1% but had reached 3% when used on this particular case.

e. It is better for midwives, in my opinion, to wash out the eyes with saline half a minute after the use of the silver nitrate.

f. Midwives should only be allowed to use the drops once in each eye. Cases have come to my notice where several applications by midwives have led to badly irritated eyes, if not worse. In my view, a badly irritated eye may be more prone to subsequent infection.

Silver Discharge:—It is possible for silver nitrate to produce a discharge in the normal eye of an infant. Having put silver nitrate into an eye without discharge the position may be very equivocal and unpleasant should a discharge subsequently occur. It is a matter of extreme difficulty to diagnose Silver Discharge from Ophthalmia Neonatorum. In the former treatment must be stopped at once, in the latter any delay in treatment is dangerous to the eye.

5. **Alternative Methods.**— The alternative methods of prophylaxis are almost too numerous to mention and success is reported for each method. Very many people have been and are still averse to using silver nitrate at all. Recently Silver Acetate, which is only 1% soluble at room temperature, has been used by Emil de Grosz. Should the acetate disintegrate, acetic acid is formed which is less irritating than nitric acid.

6. **Conclusion.**—There can be no doubt that Crede's method, if used with knowledge, is one of the most, if not the most, efficacious prophylactics for ophthalmia neonatorum. It must be remembered that any technique such as this is judged mainly by its results in the hands of those who have no special ophthalmic experience, and that it is sometimes advisable, in such circumstances, to reduce the efficiency slightly in order to increase the safety of the method.—*Journal of Social Ophthalmology.*

The Confessions of a Smoker

LIKE most persons who smoke, I too realise that it is bad for me and wish frequently that I am rid of this habit. I too have made frequent ineffectual attempts to stop and cut down or stop entirely, but then have drifted gradually back. Admitting my defeat, I content myself with advising others not to start.

My first attempts at smoking when a boy were followed by severe prostration, terrible nausea, and worse vomiting. Determined to be a man, I persisted and gradually acquired a tolerance. In spite of this, for many years, if I smoked a cigar or inhaled too many cigarettes, I became sick. I had to watch the dose. That is all past now, and I can smoke any number of cigarettes or cigars.

Ordinarily, I smoke ten to twenty cigarettes a day. If I smoke the latter number for a week or more I become tired, irritable and nervous, and am troubled with insomnia. These symptoms become so bothersome that I am led to cut down to ten or less a day but then, feeling better, I gradually relax the effort that this entails and am soon back at my maximum and am again soon warned to cut down. I do not smoke before breakfast, but I go down to eat before shaving so that I can get in my smoke without delay. The first morning cigarette occasionally makes me slightly dizzy and until I have finished it I do not feel awake or ready for the day. Smoking just before a meal cuts down my appetite noticeably. If I am nervous about anything or have any ordeal to go through, I smoke one cigarette after another.

The pleasure of smoking is, like drinking water when thirsty, a relief from the discomfort that rapidly develops if I do not smoke. About an hour after I have had a cigarette, I develop a peculiar sensation in my mouth. My tongue and lips and cheeks come into my consciousness and seem swollen and burn slightly. I feel like sucking my cheeks, biting my lips and scraping my tongue over my teeth. As it becomes more severe there develops a sense of tightness in the face. This and the other mouth sensations are probably incident to an overactivity of the salivary glands.

Soon after the appearance of the mouth symptoms I begin to be conscious of my legs and arms—in fact of my whole body. It is difficult to describe these sensations accurately, for there is no other feeling like it. Then my respirations become slow and irregular.

As the desire to smoke increases I become mentally dull. I cannot work or concentrate. Active physical exercise, such as brisk walking relieves most of the symptoms.

I recently stopped for two months. After the first day, the discomfort was less bothersome. I was more comfortable when walking or exercising strenuously or doing anything that tends to raise the blood pressure. The oral discomfort persisted throughout the period. My appetite was better; I looked forward to and

enjoyed my meals, a thing I rarely do when smoking. During the two months I gained 15 pounds and was still gaining when the time came to smoke again. I slept well and was more rested when I wakened in the morning. I felt refreshed and liked rising immediately. During the two months I could drink as much coffee as I wished without becoming nervous as before.

It will seem strange to many that having stopped for two months one should return to a habit which he realises is unnatural and deleterious. I returned simply because I could no longer afford to be as inefficient and as disturbed psychologically as I was when refraining. So, I keep on smoking but I would strongly advise others not to start this habit.—Jerome R. Head, M.D., in *Illinois Medical Journal.*

Recent Advances in Leprosy

St. John's Hospital Dermatological Society, The Lancet, July 2, 1938.

THE present situation as reported to the International Leprosy Association, especially by Prof. Flandin of Paris, points to the possibility of an increase of indigenous leprosy in European countries. Where the incubation period has been regarded as from six months to twenty years, there is evidence that in some of these indigenous cases it was less than six months, and in one case apparently as little as two months. An intradermal injection of chaulmoogra oil would attract Hansen's bacilli, demonstrable after an eight-day interval. The site of election was undoubtedly the lobule of the ear. The infection is still thought to be through prolonged and intimate contact as in family life, and the examination of family contacts is considered essential.—C. P. B. —*The National Health Review.*

Bathing Dangers

THE modern child is encouraged to find his feet in the water, if one may so express it, at as early an age as possible. He is encouraged to be fearless, but being fearless does not mean being incautious, and a good many tragedies might be averted if children were trained to take some common sense precautions when bathing.

"Take common sense into the water with you" is the basis of a holiday warning issued jointly by the National "Safety First" Association and the Royal Life Saving Society. They suggest the following "Don'ts" :—

Don't take risks when bathing. Use common sense.

Don't bathe too soon after a meal. Wait at least two hours.

Don't go beyond your depth alone, and even then only when a good swimmer.

Don't dive into water of which the depth is not known.

Don't swim out to sea. Just as much enjoyment can be obtained by swimming parallel with the shore.

Don't stay in the water when feeling numb or cold.

Don't play or swim near creeks, harbour mouths, etc.

Don't try to swim across rivers or streams. It is not worth the risk unless accompanied by a boat.

Don't enter the water when overheated or fatigued.

Don't allow children or young people to play with rubber floats, rubber balls or other pneumatic appliances, or use them iu an attempt to learn to swim. They are dangerous.

Don't lose your head if attacked with cramp. Turn on to the back, keep calm and try to attract help.

Don't bathe in unfrequented places or away from a crowd. There is safety in numbers.

Don't fail to make inquiries first as to tides, currents, etc., when bathing in any less frequented spot.

Don't bathe outside marked safety areas.

Swimming and bathing are health giving exercises which can be enjoyed with perfect safety if due consideration is given to possible dangers.—*Mother and Child.*

Parturiunt Montes

"It is difficult to imagine an occurrence that would cause greater concern to an individual than, having consumed part of a steak and kidney pie, to find portions of a mouse in the remainder." Thus comments Dr. G. Clark Trotter on an incident at Islington last year. Part of the offending pie was left at the Public Health Office with no comment other than the address of the sender and on examination a foot of a mouse was found amongst the meat and a tail was seen lying across the top crust, one end embedded in the pastry. Inquiries were made and the manufacturer ascertained to be outside the borough, and the local inspector reported satisfactory conditions. Dr. Trotter adds: "There must have been a lack of supervision in the preparation of the pie as the tail could have been seen on top of the crust from the time the pie entered the oven, yet it was not discovered until examined in this office on the morning after the pie was brought to the town hall."—*The Medical Officer.*

Worry

In a paper on psychiatry and surgery read at the 28th annual Clinical Congress of the American College of Surgeons at the Waldorf—Astoria Hotel, New York, in October, Dr. Franklin G. Ebaugh of the University of Colorado, said that careful analysis of a person's past and family history might show that worry, not a diseased organ, caused many symptoms. Dr. Ebaugh presented the case of a 23-year-old woman who had undergone seven operations in three years and complained of pains in the chest, loss of weight, and menstrual upsets. The patient had been jobless five years and felt she was a burden to her family. Her main "treatment" consisted of depression-relieving advice, and so on afterward she obtained a job. With the job, her symptoms disappeared. Dr. Ebaugh believes such psychiatric care might reduce the States' estimated total of 3,000,000 operations a year.—*The National Health Review.*

Savant Urges Subsidy

The better classes must save democracy for the United States. And the way to do it is to subsidize early marriage of sound young people.

This statement was made recently by Dr. Arthur H. Steinhaus, professor of physiology at Chicago's George Williams College.

Declaring citizens of the United States must turn their interests from stocks to stock, Steinhaus pointed out that there are 6,500,000 idiots, imbeciles and morons in the nation, and that the number of persons with less-than-average intelligence is growing annually—*Birth Control News.*

Honey for Asthma

WHEN the old Roman Pliny remarked in passing that the fat of fish mixed with honey made an excellent healing salve, he probably had no inkling why this was so. Recently, though, in the Red Cross Hospital at Hamburg anointment produced from liver and honey has been applied with success to small wounds such as burns and furuncles. Is this perhaps due to some property of honey ?

The bee is not only the source of honey, but also of bee venom that is used for rheumatism. A further beneficent property of honey was discovered by pulmonary specialists. When a jug of honey is held under a patient's nose so that he can inhale the air that has come into contact with it, he begins breathing more easily and deeply. In cases of short breath and mild attacks of asthma, this "honey-breathing" is of particular value. It is a remedy that can be kept constantly handy in one's home. Its effect is instantaneous, although relief lasts only about an hour.

Honey is composed of a mixture of "higher" alcohols and ethereal oils. That is why the vapours given off by it are so beneficial to the lungs. Alcohols, like fir balsams and turpentines, can quicken or retard breathing, on their composition. In addition honey contains a series of other components of surprising medicinal properties. These consist partly of secretions of the bees (perhaps hormones) and in part are extracted from flowers.

Further research alone will reveal whether these qualities of honey are to be traced to a hitherto unknown component. If so, it will be necessary to study this remarkable substance more carefully and perhaps isolate it in its chemically pure form. In any case we are indebted to homely honey for the revelation of yet another curative element in nature.—*Condensed from Kolnische Zeitung, Cologne.—The Oriental Watchman.*

Expanding Scope of Engineering in Health Departments

Holmquist, C. A. and Dappert, A.F.; Municipal Sanitation, Vol. 8, No. 10, p. 530.

AHEAD of the public health engineer there lies a large and untouched field of many functions which, under the compelling force of public opinion, will yield to public health engineering methods.

Air, water, food and sunlight are the essential elements necessary for human existence. Public health engineering seeks to preserve and maintain the purity of the supply of each. Water and foods, especially certain kinds of foods, afford almost unlimited opportunity for adversely affecting the health. It is in these and related fields that the public health engineer should be able to render invaluable and indispensable service. Epidemics of scarlet fever, diphtheria, septic sore throat, typhoid fever and dysentery traceable to milk, continue to take their toll of human life. Public health engineering can be depended upon to eliminate milk as a factor in the transmission of such diseases. The humble oyster and clam must be placed under strict sanitary control to protect consumers of the raw products from the dangers of epidemic typhoid.— G. H. F.— *The National Health Review.*

Glaucoma

WHEN the tension or pressure within the eyeball is increased, glaucoma or hardening of the eyeball exists. Eyesight sometimes may be saved through continued eye and medical treatment. Treatment for glaucoma may consist in proper diet, sufficient sleep, exercise, elimination of waste products of the body, as by sweat baths and by the continuous use of drugs in the form of eye drops. Surgical treatment is not always markedly successful. Much depends upon whether operation is performed early in the disease when advised by the eye surgeon. Disease in other parts of the body must be eliminated. Too frequently worry is also a factor in these cases. of glaucoma.—*Sight-Saving Review—The Medical World.*

The Sun-Lamp the Genie of the Home

By Alice Home

NOW that the dark days are here the instalment of a sun-lamp becomes, thanks to modern enterprise, a practical possibility.

A few years ago a sun-lamp was a luxury to be enjoyed perhaps only at a clinic or under midical supervision, but now that one can be bought for as little as three guineas, the ordinary family can afford to avail themselves of its rays.

My own very moderately priced lamp is not only a sun, but an infra-red lamp as well. For some months I visited a clinic for infra-red treatment for an injured knee, and the relief was so remarkable that I decided to invest in a lamp with the dual ray so that I could give myself treatment at home. The result has been beyond my expectations.

The advantage of one type of modern lamp is that no goggles are required, and they are perfectly safe for the most timid invalid to use. Moreover, it is impossible to overdo the treatment. Children can play in the rays of these sun-lamps for hours on dark and foggy days when they cannot get out into the park or garden. The sun is thus brought into their playroom.

With a dual-ray lamp all that is needed is to screw in the appropriate bulb, according as sun or infra-red rays is required and the lamp is operated either from a lamp or wall plug.

If a general tonic is desired the spine is irradiated. Lumbago is greatly relieved and sometimes completely cured by an hour's exposure to the infra-red rays, and it is possible to sit and sew or knit with the rays of the sun-lamp directed on any part that may be stiff or painful. This is a great boon to invalids who feel independent and do not wish to give trouble to anyone.–*Good Health.*(*Lon.*)

Childlessness

DR. KISER reported results of this survey last week at the autumn meeting of the American Philosophical Society in Philadelphia. Three-fourths of the women had not practised contraception in any form since they were married; 57 per cent had sought medical aid to learn why they could not conceive. Dr. Kiser coucluded: "Similar investigations in other areas are needed for more general results, but it appears that even in a metropolis the practice of contraception cannot be held responsible for any major share of permanent childlessness."—*Newsweek, Nov. 28, 1938,* —*National Health Review.*

Health Tit-Bits

Blessings of Health

OH, Health ! Health ! The blessing of the rich ! The riches of the poor ! Who can buy thee at too dear a rate since there is no enjoying the world without thee ?—*Ben Johnson.*

* * *

Public Health

PUBLIC health is the foundation upon which rests the happiness of the people and the welfare of the State.—*Disraeli.*

* * *

Buying Health

GOLD that buys health can never be ill spent.—*Webster.*

* * *

As Shakespeare Might Have Said

"SOME people are born with syphilis, some have syphilis thrust upon them."—*St. Mary's Hosp. Gazette.*

* * *

Early History of Blood Transfusion

THE first human patient was a 15-year-old Parisian boy, weakened and near death from repeated bleedings then in vogue for the relief of obscure fevers. Jean Baptista Danis, physician to Louis XIV, introduced lamb's blood directly in the youth's vein with immediate and beneficial results and the patient recovered. In the wake of this astonishing cure, a wave of enthusiasm inundated the early investigators and led to the promiscuous transfusion of blood from animal to man.—*O. W.*

* * *

Given up Smoking

"So Jack has given up smoking ?"

"Yes. On the advice of his doctor, at the request of his wife, and by command of his mother-in-law !"

Book Reviews

The Human Eye—*By K. S. Malkani*, oph. D., Ophthalmic Surgeon, Hyderabad, (Sind), 2nd edition, pp. 62. Price : As. 8/-

It is rather strange that people who seem to know all about the intricate mechanisms of the Radio and the Wireless are utterly ignorant of the structures and functions of the various organs of their own bodies. Among these organs, the eye is the most important and a knowledge, therefore, of what the eye is, what it is made up of, how we see and how and why we lose our sight and how again it can be regained or preserved is found to be very helpful.

The above booklet, written in simple language by an experienced ophthalmic surgeon, deals briefly with the structure of the eye, physiology of vision, defects of eye sight, diseases of the eye etc. The last two chapters on spectacles and their selection and rules for preserving sight, will prove beneficial to those whose vision is impaired. Some useful eye-exercises are given in Appendix I.

The booklet is interesting and instructive and we commend it to the readers of Health.

Aksharamalika Sivastotra—*By K. Viswanathan*, pp. 24. Bombay : Barati Bros. Price : As. 3/-

The influence of music on the health of an individual is well-known. A devotional song will have beneficial effect whether the person is ill or well. This booklet, containing poems on God Siva, will have double advantage of imparting instruction to a beginner in Sanskrit and elevating the soul of an adult and will amply repay perusal.
